

स्वाध्याय

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# UTTAR PRADESH RAJARSHI TANDON OPEN UNIVERSITY

*(Established with National Act No. 10, of 1999)*



Indira Gandhi National Open University



UP Rajarshi Tandon Open University

## PGD-ESE-02 Towards Participatory Management

- FIRST BLOCK** : Genesis and Concepts Participatory Management
- SECOND BLOCK** : Approaches and Practices
- THIRD BLOCK** : Programmes and Services
- FOURTH BLOCK** : Participatory Resources Management

Shantipuram (Sector-F), Phaphamau, Allahabad - 211013

# SAFLI

South Asia Foundation  
Learning Initiative



# Towards Participatory Management

DRAFT



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TOWARD PARTICIPATORY MANAGEMENT

# Block I

Genesis and Concepts of  
Participatory Management

*Post Graduate Diploma*  
Environmental Sustainable Development  
South Asia Foundation Learning Initiative



Uttar Pradesh  
Rajarshi Tandon Open University

**PGD-ESD-02**

TOWARDS PARTICIPATORY  
MANAGEMENT

Block

**1**

## Genesis and Concepts of Participatory Management

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UNIT 1

Introduction

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UNIT 2

Historical Perspective

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UNIT 3

State Policies and Programmes

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UNIT 4

Models of Participatory Management in South Asia

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## INTRODUCTION

### Unit introduction

The main focus of this unit will be on explanation of the basic concepts of the participatory management, including its emergence as a new paradigm of management; its philosophy and approaches to development; participation mechanism and impact of political system on that and major constraints in the participation. All these topics will be discussed in the context of the human relationship with the nature and focusing on the role of individuals and communities to promote and integrate their contribution in the conservation efforts and development. The main contents covered include the following:

- Participatory Management and Development: Basic Concepts
- Philosophy of participatory approach to development
- Socio-political context and constraints of the Participatory Management and development process;
- Participation in and community mobilization for the development process;
- Major constraints in participation; and
- PRA – Participatory Rural Appraisal: A Tool for Participatory Development.

### Unit Objectives

After studying this unit you will have improved your ability to:

1. understand and discuss the concept of participatory management and new paradigm for development, and the philosophy of participatory approach to development,
2. define the concept and process of participation; people's involvement, and empowerment to promote the development process,
3. realize the process of community mobilization and participation in the participatory management,
4. apply the PRA methods in the development projects,
5. comprehend the socio-political context of the participatory management, and identify and address the major constraints in people's involvement and participation in participatory management.

## **1.1 Introduction to the Basic Concepts of Participatory Management and Development**

### **1.1.1 Participatory Management**

Participatory Management means that staff, not only the designated managers, have input and influence over the decisions that affect the organization, project or any development activity. In this process, participation of all the stakeholders is assured, throughout the project cycle, starting from the visualization, and planning to the implementation and final evaluation and assessment.

Participatory management can improve the effectiveness and capacity of an organization, involved in the development management and it contributes to good leadership by management. It also contributes to increased transparency in organizational decision making and implementation of project activities.

Participatory management is not the same as communal or co-operative management, where every staff member has the same weight in the decision making process. In this form of management, a number of stakeholders are ignored and not involved in the management process.

### **1.1.2 Social Organization**

Social Organization is a process of organizing the community ingroups to achieve any collective objective or to fulfill the community needs.

### **1.1.3 Community Mobilization**

Community mobilization is a process of mobilizing the community for participation in the social, human and community development process.

### **1.1.4 Development and Social Change**

These terms are always used inter-changeably, which is not true. Although they have many common features but they are different from each other in substance and practice. In addition, the social change is an integral part of development and development facilitates and leads towards social change.

Development implies improvement, growth and change. It is concerned historically with the transition of cultures, societies, and communities from less advanced to more advanced social stages.

Development as change involves a broader perspective. Development has come to be regarded as a type of social change. While social change can be considered as a concept that charts the transformation of societies, states and communities, development is seen as planned and directed social change.

### **1.1.5 Intervention versus Non-Intervention**

By presenting two visions of the social order, one can see development as a form of social change more easily:

- First is the vision of those who adhere to the law of non-intervention. This perspective has evolved from the natural law and the “invisible-hand” ideology of the laissez-faire doctrine. It is based partially on economic analysis and partially on ideological beliefs.
- The idea of development stems from the vision of society in term of planned intervention, which stresses the utilization of knowledge and technology to help solve the problems of individuals and groups. It is based on the philosophical idea that in applying systematic and appropriate knowledge to the problems confronting the social system, we can facilitate purposefully directed change for the betterment of all.

### **1.1.6 Community Development**

Community Development is “The process by which the efforts of the people themselves are united with those of governmental authorities to improve the economic, social, and cultural conditions of communities, to integrate the communities into the life of the nation, and enable them to contribute fully to national progress. This complex of processes is, therefore, made up of two essential elements.

The participation by the people themselves in efforts to improve their level of living, with as much reliance as possible on their own initiatives; and the provision of technical and other services in ways, which encourage initiative, self-help and mutual help and make these more effective. It is expressed in programs designed to achieve a wide variety of specific improvement”.

In brief the Community Development could be defined as

- (1) A group of people
- (2) In a community
- (3) Reaching a decision
- (4) To initiate a social action process i.e., planned intervention
- (5) To change
- (6) Their economic, social, cultural, or environmental situation.

Community Development has evolved from two major forces:

1. Economic development; and
2. Community organization.

### **1.1.7 Participatory Development**

Participatory Development is the empowerment act of helping people to help themselves to address local issues and create associations through which to plan and act on their own behalf, to encourage trust and self-awareness and to enable independence and self-sufficiency.

The main goal of the participatory development is to involve local communities, and all other stakeholders, by using participatory methods to create voluntary associations for community development, so that they can identify, plan, control and maintain and use local resources for greater prosperity. Local associations are part of the bases of civil society. In this process, besides the community organizations, all other stakeholders and partners, which may be the potential contributors in the development process, are also involved, at various stages, when and where required.

### **1.1.8 Participation**

Participation is the act of being involved and of involving individuals or groups in making choices and decisions, in planning, in taking actions, in controlling and sharing the benefits. Participation reduces dependency by creating confidence, self-sufficiency and trust.

In community work, participation means that the whole community, including those that do not usually speak up, participate in decisions that affect the future of the community.

### **1.1.9 Stakeholders**

Stakeholders – the people and groups which have an interest, or “stake”, in the success of the organization, project or any other development activity. This definition of stakeholders is very broad. Most voluntary and non-profit organizations have a wide array of stakeholders. Often stakeholders feel that their perspective should be represented in decision-making and accountability is owned to them.

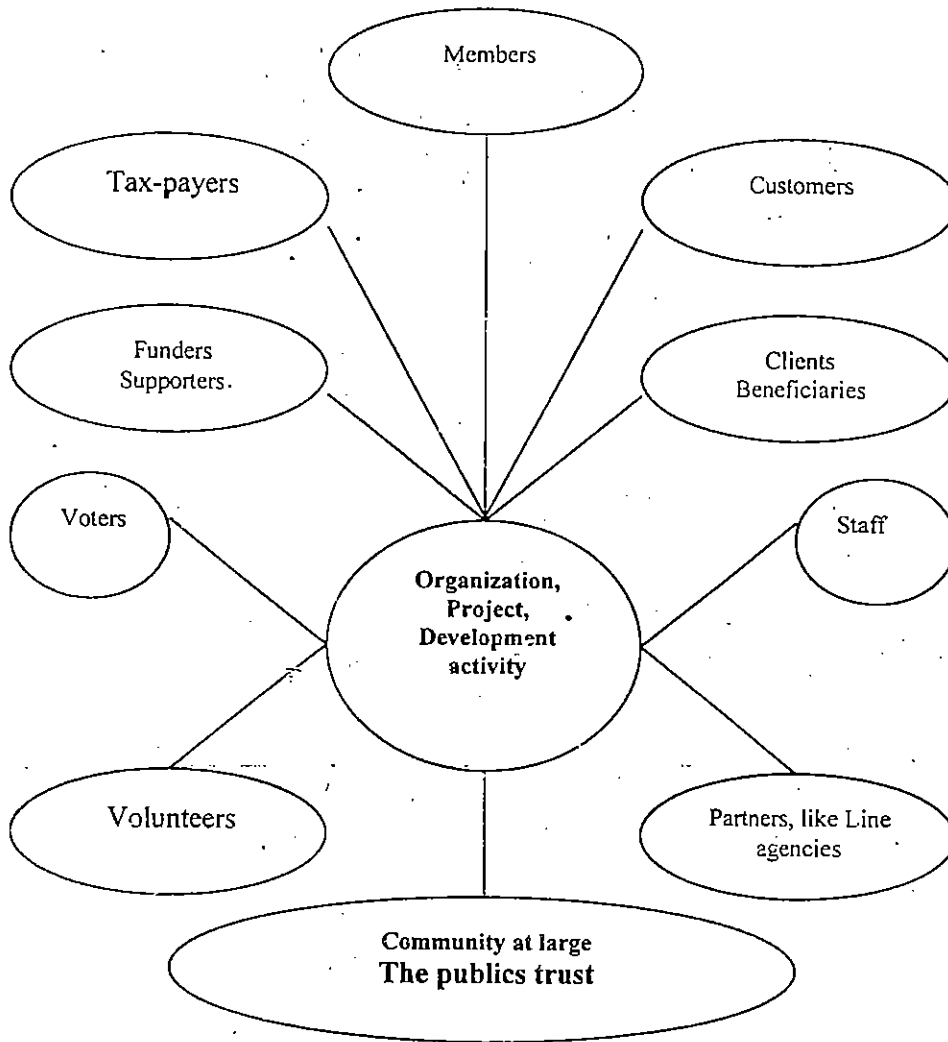
Stakeholders' connection can be:

- legal, such as with members,
- or practical, such as with funders,
- or moral, such as with clients, partners, and the public at large.

The existence and importance of stakeholders adds an entirely new dimension to governance and participatory management and development. Representation and accountability become core parts of the governance and management and development process, closely intertwined with decision making.

Connecting to and satisfying these stakeholders is a complex task: relationships differ, their weight of influence varies, competing interests must be balanced and conflicting perspectives reconciled. The result is a **complex web of players**, as shown in the diagram given.





**Complex Web of Stakeholders and Players of the Participatory Development and Management Process**

## 1.2 Philosophy of the Participatory Approach

How to bring about a true participatory approach to management and development, depends on the tools we use. Communities cannot be lectured about participation. They know when they are excluded. So for development workers, seeking a more meaningful and sustainable relationship with the poor, actions will need to speak louder than words. Listening to what the poor have to say, allowing them to make sense of the reality they see, enabling them to put it in a shape that is workable and supporting the actions they decide to take, is part of the development workers' job today. And because it is so different from development work of past, it requires other skills and tools.

**Participatory Rural Appraisal (PRA) and Participatory Learning & Action (PLA)** are among the basic methods, which are commonly used in the participatory development and management. These methods use specific

tools to enable people to analyze their situation. The tools of PRA & PLA come with a philosophy, which ensures that knowledge of the people is used to empower them, rather than the development worker. Both together form part of the participatory process towards involving people in their own development.

### **1.3 Participation as a Process Of Consultation**

Participation is a process of consultation and willingness to share something and to do something collectively. Participation is a process, in which, everything, from the concept through planning, implementation, monitoring, evaluation, and maintenance, should be in the ownership of the people.

In order to elaborate the concept and process of participation, let us review some of the characteristics of the participation:

- Participation is a way of life.
- Individuals are like the components of machinery.
- Participation demands equality in decision-making.
- Change in the attitude is required for participation.
- Commonality of interest provides basis for participation.
- Combined thinking and struggle promotes participation.
- Participation is need-based.
- Two-way learning process leads towards participation.
- Some one has to initiate the process of participation as an activist.

#### **1.3.1 How to Promote Participation**

- Involve people's time/money to ensure their interest. *Not only voice but also money.*
- Listen. Do nothing. Learn where to support.
- Consult, take collective decision without hierarchy.
- Follow up in personal life.
- Identify common interests.
- Promote solution.
- Through leadership but reaching the poor.
- Allocate works, promote leadership, and convene meetings.
- Provide appropriate technology to solve and manage collective social and economic problems.
- By giving equal chance of opinion to all the member of the community or group.
- Call meetings, select activists / people by criteria.
- Take burning issue to mobilize the people.
- Organize people around their rights.
- Form Village Development Organizations (VDOs).
- Mobilize, be punctual, make no promises.
- Set personal examples through actions and deeds.

#### **1.3.2 Barriers and constraints hampering community participation and mobilization process**

It is evident that there are a number of obstacles, barriers and constraints, which are serving to prevent community participation and mobilization

process from occurring. On the one hand there are quite strong networks in the communities in terms of interdependence or cooperation amongst friends, families, and neighbors. Unfortunately, in most of the communities there is little formal organization and strategizing around community organizations, which could potentially serve as a means to address their needs.

This sense of immobility and trends to avoid participation in the development process arises from a number of factors:

- (1) The misperception among the community members that politicians and bureaucrats will alleviate their problems for them (yet the problems of corruption and poor administration are evident) throughout the world;
- (2) A lack of expertise amongst the community to facilitate such organization;
- (3) A lack of will and interest amongst the community members to enhance the required skills for facilitation of such social organization;
- (4) Illiteracy, social problems, especially lack of access to social and economic resources/services and poverty among the majority of people living in rural areas and among the marginalized groups in the urban areas;
- (5) The unwillingness of the community as a whole to give up individual interests to form a broader cooperative;
- (6) An extreme shortage of available resources to facilitate the community mobilization process;
- (7) Politicization of the development and management procedures and processes;
- (8) Traditional cultures, social systems and adherence to fundamentalism;
- (9) Authoritarian and non-democratic societies and political systems.

### **1.3.3 Solutions to resolve the problems related to community participation**

The solutions to resolve such problems are rooted within the resource capacities and social organization structures of the communities. The organizing structure presented here to resolve the problems related to the community mobilization is based on the concepts of self-help, encompassing various distinguishing features of community development theory, practice, and ideology. While it is not assumed that all of the problems of the communities can be resolved by community's efforts alone, it is seen as a means of achieving broad community participation and effort. Through this means it is suggested that the living conditions, facilities and services of the community will improve, along with the empowerment of the community.

#### 1.4 Visual Tools and Materials Help Participatory Modes of Interaction and Empowerment

Visual tools that reflect local reality help overcome class and literacy barriers and facilitate the involvement of those usually excluded: *women, the poor and the less powerful*. At the agency level, visual materials help participatory modes of interaction, break hierarchical and disciplinary barriers and forces staff to explore new ways of doing things. It also demystifies planning and researches. Additionally it often marks the beginning of people realizing such materials could be used to involve community people in decision making.

*Almost all materials can be used in a participatory way. It is easy to use innovative, visual materials to extract information from communities for external planning rather than to empower people to undertake action. Readers are encouraged to relate and utilize the Ideas in the book to meet their own specific needs.*

In participatory activities, facilitators keep a low profile after introducing a task or activity and ultimately they become invisible and withdraw their support at an appropriate time. The tasks should be simple and the need for instructions should be minimal. This necessitates much time preparing the materials and thinking through the process. However during the actual activity, good facilitators, let the process be controlled and taken over by the group to the greatest extent possible. Tasks that are open-ended allow the emergence of local perspectives; beliefs, values, reality rather than eliciting the "one correct answer".

When the intention is to empower participants, it is helpful to keep the following questions in mind in designing and conducting activities:

- Is the task open-ended or over-structured?
- How much time and instruction is needed to clarify the task?
- Who is controlling the process?
- Who plays the dominant role in managing the task?
- Who is controlling the outcome?
- Does the task search for the correct answer?
- Who is talking the most? (Facilitator or participants).
- Does the task generate discussion, thinking, energy, excitement and fun?
- Does the activity lead to changing perspective, group spirit or discussion of "what next"?

A "good" participatory activity, is one in which the facilitator becomes invisible!

#### 1.5 Approaches and Methods for Participatory Management and Development

The bases for participatory management and development should be 'communities first' approach and planning/action which leads to the formation of sustainable community organizations (COs).

Field workers using participatory methods achieve community involvement and empowerment. The methods we use come from a large set of tools developed for Rapid Appraisal and Participatory Assessment (RA & PA), which have evolved into a dynamic people-centered Participatory Learning & Action (PLA) approach to development.

The premise of participatory development is that when community members plan and act as a group, in local associations, the result is more lasting and sustainable (as compared to results using top-down methods of development defined and dictated by outsiders).

Full participation of the community members in social organization and mobilization from beginning will lead to their empowerment and self sufficiency as members of the Community Organizations.

The use of participatory tools to empower communities not only helps them to develop sustainable associations and take action on their own behalf, but also helps field workers, and agency and government workers, to understand and better appreciate local communities, local people and local institutions; thus, a participatory is many-sided. The understanding and information gained by the participatory process are more useful for local development than those gained by using other methods. The active involvement of local people in the process is more productive, realistic, appropriate, dynamic and empowering than the questionnaire survey approach to research or the dependency-creating methods of top-down development.

There are many tools for participatory development. The following section contain several which are especially good for creating rapport, generating a participatory process, and collecting information for use in planning and action. Some tools are based simply upon common sense and are improved by experience. By using combined techniques and strategies of PLA and rapid appraisal, the field worker-facilitator is armed with a powerful, flexible and creative tool kit for the field.

Some of the common tools and strategies for participatory social mobilization are given below for the guidance of the social organizers:

- conduct semi-structured interviews (SSI) and focus group discussions with farmers;
- conduct key informant interviews;
- probe for better understanding;
- practice participant-observation;
- use observation skills based on experience to make social viability judgments;
- promote simple community resource sketch mapping by farmers;
- plot water accessibility and distribution patterns and problems with farmers;

- map water distribution systems with farmers;
- conduct watercourse transect surveys with farmers;
- give farmers a pen and encourage them to do the mapping, plotting and transects;
- conduct a watercourse or community SWOL analysis with farmers, identifying the local Strengths, Weaknesses, Opportunities and Limitations (SWOL), especially encourage discussion on the 'opportunities' and be positive;
- document water utilization history and practice from oral histories;
- create social profiles and farmer profiles through discussion and social mapping;
- Conduct simple eye-ball measurements of water courses systems; etc.

These sorts of participatory tools and observation-based judgment methods are useful for gathering information and mobilizing farmer associations. But because they are subjective and qualitative, so the data is not very much 'enumerated' or 'counted'. Similarly, precision and accuracy of information is not essential and fixed blueprints for mobilization do not exist. Approximate understanding is fine, and flexibility is an asset.

Certain helper questions are useful to ask at the initial stages of both consultative and participatory fieldwork (see below); they are open ended and excellent for probing a topic:

- Use them to avoid simple yes/no answers (yes and no tell you very little).
- Avoid leading questions in which the answers are suggested in the questions (they are usually misleading or leading).
- Follow up by silently asking yourself; so what? "What am I learning? What am I hearing about this issue or situation? What is really important there?"
- Use probing techniques, then analyze the answer and use your accumulated insight, judgment and good sense based on experience, along with the clues which farmers give you, to raise more and better questions.

### **Helper Questions:**

What ?      Kia?

Where?      Kahan?

When?      Kab?

Who? Koun?  
 Why? Kiyun?  
 How? Kaisey?

Throughout the process of social mobilization, the field worker maintains a strong positive attitude. He follows certain principles, like the following 4-D's (from a form of PLA- known as Appreciative Planning and Action):

1. **Discover** ask POSITIVE questions,  
 seek WHAT WORKS,  
 search WHAT EMPOWERS,
2. **Dream** look forward to WHAT CAN BE,  
 and WHERE WE WANT TO GO,
3. **Design** make an ACTION PLAN based on what we can do for  
 ourselves
4. **Deliver** make PERSONAL COMMITMENTS to take action  
 start taking action , NOW!

The field worker strives to be a true facilitator and catalyst for development. He practices a soft, low-key approach that is courteous, informative, supportive, and helpful. He avoids behavior that is showy or elite. (For example, he rides a motorcycle, not in a flashy jeep. He wears village style clothes, not a city suit. He speaks the local language, not showing off his English). Thus the field worker is madadgar (helper)-not haakim (boss).

A social organizer is directly translated into Urdu as 'samaaji madadgar'. Below are two comparative lists of terms and ideas about the ideal madadgar (facilitator) role compared with the undesirable haakim (Ruler or Boss) - like style and attitudes. Be a Madadgar not a Haakim.

<b>MADADGAR(Helper or Facilitator)</b>	<b>HAAKIM (Ruler or Boss)</b>
an expediter and assistant	bureaucratic, authoritarian
a humble helper & consultant	a bossy dictator, autocrat
Dresses simply like a community member and walks or rides local transport or a bicycle or motorcycle; walks, talks and respects farmers	tries to look superior (wears urban dress, is driven in a flashy jeep, shows off his mobile cell phone etc.); disregards community members.
Maintains a low-key, soft approach to his work, focusing attention on the community members not on himself	Likes a flashy approaches; drives too boldly and noisily on to community members, drawing attention to him.
likes to learn from local experience	opinionated, has all the answers
respects local knowledge and skills	disrespects local knowledge and skills
Encourages participation, self-	does not appreciate or encourage

confidence and independence, helps community members do it themselves	participation, perpetuates beneficiary dependency
prefers working with community members, enjoys their company	does not really like working with community members, not living in villages
Understand civil society and appreciates its importance in local and national development.	Does not appreciate civil society, nor its significance for local or national development
Is people centered	Is technology/bureaucracy-centered

## 1.6 When Do You Use the Participatory Approach?

The answer is use participatory communities-first methods in every activity associated with social mobilization, group organization and planning, operation, and management.

You may wish to start with a community mapping exercise to become familiar with the place, the people and the issues. But give farmers the lead.

Walk, talk and draw a transect map, to focus attention on resource issues and their management. Let them make the maps and lead the discussion.

Collect information for community profiles. Learn the community.

Put the communities-first. All decisions about forming an association, how to run it, and how to manage the watercourse resources must be the decisions of the community members.

Encourage and enable them take action to address local issues, solve their problems and manage their resources.

Our goal is formation of community based associations that are community-lead and self-sufficient.

As a facilitator, guide and catalyst, you encourage innovation. The more that rural development is conducted by, with and for communities, the more sustainable it becomes.

Development by intervention is directed by the outsiders, and for outsiders. Communities have little say in the matter. This old-style development promotes dependence on outsiders and outsider solutions. Perpetuating dependent beneficiaries should not be the goal.

Participation encourages innovation.

Innovation promotes positive development. In innovative development, progressive ideas and actions are based upon local experience, local leadership and local management on what works, locally! Innovative development reduces dependency. It empowers.

Ultimately, mobilization will be successful and development sustainable when the farmers say in a positive voice, with conviction:



"This is our association - we will run it!"

"This is our watercourse - we will manage it!"

"These are our resources - we must look after them!"

## **1.7 Participatory Rural Appraisal (Pra) as a Basic Tool for Participatory Management and Development**

### **1.7.1 What is PRA?**

Over the past ten years, since 1990; rapid appraisal techniques have gained widespread recognition in participatory management and development research and implementation of various projects. The reason for emphasis on rapidity is that commonly used survey methods are not only very costly, but also take too long time for data collection and analysis. The participation in data collection is more important because all the key responsibilities are given to outsiders in the conventional research, rather than community members.

PRA is an intensive but semi-structured learning experience carried out in a community by a multi-disciplinary team working with the community. It is an alternative to the traditional research methods, which focuses upon questionnaire-based surveys and statistical analysis.

Much of what is new in PRA, involves the approach of the professionals involved. We should encourage the participation of the community members, believing that the community knows the purpose of the study and will reveal if we are prepared to listen. We respect the community members; show interest in what they say, know, show and do – and do not visit them with the intention of confirming our own biases. We are patient, we do not rush or interrupt the community members, we listen in order to learn. We do not lecture, but we provide information that is requested if we have it. We are humble when with the farmers – respecting their understanding of their own situation. We facilitate the community members to express, share and analyze their own knowledge. We are assertive with those who have sent us to learn – making clear what we have learned and facilitating positive and constructive change.

PRA began and continued to be acknowledged, as a better way for outsiders to learn. In answering the question, 'Whose knowledge counts?' it seeks to enable outsiders to learn from rural people and about rural environment and conditions, and to do this in a cost-effective and timely manner.

### **1.7.2 PRA as an Approach for Shared Learning**

"An approach (and family of methodologies and techniques) for shared learning between local people and outsiders, to enable development practitioners, government officials and local people to plan together, appropriate interventions for launching and completion of various development projects."

**Participatory Rural Appraisal - a misnomer:**

<b>Participatory</b>	more or less
<b>Rural</b>	but also urban uses
<b>Appraisal</b>	but also in identification, Implementation, evaluation, And ESW (Economic and Sector Work)

The term-PRA, itself is misleading since more and more, PRA is being used not only in rural settings (a recent World Bank study of urban violence in Jamaica used a range of PRA techniques), and not only for project appraisal, but throughout the project cycle, as well as for Economic and Sector Work (ESW).

**1.7.3 PRA, PLA, and RRA.**

Indeed, the term PRA, is one of many labels for similar participatory assessment approaches, the methodologies of which overlap considerably. It is probably more useful to consider the key principles behind PRA, and its "trademark techniques" rather than the name, per se, when assessing its appropriateness to particular situation.

The term PRA, also refer to some other research methods and techniques, such as:

- ◊ Participatory Research Approaches (PRA).
- ◊ Participatory Rapid Appraised (PRA).
- ◊ Participatory Reflection Action (PRA).

There are some other research methods, where participatory approaches are commonly used for conducting social and development research, or to conduct field work for data collection. For example:

- PLA - Participatory Learning Approaches.
- PLA - Participatory Learning and Action.
- RRA - Rapid Rural Assessment.

**1.7.4 PRA: Key Principles****PRA: Key Principles****Participation:**

local people partners in data collection and analysis

**Flexibility:**

not a standardized methodology, depends on time, purpose, resources, and skills

**Teamwork:**

outsiders and insiders men and women, mix of disciplines

**Optimal Ignorance:**

cost and time efficient, ample time for analysis and planning

**Systematic:**

for validity and reliability, partly stratified sampling, triangulation

## 8 Application of The PRA Tools in the Development Projects

### Note for Tutors

This section of the unit is based on the application of the PRA tools and techniques for conducting fieldwork and implementation of the development projects. Teaching and learning of the tools/techniques should be done through simulations; practical demonstrations and the field training to apply the PRA TECHNIQUES in the natural and real life situation. To facilitate the students some of the commonly used techniques are discussed here while minor and less used tools should be verbally described and discussed by the tutors during tutorial sessions or practically demonstrated during the fieldwork.

### 8.2 Grouping of the Key Techniques of the PRA

#### Interviews/Discussions:

Individuals  
Households,  
Focus groups,  
Community meetings

#### Mapping:

Community maps  
Personal maps  
Institutional maps

#### Ranking:

Problem ranking  
Preference ranking  
Wealth ranking

#### Trend Analysis:

Historical diagramming  
Seasonal calendars

### 8.3 "Basket of Techniques"

It offers a "basket of techniques", from which the most appropriate for the project /ESW context can be selected. The central part of any PRA is semi-structured interviewing-that is, interviewing based not on a questionnaire, but on a checklist of issues, which the PRA team adapts according to the interview situation. The interviewers therefore more like conversationalists, guide these interviews informally. While sensitive topics are better addressed in

interviews with individuals, other topics of more general concern are amenable to focus group discussions and community meetings.

During these interviews and discussions, several diagrammatic techniques are often used to stimulate debate and record the results. Many of these visuals are drawn, not on paper, but on the ground with sticks, stones, seeds and other local materials, and then later on transferred to paper for a permanent record.

Mapping techniques, very useful at the start of a PRA activity, involve community members depicting the physical and /or social characteristics of their community and the areas of most importance to them, or key informants mapping the extent to which local organizations interact with each other. Ranking exercises, done either by individuals or groups, reveal the priority problems and preferences of the population, or, in wealth ranking, the local definition and indicators of poverty and the stratification of the community by relative wealth.

Other diagrams address the historical and seasonal trends and daily routines of local livelihoods.

#### **1.8.4 Commonly Used PRA Tools**

Some of the commonly used PRA tools for analyses are being elaborated on the following pages.

##### **I. Observation**

Observe everything and anything about the life of the people and about the environment and use this data to confirm or dis-confirm hypotheses you have about the community.

##### **ii. Semi-Structured Interviews (SSI):**

Ask informal, open-ended questions, so that data is generated and more questions arise out of it. An important aspect to keep in mind is how to select people to approach.

##### **DO'S**

- Ask after health
- Introduction
- Purpose of visit
- Check time suitability
- Speak with respect
- Cultural feeling
- Speak in local language
- Stay sensitive to people's environment
- Don't interrupt
- Use social maps

**Find out about:** Division of resources; participation; Health facilities; Local population; information of local NGO; General information; Ranking

problems; Find out who can act, local potential; political situation and any other information related to the project activities.

### i. Mapping

Using open spaces as when in the village, maps can be drawn on the ground with the help of stones, strings, etc. Historical landmarks and how they became so, is one way of gaining information.

### ii. Transect Walk

As we walk through the village, we mark down anything we see on the way, and ask questions about what we see. Who did we meet, what kind of houses did we see, and water routes, etc. This is later on plotted on a paper and becomes a transect map.

### iii. Venn (Chapati) Diagram/ Institutional Diagram

Any agencies present in the village like village council, schools, government offices, etc., that serve the people. Draw chapatis (circles) for those that are important, the size corresponding to the importance of the agency. The central chapati (circle) represents the village; the length of lines leading from its center point indicate the effectiveness of service delivery, that is accessibility of the villagers to those resources offered by the agencies. The chapatis (circles) of different size indicate importance of these organizations and agencies to the village.

### iv. Pie Diagram or Pie Chart

This is basically a circle with sections, which indicate proportion, e.g., household expenses; how much is spent on medicines, food, etc., to determine where savings can be made. This can also be used to determine household income. It may, however, be wiser to start with expenditures, first. People then are less hesitant to talk about their incomes. Although the information may not be statistically correct, it does give the field worker and the community members an idea of income and expenditure.

### v. Problem-Solutions Matrix

Several columns representing problems and solutions, which can be done with individuals and groups and gives a cross-analysis of varying perspectives of existing groups in the community. Since this chart also indicates what efforts the people have already taken to improve their situation or solve their problems, it is a good tool to use when planning new action. The suggestions of the community are also represented on the matrix and so act as a guide to the local *tanzeem* or planning committee. This tool is useful for cross-checking information gathered through other techniques.

### vi. Ranking

(Means "darjiband" - prioritization of the issues or classification), in a community according to importance, e.g. water, electricity. It can also be done in *pan-wasi* ranking to prioritize between two or more issues. The

community members themselves prioritize the issues by discussing among themselves the importance of each in relation to the next. The problems-solutions matrix can follow this exercise.

#### **ix. Seasonal Calendar**

It can be used to determine how time is used, what crops are grown, rainfall, income levels, occupations of women, etc., from season to season-e.g. in the case where a seasonal calendar was given, where daily routine of an old woman and young girl was compared in terms of activities and time spent in carrying out each task in the course of one day.

#### **x. Mobility Chart or Mobility Mapping**

Mobility patterns of a persons, for marriage attendance, school, job, where people travel and how far, gives us and idea of movements of people- e.g., visits out of village frequently to a doctor, could indicate the lack of a doctor within a the village. Several movement lines in certain areas could indicate the importance of the person or place to the community.

#### **xi. SOME MORE TECHNIQUES**

Because PRA makes use of a wide range of techniques so, besides, the above-mentioned tools, in order to familiarize the participants with some other techniques, a list is given below:

- Secondary data review
- Direct observation
- Observation indicator checklists
- Focus group discussions
- Preference ranking a scoring
- Pair wise ranking
- Direct matrix ranking
- Ranking by voting
- Wealth ranking
- Analysis group discussion
- Innovation assessment
- Construction of diagrams
- Modeling
- Participatory mapping
- Historical and future (visioning) mapping
- Social mapping
- Historical seasonal calendar
- Time trends
- Historical profile
- Livelihood analysis
- Flow/casual diagram

- Systems diagram
- Histogram
- Participatory observation– learning by doing
- Oral histories
- Participatory genealogy
- Workshops
- Group walks,
- Stories
- Case studies and portraits
- Proverbs
- Indigenous categories and terms, taxonomies, Eton-classifications
- Rapid market surveys

**CAUTION**

*No PRA will use all of these techniques, we select the most appropriate and useful set of techniques each time a PRA is done and should experiment with, invert, and adapt methods as necessary*

### **1.9 Constraints and Barriers of Participatory Management and Development**

The participatory development workers and management experts have normally experienced following constraints and barriers, in the participatory management and development work:

1. The first constraint involves goal and the objectives of the organization or project;
2. A second constraint centers around process versus product;
3. Community related constraints or citizen involvement;
4. Language, semantics, titles all represent constraints;
5. The holistic approach versus traditional approach;
6. Allocation of resources,
7. Resources and Processes;
8. Constraints related to the project scope;
9. Profit motives.

Some other barriers, which slow down or prohibit the participatory management and development, include:

1. Psychological barriers;
2. Sociological barriers;
3. Economic or financial barriers;
4. Technical barrier

## **Unit 1: Self-Answering Questions**

### **Introduction to the Participatory Management and Development**

Q.1 Define and discuss the following terms and concepts:

- Participatory Management
- Social Organization
- Community Mobilization
- Development and Social Change
- Intervention versus Non-Intervention
- Community Development
- Participatory Development
- Participation
- Stakeholders

Q.2 Discuss the philosophy of the participatory approach?

Q.3 Do you agree with the concept that participation is a process of consultation?

Q.4 How participation can be promoted and community may be involved in the participatory management and development?

Q.5 Describe the barriers and constraints hampering community participation and mobilization process? What are ways to overcome such barriers?

Q.6 How visual tools and materials help participatory modes of interaction and empowerment?

Q.7 Describe the approaches and methods for participatory management and development? When do you use the participatory approach?

Q.8 Discuss the PRA as a basic tool for participatory management and development?

Q.9 Describe commonly used PRA tools? How these tools are applied in the participatory development projects?

Q.10 Identify the constraints and barriers of participatory management and development? Can you suggest some measures to remove such barriers?



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**UNIT 2****HISTORICAL PERSPECTIVES****Unit introduction**

The main focus of this unit will be on explanation of the historical perspectives of the participatory management of development, including its background and evolution and its introduction of this approach in South Asia, along with the history and evolution.

The main contents covered include the following:

- historical perspective of the participatory management of development,
- background and evolution of participatory development,
- history of participatory approach in South Asia.

In this unit you will be introduced to:

- the historical perspective of the participatory management of development,
- the background and evolution of participatory development,
- the history of participatory approach in South Asia.

**Unit Objectives**

After studying this unit you will have improved your ability to:

1. understand and discuss the historical perspective of the participatory management of development,
2. describe the background and evolution of participatory development,
3. recall the history of participatory approach in South Asia.

## 2.1 Historical Perspective of the Participatory Management and Development

### 2.1.1 Visioning a 'New Paradigm'

Robert Chambers, who is considered as one of the pioneers of the participatory approaches of management and development, says, in his book, *Whose Reality Counts? Putting the first last* (1997):

"Participatory approaches and practices enable lowers to express and analyze their multiple realities. Many poor people's realities are local, complex, diverse, dynamic and unpredictable. For farming, forest-based and pastoral livelihoods they often seek security by complicating and diversifying activities, and multiplying linkages and supports to exploit varied and varying local resources and opportunities.

The values and preferences of poor local people typically contrast with those of the better off, outsiders and professionals. They need and want to be able to take a long view. They can, locally, manage greater complexity. Their values, preferences and criteria are typically numerous, diverse and dynamic, and often differ from those supposed for them by professionals. Local people are themselves diverse, with sharp contrasts of preferences and priorities, by age, gender, social and ethnic group, and wealth.

Reversals of normal dominance to enhance the diversity and complexity, to empower local people, the poor and other lowers, and to privilege their realities, expresses a new paradigm (as discussed in chapter 9 of his book) and requires changes in the behavior and attitudes of uppers" (as mentioned in chapter 10 of his book). P. 162

The above analysis of the human society and socio-economic development perspective based on the previously practiced development models, mainly structured upon the "top-down" approaches, outlines the reasons and factors leading toward the introduction and evolution of the participatory approaches in the management and development.

Referring to the impact and failure of the traditional models of management and development, Daphne Thuvesson (1995), writes, "As the existing system crumbles around us, new and exciting alternatives are sprouting up in the rubble". While, Thomas Kohn, wrote in 1962, "Probably the single most prevalent claim advanced by the proponents of a new paradigm (participatory approaches) is that they can solve the problems that have led the old one to crises".

How for these 'claims' have proved successful is under debate for quite some time, but the results of the application of the participatory approaches in management and development and existing realities, shows that the proponents of the 'new paradigm' were not totally wrong in their assumptions.

**Activity: Book Review**

Write a comprehensive review on the Robert Chamber's book *Whose Reality Counts? Putting the first last*, Intermediate Technology Publications, London, UK, 1997.

**2.1.2 Transition from the conventional to participatory approaches**

The 1980s and 1990s have seen a gradually growing criticism on development models and strategies, which were followed for the past three decades with only minor adjustments. The conventional models and strategies have seen development primarily as a series of technical transfers aimed at boosting production and generating wealth. In practice, conventional development projects usually target medium to large-scale progressive producers, supporting them with technology, credit and extension advice in the hope that improvements will gradually extend to more "backward" strata of rural society. In many cases, however, the channeling of development assistance to the better off has led to concentration of land and capital, marginalization of small farmers and alarming growth in the number of land-less laborers, which is simply widening the gap between rich and poor.

Over the past ten years, since 1990, rapid appraisal techniques have gained widespread recognition in development research and in planning and implementation of the development projects. The reason for emphasis on rapidity is that commonly used survey methods and other data collection and implementation techniques applied in the development sector are not only very costly, but also take too long time for data collection and analysis. Moreover, the participation in data collection and development process is more important because all the key responsibilities are given to outsiders in the conventional research and development project implementation processes, rather than community members and other relevant stakeholders.

The basic fault in the conventional approaches of development is that the rural poor and other marginalized groups of society are rarely consulted and involved in development planning and usually have no active role in the implementation and monitoring and evaluation of the development activities. This is because the vast majority of the poor have no organizational structure to represent their interests and to protect their rights. Isolated, illiterate or under-educated, and often dependent on rural elite, they lack the means to win greater access to resources and markets, and to prevent the imposition of unworkable programs or technologies.

In most of the countries of South Asia, including Pakistan, particularly, in Government sector, the rules of business of development do not focus on the poorest, for running various rural development and extension programs.

## 2.2 Background and Evolution of Participatory Development

Viewing the background and evolution of the participatory research, management and development approaches, in the academic perspective, the following significant phases can be identified, which helped in the formulation and development of participatory approaches:

- Contribution of the scholars and researchers who were involved in ethnographic research;
- Development and application of rapid assessment procedures;
- Adoption of participatory rapid/rural appraisal techniques;
- Introduction and use of rapid rural appraisal tools and methods;
- A vigorous development and application of the farming system research; and
- Finally, on the basis of the conducted research, recognition of limitations of "green revolution" and transfer of technology

### 2.2.1 Evolution of PRA

Participatory Rural Appraisal (PRA), evolved from a series of qualitative, multidisciplinary approaches to learning about local-level conditions, environment and local peoples' perspectives, including Rapid Rural Appraisal, and Agro-eco-system Analysis. The pioneers of PRA development have been NGOs, and agricultural research organizations, and in recent years the World Bank and other donors have begun to adopt PRA-type methods in their work.

All the phases of the evolution of the PRA have been reflected in the following diagram Number 1:

**Activity: Write a note**

View the Diagram Number 1, given below and write a note on the Background and Evolution of the Participatory Research, Management and Development Approaches, leading towards the development of the PRA.

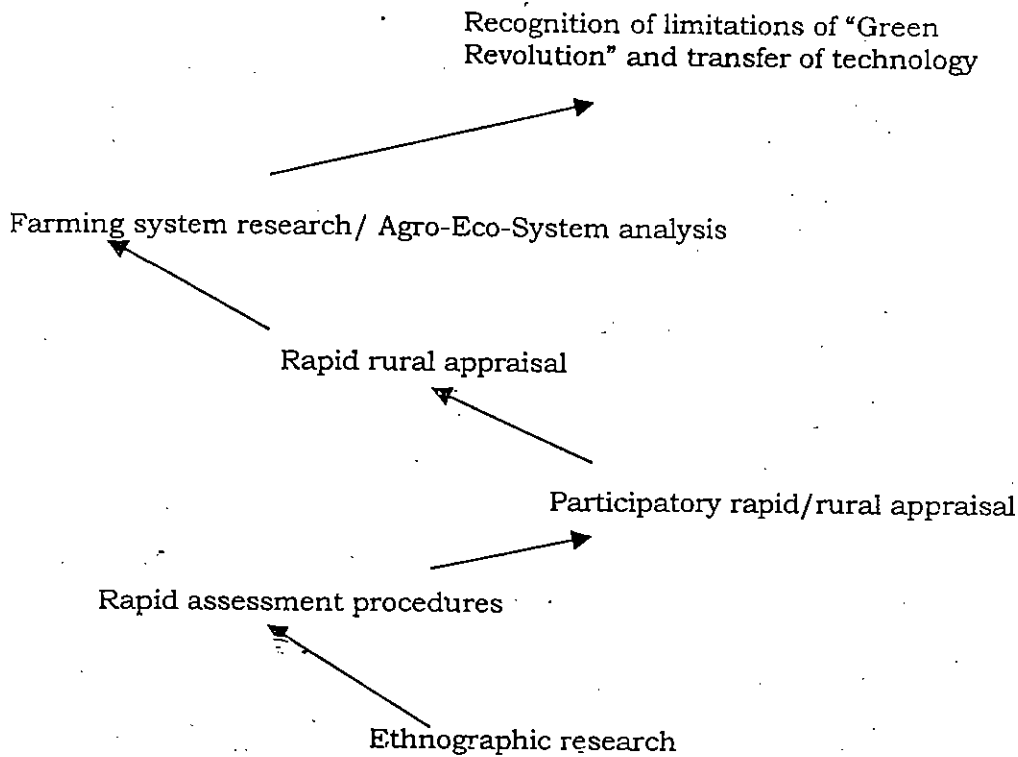


Diagram Number 1

## Background and Evolution of the Participatory Research, Management and Development Approaches

### 2.2.2 Usage of PRA and its "trademark techniques"

Indeed, the term PRA, is one of many labels for similar participatory assessment approaches, the methodologies of which overlap considerably. It is probably more useful to consider the key principles behind PRA, and its "trademark techniques" rather than the name, per se, when assessing its appropriateness to particular situation.

The term PRA, also refer to some other research methods and techniques, such as:

- ◊ Participatory Research Approaches (PRA).
- ◊ Participatory Rapid Appraised (PRA).
- ◊ Participatory Reflection Action (PRA).

There are some other methods of research, where participatory approaches are commonly used for conducting social and development research, or to conduct fieldwork for data collection. For example:

- PLA - Participatory Learning Approaches.
- PLA - Participatory Learning and Action.
- RRA - Rapid Rural Assessment.

On the basis of above discussion, it may be concluded that PRA is "An approach (and family of methodologies and techniques) for shared learning between local people and outsiders, to enable development practitioners, government officials and local people to plan together, appropriate interventions for launching and completion of various development projects."

It is also worthy to note that the term-PRA, itself is misleading, since more and more, PRA is being used not only in rural settings (a recent World Bank study of urban violence in Jamaica used a range of PRA techniques), and not only for project appraisal, but throughout the project cycle, as well as for Economic and Sector Work (ESW). It shows that Participatory Rural Appraisal is a misnomer because it is:

<b>Participatory</b>	more or less
<b>Rural</b>	but also being used in urban settings
<b>Appraisal</b>	but also applied in identification, implementation, evaluation, and ESW (Economic and Sector Work)

### 2.2.3 Inculcation of Participatory Techniques in the Development Projects

Participatory Rural Appraisal (PRA), is an intensive but semi-structured learning experience carried out in a community by a multi-disciplinary team working with the community. It is an alternative to the traditional research and development methods, which focus upon questionnaire-based surveys and statistical analysis.

Much of what is new in PRA, involves the approach of the professionals involved. They should encourage the participation of the community members, believing that the community knows the purpose of the study and development activities, and will reveal that if the professionals are prepared to listen to them. The professionals should respect the community members; show interest in what they say, know, show and do – and do not visit them with the intention of confirming their own biases. If they are patient, and do not rush or interrupt the community members, and listen to them in order to learn. The professionals should not lecture, but only provide information that is requested if they have it. They should be humble when with the farmers – respecting their understanding of their own situation. They should facilitate the community members to express, share and analyze their own knowledge. They must be assertive with those who have sent them to learn – making clear what they have learned and facilitating positive and constructive change.

During mid – 1980s the term participatory was associated with RRA – hence participatory rural appraisal. During the 1980s, the principles and rigor of PRA gained increasing acceptance. Initially it was designed to be cost-effective, especially for gaining timely information, but still with some sense that it might only be a second-best. Later its approaches and methods, when properly conducted, were shown to elicit a range and quality of information and insights inaccessible through more traditional methods. Except when rushed and not self critical, PRA came out better by criteria of cost-



effectiveness, validity and reliability, when it was compared with more conventional methods of research and development.

PRA began and continued to be acknowledged, as a better way for outsiders to learn. In answering the question, 'Whose knowledge counts?' it seeks to enable outsiders to learn from rural people and about rural environment and conditions, and to do this in a cost-effective and timely manner.

**Activity: Discussion**

Arrange a discussion among student groups, to discuss the characteristics of the participatory approaches, especially PRA.

## 2.3 History of Participatory Management and Development Approach in South Asia. (Pakistan, India and Bangladesh)

### 2.3.1 Rural and Participatory Development Perspectives in South Asian countries

Rural development has been used mainly as a catchphrase and regarded erroneously as a panacea for rural poverty in Pakistan and many other countries of South Asia and other Third World regions. Many public sector programs in the past and even now have claimed to specifically address the problems of rural people and their socio-economic development. The experiences and results of the most of these programs indicate that the benefits have been distributed disproportionately between various rural groups even when the programs have worked well. Also, these programs have been 'prescriptive' and not 'participatory'. Most of these programs were implemented through public sector departments and organizations adopting top-down approaches of management and development.

The prospective beneficiaries, particularly the rural poor, including small farmers and the landless, have rarely participated in the planning, management and implementation of various development projects and programs, mainly run by the respective Governments in Pakistan and other South Asian states. One of the major reasons for adopting the perspective and top-down approaches resides in the structure of social and economic relations in rural areas, where a minority of landlords (*zamindar waderas, sardars* and *khans*) exercises most of the power at the local level and influences the machinery of the state. The highly differentiated agrarian structure in many areas in which the patron-client relations between the *zamindar* and *hari* (or *muzara*) are visibly asymmetrical acts as a barrier to the direct participation of a vast majority of the intended beneficiaries in the decision-making processes affecting their welfare and socio-economic development.

One aspect of rural development is political development: in introduction and stability of institutions of participatory democracy. Sometimes, it is sought as an end and sometimes as a means to economic growth and social change. In most of the cases, democratic institutions do not already exist

nor do they emerge spontaneously from traditional political cultures. They need to be deliberately created through conscious and planned interventions. A significant part of this process is the socialization of rural communities in democratic political behavior. In this sense, political development requires the full time and devoted patronage of sympathetic institution builders.

### **2.3.2 Introduction of the Self -Government System and other measures for Rural Development during the British Period**

The British ruled the sub-continent for about two hundred years as their colony. This era can be divided into two periods:

- East India Company rule (1757 - 1857; and
- British Crown rule (1857 - 1947).

The East India Company ruled the British India exclusively for their military and commercial gains. It was a period of ruthless exploitation and oppression. Two main features of this period are given below:

- a) No rural development efforts were made in this period;
- b) The Permanent Settlement (Zamindari System) was introduced in 1793 for facilitating the collection of land revenue. But it depressed the peasants and created a class of landlords. It also affected agricultural production.

A few steps were taken during the later phase of the British rule, from 1880 to 1940, to alleviate some problems of the rural people. But the British, primarily, ruled this continent with two aims in view:

- a) Collection of revenues; and
- b) Maintenance and law and order.

Four main features of the British colonial administration and their results were:

<u>Features</u>	<u>Results</u>
a) Elitism:	Disparity, privileged few and vast non-privileged.
b) Paternalism:	Childish dependency; Cult of prayerful petitions.
c) Neglect:	Meager allocations for development of rural areas.
d) Centralism:	Non-participation and Apathy.

The status of the peasants, workers and artisans was weakened due to the oppression and exploitation of the Zamindars (landlords); Merchants and Moneylenders. Besides that, famines prevailed in the land, which was surplus in food before the British rule.

The British Government, during its rule in the sub-continent, introduced many political and administrative reforms, including establishment of Agriculture Department (in 1880); a system for rural self-government (in 1885); and Cooperative Societies for credit (in 1904); and setting up of Rural Reconstruction Department (in 1938-1944). But these organizations

remained largely ineffective and proved to be inadequate for various factors, mainly lack of funds, limited jurisdiction and short term goals, etc.

Lord Ripon introduced a modern framework for rural self-government, with the stated objective of political education only, without focussing on administrative efficiency. However, the implementation of the reforms was entrusted to the provincial governments, which were composed almost exclusively of civil servants.

The circumscribed model of rural self-government was operating throughout Indian sub-continent. Looking at the areas included in present-day Pakistan, practically in all Districts of Punjab it had the strongest legal framework (starting from 1883). Some headway had been made in the NWFP and Bahawalpur by 1950. The significant exceptions were the province of Balochistan, all princely states, and the tribal areas. Punjab possessed by far the strongest traditions of rural local government. Not only was this province the first to follow the lead of Lord Ripon's resolution in establishing rural self-governing institutions at the District level, it was also the only province that had established that grassroots village government units known as *panchayats*, a form of village government that the British had resurrected from India's distant past. However, even in Punjab, over three quarters of the villages legally eligible for the *panchayat* system was without that system.

**Activity: Short Note**

In the light of above discussion, write a short note on the conditions of rural areas of Indian sub-continent and highlight the measures done by the British Government for rural development.

### **2.3.3 The Rural Development initiatives taken during 1947 - 1971 period**

In Pakistan, like many other countries of South Asia, the role of the socio-economic development professionals, has fallen on the bureaucrats and public servants, who are, neither sympathetic nor capable, nay more to act as institution builders. The Pakistani experiment with this model of political development has revealed inherent contradictions and has shown how the rational tendencies of bureaucracy operate to frustrate a major purpose it is supposed to serve, i.e. the development of participatory democracy. Looking at the situation in other countries of South Asian region, almost similar conditions and scenarios emerge during the last few decades, especially to the 1970s and 1980s.

After the creation of Pakistan, universal adult franchise was introduced in place of the extremely restricted colonial franchise. The law of *panchayats* was extended to the whole of Pakistan in 1956. Plans were prepared to make local government laws uniform throughout Pakistan, and an election commission was appointed in order to prepare the ground for holding elections to local bodies. However, subsequent government action was in opposite direction; 24 out of 34 district Councils stood superseded by 1957.

A further complication for the development of rural self-government was the experiment of rural 'community development' called the Village Agricultural

and Industrial Development (Village - AID) Program. The government created a network of new institutions for rural development under Village-AID in 1953, while at the same time it withdrew many of the functions that the local government was performing. The *ad hoc* councils created under Village-AID, however, failed to mobilize villagers because they lacked roots in the people, and program was discarded in 1961.

V-Aid was the first the first program of the comprehensive village development launched in Pakistan and Bangladesh. This was also the first program, which laid considerable emphasis on people's participation. But the expected participation could not be achieved due to the lack of proper mechanism. This program had a short life. It also heavily suffered from departmental rivalries and lack of departmental coordination. However, it left rich experiences for the formulation of future plans and programs.

In 1959, soon after the imposition of martial Law in Pakistan, the military government introduced the experiment of 'basic Democracies' as a basis on which local government was to build a positive role in national development. It was also a system of indirect rule.

The experiment of Basic Democracies repeated the folly of placing local governments under the tight control of bureaucrats. Following in the footsteps of their imperial predecessors, the Pakistani bureaucrats again restricted the independence of local councils by remaining as presiding officers, chief executives and the controlling authorities. The experiment of 'guided' democracy, or indirect rule, which ended in 1970, left the local self-government system greatly weakened because it was used to maintain centralized authority and to distribute largesse according to the contributions made to the election of representatives for the Provincial and National Assemblies.

During this period, the respective governments of the South Asian region, including India, Pakistan and Bangladesh (former East Pakistan), introduced a number of rural development initiatives. These efforts created a new environment for rural uplift through creation of institutional infrastructure and by launching various projects for multi-sectoral development in the region. During this phase the public sector projects also tried to involve the people in the development activities, but the results were not satisfactory to a large extent.

In Pakistan, after V-AID program and introduction of the system of the Basic Democracies, Rural Works Program (1963 - 72), was launched. This program had origins in a pilot project for community development undertaken by Dr. Akhtar Hameed Khan as Director of the Pakistan Academy for Rural Development in Comilla, Presently located in Bangladesh.

The basic purpose of the pilot project in Comilla was to assess the capability of the village people, Basic Democracies, and local government officials to undertake sizable development programs in their respective areas and to evolve a sustainable working procedure for the implementation and maintenance of the projects.

Some of the other significant steps taken during this period in Pakistan, included:

- Union Multipurpose Cooperatives were introduced in 1950 in place of village-based credit cooperatives;
- Zamindari system was abolished through the enactment of the Estate Acquisition Act 1951;
- V-AID program, which was introduced in 1953, was discarded in 1961, before it could be introduced all over the country;
- Nation-building departments were strengthened and field workers were posted at thana and union council level;
- Several autonomous bodies were set-up with the aim of supply of agricultural inputs, irrigation and flood control, etc.

The Comilla experiment created a new era in the history of Bangladesh and Pakistan, as Akhter Hameed Khan, in Karachi also replicated this model in the later period, as Orangi Pilot Project (OPP). Besides that:

- A number of other rural development projects were also launched on the basis of this model throughout country, at various times;
- The concept of Integrated Rural Development came into being through the Comilla Experiment;
- Institutionalization of the whole process of rural development was the key word of the Comilla Approach;
- The Comilla Experiment has produced a set of principles and procedures on the basis of which new programs have been and can be developed for rural development.

In India, Community Development (CD) Program was launched, in 1952. It was introduced, first as an experimental project, and was made a national program in 1955 and extended to cover all parts of rural India in a phased manner.

It was basically "government program with people's participation". Community Development (CD) was the first and the biggest program of comprehensive village development in India, which aimed at multi-sectoral development, through a single agency. By the end of 1966, the entire rural India, (comprising 5.5 lac villages), was brought under this program.

This Program made a deep impact on rural development in India. Under this program:

- 'Panchayat Raj' was introduced. Elected panchayat bodies were set up at the Block (thana) and Lower (village) levels, which have widened the scope of people's participation in village development;
- Democratic decentralization has been effected to a certain extent following the introduction of the CD program;

- Intensive area development programs were introduced, which have helped increasing food production;
- Several anti-poverty programs have been launched in different parts of India for socio-economic development of the rural poor.

**Activity: List out**

List out various rural development programs launched in India, Pakistan and Bangladesh, during 1947–1971.

**2.3.4 Participatory Management and Development initiatives taken since 1971**

In Pakistan, some of the major programs introduced during this period, include the following:

- The Integrated Rural Development Program (IRDP), 1972 – 78, which was based on the comprehensive and systematic (holistic) view of rural development. Two of its programs were targeted at broadening its popular support in the rural areas: land reform, and a rural development program, including the IRDP, People's Works Program (PWP), and Agro-villas.
- Rural Development Programs introduced during 1978 –88, included: land reforms; reinforcement of five-year development plans. Rehabilitation of local self-governments in 1979; introduction of Zakat and Usher – religious levies on personal wealth of Muslims;
- Social Action Programs (SAP I & II), which were channeled through District Development Committees.

In Pakistan, during the 1970s, the entire local self-government system remained suspended since no elections were held. Local self-government was revived during the 1980's mainly to give legitimacy to an unallocated (military – controlled) government at the Federal and Provincial levels. There have been no elections since 1991, and public officials have replaced almost all of the elected local governments. It is interesting that, while there have been four general elections for the National and Provincial Assemblies since 1988, the local self-government system has been allowed to languish without elections. Public servants are running the show in both rural and urban areas, unhindered by elected local representatives.

This brief historical account of local government in Pakistan shows that successive governments have felt obliged to establish some kind of local government institutions to mobilize rural communities. All have sought to achieve this goal under the leadership of professionals' public servants, but, significantly, none of these attempts has succeeded in producing viable local governments. Above all, rural communities, particularly the vast majority of marginalized and poor people, have not been empowered to make basic decisions at the local (village level) without dictation (or prescription) from their traditional leaders and government officials.

The checkered record of rural self-government in Pakistan has highlighted several inadequacies with regard to direct participation by rural people at the village level in the planning and implementation of rural development programs and projects:

- The village (*mohalla*) is not the basic unit for the Union Council. The constituency of a Union Councilor does not correspond to the village boundaries: one ward may contain four villages or one village may have four members.
- Since an electoral unit comprises a face-to-face group, local elections have led to strong enmities and the division of villages into contending groups. It is almost impossible to have any sort of development cooperation among the village people.
- A local councilor, because of several contestants for the office, usually represents less than half of his/her ward and cannot effectively mobilize the constituency for development purposes.
- A grassroots (village level) organization, which identifies the real needs and problems of the rural population and can activate the people to participate directly in development activities, has not been encouraged or supported to develop because of the village rivalries and excessive interference by public officials.

During the same period of 1970s, the phenomenon of participatory development through NGOs and donor driven programs started and spread rapidly through out Pakistan. The first two major programs of this nature were Agha Khan Rural Support Program (AKRSP), which was started by Shoaib Sultan Khan, in the Northern Areas of Pakistan, and Orangi Pilot Project (OPP), which was launched by Akhter Hameed Khan, in Orangi Town, Karachi. Both these programs were launched in the early 1980s. Both the programs were taken as trendsetters for participatory development, due to the remarkable results and impact.

Later on, especially in 1990s, in Pakistan, a series of rural support programs was started, following the AKRSP model, at national, provincial and local levels. All of these programs were of the participatory nature and based on the community organization and mobilization models.

Besides these rural supports programs, in Pakistan, many other projects of the social sectors, also adopted participatory development and management approaches and involved the communities at various levels, for implementing development projects. These projects, leaving aside a few, have proved more effective, productive and result oriented, as compared to the rural development projects of the past, which were implemented through top-down approaches.

In Bangladesh, during the post 1971 periods, following significant developments were recorded in the community based rural development projects and participatory management and development sectors:

- All the national programs of rural development introduced in the 1960s were continued;

- Elected bodies of Union Parishad were suspended for over 3 year, which affected the local councils and their role in rural development;
- The First Five year Plan (1973 - 78), Two year Plan (1978 -80 and Second Five year Plan (1980 - 85) were developed and the practice continued in the following years. But the allocations for the rural areas were meager;
- Some scattered efforts to develop the marginalized groups were also done;
- Much emphasis was laid on "self-help", "self-reliance", and "People's Participation".
- A number of programs, like Swanirvor; Canal Digging Through Voluntry Mass Participation; Youth Complex; Mass Literacy; Jatiya Mahila Sangstha and Gram Sarker were introduced during these years and were discarded after some period.
- Grameen Bank; BSS; MSS; were also introduced for alleviation of rural poverty;
- A large number of NGOs started work in the field of rural development during this period;
- The scheme of Administrative Re-organization was introduced in 1982 with a view to developing the thana as the seat of decentralized and coordinated rural administration. Upazilla Parishad was entrusted with planning and implementation of local level plans for village development.
- Bangladesh Rural Advancement Committee (BRAC) was established for the grass-root participatory development;
- A vigorous family planning program was launched to control the population growth and to enhance the community development process..

All these initiatives, especially the Grameen Bank micro- credit programs and effective intervention made by the BRAC, produced positive and fruitful results. These programs promoted the participatory development and management process and helped to reduce the rural poverty through community mobilization, social organization, micro credit, skill enhancement and enterprise development programs in the rural and semi - urban areas of the country.

In India the Community Development Program continued functioning through out the country in the post 1971 period, with the same objectives, spreading its scope and area, for helping rural poor and reducing their poverty through multi-sect oral, participatory and community based development initiatives.



During this period, simultaneously, in India, a large number of NGOs have started their activities, to promote the participatory development process and for addressing the poverty issues, especially in the rural and semi-urban areas of the country. The interventions, made by these NGOs, are not only supplementing the government intervention in the socio-economic sectors, but also contributing remarkably in the poverty reduction and enhancement of the living standards of the poor and marginalized groups and communities.

**Activity: List out**

List out various rural development programs launched in India, Pakistan and Bangladesh, during 1947- 1971.

**2.3.5 Future of the participatory approaches of management and development in South Asia**

Looking at the trends of and the interventions in the rural and participatory management and development, in the South Asian countries, and analyzing, especially, the socio-economic development initiatives taken during the 1980s and 1990s, it may be realized that this trend would be further multiplied and serious replicated in all socio-economic projects and sectoral development initiatives during the 21<sup>st</sup> century. It is hoped that replication and multiplication of these experiences will not only facilitate the planning and implementation of the development projects at the grass root level, but also help in promotion of the quality of life through poverty reduction, skills and enterprise development, enhancing the income and access to the social services for the poor.

### Self Answering Questions

- Q.1 Describe the concept of the 'New Paradigm' in the light of the philosophy of Robert Chambers?
- Q.2 Discuss the phenomenon of transition from the conventional to participatory approaches?
- Q.3 Elaborate the background and evolution of participatory development?
- Q.4 How the PRA has been evolved?
- Q.5 Comment on the usage of PRA and its "trademark techniques"?
- Q.6 Do you agree with the notion that Participatory Rural Appraisal is a misnomer?
- Q.7 Describe the process of inculcation of Participatory Techniques in the Development Projects?
- Q.8 write a comprehensive note on Rural and Participatory Development Perspectives in South Asian countries like India, Pakistan and Bangladesh?
- Q.9 Comment on the Introduction of the Self -Government System and other measures for Rural Development during the British Period?
- Q.10 Highlight the Rural Development initiatives taken in South Asian countries during 1947 - 1971?
- Q.11 Discuss the Participatory Development initiatives taken since 1971 in South Asian countries?
- Q.12 comment on the future of the participatory approaches of management and development in South Asia?

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## **UNIT 3**

# **STATE POLICIES AND PROGRAMMES**

### **Unit Introduction**

The most striking feature of the environment from the institutional point of view is that it is common property. Community institutions are institutions for the management of common property. Yet most conventional thinking about resource management takes place at two levels – the individual household and the higher, usually governmental level. Correspondingly, current policy and projects focus on the individual and public sector management of environment, admitting private and state property but ignoring common property. One result of such an approach has been known for several decades as ‘the tragedy of the commons’ – the unsustainable use of common resources. The second result is that the strategy is inequitable, since the poorer segments of society depend on common property for substantial parts of their livelihood.

In this unit we will examine:

- Present policies and programmes of Pakistan
- Pakistan’s National Conservation Strategy
- Elements of National Conservation Strategy (objectives, operating principles and instruments)
- Implementation Arrangements
- Action Agenda and Implementation Strategy
- Co-operation of community organizations and NGOs
- Structure of community organizations and support systems.

### **Unit Objectives**

After going through the unit the students would be able to learn:

- Three broad approaches to development and natural resource management in Pakistan.
- Managerial and representative versus participatory community management
- The role of federal government, provincial governments, local bodies and NGOs
- Institutional arrangements and financial arrangements regarding community organizations.

### **3.1 Introduction**

Humanity's impact on the earth and its resources has increased at an unprecedented rate with every decade in the last two centuries and with every year in the most recent decades. Human activities are now affecting some of the most basic climatic and biological cycles of planet. Pakistan, with a per capita gross national product just one-ninth the world average, is neither a major global polluter nor a large consumer of resources.

It is commonly noted in Pakistan that traditional institutions for the management of community resources and common problems have disintegrated or become weak. There is a direct relationship between these two trends – that resources and infrastructure are being destroyed because the social organization to manage them no longer exists. While traditional institutions for resource management have become weak, new ones have not become effective. Many specialized agencies have been created by the Government and local government has been strengthened in the 1980s but little intervention has occurred that could qualify as institutional development at the village or neighbourhood levels. The contribution of the private sector to environmental management in Pakistan is regrettably small: a few consulting firms are active, mainly in the fields of engineering and town planning but local expertise is limited in pollution control.

The most striking feature of the environment from the institutional point of view is that it is common property. Community institutions are institutions for the management of common property. Yet most conventional thinking about resource management takes place at two levels – the individual household and the higher, usually governmental level. Correspondingly, current policy and projects focus on the individual and public sector management of environment, admitting private and state property but ignoring common property. One result of such an approach has been known for several decades as 'the tragedy of the commons' – the unsustainable use of common resources. The second result is that the strategy is inequitable, since the poorer segments of society depend on common property for substantial parts of their livelihood.

The government institutions for natural resource management are sectorally organized, in line with the general arrangements for administration and development between the Federation, provinces and local bodies. Co-ordination mechanisms for economic planning and project approval are well established, especially for large infrastructure projects. But generally speaking the ministries and attached departments have limited capacities for analysis of environmental impacts, many of which are cross sectoral and line agencies are not oriented towards joint facilitation of local development. Much more collaboration and coordinated extension is needed to promote long-term rational use of resources.

### **3.2 Present Policies and Programmes of Pakistan**

Pakistan has no overarching policy that has been primarily and specifically conceived in the interests of conserving and developing its natural resources sustainably. The Perspective Plan (1988-2003) and Five-Year Plans make scant explicit references to the environment and natural resources. Yet there

are complex and forceful linkages between economic policies, instruments and allocations and the conservation or degradation of the environment. In the absence of an explicit policy framework, economic and sectoral policies have worked at cross-purposes with respect to environmentally sustainable development and management.

Although specific environmental enactments are few and insufficient, Pakistan is fairly well endowed with 'incidental' environmental legislation – on land use, grazing control, forest conservation, parks and wildlife, fisheries, mineral development, water and air quality, noise, toxic substances, solid wastes, preservation of antiquities and special premises and public health and safety. As they were not enacted with a view towards environmental protection and resource conservation, these laws lack a proper definition of the environment, quantifiable standards and implementation tools, leading to sporadic and arbitrary enforcement. In many cases, operational regulations under the laws have not been prescribed, penalties are punitive in character and inflation-depreciated fines are not regularly revised, all of which encourages corruption. Administrative agencies and the judiciary lack awareness of environmental hazards and risks. Above all, there is a lack of respect for the law and a lack of political commitment to enact and enforce it.

### **3.3 Pakistan's National Conservation Strategy**

The Pakistan National Conservation Strategy (NCS) is a broad-based policy statement aimed at achieving environmentally sustainable economic and social development in Pakistan. The NCS was developed over a nine-year period (1983-1992) through the collaborative efforts of the IUCN and the Government of Pakistan. The NCS development process included extensive consultation with thousands of experts, interested individuals, communities, NGOs, and government agencies. The final product, according to several observers, is outstanding, in terms of both comprehensiveness and quality.

The NCS specifies the basic guidelines for an integrated effort aimed at protecting the environment and natural resources of the country. This broad framework provides a comprehensive point of reference for all agencies, departments, private sector companies, financial institutions and donor agencies for undertaking systematic efforts to bring about an effective change for sustainable development.

### **3.4 Elements of the National Conservation Strategy**

#### **Objectives, Operating Principles and Instruments**

To be successful, large and complex endeavors require explicit objectives. The National Conservation Strategy (NCS) has three objectives:

1. conservation of natural resources,
2. sustainable development and
3. improved efficiency in the use and management of resources.

Although these objectives are comprehensive, their full implications are not necessarily evident at the outset. Operating principles identify the methods

and approaches that will enable these objectives to be reached. The three main operating principles of the NCS are to:

- achieve greater public partnership in development and management,
- merge environment and economics in decision making, and
- focus on durable improvements in the quality of life.

Moral suasion and leadership, social sanction and economic, legal and regulatory instruments of change – all with their various strengths and limitations – will have to be applied to bring about a hierarchy of value, knowledge, institutional change and technical innovations. Two key value changes needed are restoration of the conservation ethic (i.e., 'Qanat') and a revival of the community spirit (i.e., 'Haqooq-ul-Ibaad).

### **3.5 Implementation Arrangements**

The National Conservation Strategy is a call for action addressed to senior and local governments, businesses, NGOs, local communities and individuals. But the sustainable development of Pakistan is a huge multi-generational endeavor. Where should we begin? And how should we proceed? It is necessary to set priorities and to begin implementation from undisputed resource management and conservation domains. Yet the priority actions must be those with significant wider economic and social ramifications that would not happen by themselves owing to market or institutional failure. Strategy implies combining hitherto disparate elements to achieve synergy and understanding what becomes practical as a result.

### **3.6 Action Agenda and Implementation Strategy**

The NCS seeks to transform attitudes and practices and to influence national consumption patterns, but it can only be one contributor to inculcating sustainable and socially productive behaviour. Development will profoundly change the nature of Pakistan in the coming decades. The NCS focuses on influencing investment choices, which are more flexible than consumption patterns. More particularly, it is designed to take leadership in investments relating to the maintenance of natural resources and to increase the efficiency with which critical non-renewable resources are used. This is literally investment in having a future, as opposed to investments for a future return, yet it can pay handsomely in economic terms.

### **3.7 Elements of the General Organizational Model for NCS Implementation**

#### **1. Federal and Provincial Leadership**

- ❖ Policy review to incorporate environmental objectives.
- ❖ Increased resource allocation for priority programmes.
- ❖ Conservation pricing of critical resources.



- ❖ Rational resource sharing between provinces, local governments and non-government organizations.
- ❖ Improving interagency collaboration.
- ❖ Enhancing departmental capacities.

## 2. Departmental Responsibilities

- ❖ Applied research and development.
- ❖ Extension, outreach and facilitation.
- ❖ Project implementation.
- ❖ Project operation/maintenance.

## 3. District Co-ordination

- ❖ Project selection from sustainable development menus.
- ❖ Sectoral/spatial co-ordination.
- ❖ Land use regulation/revenue settlement.

## 4. Community Participation

- ❖ Resource management.
- ❖ Community self-management.
- ❖ Project implementation.
- ❖ Project operation/maintenance.
- ❖ Involving women in development.

## 5. Individual Action

- ❖ Capital investment.
- ❖ Labour input.
- ❖ Improved management practices.

## 6. Corporate Tasks

- ❖ Enhanced production/improved products.
- ❖ Change of technology.
- ❖ Establishing more efficient markets.

## 7. Government/NGO Support

- ❖ Regulatory instruments.
- ❖ Economic instruments.
- ❖ Facilitating grassroots organizations.
- ❖ Enabling the exercise of common property rights.

## 3.8 Operating Principles

The three NCS objectives are comprehensive. Their full implications may not necessarily be evident at the outset. Operating principles identify the methods and approaches that will enable these objectives to be reached. These principles should be compatible with the objectives and they should illustrate, in their application, the approach of the NCS.

Three main operational principles of the NCS are to:

1. achieve greater public partnership in development and environmental management,
2. merge environment and economics in decision making, and
3. focus on durable improvements in the quality of life.

### **3.8.1 Greater public partnership in development and environmental management**

This operating principle has four components, which may also be seen as four sequential measures, ranging from a general base of more awareness to linking channels created and institutionalizing participative community management.

- Develop greater public awareness and appreciation of the need for conservation of natural resources and the quality of the environment, using mass media as well as the formal education system,
- Promote environmental NGOs and participative community organizations that can implement environmental conservation programmes and consciousness raising events to achieve greater public awareness and understanding of the importance of environmental conservation and sustainable development.
- Provide for a two-way flow of communication between government, community organizations, and NGOs on matters relating to the conservation of nature and natural resources.
- Identify and develop an institutional framework that will enable people in urban neighborhoods and in villages to identify, design in detail, and implement projects and programmes that they desire and that will maintain or improve the quality of their community and its environment. The structure and relationship of this community-oriented framework to other public and private institutions should be designed to maximize co-ordination and co-operation and minimize conflict, since all institutional components have important roles to play and are essential to effective sustainable development this is the essence of the full partnership between government and NGOs that the NCS seeks to foster.

### **3.8.2 A merger of environment and economics in decision-making**

Economic development and ecological effects are bound together in the workings of the real world; their consideration needs to be similarly integrated in decision-making. This will require changes in attitudes and objectives and institutional arrangements at every level:

- Make the central economic, planning and sectoral development agencies at the Federal and provincial levels directly responsible for the maintenance of ecological systems and processes and for the sustainable use of natural resources. Specialized environmental

agencies have a supporting role to play in the provision of technical expertise. But the mainstream departments and agencies alone should be held responsible for the impact of economic development on the environment.

- Set up a programme to identify the minimum requirements in establishing an environmental quality baseline and begin continuous monitoring of the parameters selected.

### 1.8.3 Durable improvements in the quality of life

To provide a focus that ensures improvement is durable and continues in perpetuity, it is important to match improvements in the quality of amenities and infrastructure with increases in the efficiency of natural resource use and the quality of human capital.

A major threat to the ability of the natural resource base to sustain Pakistan's population and an improved quality of life is the rate of population growth. Thus an important operational principle of the NCS is to reduce the rate of population growth as quickly as possible. These initiatives entail a significant shift in government development allocations.

Moreover, improvements in the quality of life in human settlements must involve the efficient use of raw materials and energy. Their uses should be based on technologies with the greatest practicable recovery and recycling of materials and on the adoption of natural processes (e.g., biomass, direct solar, wind and wave power) as a replacement, complement, or supplement to the use of fossil fuels.

Expenditures required for restoring ecosystems devastated by pollution typically exceed by at least a thousand fold the costs of pollution abatement measures. Durable improvement in the quality of life requires control and prevention of pollution.

Preference should be given to developments that rely on biological and natural processes rather than engineering or structural works, which are intrinsically capital- or energy intensive. Biological solutions are frequently low to establish and therefore need to be planned. Once established, however, they have the ability to operate on low-cost or free inputs, to be self-maintaining and self-replicating and to have increased rather than depreciated value and productivity over time.

### 1.9 Co-operation with community organizations and NGOs

Three broad approaches to development in Pakistan exist:

1. The departmental approach
2. The representative approach, and
3. The participatory approach

All three should be a part of environmental management; no one is a perfect substitute for another.

### **3.9.1 The departmental approach**

The departmental approach is often used for building infrastructure, such as schools, hospitals, roads, or a dispensary. It continues to be pursued by the various government development agencies. It is important to note that these activities are usually carried out without the involvement of the people for whom the services are provided. This unfortunately leads people to think the facility is a gift of government; they are not concerned with cost of providing the infrastructure or with its operation and maintenance, and end up feeling dependent on the government. The other serious problem with the departmental approach is that it does not allow communities to incorporate changes according to their needs in the blueprints developed by the line agencies technical experts. There is no mechanism for example, to either construct or maintain irrigation water channels outside the administrative control of the Irrigation Department.

### **3.9.2 The representative approach**

Political representation is essential for many purposes, but it is not a substitute for participation by ordinary citizens in the process of development. Representatives cannot plan and implement the day-to-day economic activities of communities. They cannot substitute, for example, for farmers' improvements to the organization of production, marketing, input supply, credit, and community resources and infrastructure. At the same time, representative approaches are more often than not divisive and political rather than consensual, whereas consensus is a prerequisite of development at the community level.

The departmental and representative approaches are not successful in reaching people and solving their problems. This is not due to their inefficient working but to their implementation structure and mandates. The Federal and provincial governments have established specialized agencies for training, credit, input supply, and extension that are hampered in their effectiveness and reach by the lack of a strong and broad institutional base at the grassroots level. At the same time, development agencies are organized on a sectoral or functional basis instead of following an integrated, multifunctional approach.

### **3.9.3 The participatory approach**

To make optimal use of grassroots opportunities, therefore, it is important that villagers and city dwellers be provided with an environment in which they can establish their own organizations, identify their priorities, organize their resources, manage their development agenda, and forge necessary links for on-going technical and financial assistance by outside agencies. The systems of local government, development administration, and resource mobilization are all incomplete without participatory community organizations.

The most important element in energizing this local development is a change in the role of government departments; the government needs to recognize the potential role of local communities in mobilizing capital resources and undertaking managerial tasks for resource management in keeping with the goals of the NCS. It needs to pay considerable attention to people's participation in their work, and to appreciate that community organizations and people's initiatives can complement government in initiatives in difficult areas. The government needs to accept and engage the community as partners in development, not competitors, for government alone will never succeed at sustainable development.

The government does, however, have an important role in facilitating and encouraging the development of community initiatives and community organizations. It can create an environment in which people's solutions to their problems are encouraged and imitated by other communities. It can remove bottlenecks and obstacles. This requires mechanisms for engaging the resources, ingenuity, and sense of ownership of communities, and a much greater understanding of people's priorities.

Overall, the provision of intercommunity infrastructure will remain the responsibility of the Federal, provincial, and local bodies. In the first phase, community organizations should emphasize development programmes within their own communities. In the long run, after gaining experience with small schemes, these groups can also play a role in the construction and management of intercommunity infrastructure.

The managerial approach is followed by most of the line agencies and development projects in Pakistan. The participatory approach is being followed by the Pak-German Integrated Rural Development Project in the NWFP and Balochistan, the Agha Khan Rural Support Programme (AKRSP) in Chitral and the Northern Areas and the Orangi Pilot Project in Karachi (See Box 1). Participatory models are also being tested by the Pak-Holland WATA Irrigation Project and the Pak-Swiss Kalam Integrated Development Project in the NWFP and the by the Hyderabad Development Authority's Khuda Ki Basti, a low-income housing project. It is clear that these initiatives are recent and few. Beyond these formally recognized ones, however, the participatory mode is common in many villages, where farmers may get together to scrape and maintain access to a pucca road or to run a *iwai* (custom)-based warabundi (water turn) system.

The representative approach is followed in all programmes that depend on public representatives (including Members of National and Provincial Assemblies, District and Union Councilors and political party office holders) and in all models of organizations (including official co-operatives and Water User Associations) in which decision-making powers are vested not in the general body but in executive committees, management boards etc.

All three approaches – managerial, participatory, and representative – should be part of environmental management; none is a perfect substitute for the other. However, their domains have to be understood on the basis of their efficacy and their impacts at various scales and levels.

**Activity 3.1**

What are the state policies and programmes of your country regarding participatory management of conservation and development (community mobilization, participation and organization)

**BOX 1****An example of successful participatory management**

The Agha Khan Rural Support Programme (AKRSP) in the three northern districts of Gilgit, Diamir and Chitral is a prime exponent of the participatory approach.

Some 1100 village organizations (VOs) now participate in AKRSP. The standard operating procedure for the establishment of VOs is to have the village identify a productive infrastructure project. The nature of the project is less important than having it be the catalyst around which the participatory organization can form. It shows villagers what they can do when they organize themselves and makes use of all the talents they possess. The programme includes sending villagers away on courses that teach them special skills – veterinary or irrigation techniques, tree planting, basic management principles or accountancy, or any skill that they lack and could learn on a short course at a training center.

One important feature of the AKRSP approach is the insistence that the village organization collect money from each member, no matter how impoverished, to help build a source of credit that the VO can use for whatever purposes it wants without having to satisfy the criteria and hurdles imposed by banks or governments. It also gives the members a feeling of participation in the VO and, since it is their money, an interest in spending it wisely.

AKRSP understands well the limits of community-based management systems (CBMS). The system works best among small farmers and in small groups. According to AKRSP: "maximum workable group size is 100; beyond that it is difficult for groups to manage their activities and decisions, unless VOs or CBMS come together along traditional organizational structures. The implication is that for activities such as range management or forest management, involving activities beyond the scope of individual CBMS, some form of representational system is inevitable."

### **3.10 NCS core programmes and community organizations**

Community participation and the facilitation of grassroots organizations are vital for the implementation of all the core programmes of the NCS except the one on preventing/abating pollution. The following tasks are either critical or important within the specific programmes.

**1. Maintaining soils in croplands**

- Soil conservation works in rainfed croplands.
- Saline agriculture

**2. Increasing irrigation efficiency**

- On-farm water management.
- Improved water harvesting in torrent-irrigated areas.

**3. Protecting watersheds**

- Afforestation.
- Construction of soil conservation structures.

**4. Supporting forestry and plantations**

- Community forestry.
- Courtyard/social forestry.

**5. Restoring rangelands and improving livestock quality**

- Community-based range management.
- Disseminating high-yield variety fodder.

**6. Protecting water bodies and sustaining fisheries**

- Sustaining mangroves under reduced fresh water inflows.
- Ancillary employment programme for fishers.
- Improved handling of marine catch.

**7. Conserving biodiversity**

- Management plans for priority national parks and protected areas.
- Management of game reserves.

**8. Increasing energy efficiency**

- Energy-efficient cooking programmes.

**9. Developing and deploying renewables**

- Development and deployment of biogas units.
- Development and deployment of open-core gasifiers and solid-state fermentation units.
- Development and deployment of windmill pumps.
- Development of micro-and mini-hydel plants.

**10. Managing urban wastes**

- Garbage disposal programmes in cities.

### 11. Integration population and environment programmes

- Acceleration of conventional population welfare programmes through the health system and NGOs.
- Intensive population programmes in fragile areas with high fertility rates.

### 12. Preserving the cultural heritage

- Conservation of shopping precincts and of large urban centers of historical and cultural significance.
- Conservation of small historic towns.

### 13. Supporting institutions for common resources

The activities in the 12 other core programmes cover the whole of Pakistan. Some are location specific; on-farm water management is confined to irrigated areas, for example, whereas torrent irrigation is an activity for fragile areas. The proposed community organizations should address different environmental and resources conservation issues according to their location:

#### In fragile areas

- Soil conservation works in rainfed croplands.
- Afforestation.
- Construction of soil conservation structures.
- Community forestry.
- Community-based range management.
- Dissemination of high-yield variety fodder.
- Energy-efficient cooking programmes.
- Development and deployment of biogas plants.
- Development and deployment of open-core gasifiers and solid-state fermentation units.
- Development of micro-and mini-hydel pumps.

#### In irrigated areas

- Saline agriculture.
- Community forestry.
- Dissemination of high-yield variety fodder.
- Energy-efficient cooking programmes.
- Development and deployment of biogas plants.
- Development and deployment of open-core gasifiers and solid-state fermentation units.
- Development and deployment of windmill pumps.

#### In urban areas

- Courtyard /social forestry.
- Garbage disposal programmes in cities.
- Conservation of shopping precincts and large urban centers of historical and cultural significance.



- Conservation of small historic towns.

#### **In special areas**

- Sustaining mangroves under reduced freshwater inflows.
- Ancillary employment programme for fishers.
- Improved handling of fish catch.
- Management plans for priority national parks and protected areas.
- Management of game reserves.

### **3.11 Institutional Arrangements**

A satisfactory framework for collaboration between government and community organizations involves agreements on the priorities for sustainable development; on the allocation of resources between government and community organizations and among the agreed-upon priorities; on the implementation roles for the government, and on the approach to be followed in promoting community organizations.

The NCS envisages two sets of priorities, with an implementation mechanism corresponding to each:

- Creation of 'institutions for common resources'. This priority will be addressed by NGOs through the support and collaboration of Federal and provincial governments, local bodies, and other NGOs. These NGOs will be registered under the laws of Pakistan and should complement and supplement the policies, programmes, and new initiatives of the government.
- Other programmes for natural resources and urban waste management. These priorities will be addressed by Federal Agencies, provincial line agencies and local bodies, working with the new institutions for common resources.

These implementation mechanisms differ in their relationship to the government machinery, but they are both expected to follow a common arrangement for the allocation of funds and evaluation of performance, and a common approach to community organization— the participatory approach to development.

The most important function attached to community organizations is to fill the gap that exists between communities and government in formulation, planning and implementation of projects related to common resources. As these organizations have to function and collaborate on two fronts, they should be created by arrangements through which both communities and the government can own them. Community response towards these initiatives depends greatly on the organization's success at improving conditions. The government has to take the first step towards the creation of these organizations with the help of NGOs, and should continuously facilitate their success by providing financial support and policy guidelines.

### **3.11.1 Role of Federal Government**

Three main functions should be handled by the Federal government:

- ❖ formulation of policy guidelines,
- ❖ financial allocations, and
- ❖ provision of an enabling framework.

The Federal Agencies that can perform these functions, in co-ordination with the concerned ministries, are the Economic Affairs Division (EAD), Environment and Urban Affairs Division (EUAD), and the Planning Commission, especially its proposed Environmental Cell, the ministries, will send proposals of project in which community participation seems necessary to EAD, EUAD, and Planning Commission to formulate the Policy guidelines, enabling framework, and financial allocation for the community organization.

### **3.11.2 Role of Provincial Governments**

All the provincial line departments should collaborate and coordinate with community organizations on the activities and projects related to natural resources conservation and environment as a whole. Many line departments have extension teams to disseminate their specific messages to the communities. These departments can pool their human resources and share their experiences with community organizations. Proper co-ordination between these extension teams and community organizations will be needed to develop an integrated approach for the organization and development of communities. Provincial governments will also make some financial allocations to community organizations.

The other important function of the provincial governments is to establish provincial environmental councils (PECs). Sitting on these councils will be senior officers of the provincial governments, heads of line departments, local bodies, and NGOs. Their main function will be to monitor and evaluate the performance of community organizations, line departments, and NGOs. Evaluation reports will be submitted to the provincial governments and published for the general public.

### **3.11.3 Role of Local Bodies**

The most important NCS function for local bodies is to develop a working relationship with community organizations. While preparing district development plans, community organizations should be consulted about the incorporation of environmental concerns. Local bodies will also allocate some financial resources to community organizations from their annual development funds.

### **3.11.4 Role of NGOs**

A wide range of NGOs work in different parts of Pakistan on different subjects, and they have an extremely important role to play in creating community organizations. The groups can share their experiences and design joint ventures for broadening their scope of activities. This support is

essential as the Federal provincial governments work to foster community organizations as part of the NCS.

### **3.12 Structure of Community Organizations and Support Systems**

Community organizations seek to help people in rural villages and urban neighborhoods to undertake development on the basis of participation. Villages and lane organizations (VOs and LOs) are coalitions of residents whose common interests are best served by organizing as an interest group. The VO/LO will identify the project that would benefit most of the residents and could be implemented by the residents themselves. In return for initial project funds, the VO/LO members commit themselves to the discipline of organization, collective savings, training in use of new technologies, and implementation and maintenance of the project. All members of the organization are required to attend weekly or monthly meetings where work done on a project is reviewed, plans are made for the future, and savings are deposited by all members, in short, the VO/LO would be the executing agency for all village and lane-level projects.

VOs and LOs can be created by directly investing in the Productive Physical Infrastructure, as was done for the creation of Water Users' Associations. A support structure is crucial for these new organizations, lest they collapse after the consumption of seed capital. Two tiers of support structure are proposed - district/city programme offices (DPO/CPO) and technical support units (TSU). They need to try to organize communities so that they can generate their own revenue through savings to solve their common problems.

Five to fifteen technical support units per district and 5 to 25 per city should be established. Their most important function is to induce formation of VOs and LOs as the primary vehicle for all development activities. Their responsibilities will include conducting physical infrastructure surveys, collecting information on the status and use of natural resources, performing land use surveys and budget estimates, and planning. One TSU will cover about 100 VOs/LOs.

One DPO per district and one CPO per city should be established. These will perform all programme planning and management function, and will provide initial funds, to a VO/LO as a grant. The main responsibilities will be project formulation; monitoring and evaluation research; training, and development; co-ordination with Federal Agencies, provincial line departments, local bodies, and NGOs; and supervision and coordination of project implementation in the field.

### **3.13 Financial Arrangements**

Rural development in Pakistan is highly subsidized, yet the credibility of existing community organizations has been questioned. In this environment, community organizations have to establish their credibility rapidly; they have to recognize that they will be operating in a buyer's market. They will need the resources with which to see their approach people new staff, and institutional partners. The demonstration of new approaches will need to be

subsidized which should be considered an investment in institutional development at all levels. With these subsidies, community organization should aim to bring about behavioral change. But subsidies will need to be phased out over time as the organization's approach becomes acceptable, and as they enter the seller's market. The NCS financial arrangements for community organizations are designed with these guiding principles in mind. Continued funding will be contingent on the performance of the community organization.

The best available example of a technical proposal for the creation of a community organization is that of the Sarhad Rural Support Corporation, NWFP. A forum of NGOs prepared senior Ministers, its feasibility study, was prepared by a forum of NGOs, senior Ministers, civil servants, donors, and prominent individuals in both Federal and provincial government. The Aga Khan Rural Support programme served as the focal point for the documentation and preparation of the proposal. The NCS proposes that the Federal government should identify such potential NGOs in different parts of the country that can serve as local points for the preparation of such proposals. Finances for such exercised could be provided by the Trust for Voluntary Organizations (TVO) under the EAD.

Finances required for the creation of community organizations will be the responsibly of the Federal and provincial governments. Once organizations are created. They can raise their funds independently from EAD. Provincial Planning and Development departments (P&D), local bodes, and local and international donor agencies.

At the Federal level these finances can be arranged from:

- the EAD resource pool for NGOs (project-specific bilateral funds, for NGOs), and
- the Trust for Voluntary Organizations (funds received from donors without any project title but earmarked for NGO development).

Annual revise to determine the future allocation of Federal funds can be conducted by EUAD and the Planning Division, with the help of local government rural development, provincial P&D, and social welfare departments, and of the provincial environmental councils, the TVO may also want to use these review reports when considering future financial allocations.

At the provincial level, community organizations can raise funds from provincial P&D and social welfare departments and of the provincial environmental councils. The result of annual PEC evaluation reports should determine the future allocation, of funds by provincial governments and P&D.

Local Bodies should also allocate some funds for community organizations according to the requirements of their development projects. At this level, allocation of funds will be monitored by the district councils.

An independent source of funds for community organizations is domestic and international donor agencies. The only condition should be that the

organizations show these grants in their total receipts, so that public sector evaluation bodies can do comprehensive evaluations.

### **3.14 Lessons in Community Management**

Natural resource and environmental management issues are complex. The forms of organizations most appropriate to sustainable development are intensely debated and controversial. However, a broad map of the applicability of various institutional forms and instruments at the farm household, community, departmental, provincial and national levels show that managerial, representative and participatory approaches will all be needed. Insofar as there is a vacuum at the grassroots level in terms of viable community-based management systems, a priority for the National Conservation Strategy is to promote such Participatory community management.

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**UNIT 4****MODELS OF PARTICIPATORY  
MANAGEMENT IN SOUTH ASIA****Unit introduction**

The main focus of this unit will be on explanation of the introduction, application, evolution and impact of various models of the participatory management of development, in South Asia. The models covered include the following:

- The Individualist Model
- The Collectivist Model
- The Organizational Model
- The Debate Model

In this unit you will be introduced to:

- What is a model?
- Significance and Role of Models
- Participatory Management and Good Governance
- Models of Participatory Management in South Asia, including:
  - The Individualist Model
  - The Collectivist Model
  - The Organizational Model and its basic features
  - The Debate Model
- Application and usage of these models in South Asia

**Unit Objectives**

After studying this unit you will have improved your ability to:

- Define and discuss the concept, significance and role of models;
- understand and discuss various models of participatory development, including the Individualist Model; the Collectivist Model; the Organizational Model and the Debate Model,
- describe the basic features of these models, with a special focus on the Organizational Model; and
- assess the application and usage of these models in South Asia.

## 4.1 Why models? Are Models Helpful or not?

If you seek advice on improving governance in any organization, or about management of the development activities, it probably won't long before some one says, "What about adopting a model?" or, more pointedly, have you considered Organization Model?"

It is a matter of fact that very few matters in the literature about development management and governance of the organizations are more hotly debated than the question of models. What is a model, anyhow? Are models useful? Should a management board adopt a model?

A model may be defined in a number of ways, on the basis of its nature and characteristics or the usage, etc.

### A model is:

- A simplified description of a complex entity or process: "the computer program was based on a model of the circulatory and respiratory systems."
- Something to be imitated: "an exemplar of success"; "a model of clarity".
- A representation of a system or process.
- A representation of a set of components of a process, system, or subject area, generally developed for understanding, analysis, improvement, and/or replacement the process.
- A representation of information, activities, relationships, and constraints.
- A way to represent a system for the purpose of reproducing, simplifying, analyzing, or understanding it.
- A system that describes or predicts an associated process based on the definition of variables, rules and equations. A properly defined model enable analyzing the possible effects of changes in the underlying process based on the changes in the model.

**A model of governance and participatory development management may be defined as a coherent set of policies related to governance and management.**

Governance models vary according to how a board is structured, how responsibilities are distributed between various stakeholders, like board, management, and staff, and in the process used for board development, management and decision making.

Some say adopting a model is essential. The strongest model proponents are those who adhere to a view of voluntary sector governance conceived by John Carver. Carver, a consultant and author on governance issues, made a very important contribution to thinking about governance by developing what he called the "policy governance" model. But, the policy governance



model, like all other management models, is not without problems. Critics of this model object to the notion of a universally applicable approach to governance and development management. They say that the model does not take account of the realities of human nature and the inherent messiness of trying to run a voluntary organization. Also, some feel that the model makes the organization staff and board members too remote from the activities of their organization, and that it discourages teamwork between board members and staff.

Given the controversy over this model, what should an executive director or board member and any development worker do – adopt a model, or forget about it altogether?

#### **4.1.1 Results of the debate on models**

The research on the models was inspired by the belief that one model of governance and management/development could not possibly accommodate the great diversity of organizations within the corporate or non-profit sectors and could not address the developmental needs of the society.

Back at the start of the 20<sup>th</sup> century, early writers about management saw their work as a quest to identify the “one best way” of doing something. Proponents of this search for universal truths became known as the scientific school of management.

However, as thinking about management became more sophisticated, the idea that there must be universally valid best practices was abandoned in favor of a situational approach. That is, the right way to manage a development organization depended greatly on its situation: its business or mission, its market, its stakeholders or clients, its history and traditions, and so forth.

The researchers view on the models' debate is that discussion about governance has been mired at the stage that management thinking was at about seventy-five years ago. The notion that there is one universal set of principles valid for all invites development organizations to adopt governance policies or practices that are ill suited to their circumstances.

One of the researches, which examined the governance practices of several different organizations in the non-profit development sector, illustrated that one, but several different approaches to governance in the development sector, which could be seen as models in a descriptive sense.

## **4.2 Role of Participatory Management Models in Good Governance**

Application of various participatory management models of development intends to promote the condition of the humanity at large, with a special focus on the conditions of the poor and marginalized groups of the society, through establishing a just, equitable, and secure social system. The matter of the fact is that such social system may not be established without good governance. So before discussing and analyzing various models of the participatory management and their application in South Asian countries, it

deems fit to have a look on the concept of good governance and its basic principles. This discussion, would also provide a framework to understand and analyze the application and functioning of various models in South Asian countries.

#### 4.2.1 What Is Good Governance?

One goal of good governance is to enable any organization or institution to do its work and fulfill its mission. Good governance results in organizational or institutional effectiveness.

But good governance is about more than getting the job done. Especially in the voluntary and development sectors, where values typically play an important role in determining both organizational purposes and style of operation, process is as important as product. Good governance more than only a means to organizational effectiveness, sometimes, become an end itself.

**Good governance is about both achieving desired results and achieving them in the right way.**

Since the cultural norms and values of the organization largely shape the "right way", there can be no universal template for good governance. Each organization or institution must tailor their own definition of good governance to suit their needs and values.

There is plenty of room for different traditions and values to be accommodated in the definition of good governance. At the same time, all is not relative. There are some universal norms and values that apply across cultural boundaries. The United Nations published a list of characteristics of good governance. They include:

- **Participation:** providing all men and women with a voice in decision making.
- **Transparency:** built on the free flow of information.
- **Responsiveness:** of institutions and processes to stakeholders.
- **Consensus orientation:** differing interests are mediated to reach a broad consensus on what is in the general interest.
- **Equity:** all men and women have opportunities to become involved.
- **Effectiveness and efficiency:** processes and institutions produce results that meet needs while making the best use of resources.
- **Accountability:** of decision-makers to stakeholders.
- **Strategic vision:** leaders and the public have a broad and long term perspective on good governance and human development, along with a sense of what is needed for such development. There is also an understanding of the historical, cultural and social complexities in which the perspective is grounded.

As we have seen above, good governance is laden with values but it has a practical side as well. Organizational structure, traditions, and most importantly people and the relationships between them shape governance in practice. A sample of good governance in practice could be defined by:

- A high degree of key stakeholders agreement on mission and values.
- Appropriate representation of different stakeholders.
- Role clarity and clear lines of accountability.
- Positive working relationships between board, management and staff.
- A process for monitoring achievement of objectives.
- A balance between stability and flexible response to environmental changes.
- Respect for organizational norms.

### **4.3 Models of Participatory Management Approaches in South Asia**

#### **4.3.1 Background and Situation Analysis of the South Asian Region**

In the South Asian region, majority of the rural population, like most of the rural people in underdeveloped countries, is poor, no matter how poverty is defined. The rural poor are not a homogenous group, nor is the incidence of poverty equally distributed among them. They do, however, share the underlying causes of their poverty. Landlessness or scarcity of productive land and poor prospects of employment or low wages are among the major factors.

In some regions, such as northern Pakistan, the physical and natural environments exacerbate the conditions of poverty, even if the poor have reasonable entitlement to land. The prospects of improved living conditions for the rural poor depend on many factors. The major ones seem to be population growth, technical progress, markets, and public policy. The contribution of each of these factors is not easy to identify, because they act on the human condition in an interdependent and complex way. In many underdeveloped countries, the forces of market and government policies work against the rural poor.

The rural poor (small landholders and the land-less), like their counterparts in urban areas, are a marginalized and peripheral people. The rich are at the center in both places. There is, however, one big difference between the rural and urban poor: the latter group can share with the rich some of the services and facilities that the rural poor have no way of accessing. This is partly due to the indivisibility of these services and partly because of the capacity of the urban poor to organize and agitate. The rural poor do not have the rich living in their midst; nor do they have the capacity to organize because of their isolation, division, and sometimes indifference, etc. Added to this is the fact that industrial growth is mainly concentrated in urban areas, fed by the agricultural surplus produced largely by the rural poor.

#### **4.3.2 The Issues of and Approaches to the Access and Control**

How can the rural poor acquire greater control of their physical and social environments to improve their living standards? The answer to this question lies in their access to opportunities to exploit the potential they have rather than their exploitation and dispossession in the process of development.

The difference of approaches to the development of rural people is based primarily on the division between theoretical perspectives on the causes of mass poverty and the sources of its alleviation. Three conceptual models have been used in analyzing the issues related to rural development. They are the individualist (capitalist) model, the collectivist (communist) model, and the organizational (cooperative) model. The difference between the first two is embedded in the mutually exclusive ideologies of development. A brief conceptual and theoretical overview of these models and their application and impact in the South Asian region has been given in the following discussion.

### **4.3.3 The Individualist Model**

The individualist model has its roots in the classical and neoclassical theories of private or "free" markets as the only rational vehicle to improve the material welfare of the rich and poor alike. The individual's right to private property in the means of production is the fountainhead of enterprise, and competition among these individuals is the assured way of efficiency. More importantly, it is also regarded as the basis of a just order, because free markets reward the participants according to their contribution in the process of production. The uneven distribution of assets and resources cannot be blamed on the operation of the capitalist model. Uneven development and inequitable distribution are not accepted as the inevitable products of a capitalist economy. The development of a Capitalist agriculture, based on the forces of private (and free) markets, is seen as a fortuitous circumstance for alleviating poverty among the majority of rural and urban people.

In many underdeveloped countries, the same "bimodal" strategy of rural development has been promoted. One of its major consequences has been the proletarianization of peasantry (smallholders and tenants alike) and dependence on wage labor at one end and accumulation of land and capital at the other. Several Latin American countries, and some in Asia and Africa, have followed this route with disastrous effects on the society: displacement of small land holders and their flight to urban areas in search of jobs and incomes for survival are among the most visible signs of the process of change.

Specialized production based on capital - intensive methods and oriented to markets for value has also deeply affected the availability of products that the peasants used to produce for the household. The increasing involvement of small landholders in the cash nexus and contraction of land as an asset threatens their survival. The transition from subsistence to a cash economy then victimizes the vulnerable groups in the market place. Slums of the poor and enclaves of the rich in urban areas are only two of the major manifestations of the development process. Should the rural poor wait for the promised "trickle - down" effect of the invisible hand of market? There is much evidence, now and in the past that the answer to this question cannot be in affirmative.

### **3.4 The Collectivist Model**

The collectivist model is premised on Marx's critique of classical theory and calls for abolition of private property in the means of production (land and capital). Private property and markets are seen as the basic cause of division of society into antagonistic classes and observed inequalities of income and wealth. Abolition of private property and classes and its replacement by collective ownership and management are regarded as the only assured foundation for harmonious social and economic development. There is, however, no general agreement about the nature of collective control, particularly of land and labor.

The Russian collectivist model, (as developed in the former Soviet Union), practiced in several countries until recently, was plagued with problems of inefficiency because of excessive state control without autonomy for the peasants. The Chinese commune system, as a variant of the Russian model, is faced with similar problems of rigid and hierarchical structure of production and distribution with little incentive for the individual's effort. Recent changes in the collective and commune systems - particularly long-term leasing of land by the state to the individual and cooperatized peasant households - reflect clearly the weakness of a centralized regime to rapidly improve the living standards of peasants. This change in several communist countries is part of the larger and even revolutionary attempt at freeing the economy from state control. It must, however, be noted that some Eastern European countries and China produce serious contradictions between the ideology and practice of communism. Some communist countries have opted to disown even the trapping of Marxian ideology.

### **3.5 The Organizational Model**

The organizational model is skeptical about the ideological claims of the other two models, i.e. the individualist and collectivist. It favors neither pure individualism nor pure collectivism. In the organizational model, the abolition of private property in land is not abolished. Its claim is that the pooling of individual endowments or resources within a cooperative network avoids the costs inherent in other models of rural development. A participatory mode of organization would reduce the vulnerability of the individual households and foster the development of a sustainable and self-sustaining socioeconomic system.

#### **Key Features of an Organizational Model**

At the conceptual level, the organizational model involves three basic components:

- 1. a program,
- 2. participants or prospective beneficiaries, and
- 3. a support organization.

The success of the organizational model depends on a high degree of fit between program design, beneficiary needs, and the capacities of the supporting organization. In other words, the model is responsive to the

expressed needs of beneficiaries through a strong organization capable of making the program work.

The concept of "fit" in the context of rural development is central to the understanding of why some programs succeed and many do not. Underlying this is the assumption that it is best achieved through learning and not by following a blue print or plan. It uses the "learning by doing" method.

The fit between the participants and the program involves their needs and the specific resources and services supplied as program outputs. Of course, the beneficiary needs will depend on the social and political context of the village. The supporting organization's fit with the beneficiaries is determined by the means used to express the needs and the ways in which the organization responds. This will include the capacity to organize and to make decisions in response to the expressed needs that galvanize the beneficiary organization. Finally, the fit between the organization and the program involves activity requirements of the program and competence of the support organization to deliver inputs for program outputs. The technical and social capabilities of support organization are the critical factors, which help it to play its role effectively. Let us examine the three fits (relationships) in the context of a strategy for rural development based on the organizational mode:

- i. The prospective beneficiaries-small landholders-must participate fully in each stage of the development of a specific program, starting from articulation of their needs and assessment of their resources. The program has to address those needs of the beneficiaries that increase their capacity for sustainable development. It must offer to the participants' outputs that use their resources and assist in making their organization viable. Organization is the vehicle through which the program provides inputs and the participants realize services and outputs on a sustainable basis. The program and beneficiary needs have to be welded together through a participatory organization.
- ii. The partnership of the support organizations with the participants must be based on reciprocal obligations. The entry point has to be selected with great care to glue the participants to a common and productive activity, which will act as individual and collective resources to generate a process of equitable and sustainable development. The success of this relationship would depend mainly on the managerial skills and credibility of the support organization in organizing the beneficiaries and in providing the inputs that strengthen the capacity of participants both as individuals and groups to become self-reliant.
- iii. The technical and social capabilities of the support organization are the crucial factors in making the program efficient and effective. They will include assessment of needs, identification of the entry point for social organization and activists, speed and flexibility in management, cost effectiveness of program packages and development and delivery inputs and services directly related to the outputs the participants expect and need. The key to these capabilities is the learning-by-doing approach, in which innovations are induced in response to and by the experiences and resources of participants. The program and

the support organization have to be guided by the principle of participation in developing the social organization capacity to improve their economical and social environment.

The concept of fit and the learning approach are the basic ingredients in a successful program of rural development. The learning approach greatly helps in achieving the desired fits because there is always some specificity or uniqueness in the circumstances and timing of a program. While the general principles stay intact, adjustment may have to be made in the program packages for specific target groups or regions. The practice has to be flexible and evolutionary: developing through learning.

For example, what may work for a rather homogeneous community of the poor living in an isolated and harsh physical environment would not be workable in a community of the poor living in an isolated and harsh physical environment would not be workable in a community that is highly differentiated on the basis of endowment of assets such as productive land and capital.

In the first case, there is probably a long tradition of reciprocal obligations of member household to survive in a hostile physical and natural environment.

In the second community, the interests may be fragmented; depending on one's position in the rural hierarchy based on the ownership of land and related assets.

An effective fit is seldom achieved in those rural development programs that have followed a blueprint approach, guided mainly by fixed ideas and run by centralized bureaucracies without the participation of prospective beneficiaries. The examples are too numerous to mention.

#### **4.3.6 The Debate Model**

In countries where a collectivist or communist model has not been accepted, there is considerable debate about the impact of the individualist (capitalist) and organizational (cooperative) approaches. The individualist approach can exist in both the feudal (landlord-tenant) and peasant (owner-operator) agrarian system. In the feudal system, broadly defined, the landlord lives mainly on the rental income appropriated from the output of land produced by the sharecropper or tenant.

The existing distribution of land-ownership excludes the tenant from access to land without the landlord. In the peasant system, small parcels of land with family labor are the basis of production for the household and market. Given these agrarian structures, the introduction of capital and technology by both the forces of market and government policies creates new pressure on the land-less tenants and small landowning peasants. Their displacement from the land becomes a necessity for development. They must look for work as wage laborers, mainly outside the agriculture. Their entitlement to land as a source of income is lost. Steady employment and a reasonable wage can now be the only sources of sustenance. In the capitalist development of agriculture, the process of adjustment is often quite costly both for the dispossessed peasants and the society.

Rural development in the individualist approach is a catch phrase, usually devoid of content. If its objective is to provide opportunities for the rural poor to improve their living standards, it must depend on the organized and collective efforts of this group. But a collective and cooperative effort requires certain conditions that usually run counter to the interest of rural elite. How can the small farmers, tenants, and land-less workers organize to articulate their needs and mobilize their resources for higher standards of living if the elite see little gain or much loss in rural development? Alleviation of rural poverty in an agrarian system based on the highly unequal endowments of land and capital poses a formidable challenge to practitioners. Should we insist that rural development under these conditions is highly unlikely, because the rural elite will either resist or subvert the program by which they either gain little or lose much?

In communities where most rural people are land-poor and live in a harsh or isolated environment, there is usually a long and well-established tradition of cooperative or collective behavior for survival. They know that the management of their own meager resources and of common property in the village must depend on reciprocal obligations. They are well aware of the benefits from economies of scale and the price of waste. Outside interventions with emphasis on articulated needs and cooperative management of resources can bring about new choices for these rural people. These choices are not imposed on them, but are made available in response to their collective demands and capacities. Their organization can unleash a self-sustaining and equitable process of rural development, because outsiders would be involved on a self-liquidating basis.

A "diagnosis prescription" approach to alleviate rural poverty, on the other hand, is often based on outsiders' arrogance about their knowledge of the rural poor. Rural development, as a strategy to improve the well-being of this group, is premised on outsiders' views and perceptions. The poor themselves are rarely a part of the strategy. They do not participate in providing information, in making decisions, and in managing the rural development projects and programs. In fact, some development programs increase their powerlessness and vulnerability to both physical and economic environment.



## Self Answering Questions

- Q.1 Define a model. Why models are needed? Are Models Helpful or not?
- Q.2 What is the Role of Participatory Management Models in Good Governance?
- Q.3 -What Is Good Governance? Describe its Characteristics?
- Q.4 Discuss the background and Situation of the South Asian Region with reference to rural poverty?
- Q.5 describe the Issues of and Approaches to the Access and Control to the resources and Physical environment?
- Q.6 Describe and analytically comment on the following models, with reference to the South Asian region:
- The Individualist Model
  - The Collectivist Model
  - The Organizational Model
  - The Debate Model
- Q.7 Describe in detail the Basis Features of an Organizational Model?
- Q.8 Which model of development is suitable for South Asian countries? Comment with arguments?

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# SAFLI

South Asia Foundation  
Learning Initiative

## Towards Participatory Management

DRAFT



*Department of Environmental Science*  
**Allama Iqbal Open University Islamabad**

TOWARD PARTICIPATORY MANAGEMENT

# **Block II**

Approaches and Practices

*Post Graduate Diploma*

Environmental Sustainable Development  
South Asia Foundation Learning Initiative



Uttar Pradesh  
Rajarshi Tandon Open University

**PGD-ESD-02**

TOWARDS PARTICIPATORY  
MANAGEMENT

Block

**2**

**Approaches and Practices**

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UNIT 5

**Participatory Approaches to Environment  
and Development**

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UNIT 6

**A Model of Urban Development: Orangi Pilot Project**

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UNIT 7

**Women's Participation in Community Decision-making**

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UNIT 8

**Practical Actions**

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## UNIT 5

# PARTICIPATORY APPROACHES TO ENVIRONMENT AND DEVELOPMENT

### Unit Introduction

Over the last few years, words such as 'participation', 'empowerment', 'bottom up planning', and 'indigenous knowledge' have become increasingly common in the world of rural development. Such is their popularity that it is now difficult to find a ruraly based development project which does not in one way or another claim to adopt a participatory approach involving bottom up planning, acknowledging the importance of indigenous knowledge and claiming to empower local people. It is increasingly possible to talk, at least provisionally, of an emerging common orthodoxy in rural development, which is shared by a range of practitioners working in the bilateral, multilateral and non-governmental sectors of the development industry.

In this unit, we will examine:

- Participatory approaches
- Participatory development
- Principles of participation
- Community organization
- Participatory learning
- Significance of Participatory Approaches in Empowering People for Sustainable Development

### Unit Objectives

After going through the unit, the students would be able to learn:

- 1 The most developed approach and bundle of techniques is Participatory Rural Appraisal (PRA)
- 2 Five streams which stand out as sources and cousins of PRA and between which insights, approaches and methods are continuously flowing
- 3 Why is a participatory approach needed?
- 4 What is participation in development?
- 5 The use of participatory methodologies in the empowering process

## 5.1 Introduction

For more than two decades development theorists and practitioners have lectured the world about the need for participation of ordinary people in development. In much of rural development, however, thinking about participation has remained at a very idealistic and ideological level. It has lacked analytical tools, practical methods and an adequate theoretical framework. So it has degenerated into a kind of propaganda— words to convince audiences, NGOs and governments have recognized the necessity of involving people in development activities. Sometimes it is the participation of particular categories of people which has to be demonstrated — women, the poorest of the poor, minority groups. But participation is usually asserted, not demonstrated. Few in the audience have time to examine the indicators, which are in any case poorly developed. Indicators of how participation happens and what its effects are on participants and in the wider society need to be developed and applied.

Rahman (1990: 45-49) identified several dimensions of empowerment which provide a good starting point for developing indicators about participation:

1. organization of the disadvantaged and underprivileged in structures under their own control;
2. knowledge of their social environment and its processes developed by the disadvantaged;
3. self-reliance, an attitudinal quality strengthened by the solidarity, caring and sharing of collective identity;
4. creativity;
5. institutional development, in particular the management of collective tasks and mass participation in deliberation and decision-making;
6. solidarity — the ability to handle conflicts and tension, to care for those in distress and a consensus that all should advance together;
7. progress for women in articulating their points of view, and the evolution of gender relations towards equality, as assessed by women themselves. Empowerment would also imply that there were changes going on in the wider society as a result of grassroots changes: the development of human dignity, popular democracy and cultural diversity.

## 5.2 Participatory Approaches

The most developed approach and bundle of techniques is Participatory Rural Appraisal (PRA). PRA is a growing family of approaches and methods to enable local people to share (with each other? with outsiders?), enhance and analyze their knowledge of life and conditions, to plan and to act. As PRA expands it is getting difficult to define it. Is it a set of techniques (RRA), or a set of techniques wrapped up in a participatory approach (PRA), or a philosophy and approach to life for a professional's development? Its core lies in the development, adaptation and application of simple, structured interactive techniques based on game theory and

social science research methods which produce accurate information through group work and dialogue.

Five streams which stand out as sources and cousins of PRA and between which insights, approaches and methods are continuously flowing are listed in alphabetical order, as:

- action-reflection research;
- agro-ecosystem analysis;
- applied anthropology;
- field research on farming systems; and
- rapid rural appraisal (RRA)

### ***Participatory action-reflection research***

The term 'Participatory action-reflection research' is used to encompass approaches and methods, which have in various ways combined action, reflection, participation and research. These range from action science and reflection an action in which professionals act and reflect on what they do and how they learn, to approaches which use dialogue and participatory research to enhance local people's awareness and confidence and to empower their action.

### ***Agro-ecosystem analysis***

Drawing on systems and ecological thinking it combines analysis of systems and system priorities (productivity, stability, sustainability and equitability) with pattern analysis of space (maps and transects), time (seasonal calendars and long-term trends), flows and relationships (flow, casual, Venn and other diagrams), relative values (bar diagrams of relative sources of income etc.), and decisions (decision trees and other decision diagrams). The approach was further developed by Conway and others with the Agha Khan Rural Support Programme (Pakistan) for application in villages in Northern Pakistan, where it took a form which led to identification and assessment of practical hypotheses for action.

### ***Applied anthropology***

Social anthropology in its classical forms has been concerned more with understanding than with changing. Social anthropologists helped other development professionals to appreciate better the richness and validity of rural people's knowledge and to distinguish the etic (the outsider's mental frame, categories and world view and the emic (those of the local insider).

### ***Field research on farming systems***

Farming systems research systematized methods for investigating, understanding and prescribing for farming-system complexity, but these sometimes got bogged down in ponderous surveys and data overload.

Field research on farming systems contributed especially to the appreciation and understanding of:



- the complexity, diversity and risk-proneness of many farming systems;
- the knowledge, professionalism and rationality of small and poor farmers;
- their experimental mindset and behaviour; and
- their ability to conduct their own analyses.

### ***Rapid rural appraisal***

RRA began and continues as a better way for outsiders to learn. In answering the question 'Whose knowledge counts?' it sought, and continues to seek, to enable outsiders to gain information and insight from rural people and about rural conditions, and to do this in a more cost-effective and timely manner.

## **5.3 Participatory Development**

### **Participation**

The concept of growth with equity and participation is becoming popular in recent years. Many donor agencies and aid organizations have now recommended that governments in the Third World should adopt popular participation as a basic policy measure in national development strategies and encourage the social mobilization for community organizations, trade unions, youth, women and other associations in the development process particularly in setting goals, formulating policies and implementing development plans.

Participation is a process of development, whereby people are given the opportunity to express their voice and choice in decisions, which affect their future. This participation needs to be more action oriented than a token one for the justification of other motives. A study by the International Labour Organization of "Poverty-oriented" project worldwide showed that the poorest were excluded from activities and benefits. All this shows that there is a need for beneficiaries' participation in a development programme at all levels.

## **5.4 What Has Gone Wrong?**

Recent years have seen growing criticism of development strategies followed for the past three decades with only minor adjustments. These conventional strategies have seen development primarily as a series of technical transfers aimed at boosting production and generating wealth. In practice, conventional projects usually target medium to large scale progressive producers, supporting them technology, credit and extension advice in the hope that improvements will gradually extend to more "backward" strata of rural society. In many cases, however, the channeling of development assistance to the better off has led to concentration of land and capital, marginalization of small farmers and alarming growth in the number of landless laborers, which is simply widening the gap between rich and poor.

The basic fault in the conventional approach is that the rural poor are rarely consulted in development planning and usually have no active role in development activities. This is because the vast majority of the poor have no organizational structure to represent their interests. Isolated, under educated and often dependent on rural elite, they lack the means to win greater access to resources and markets, and to prevent the imposition of unworkable programmes or technologies.

### **5.5 The Lesson in Clear**

Unless the rural poor are given the means to participate fully in development, they will continue to be excluded from its benefits. This realization has provoked new interest in an alternative rural development strategy of people's participation through community organizations controlled and financed by the poor.

Discussion about participation is never easy, mainly because there are so many, contradictory and ambivalent notions of the concept and the practices involved. In a very general way, participation may be defined here as:

*A complex social, technical and institutional process through which communities may become more fully involved in their own development, more particularly taking an active part in the design, implementation and evaluation of specific development initiatives.*

Participation by rural people in the community organizations and other institutions that govern their lives is a basic human right. If rural development was to realize its potential, the conference said, advantaged rural people had to be organized and actively involved in designing policies and programmes and in controlling social and economic institutions. There is a close link between participation and voluntary, autonomous and democratic organizations representing the poor. The donor agencies are showing great interest in close co-operation with organizations of intended beneficiaries, and it is being proposed that the assistance be channeled through small farmer and peasant groups.

With their economic survival at stake, many developing countries like Pakistan have been forced to cut back on rural development, giving priority to growth ahead of the alarming concern for participation and equity. Great progress however, has been made by many development programmes in the elaboration of participatory principles and methodologies.

### **5.6 Principles for Participation**

The experience of programmes working on the principles of participatory development has demonstrated that true participation is possible only when the rural poor are able to pool their efforts and resources in pursuit of objective they set for themselves. The most efficient means for achieving this objective are small, democratic and informal common interest groups composed of 20-30 like-minded community members. For governments

and development agencies, people participation through small groups offers distinct advantages ranging from economy and efficiency to equity and sustainability:

- **Reduced costs and increased efficiency:** The poor's contribution to programme and project planning and implementation represent savings that reduce projects costs. The poor also contribute their knowledge of local conditions, facilitating the diagnosis of environmental, social and institutional constraints, as well as the search for solutions.
- **Economies of Scale:** The high cost of providing development services to scattered, small-scale producers is a major constraint on poverty and other development oriented programmes. Participatory groups constitute a grassroots "receiving system" that allow development agencies to reduce the unit delivery or transaction costs of their services, thus broadening their impact on the one hand and give an opportunity of pooling their resources for many collective actions to the community members on the other. Economy of scales also ensures economy.
- **Higher productivity:** Given access to resources and a guarantee that they will share fully in the benefits of their efforts, the poor become more receptive to new technologies and services, and achieve higher levels of production and income. This helps in building net cash surpluses that strengthen the groups' economic base and contribute to rural capital formation that in most cases has been used for internal lending and carrying on other joint development schemes.
- **Building of community organization:** The limited size and informality of small groups is suited to the poor's scarce organizational experience and low literacy levels. Moreover, the small group environment is ideal for the diffusion of collective decision-making and leadership skills, which can be used in the subsequent development of, inter group federations that are known as apex organizations.
- **Sustainability:** Participatory development leads to increased self-reliance among the poor and the establishment of a network of self-sustaining community organizations. This carries important benefits: the greater efficiency of development services stimulates economic growth in rural areas and broadens domestic markets thus favoring balanced national development; politically participatory approaches provide opportunities for the poor to contribute constructively to development.

Through active participation, every one in the group is benefited to some extent. Decisions are made in the group on the basis of equity and saving is equity capital of the community

## 5.7 Constraints to Participation

In their attempts to achieve participatory approach, many developmental project personnel realized the far-reaching consequences of this choice and the necessary adjustments needed to fit it into the existing social, cultural and institutional conditions of different areas.

Several constraints emerge while implementing the programme. Such problems arise, on the one hand, from the mentality prevailing among planners and development agents, and, on the other hand, those stemming from the cultural values and social patterns of the populations of the programme areas.

In some cases, the planners, decision-makers and social organizers who, while advocating some forms of people's involvement in the development process, continue to think and act according to a perspective that posits people as 'passive targets' and not as 'active participants'— as objects, and not as subjects of development. This mentality is firmly based on a number of attitudes and certainties. The following beliefs can be encountered as the programme unfolds.

- Programme and target people share common interests so that people's participation is simply a matter of collaboration by the community with programme officials for implementing an activity;
- Social issues are either irrelevant or can be dealt with on the basis of a good dose of 'common sense';
- Involvement of people is important only at the implementation stage, after the major technical parameters have been decided by the experts for the programme;
- A 'participatory approach' simply means that people have to be mobilized quickly and easily in order to meet predefined goals, targets and objectives, with no latitude for them to decide on other goals or objectives;
- Rural communities are backward, primitive, and hostile to change, while their production methods are irrational and detrimental to the environment. Thus, people are viewed, on the one hand, as the problem in development efforts and, on the other hand, as in need of technical direction since they do not know what is good for them.
- Women are not important actors in productive activities, perceived as a predominantly male sphere, and thus may be conveniently ignored as participants in or beneficiaries of technical projects in this domain.

In short, with such mentality on part of the programme staff, participation seems simply to designate the process through which programme officials have to convince people to adopt what, from a technical point of view, has been identified as good for them, as well as implement what is considered to correspond to the political and economic objectives of the country or province as a whole.

The work of socialization relates to human behavior. Many problems emerge when one is involved in the process. Some of the problems may arise from specific social and cultural values of the populations in the programme areas. Feudal lords, Khans and their hold on the local poor, the political autonomy of individual households, male honor, and women's seclusion, all of which have consequences for a participatory approach.

- Most of our societies are characterized by personal individualities within the framework of lime tied kinship-based groups. It is essentials with in these groups that aid, co-operation, solidarity, alliances and obligations are regarded. Membership in these groups is based on birth and alliance;
- Some communities are prone to schism; each individual family heaps may pursue activates perceived in terms of this own family's interest, eschewing any form of solidarity.
- Local social economy is broken down into independent household existences. There is a diffuse, local and familial control of production, decisions are self-centered and there is no wider organization nor centralization in the set-up of the productive process;
- Most of the rural communities are not homogenous; and
- Apart from their heterogeneous nature, most are elderly dominated societies with off farm source of income.

Experience of the development programmes in such circumstances shows that while these attitudes and behavior patterns, should not be considered as obstacles to a participative form of development, they may significantly slow down the process of involving all community members and categories of people in the development effort, especially at the initial stages.

## 5.8 Overcoming Constraints to Participation

Following are the main elements of a pragmatic, step-by-step participatory approach for tackling the above-mentioned constraints to participation.

- Setting up a favorable context allowing the populations to express their views and opinions;
- Allowing the different social categories of a community to meet and discuss problems;
- Establishing a dialogue between programme staff and the community as equal partners;
- Contributing to changing attitudes of development agents, through publications and organization of workshops and training courses;
- Assessing the constraints realistically and steering clear an alternative approach wherever necessary; and

- Demonstrate participation of the people on pragmatic and sociological situation of the community by producing replicable models and use them as learning example.

## **5.9 Community Organization**

In order to translate the principles of community development effectively into practice for the attainment of socio-economic and environmentally sound development, the formation of Local Community Organization is vital for the whole process to follow. Such organizations are local institutions to decide, plan, implemented and manage activities in the light of the principles formulated for the comprehensive community development. These institutions may be a mass coalition of village, or Muhalla, or an interest group, or a group of like-minded people for promotion of the groups' interest in the principles of co-operation and democracy.

Such organizations can be created around a single activity of common interest of the community and it can be nurtured over the time by development activities. It is easy to organize but to keep them organized is not an easy task for the social organizers and the community members themselves. They would cooperate when is profitable. Moreover, they will remain organized if it continues to convey benefits to its members.

## **5.10 Necessary Conditions for Social Organization**

The necessary conditions for initiating and sustaining the participatory institutional development process at grassroots level are:

- It is important to emphasize that great care must be taken to ensure that these measures complement or build upon locally existing institutions and organizations rather than replace them. Problems of acceptance often occur when introducing completely new forms of organizations. Yet, the simple transformation or modernization of "traditional organizations" can also be problematic.
- Field experience showed that it is most helpful if Group Promoters (GPs) assist as catalysts in group development and in linking groups to government/NGO services. Community leader or social organizers role is that of an advisor strengthening the groups leadership, organization and planning capacity, a participatory trainer teaching basic problem solving and technical skills, and a link person facilitating communication between the groups and government/NGO's developments services. Once groups reach maturity, community leader or social organizers withdraw from the groups.
- Financial support (government or external project) is necessary for financing training of support staff and providing seed money, and or financial topping-ups to self-mobilized savings, and or loans.

### 5.11 Participatory Learning

Participatory learning describes an interactive learning process engaging the co-operation and problem solving capacities of the poor. It addresses participants on all levels from the local to national levels. Participatory learning methods are based on participatory rural appraisal (PRA) techniques as well as small-group learning techniques. Ideally a participatory learning exercise for institution building is a phased approach. It aims first at team building and group formation processes with a focus on demand-driven skill development in fields, such as organizational management and leadership. This phase of learning is directed towards and brings together representatives from all institutional layers involved into programme implementation. A second phase focuses on technical skill development addressing mainly the small self-help groups on topics of direct relevance to the rural poor such as group savings and credit and small business management and accounting. When learning groups are small, members come from the same socio-economic level and have similar concerns; learning of technical skill is easier. Beneficiaries set the demands, not outsiders. The use of group-based, participatory learning methods for strengthening the collective learning, problems-solving and enterprise management skills of the poor have proven quite successful and a number of piratical tools for doing this are already available.

### 5.12 Advantages of Organization

Advantages of organization can be summarized as follows:

- Solves those problems collectively which are not possible to tackle individually;
- Develop, protect and improve land collectively;
- Investment increases due to pooling of meager resources through collective action;
- Raises equity capital and controls capital collectively;
- Easy availability and utilization of services and facilities;
- Co-operative management of capital and credit;
- Collective arrangement for agricultural unjust and sale of agricultural produce, thereby minimizing expenses and maximizing returns;
- Up-gradation of skills, know-how etc;
- Self-arrangement of local affairs settlement of disputes and petty affairs help by the community members themselves and
- Develop a local management system.

### 5.13 Disadvantages of Not Organizing

In a nut shell disadvantages for the community of not getting organized are as follows;

- All the above mentioned advantages will not accrue and hence great losses will occur;

- The condition of land and the economic plight of the communities will further deteriorate;
- The village communities will remain deprived and neglected;
- Exploitation by the middlemen, and commission agents will continue;
- The people will lag behind in development and progress; and
- The village communities will never stand on their own feet.

### **5.14 Functions of Organizations**

Functions and responsibilities of the local organizations are to:

- Promote local economy activity, which would lead to higher income;
- Take-up social projects in order to create harmony and mutual understanding among the people;
- Mobilize saving to provide credit to the community members;
- Arrange reclamation and development of land and irrigation facilities and other productive physical infrastructures and their regular maintenance;
- Identify productive projects and prioritize them according to the need;
- Supply agriculture inputs and other requisite of the community;
- Arrange the marketing of agricultural produce and handicraft products;
- Arrange veterinary and plant protection services and facilities in the village;
- Arrange and participate in up-grading of human skills training programme;
- Participate in management of local affairs, settlement of dispute and petty affairs in the village;
- Establish projects like poultry, livestock, dairy, agro-processing industries etc, and encourage similar projects among members;
- Sponsor and supervise schemes of primary health with special emphasis on sanitation, conservation, and cleanliness of environment and portable drinking water.
- Encourage primary education and adult literacy;
- Co-ordinate and co-operate with other departments and organizations for their activities;
- Fix credit limit for members in accordance with equity and social justice;
- Examine the accounts, sanction loans to members, supervise their end-use and effect recoveries;
- Sanction contingent expenditures;
- Decide the terms and conditions on which deposits are to be received and arrange for the payment for return of deposits;



- Acquire and construct buildings or carry out works necessary or conducive to the proper functioning of the council; and
- Any other function likely to promote the welfare and economic betterment of the village community.

### 5.15 Salient Features of an Exemplary Community Organization

- The members of local organization should have a clear-cut understanding about the concept of self-help and self-reliance through community development and its own duties and responsibilities within a community organization.
- The members of a community organization should have collective and participatory approach towards the solution of their common, social and producing problems.
- They must believe that "all are for one and one is for all" and should have a sense of "we" feeling and collective belonging.
- The community organization should try to promote the common interest of its members and to facilitate them in the attachment of their needs. Minority benefits should be considered minor and secondary factors by community organization.
- Fortnightly/monthly meetings and savings should be a regular business of the community organization in order to promote the habit of thrift and savings among the members and to generate capital for seller financing
- Community organization should have the spirit of self-management self-help and self-reliance.
- The community organization should try to obtain maximum benefits from the package offered by development agencies.
- The community organization should try to obtain commit benefits from the packages offered by development agencies and NGOs.
- The community organizations should be free of all political and sectarian issues and its sole objective should be the promotion of socio-economic interest of its members. They, however, must make the community members aware of their right to vote and their understanding as to how they can effectively exercise this right.
- The office bearers should be devoted and dedicated leaders and sincere to develop their communities.
- The community organization should initiate some socio-economic activities from time to time from their own resources.
- It should establish links with other institutions and agencies for the comprehensive village development.

### 5.16 Threats to Community Organization

#### Resistance

Community organizations can encounter active and passive resistance from many sources like local élite, political leaders, religious leaders and in some cases may be area administrators. To avoid such resistance the programme should have an equitable and supportive role for all walks of life and for all governmental and non-governmental organizations in the area. The community workers would have to use all organizational tactics to deal with all such people during his interaction and motivational visits.

### **Subordination**

Some time the community organization is dominated by the prosperous farmers, merchants and other businessmen and the organization is converted to the services of vested interest people and not the whole community. Moreover, in some cases the main cause of the damage or effectiveness of a community organization may be leadership; and today's leadership might become tomorrow's oligarch to use the local organization for his own vested interest.

The factor, which leads to dominate, is the lack of managerial skills between the leaders and the followers. The major measures for controlling dominance are the training of members of the local organization in participation, decision-making and other organized activities. Regular follow-up, general conferences of the representatives, papers on different activities and on performance of the local organization and its wider distribution or reading in the general meetings can improve such situations.

### **Ineffectiveness**

Community organization might become ineffective to its members in due course to time. This is mainly due to lack of skills in organization development, accounts and planning work.

The other reasons include no risk taking nature of the rural people and uncertainties surrounding the rural life. The community worker will have to train the office bearers in particular and general members in book-keeping, organizational work and resource mobilization from the community itself through their leaders. Fund raising through donation and saving will considerably improve the effectiveness of a local organization. Similarly, follow-ups by the social organizers are also helpful in keeping the community organization effective.

### **Mal-practices**

Dishonesty and lack of dedication are the common problems for the survival of a community organization. Some time individuals use community organization for their own interest or for the interest of his friends and family, which diminishes the collective interest of its members. Sometimes the funds are miss-appropriated and used for the above purpose. Smaller groups, regular meetings and simplification of the procedures can overcome the mal-practices. In the smaller groups, there is more interaction and all overcome the mal-practice. In the smaller groups, there is more interaction and all members know each other through their

names, faces and performance and such cases there is more group pressure to handle the funds honestly.

Similarly general body meeting makes the representation more effective and prevents misappropriation. Simple bookkeeping procedures can enable the community members to understand the financial position of community organization and their own liabilities. The important point of the sustainability of an organization is to encourage and reinforce member's commitment to their organization and to their sense of responsibility toward the organization.

### **5.17 Community Organization and Women**

Participation of both male and female partners in development activities is an inherent part of the participatory development and the social organization process that facilitate it. But women participation in the development of natural resources and other development activities is not possible without an explicitly awareness of gender, and without building the techniques for understanding and systematically addressing the issue on wider scale. The programme staff as well as the community needs to be sensitized on gender issues and the concept of gender disparity shall be clarified within our cultural and religious contexts. All the programmes should have a clear strategy for organizing women of their respective programme areas.

An objective of women participation in development activities is wider than the promotion of women only. The programmes shall focus on the relationship between men and women, their roles, access to and control over resources, division of labor and needs through the community organizations. A clear understanding on these issues lead to household security, well being of the family, natural resources and production and many other aspects of rural life. Failure to take into account women and their role leads to unsuccessful project activities.

Therefore understanding men-women relationships and adjusting methods and messages for them is critical for full participating by all sectors of the community. Separate women participating strategy should be devised to ensure balanced involvement of men and women in the project activities; However, as far as social organization of women is concerned, it is important to follow all of the following steps for establishing women community organizations.

- Understanding and documenting the differences in gender roles, activities, needs and opportunities in the context of each community development programme.
- Data should be collected and organized to highlight key women problems, underlying causes of problems for men and women, and the relationship between problems and causes
- A thorough analysis of the data should be conducted to highlighting learned behaviours of men and women
- Women participation analysis framework should cover various categories of information such as need assessment, activity profile, resources, access, and control profile, benefits

- and incentive analysis and institutional constraints and opportunities
- Specific-training packages should be developed to sensitize programme staff and the community on gender issues in the context of our social and cultural environment
  - Objectives of women participation should be clearly stated in the context of overall objectives of the project. This will help staff to understand how to get out of conventional approach of thinking only in terms of providing different facilities for women; and
  - Special monitoring and evaluation system should be in place to enable adjustment to experiences of women participation, to establish accountability of commitment, and to achieve gender-specific priorities.

The social organization objectives of increasing women's managerial and organizational capacities, enhancing their self-confidence, and putting the control of income into their hands, are best met where there is a separate women's organization. When activities are implemented through the male dominated organizations, the physical and economic objectives of increasing productivity and income or reducing labor time may be met, but the conscientization effect on women is definitely less or even nil sometimes. By forming an organization with separate membership, meetings savings accounts, the women initiate a process that enables them to share experience, workload, problems and decisions making.

## **5.18 Significance of Participatory Approaches in Empowering People for Sustainable Development**

### **5.18.1 Introduction**

The family of approaches and methods known as Rapid Rural Appraisal (RRA), Participatory Rural Appraisal (PRA), Participatory Interaction in Development (PID), and Participatory Planning, and Action (PLA), has gained increasing acceptance during the past decade within development projects. It applies to theory as well as development practice, bringing about a reversal from 'top-down to bottom-up, from centralized standardization to local diversity, and from blueprint to learning process.

This unit focuses attention on the what, why and how of such participatory approaches, and their impact on sustainable development. It also makes the case for using such an approach as the intervention strategy for development, be it rural or urban.

### **5.18.2 What is Participatory in Development?**

Participatory basically means taking part or sharing. In a development context it goes further, with implications as to who shares, with whom, and in what context. Participation in development has a long history. Various government and non-government organizations, both national and international, have focused attention on participation in a conspicuous manner over the past two decades. The terms 'popular participation' and

'people's participation' have now become a part of the development language in both sectors.

The term participation, as well the rationale for this approaches, have been interpreted in a variety of ways, the Peasants Charter of the food and Agriculture Organization argues for participation in the following manner; Participation by the people in the institutions and systems which govern their lives is a basic human right and also essential for realignment of political power in favour of disadvantaged groups and for social and economic development. Rural development strategies can realize their full potential only through the motivation, active involvement and organization at the grassroots level of rural people, with special emphasis on the least advantaged, in conceptualizing and designing policies and programmes and in creating administrative, social and economic institutions, including co-operative and other voluntary form of organization of implementing and evaluating them.

Similar views are reflected by the present director of the United Nations Research Institute for Social Development (UNRISD), when he states that the value of participation arises from the inherent strength of participation as a means of articulating genuine needs and satisfying them through self reliance and mass mobilization. UNRISD used the following definition of participation one of its publications; Participation involves organized efforts to increase control over resources and regulative institutions in given social situations, on the part of groups and movements of those hitherto excluded from such control.

There are however, significant variations in the usage of the term, According to Chambers; "Participation" is a word, which is experiencing a renaissance in the 1990s. So widespread is its use that some talk of a paradigm shift to participatory development... But he argues that There are three main ways in which participation is used. First it is used, as a cosmetic label to a make whatever is proposed appears good. Secondly it describes a co-opting practice to make whatever is proposed appear good. Secondly it describes a co-opting practice to mobilize local labour and reduce cost. Often this means that they (local people) participate in "our" project. Third, it is used to describe an empowering process, which enables local people to do their own analysis, to take command, to gain confidence, and to make their own decisions. In theory, this means, that "we" participate in "their" project not "they" in "ours" In this perspective reversing power relations is the key and weak link in achieving participation. He also notes that the gap between concept and actual practice is overshadowed by the use of the term participation in development jargon today, so much so that the meaning of the term needs clarification.

Field experience clearly shows that participation means very different things to different people. For some it means people attending meetings, or labour contribution in development work like *shramadana* (free labour). In irrigation rehabilitation, for example, participation in some cases appears to have meant holding meetings to get people's endorsement to what has already been planned by the technical experts. Such meetings, presided over by the decision makers, came to be known as ratification meetings,

where the dominant views of those who knew, prevailed over the others. But for official purposes, such meetings are prayed as consultation with people's participation. In other instances, participation means group formation for co-operative/collective action for input supply and marketing.

The highest form of participation appears to be self-organization and self-responsibility and self-actualisation, which result in empowerment of the people concerned, Stan Burkey, defines participation as an essential part of human growth, that is, the development, which guides towards sustainability.

The meaning of participation used in this unit has empowerment and self responsibility for collective decision making as its final goal. The achievement of such participation needs to be a process in which the rural poor themselves become more aware of their own situation, of the socio-economic reality around them, of the problems. Having understood such problems they take decisions on the steps to take in initiating a change in their situation, Development strategies in such a context should be supportive, and accompany this process.

In such a perspective participation becomes interrelated with a process, which opens out a wide spectrum of free and open interactions. In this process there can be progress as well as failures, but both must be viewed as opportunities to learn for taking better decisions in the future. Participation becomes a learning process for both the villagers and the development workers. Such a process cannot be determined from outside. Continuing interaction and reflection generates it.

Experiential learning makes the process the people's own, as opposed to the people being mobilized, led or directed by outside forces. Through collective self reflection on there experiences and problems, people become more aware of different dimensions of there reality, and of what can be done by themselves to transform it, With this awareness they decide upon what collective action to take, And analyse its results to promote their awareness further. Thus they move on with progressively advancing knowledge of their evolving reality.

### **5.18.3 Why is a Participatory Approach Needed?**

During the early 1970s the development interventions that were carried out with either local or external funding emphasized two types of actors. On one side were those who engaged in the task of identifying development needs, planning development activities, mobilizing resources for development, implementation, monitoring the implementation process to ensure that designs, plans and disbursement of resource were taking place as planned and evaluating the success or failure after the event, using monetary disbursements, physical achievements or impact that the activities has on the target group as yardsticks.

On the other side were the beneficiaries for whom and for whose development all these tasks were undertaken. They were only upon to

operate and maintain structures such as minor irrigation reservoirs, wells and rural roads, and to share the cost of the development activities.

The two categories of actors therefore were those who do things and those for whom things are being done. Those who do are the empowered. They have knowledge, authority, access to resources and decision making power, those who are the beneficiaries, or for lacking in authority, poor and therefore lacking in resources, and basically voiceless in the decision making process. The gap that exists between these two groups has resulted in mutual mistrust, often leading to antagonism, and has serious implication on the development process.

Therefore bridging this gap between these two parties, namely the doers – the politicians, the bureaucrats, NGO activists, and those for whom things are being done – the peasant, the poor, the citizenry at large, is identified as a prime need for successful achievement of development activities/projects. Numerous failures have been recorded in a wide spectrum of development activities. Owing to the existence of this gap.

The gap can be illustrated by looking at the process through which development activities are usually undertaken. Development work is usually undertaken through projects, with set objectives, a predetermined time schedule, a plan of action, and a budget. Responsibility for implementation is assigned, and the beneficiary clientele comes into the picture only as a peripheral element.

Most of these projects are conceptualized and formulated around availability funds for prospects of obtaining funds. There are many instances where the need for a project to achieve some objective is conceived in the mind of some authority who either has access to funds or enough power to start others carrying out the different tasks needed to formulate a project. After the project is conceived, a pre feasibility study may be carried out, with data being gathered through traditional methods, and a justification for the project is worked out. If the initiator of the project is very keen on the project and has enough power, then even projects, which are not really feasible, are manipulated to appear feasible.

Once the pre-feasibility stage is over, a feasibility study is undertaken. The same manipulatory process is carried out in a deeper and more intensive form. If the feasibility study meets requirements, then the projects gets off the ground, thereafter the project is implemented. Invariably the project is to benefit a specific clientele but where does the clientele come into the picture in the project planning process? Often clients are considered a nuisance, because they express justifiable fears about the changes that may result from the project.

Are development projects planned to satisfy someone's ego, to utilize some available funding, or to solve genuine problems? If the objective is to solve problems, all parties affected by the problem should have a say in the solution that is identified. The affected by the problem should have a say in the solution that is identified. The affected parties should be brought into the project identification and formulation process. But if involvement of the clientele is desired, how should it be done and what are the methodologies, and processes that are available to do so? It is here that

participatory methodologies, applied to project planning and implementation, become relevant.

The participatory of the beneficiaries is also needed to achieve success of projects at a very practical level. Cohen and Uphoff cite an evaluation of over 50 rural development projects, which reveals that participation, and decision-making during implementation is even more critical to project success than participation at the initial stages. Due to lack of participation, a large number of development projects have resulted only in a short-lived progress.

The writer has experience of a similar situation with regard to some minor irrigation projects implemented in the latter half of the 1980s in the districts of Kurunegala and Moneragala in Sri Lanka. In the early 1990s, two to three years after projects completion, the Self Help Support Programme of Swiss Interco operation undertook an evaluation of some of the completed irrigation projects. The results revealed that about 70% of the minor irrigation tanks rehabilitated were found to be poorly maintained by the farmers, as they were envisaging further external support for maintenance.

When some of the farmers were asked why they allowed the tank bund to get eroded to half its size in certain places, let plants grow uncontrolled, and neglected the ant hills destroying the bunds, the answer was: we have informed the Field Officers in writing several times but none of them came this way after the construction work was over. This is a clear indication of lack of involvement in decision-making and implementation.

Field interaction showed that they lacked a sense of ownership or responsibility for maintaining such structures. There was no organized effort to find alternative means of addressing such issues. *Wewa Sabhas* and Farmer organizations appear to have been formed by the intervening organizations to renovate the first set of tanks rehabilitated. When physical construction work was over, the need to take collective action for maintenance was not realized.

With this experience, a participatory approach was encouraged with the next set of tanks to be rehabilitated, implemented by two partner organization in Mahawa and Kurunegala. It took a much longer time to complete the structures, as compared to the earlier experience. *Wewa Sabhas* and Farmer Organizations were involved from the planning stage, through implementation and monitoring and evaluation, using a participatory approach, PRA. This meant building up the capacity of the Farmer Organizations, and even more so of the field officers who were used to planning and implementing projects on their own for the benefit of the people. The role of reversal these officers did not come about automatically by using the methods alone, but resulted from field follow-up after training in participatory methodology.

This slow process of reflection and action finally allowed information generation, analysis, planning and action by the farmers based on their own decisions. The results can be seen today. Urapolayagama, Heeralugam, villages in the Kurunegala District facilitated by the National Development Foundation, Kandubodagamawewa in Mahawa facilitated by the Sri Lanka Freedom from Hunger Campaign Board, Savings and Credit



Groups at Mahiyangana facilitated by Future in our Hands, are examples of successful efforts of this approach. In these instances farmers organized themselves to maintain the rehabilitated schemes backed by groups funds and collective action. The difference in the results and impact when the implementation strategy used a participatory approach has been evident.

These experiences also show the importance of the participation of the people concerned in the decision making process throughout the steps of the development cycle. A sense of ownership of assets arises when there is participation in planning, designing, implementation, monitoring and evaluation.

#### **5.18.4 The Use of Participatory Methodologies in the Empowering Process**

##### ***The Methods and Tools***

The recognition of the importance of participation in the development process has led to the development of a variety of methodologies in order to achieve its objectives in development projects. Current practices in implementing participatory approaches in development draw from variety of traditions such as Activist Participatory Research, Applied anthropology, Field Research on Farming Systems, Traditions and Methods of Participatory Research, Agro-Eco Systems Analysis and Rapid Rural Appraisal. According to Chambers, it represents a growing family of approaches and methods, which will enable local people to share, analyze and act to enhance their life and conditions.

In the Sri Lankan Context, the national network promoting participatory approaches uses the term Participatory interaction in Development (PID) in order to identify the methodology used in this country. This connotes participatory interaction among all actors in development, while recognizing the key role of the people themselves and the relevance to all stages of the development cycle. In promoting the use of this approach in Sri Lanka, the Network keeps in mind the experiences of social mobilization, such as in the Change Agent Programme, that have evolved during the past decade in Sri Lanka.

PID draws heavily on PRA in the use of visualization of tools and techniques and changes in the behavioral patterns and attitudes, while focusing on the interaction and process. It is envisaged that such a conceptual outlook promotes sustained participatory development, which will contribute to the empowerment of the people. This approach needs to be treated as an adapted version of participatory development, which is supported by creative ingenuity. In the same way as the participatory approach, these methodologies are bound to change with experience.

Field experience over many years has shown that PID/PRA tools and techniques have a strong potential for achieving the participation of all actors concerned, particularly the villagers whether literate or illiterate. The key to this is the element of visualization associated with such tools. The shifts from verbal to visual help even the non-articulate members,

such as the under-privileged, women, and children, to participate. It creates a free and open environment for interaction.

The methods and tools often used are participatory mapping and modeling, direct observation and transect walks, seasonal calendars, time lines and trend line's matrix scoring and ranking, wealth and well-being ranking and grouping, institutional diagramming (Venn diagrams), and other forms of analytical diagramming such as different types of graphs. Information generated through these techniques is often supplemented by secondary data, which can be used for crosschecking. Focus group interviews, semi-structured interviews, and key informants are also used in combination with the other methods.

The opportunities for triangulation of information generated are another aspect, which come out very significantly in the use of participatory tools and techniques, which are built on the principle of visualization. This means that the reliability and the validity of the information generated can be established through crosschecking. Visualized information also allows for the perceptions of different sectors of the populations - men and women, young and old, privileged and disadvantaged to come together on a common basis.

Interaction within groups, between groups, and sharing with those from different locations, is made more feasible by the use of visual techniques. When farmers from Dambana in mahiyangana presented their experience in Colombo to some well-educated development workers, they could articulate their views effectively with the use of visuals they prepared themselves. The same was true of the farmers from Urapolyagama in Kurunegala, when they presented their case to the members to the national Network for PID/PRA. Exchange visits from farmer organization to farmer organization, and exchanges between farmers within the group, have become more realistic and understandable with the use of these techniques. Handled carefully and skillfully by a facilitator they become an instrument for bringing about the envisaged change in behaviour and attitudes, and breaking barriers between different sections of the population.

Field experience shows that information needed for a situation analysis, or baseline data for establishing indicators for monitoring and evaluation in a participatory manner, can be elicited, understood and agreed upon in such a process. Therefore the same tools could be used for interactive monitoring of progress of impact evaluations.

One such example is the experience of the National Development Foundation. In this organization information generated through a participatory process has been helpful for group interaction during monthly meetings, to compare progress among themselves, with the tools providing the base for information generation analysis and discussion. Such information has proven to be equally effective for joint reviews and evaluations with intermediary organizations and funding partners. This, however, should not be interpreted to mean that participatory evaluation and monitoring rules out hard data. Hard data can be aggregated or drawn from such basic information by the parties concerned. But the fact

remains that the local organization should do it for their purpose of monitoring.

Wealth ranking exercises are very useful for learning about the social structure and identifying a target group. They must be carefully handled, as they can become sensitive issues. The Farmer organization of Kanudubodagamawewa in Maho is an example where such analysis promoted the community to organize itself to help the poorer sector for example, the landless poor were allowed to use small plots of paddy land allocated to them by the community for cultivating vegetables during the Yhala season. The analysis of power relations in the local setup, which is crucial for the empowerment process, is often being done with the use of the flow charts and impact diagramming.

The use of the tools and techniques is limited by the skill of facilitation. Assessing the limits of local knowledge and awareness, and when to bring in technical and scientific know-how available with experts, can be addressed with the analysis of information generated through the use of participatory tools and techniques. The experience of building on what people already know, particularly with regard to farming systems, has shown the possibility of harmonizing different types of knowledge at the local level.

None of the above should be taken to mean that the use of such methods automatically ensures participation in the manner expected that leads to empowerment, enabling villagers to conduct their own analysis, and to own the information generated. The writer's experience shows that many who pay lip service to PRA have a tendency to look at the technique as an end in itself, and not as a means for attaining development goals. Development workers often say 'We have done PRAs in so many villages, which is likely mean that they have not changed the way they behave at all.

The critique that tools and techniques of PID/PRA are only cosmetics to social mobilization can be challenged in that sense. Why do people use cosmetics? They realize the existence of a shortcoming that can be covered by such an action, or at least to improve on what exists. Such visualized tools and techniques could be considered as a strong medium or a means for social mobilization to the effective. This is particularly so if the change agent or mobilize wishes to change their role from an activator to a facilitator, who allows the key actors or the community to articulate views, generate information, analyze, draw conclusion, assess options take decisions, implement, and monitor by themselves. Therefore, as a concept it goes much deeper, and becomes complementary to the change agent and social mobilization approaches developed in Sri Lanka. All such approaches stress the importance of commitment to the process as a means for empowering the people. The complementarity of the approaches needs to be recognized in such a context - they should not be seen as additions for subtraction. Complementarity makes the final product of empowerment richer, stronger, and mutually reinforcing.

A farmer in a recent video takes pride in the fact that they could produce a result, which they never imagined they could. Therefore, it is not merely playing with stones, and sticks, or belittling the literate and the

ntelligentsia. While it looks like Montessori work, as some say, the basic principle behind the Montessori method is learning by doing. A participatory approach, with a reversal of roles, is also attributed to experiential learning, in which actors in development are in partnership with those to be empowered. In other words, it helps the potential and enthusiasm inherent in human beings to grow and blossom.

### **Attitudes and Behaviour**

Attitudes and behaviour are an integral part in PID/PRA. As observed earlier, in the project mode of development intervention, over the past half century, the emphasis was on planned projects being implemented with the most the involvement of the beneficiaries. This has meant the implementer has a dominant role, and the beneficiary a passive role. In the case of participatory approaches, these roles are reversed, and the beneficiaries become key actors in development.

Norman Uphoff further elaborates this as follows: the Major shift however during the era of participatory approaches, in the past two decades is one that recognizes people from a professional paradigm centering on things. The emphasis on things was dominant in projects implemented during the 1950s and 1960s with large infrastructure irrigation works and industrialization being the major sectors. Chambers refers to it as handing over the stick to the poor from the bureaucracy, implying a reversal of roles.

This means PID as an approach emphasizes a change in Behaviour and attitudes, as well as in concepts, values and methods. This challenges the accepted norms, which are dominant in bureaucracies, professions, careers, and the idea of transfer of knowledge from the expert to the ignorant. It also means loss of central control of power. Recognizing local diversity and empowerment. Such a role reversal applies to all the steps of the development cycle.

Experience shows that the methods and tools previously described, and the process adopted; contribute to reinforcing behavioral changes among the main actors in development. This aspect of participatory approach is the most difficult to achieve. Sometimes, depending on the behaviour of the so-called facilitator, even a participatory tool or technique may lead to top-down implementation. After many years of conventional bureaucratic behaviour, it is certainly a challenge to bring about these different behavioral patterns.

Illustration, due to non-fulfillment of promises and specific biases of objects to which the community has been exposed for generations, makes this paradigm shifts a difficult process for the village. In the eyes of the insider, the outsider is the officer, and past experience with outsiders often inhibits free and open expression.

However, there are instances here participatory methods have helped people, to articulate their views to the politicians and decision makers effectively. Even in contexts such as the plantation sector, where there is a dominant management set-up, workers have used the results of participatory analysis to open out a dialogue with the superintendent.

The culture of collaboration between development partners, based on openness and democratic decision-making, is essential for sustained development. This can only be realized through a participatory relationship with the communities. The more experience we gather in the use of such an approach, the more we shall understand its implications. It is important to emphasize the spirit in which these methods are used. It is not the tool or the approach, which is often at fault, but the way it is used. Therefore improving effective facilitation skills on the part of the development workers becomes critically important. The way in which the approach is implemented can help to prevent biases on the basis of community leadership, gender and the disadvantaged.

### *Process and Sharing*

The third significant element in PID/PRA is the process or the sharing of experience. Participatory approaches, particularly PID/PRA, emphasize the need to think beyond projects. In other words, there is a commitment to a process, and we are not limited to a project which is time bound. Such a process will create an environment where people actively pursue development activities, on their own initiative, once projects are phased out. In other words, experience in field situations reveals that self-organized collective action can evolve as a result of a positive environment, which we as development workers may have helped to generate through facilitating a process.

Due to the emphasis given to the process in participatory approaches, there is no direct guideline, which can be applied or replicated. The process of learning takes place both vertically and horizontally. Farmers learn from each other through interaction. Farmer groups share experience through interaction between groups, which leads to local people becoming good extensionists and facilitators for each other's analysis. Local people, such as farmers and villagers, become confident of their own expertise and acquire skills through the process.

This has made it possible for them to share their experience with other local, national and international organizations. In 1991, villagers from Mahiyangana presented their analysis, how they did it, and the purpose for which it was done, to a large gathering of managerial personnel and decision makers from government and non-governmental organizations at the Bandaranaike Memorial International Conference Hall in Colombo. A similar experience took place in the network for PID/PRA gathering in Colombo, where farmers from Karunegala presented their case in 1994. In spite of the change in environment from simple village life to metropolitan Colombo, the farmer men and women remained unruffled by the questions raised by the audience. This shows a clear indication of the highest esteem arising from self-actualisation and confidence. They could explain to anybody with confidence what they had analyzed, planned, implemented and monitored. Recent training conducted for field officers through farmer resource persons, by Action Aid India, is another example of this form of sharing.

Chambers points out that increasingly technologies; approaches and methods are spread laterally by peers rather than vertically through

transfer of technology. Farmer to farmer extension is becoming more prevalent, both within and between countries and ecological zones. In PID/PRA, the best trainers and facilitators for adjoining villagers are those who have already gained experience in the application of the approach.

A villager who has gone through a participatory process of development in his village was asked what he would suggest to do differently, if the PDA/PRA process was to be replicated in another village. He promptly replied: 'this is how we did it, and it makes sense to us; others may do it differently. Please ask them to evolve their own system'. This simple statement from a farmer in a remote village in Kurunegala has an in depth philosophy behind it. It shows trust in the potential, and belief in the evolving nature, of the participatory process. However, when reference was made about improved farming practices, he said: 'those could be shared with our colleagues in the next village. Friends from other villages have visited us to learn about intensive rice cultivation practices from our demonstration plots'. Thus experience spreads from farmer to farmer, and village to village.

It is also spreading from non government to government organizations and vice versa through national networking. Experience is also shared between government organizations and among NGOs themselves. Regional exchanges provide a forum for nation to nation sharing. As a result of such a process, the methodology itself is evolving and spreading.

### ***Process and time***

Very often development workers, and particularly founders, expect miracles to happen at the same time as expecting sustainable development through participatory methodology. A participatory approach is a catch work and a must in the development jargon today. However when it comes to progress monitoring of projects and programmes, the tendency is to look for easily accomplished tangible targets. Naturally the development worker gets sandwiched between the community based participatory approach emphasizing people and their reality, and the demand for physical and financial targets. This dilemma still prevails, even though participation has entered as a buzzword in development literature.

Stan Burkey comments on this conflict as follows: 'development workers don't seem to have very much time or patience. Perhaps it is all a result of the invention of the jet engine- if we can get there in only ten hours why do we need ten years to develop the place? On a more serious level, we do seem to want results amazingly quickly. It is however doubtful that the development process can be compressed to meet our ambitions. We used to talk about three year projects; perhaps we should be talking about twenty year programmes. How many rural areas have developed in one generation? We are working with people, people with their own urgencies, priorities and time scales. It is their development that is the measure of success.

This highlights the fact that if people matter in development there is no short cut. We have to facilitate a process whereby people become sensitive to their problems and express readiness to change their situation by taking responsibility for their own organizations and acting correctively,

taking decisions for the desired changes. We as development workers need to facilitate such a process and support strengthening of such organizations. This is a long-term process demanding the necessary commitment.

'A great deal of heartbreak which in the past has too often turned over optimistic idealists into later cynics, would be avoided if those who wish to help in development could learn to be content to do good slowly.' As Burkey rightly says, poor people who have never has the opportunity of participating in a democratic process require time to learn to formulate and express their ideas, participate in open debate, take collective decisions and follow up with cooperative action. Mistakes will be made but these can be made into lessons leading to better decisions in the future. Development workers need to remember that behavioral patterns cannot be changed at once. It takes time; changes must be a gradual process, a process in which the ideas and behaviour of all actors in the development process will most probably change over time.

## **Unit Summary**

In the case of specific grassroots level organizations the potential of participatory methodology has been proven in many instances. Participatory methods using visual and verbal modes of communication have been effectively used for appraisal, planning, monitoring and evaluation of development programmes. But the use of methods alone is not enough to sustain participation of the community in the development process. Other significant aspects, which need to be strengthened, include the institutionalization of the processes, delegation of responsibility, and decentralization of decision-making and resources allocation.

The anticipated role reversals are extremely significant for the key actors, namely the villagers, to perform effectively. Changing attitudes and behaviour for this takes time.

Participation, in the context of participatory approaches, specifically PID, can be used in a much wider perspective than it is currently used. All actors in the development scene have a role to play - the farmers and villagers who are the prime actors, the facilitators or change agents from government or non-government sectors, the decision makers in managerial positions, and policy makers and politicians. The roles of different actors can be geared towards the realization of the common objective of sustainable development through empowerment of the people. There is a need to create an environment where the people themselves are the key actors, and all the other actors play a facilitative and supportive role.

This should rule out the misunderstanding that a bottom up process is one where people do everything by themselves, know everything that needs to be known and that modern technology/research has no role to play.

In a participatory approach there is certainly room for scientific research and technology. The only difference is that we build on what is already known by the farmers as indigenous technology, and there is an opportunity to harmonize or adapt research findings in an acceptable and sustained manner. This means re orientation of conventional extension systems, the field workers' role, and that of the institutions they represent, in order to evolve a system which emphasizes back stopping support and facilitation for local farming initiatives, which are essential for sustainable development.



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## UNIT 6

# A MODEL OF URBAN DEVELOPMENT: ORANGI PILOT PROJECT

### Unit Introduction

Alternatives to the conventional approach habitat development have been explored in the government as well as the NGO sector. These innovative alternatives include the regularization of unplanned settlements and support for the direct involvement of communities in urban and rural resource management. Such NGO programmes as the Orangi Pilot Project (OPP) and the well-known government-led project Khudi Ki Basti identify the directions of sustainable development, and the potential for Cupertino between communities, NGOs and the state in planning, operation, and maintenance of civic facilities.

In this unit we will examine:

- About Orangi Pilot Project area and people
- Background of OPP
- OPP Programs
- Role of Akhter Hameed Khan in OPP, and
- OPP Strategy

### Unit Objectives

After going through this unit, the students would be able to learn:

- The objectives and method adopted by OPP
- How OPP approach is unique
- Participation of local communities in OPP sanitation, health and credit programmes
- How joint staff meeting of OPP became a learning experience for professionals, social organizers and technicians
- What is the finest achievement of OPP?

## 6.1 Background

There are numerous projects being undertaken by NGOs in an attempt to fill the void left by the government's (in) action with regard to shelter issues and the provision of basic necessities. Several deserve special mention; they are; the Orangi Pilot Project (OPP) in Karachi; the Khuda Ki Basti project near Hyderabad; BUSTI in and around Karachi; the Karachi Administrative Women's Welfare Society (KAWWS); urban waste management programme (implemented by the HRMDC) in Peshawar; and the Aga Khan Housing Board for Pakistan (AKHBP) projects in Karachi and in the NWFP. The activities of OPP are provided in greater detail below.

## 6.2 About Orangi Area and People

Orangi Township, consist of the most part of Katchi Abadis. It covers an area of over 8,000 acres and has a population of about one million living in 94,122 houses. The population is multiethnic, consisting of people from virtually all areas of Pakistan, consisting of mohajirs (immigrants from India), Biharis (immigrants from Bangladesh), Pathan and Punjabi immigrants, and local Sindhis and Balochis. The majority of them belong to the working classes. They are day laborers, skilled workers, artisans, small shopkeepers, paddlers, and low-income white-collar workers. Average family income is estimated at Rs 1,500 per month.

The settlement began in 1965. Land colonization, house building, development of income-generating activities, were all undertaken by local residents with help from the informal sector and without any assistance from government agencies. Writing about the energy and initiative of the people of Orangi, Akhtar Hameed Khan (**AKH, Guru of Participatory Development**) says, 'Familiarity with Orangi reveals that a town larger than Colombo or Gujranwala receives scanty services from official agencies. The people of Orangi depend mainly on "informal" sources. Land is obtained through dallals (middle-men); credit materials, and advise for housing is obtained from thallewalas (block manufacturers). Self-supporting schools teach their children. Quacks (physical and Spiritual) treat their ailments. They continuously resort to the black market or bribe market for business facilities, welfare amenities or peace from harassment. That this informal sector and its black market is many times the size of the official sector indicates the weakness of government planning for the poor. At the same time it indicates the vitality of the poor and their skill in the art of survival. Besides, their vitality is demonstrated by the presence everywhere of anjumans (associations), which lobby intensely all the time, presenting claims and guarding gains. It is further demonstrated by the growing consciousness, especially among the younger generation, of their collective vote power. However, this informal sector, in spite of its vitality and energy, cannot effectively overcome the technical and managerial problems that its involvement in development has force's upon it, as it has no access to relevant research or qualified professional expertise.

### 6.3 Background of Orangi Pilot Project (OPP)

The direction that the Orangi Pilot Project was to take are clearly spelt out by Akhtar Hameed Khan in 'A Note on Welfare Work', written in February 1980. In a way, the Note also defines the research and extension method. In this Note Akhtar Hameed Khan states; 'we are all living through a period of social dislocation where people have been uprooted from their familiar environments; this dislocation is especially acute. They have to re-establish a sense of belonging, community feeling, and conventions of mutual help and co-operative action. This can be done chiefly through the creation of local-level social and economic organizations. Without these organizations, chaos and confusion will prevail. On the other hand, if social and economic organizations grow and become strong, services and material conditions, sanitations, schools, clinics, training, and employment will also begin to improve.' He further says, 'it must be admitted that a blue print is not available for immediate implementation, although many instructive models do exist in other countries. Those who want to go beyond the conventional ways should pertinently go through the process of investigation, local consultation, experiment, and evaluation.' And again, 'the development of social and economic organizations cannot be done quickly. Undue haste in this case will surely result in waste. Enough time should be spent on careful investigation of and acquaintance with local people, their conditions and institutions. A rough timetable may be suggested; several months' preliminary plan for the first year, followed by an evaluation based on the analysis of detailed documentation. The process to be repeated till the emergence of a successful pattern.' in addition, the Note says that two fundamental principles should be followed;

1. One, the avoidance of any political or sectarian bias; and
2. Two, the observance of a populist point of view and the preference for the needs of the common people.

The understanding between Akhtar Hameed Khan and Agha Hasan Abedi, on the basis of which the former became the director of Orangi Pilot Project, reflects the considerations detailed in 'A Note on Welfare Work'. The Orangi Pilot Project would have no timetable; and Akhtar Hameed Khan would be his own master. However, he would submit detailed accounts to the Bank of Credit and Commerce International BCCI Foundation along with quarterly progress report. OPP has been working in Orangi since April 1980; OPP is a research institution, which promotes community organization and self management. By providing social and technical guidance. It encourages the mobilization of local managerial and financial resources, and the practice of co-operative action.

#### 6.3.1 Method adopted by OPP

- The project would follow the research and extension method which meant that the OPP would first thoroughly analyze the problems of Orangi and the popular methods of solving them, and

- Then try to develop, through social-cum-technical research, a better package of advice and offer it to people. This understanding has been followed scrupulously on both sides.

### 6.3.2 Objectives of OPP

Orangi Pilot Project, from the very beginning, considered itself to be a research institutions whose objectives was:

- To analyze the outstanding problems of Orangi, and
- Then through prolonged action research and extension education, discover viable solutions.
- The project does not carry out development works, but promotes community organizations and cooperative action, and provides technical support to such initiatives. In the process it also seeks to overcome most of the constraints government agencies face in upgrading low-income informal settlements.

#### Activity 6.1

Explain why it is important for local communities to participate in any development activity?

Akhtar Hameed Khan feels that the function of NGOs and pilot project should be to develop strategies that can be integrated into the planning mechanisms of the government. This is because the scale of the problem is far too large to be tackled without effective government participation. However, for this integration to become possible, there are three prerequisites.

- the models developed should overcome the constraints faced by government agencies in the rehabilitation of Katchi Abadis (or for other development programs) without requiring major changes in their structure and/or the development and imposition of any radical legislature;
- overhead staff salaries, and related costs should be in keeping with government expenditure patterns and regulations, and the strategy should respect establish state procedures;
- proper documentation of the processes of developing the model, the creation of a demonstration area, and effective training material have to be created, without which replication is difficult, if not impossible.

The OPP has followed these 'prerequisites' scrupulously, and as a result its work is documented by sixty-five progress reports which read like a story book; hundreds of case studies, monographs, extension pamphlets, and posters; and profiles of activists and lane managers. In addition, a large number of books have been published on the Project and thousands of technical reports, maps, and land-use plans for the areas in which the OPP working has been developed.

### ***Cause of urban development failure (opinion of AHK)***

In the opinion of Akhtar Hameed Khan, most programs developed for the poor in the Third World fail because they are designed by professionals who belong to the upper classes and are not fully conversant with the sociology, economics and culture of low-income communities or the causes of conditions in low income settlement. On the other hand, the informal sector, that increasingly caters to the needs of the urban poor in Third World countries, and the urban poor themselves, do not have access to the technical research and advice that qualified professionals can give. Consequently, the development they bring about is substandard and fails to make use of the full potential of informal sector operators and low-income communities. Therefore, an arrangement has to be made and institutionalized to enable effective interaction between qualified professionals and research institutions on the one hand, and the informal sector and low-income communities on the other. Akhtar Hameed Khan quite rightly feels that he has succeeded in creating such an arrangement in the OPP.

### ***6.3.3 Unique Approach of OPP***

The OPP has also kept away from publicizing its work prematurely or supplying the media with news or handouts. This makes it very different from most NGO-supported and internationally funded development projects. In 'A Note on Welfare Work' Akhtar Hameed Khan writes, 'in the beginning all publicity must be strictly avoided. The consequences of premature publicity or any kind of early fanfare are likely to be as unfortunate as the consequences of hasty and grandiose planning. As project grows, the intelligent public will be informed by means of accurate and well documented reports by impartial evaluators.'

On the above principles and approach, the OPP has been operating a number of programs. These programs include a people's financed and managed Low-cost Sanitation Program; a Housing Program; A basic Health and Family Planning Program; a program of Supervised Credit for Small Family Enterprise Units; an Education Program; and a Rural Development Program in the villages around Karachi. On the basis of the research conducted, the following model programmes have been proposed:

1. A low-cost sanitation programme enabling low-income families to construct and maintain modern sanitation with their own funds and under their own management.
2. A low-cost housing programme, which upgrades the thalla (block makers' yard) by introducing stronger and less expensive construction materials, while also upgrading the skills of local masons by introducing proper construction techniques. In addition, this programme educates house owners on planning, orientation and low-cost technology.
3. A basic health and family planning programme for segregated, illiterate or semiliterate, low-income housewives that consist of the following:

- causes of common Orangi diseases and methods of preventing them;
  - contraception;
  - the importance of growing vegetables in their homes;
  - providing immunization and family planning services;
  - upgrading existing clinics, providing vaccines, family planning supplies, and training vaccinators and traditional birth attendants.
4. A programme of supervised credit for small family enterprise units, which increases production, employment, managerial skills and business integrity. The financial benefits from this program are used by the beneficiaries to improve their homes and the physical and social infrastructure of their neighborhoods. There is a 97 per cent rate of credit recovery and an 18 per cent interest rate (per annum).
  5. A school programme that assists in upgrading the physical infrastructure and academic quality of schools established by private enterprise.
  6. A women work-centers programme, which organizes seamstresses and other garments workers into family units dealing directly with exporters and wholesalers.
  7. A social forestry programme, which promotes kitchen gardening, nurseries and tree plantation in homes, schools and mosques.
  8. A rural development programme, which provides credit and technical guidance to persuade entrepreneurs to develop their arid holdings into woodlots and orchards and to grow forage for milk cattle, thereby, enabling them to become commercial producers and traders.

#### **More about OPP**

*The Orangi Pilot Project (OPP) has become one of the best-known NGO projects in the provision of sanitation. In the 16 years since its inception, the Project has directly and indirectly assisted about one million people in Orangi (Karachi) to improved sanitation. Their intervention has been developed through research into household resources and aspiration in Orangi. From the beginning, OPP staff has sought to minimize external support in order to assist household to achieve their objectives for local development. From their first activities, their work has been extended in two directions.*

- *The Project has started to work with the people of Orangi and the surrounding area in the provision of a number of additional services including housing, health, and credit for entrepreneurs, education and rural development.*
- *More recently, staff has been assisting both government and non-government agencies to initiate a number of new projects in other cities in Pakistan drawing on the experience of the Orangi Pilot Project.*

## 6.4 Programs Details

### 6.4.1 Sanitation

To address the sanitation problem in katchi abadis, OPP adopted the research and extension approach (R&E); first, to ascertain the nature of the problem, and then to propose solutions on the basis of the data and information gathered.

OPP discovered that house owners were both willing and competent to assume the responsibility of constructing and maintaining all sanitary arrangements with their own finances and under their own management. Through the R&E approach it became possible to reduce construction costs drastically and to persuade house owners to accept full responsibility.

OPP research consisted of simplifying the design, fabricating standardized steel shuttering, surveying and mapping, preparing models, slides and audio visual aids, and lastly, preparing instruction sheets and poster. The extension included funding activists in the lanes, training lane managers and masons, providing accurate plans and estimates, loaning tools and shuttering, and finally, providing social and technical guidance and supervision.

OPP's research focused on whether the costs of constructing and maintaining sanitation facilities could be lowered to make these amenities affordable to Orangi's residents. OPP concluded that costs could be reduced significantly by simplifying the designs and methods of construction and by eliminating bribes and profiteering by providing free technical guidance to lane managers and enabling them to work without contractors. These simplified designs and the use of standardized steel moulds reduced the cost of sanitary latrines and manholes to less than  $\frac{1}{4}$  of contractors' rates. Following the elimination of the contractor's profiteering, the basic cost of labour and materials also came down to less than  $\frac{1}{4}$  of the conventional cost.

This drastic reduction in cost is possible only when construction is self-financed and self-managed without corrupt technical knowledge and tools, but OPP trained the lane managers and gave them technical guidance. And loaned them tools and shuttering. Thus providing Orangi residents with viable and affordable alternatives.

OPP's sanitation programme was presented to the people of Orangi in 1981. Its success thus far can be judged from the following figures. Statistics from August 1995 show that people in Orangi have laid 5,326 lane sewers and 395 secondary sewers. Sanitary Latrines have been constructed in 81,378 houses. The impact of this programme is evident from the fact that the sanitation facilities in the area are being maintained by the lane residents at their own cost. Moreover, Orangi residents have become accustomed to a higher standard of sanitation for which they are willing to pay. As a result of the intensive training of masons in the technology of sanitary engineering and the widespread training of lane managers, the skills of Orangi residents are much higher and they no longer have to depend on OPP for social and



technical guidance. The difference between Orangi and other katchi abadi is immediately apparent.

The OPP model of low-cost sanitation is now being replicated by NGOs and CBOs foreign donor agencies (UNICEF, World Bank), as well as by official agencies (DMC, SKAA, SMC and HMC).

### Activity 6.2

Do such model (similar to OPP) exists in your country? Search

#### **The Division of Orangi**

*Twenty-one months after the start of the Orangi Pilot Project, the BCCI Foundation reached an agreement with the United Nations Centre for Human Settlements that they would provide technical support to the project. The UN consultants started working with the Project staff but after four months, they expressed their grave reservations about the direction and content of the project. In particular, they believed that the low-cost sanitation developed by Orangi staff would be ineffective and they wished to replace it with more conventional technology and delivery mechanisms involving local councilors and using external contractors and larger community organizations, then soak pits and leach pits would be a better technology.*

*OPP staff strongly disagreed with the advise of he UN consultants. They believed that to work with local councilors and contractors would be disastrous at an early stage before the project was established. The use of soak pits and leach pits was not acceptable both because it could only be a temporary solution and because it would not lead to a (later) direct engagement with the municipality. Such an engagement was necessary in order to address the unequal relationship between municipal officials and local residents. This, the staff believed, was fundamental to further development. The staff also did not accept the technical assessment of their lowest sanitation system and argued that the system would be effective. These differences could not be resolved. The BCCI Foundation divided the area up, allowing the Orangi Pilot Project to continue to work in one section and asking the United Nations Centre for Human Settlements to develop an alternative project in other section.*

*In 1989, some seven years later and after an expenditure of US\$625,000 it was agreed that the alternative strategy of the United Nations was not successful and the OPP were once again allowed to work throughout Orangi, working with the people to provide low-cost sanitation.*

#### **6.4.2 Low-cost housing**

Again due to the impoverished state of public services, the people of Orangi have relied primarily, if not exclusively, on the informal sector. *Dallals* acquire land, develop and subdivide it, and then allot it. They also arrange for water supply, transport, and police protection. *Thallas* are responsible

for building firms, components building components, supplying building materials (cement, steel, etc), and providing credit and advice. Mason, perform the function of architects, engineers and contractors.

After the success of the sanitation program, OPP started a housing program in 1986 following the same R&E approach. Surveys showed that low-income housing in Orangi had several defects. The main building components (thalla blocks) are manually made, sub-standard, and caused cracks. Defective construction techniques had been used due to a lack of expertise. Ventilation and sanitation facilities are inadequate, and the houses needed alternative low-cost roofing and load-bearing walls to make them sturdier. Two years were spent on conducting research and the following two years on the extension of research findings, the research consisted of upgrading the local thallas, evolving standard construction designs and techniques, preparing standardized steel shuttering, writing manuals and instruction sheets, preparing audio visual aids, and lastly, constructing demonstration models. The extension process included finding thallawalas willing to participate in research and development, training masons, lending tools and shuttering providing accurate plans, estimates and technical guidance, and supervising construction. The R&E process has reduced the cost and improved the quality of construction significantly.

OPP did not set up its own thalla, but gave its research results to private thallas. In 1987 four private thallas were mechanized with OPP supervision and loans. By August 1995, they had sold 14.98 million machine-made blocks, of which 60 per cent were to customers outside Orangi. The four mechanized thallas have repaid the loan in full. Moreover, following the example of the four mechanized thallas, 46 other thallas have adopted the machine-making process without any loans, from OPP.

After improving the blocks, research focused on alternative roof designs, the process of incremental building created problems for low-income house owners. They built the ground floor room with a tin roof. If at a later stage they wanted to add another floor they had to demolish the old structure entirely because the walls could not bear the load of RCC roofs. RCC construction is also quite expensive. Few could afford the cost of demolition, leave alone RCC roofing. After a considerable investment and prolonged research, OPP conclude that block-making thallas could now also manufacture and sell roof almost half the cost of RCC and the construction was also easier and quicker.

The first thalla to whom OPP's machines and moulds were handed over (as a loan of Rs 55,000) started production in March 1990, Within a year it has sold thousands of roof construction materials. A second thalla started operating in 1992 after taking a loan of Rs 75,000. By August 1995, 155 demonstration units have been constructed and there have been numerous requests for more. Others have adopted the package on their own.

OPP has spent a significant amount of time on training masons through class lectures, meetings, instruction sheets, leaflets and manuals and job supervision. 120 masons have been trained and more are in the process of being trained. As a result there are now skilled masons working in Orangi.

### 6.4.3 Health

OPP research showed that the incidence of disease in Orangi was extremely high. Typhoid, malaria, dysentery, diarrhea, and scabies, were very common and infant and maternal mortality rates were extraordinarily high as well. There were two principle causes for the prevalence of ill health:

- ❖ first lack of adequate sanitation facilities and
- ❖ second, ignorance of health issues among the poor, largely illiterate, female population of the area.

OPP began a health and family planning education program premised on the following assumptions. Since the women were traditional and preferred to stay indoors, the utility of conventional welfare centers was questionable. Instead, OPP introduced a new system consisting of mobile training teams (each including a female health visitor and led by a female doctor), a selected activist family or contact lady every 10-20 lanes, regular meetings at the activist's home, and the formation of neighbourhood groups by the activist.

On the basis of survey research, OPP concluded that the mobile teams and neighbourhood group meetings (at activists' homes,) were quite effective. Of the 3,000 families involved in the test sample of this project, 44 per cent now practice birth control, epidemic disease is controlled, hygiene and nutrition have improved, and over 95 per cent for the children are immunized. In light of this experience, OPP revised its model in 1991 to reach out to a large number of families. Instead of continuing to visit the same families for a long period of time, OPP prepared a three-month course on the prevention of common Orangi diseases, family planning and improved nutrition and hygiene, and kitchen gardening.

Twenty family activists were selected every three months and neighbourhood group meetings were held four times a month in the activists' homes. Up to 15 women at a time attend the training meetings. Immunization services and family planning supplies were provided at the meetings. OPP discovered that these neighbourhood meetings created greater awareness, and Orangi women are now more willing to pay for immunization and family planning services. In response to this demand, many private clinics were providing these services on payment.

In November 1993, OPP decided to revise the approach of the health program. To this end, it was decided that KHASDA<sup>1</sup> would undertake mainly the training and supply function, and be responsible for anchoring the program intuitionally in schools private clinics and family enterprise units, KHASDA's daily neighbourhood meetings were terminated and were replaced with training Orangi lady teachers, managers or family enterprise units, and private clinics on primary health and vaccination. Those so trained will regularly hold mothers' meetings in schools work centers, and clinics and give information on the following: the causes and prevention of common diseases; family planning and supplies; nutrition and child care; and kitchen gardening. This programme is also being replicated by NGOs/CBOs in other katchi abadis in Karachi.

<sup>1</sup> KHASDA, the Karachi Health and Social Development Association, is an autonomous organization managing OPP's health programme.

At that time the annual budget for the health programme was Rs 493,000 (US\$13,694). The average annual cost of teaching disease prevention and birth control to one low-income family was Rs 100 (US\$ 2.70).

However, it was not all smooth sailing. The research and extension approach that Akhtar Hameed Khan adopted for the OPP had been applied only to rural development. NGOs and bilateral and multi-lateral agencies working in the urban field in Pakistan in the early eighties viewed this approach with skepticism, amusement, or outright hostility. Ironically, the first major conflict between conventional urban planning and Akhtar Hameed Khan's research and extension approach came from within the OPP itself. This conflict is worth relating as it brings out the inadequacies and the not-too-realistic assumptions on which conventional urban planning is based

## 6.5 Autonomous Institutions of OPP

Between 1983 and 1988 the OPP programs expanded rapidly. Community organizations, and activists, and NGOs from other Katchi Abadis and informal settlements in Karachi and other cities of Pakistan started applying to the OPP for help in replicating its programs, specially its low-cost sanitation program. To meet this increasing demand effectively, in 1988 the OPP was upgraded into four autonomous institutions. These are:

1. The OPP Society, whose function is to channelize funds;
2. The OPP Research and Training Institute (OPP-TRI), which manages the sanitation, housing and social forestry programs and is responsible for their replication, and is also responsible for training NGOs government agencies, members of donor agencies, and community organizations and their representatives for all OPP programs;
3. The Orangi Charitable Trust (OCT), which is responsible for managing and promoting the credit programs; and
4. The Karachi Health and Social Development Association (KHASDA), which is responsible for managing the health program. The rural program is managed directly by the OPP with technical support from the TRI.

Since 1987 international agencies have also cultivated the OPP, and in recent years have tried to replicate the OPP experience by integrating it into the planning process of government projects that they are sponsoring. Meanwhile, in its search for solutions to Orangi's problems, the OPP has had to lobby with the relevant municipal and government organizations. In addition, to protect the work of Orangi residents from destruction by intensive government planning, it has had to monitor nationally and internationally sponsored projects and deal with the organizations responsible for them. The OPP has managed to this because it has received financial support from international NGOs and multilateral and bilateral agencies in addition to the BCCI grant. And more important, the OPP was able to develop the necessary human resources required for the development and expansion of its work. What these human resources are and how they were developed is perhaps the most important achievement and asset of the OPP.

## 6.6 About OPP Staff

Broadly speaking, the OPP staff consists of:

- professionals,
- social organizers, and
- technicians.

### *Professionals*

The professionals' work consist of research into the problems of Orangi residents; identification of their own solutions to these problems; and again through technical research, the development of a better package of advice. The professionals also prepare extension literature and supervise physical work. All professionals' research has to be compatible with the sociology and economies of low-income residents. The results have to be doable by them and they have to be maintained and looked after by them.

#### ❖ **Selection of Professionals**

In the initial stages the OPP tried to recruit experienced professionals. However, it soon discovered that such professionals found it very difficult to relate to the OPP's philosophy and methodology. They were too deeply rooted in the conventional manner of doing things. Subsequently, the OPP had to rely on a consultant and young graduates who were able to grow with the OPP. It was possible for these graduates to unlearn some of what they have been taught at their universities and to learn them as well.

### *Social Organizers*

Their work consist of contacting people, helping to organize them, extending the package of advice and monitoring it, and relevant to the development work to be carried out or may need to be carried in the future. The social organizers are the link between the people and the professionals, and their involvement in, and feedback to; the professional's work keeps in rooted to the field reality.

#### ❖ **Selection of Social Organizers**

The social organizers have played a very important role in development of the OPP. In the initial stages of the OPP, Akhtar Hameed Khan was establishing his contacts with persons who he felt was suitable for the job. The choice was made intuitively, but this intuition had a long experience behind it. The social organizers are recruited from the community. It so happens that all the social organizers have a number of things in common. They are all political persons in some way or the other. They all have an element of radicalism and understood much faster than their neighbors what Akhtar Hameed Khan was trying to say. They had all been involved in some way or the other in the development of Orangi Township, communicate with people, organize meetings, and help settle up in

community-related work. Hafeez Arain and Ramzan Qureshi are the two oldest social organizers in the OPP, and they have been with the organization since its inception. Hafeez Arain has been a political worker and has worked, among other things, as an assistant to an informal developer in Orangi and as a rickshaw driver. Ramzan Qureshi has been a small contractor and an artisan making glass bangles and ivory objects.

### **Technicians**

The technicians consist of plumbers, draughtsman, and surveyors. They work with the social organizers, supervising physical work and helping to extend the package developed by the professionals. To do this, they and social organizers have to work as a team. The technician has to work with the professionals so that he can understand the package of advice and report back to the professional on the technical problems with the package.

#### **❖ Selection of Technicians**

The technicians are also recruited locally. The plumbers and surveyors are residents of Orangi and were working in these fields before they joined the OPP.

### **Joint Staff Meetings (learning experience)**

The professionals, social organizers and technicians all come from different backgrounds. When they started working together they all had different views of development that were shaped either by their education or their life experience. For them to work together it was essential that they develop a common viewpoint regarding the work they were being asked to support. It is here that Akhtar Hameed Kahn played his role as a teacher. From the beginning of the project till 1998, weekly meetings of the entire staff were held. The week's work was discussed at these meetings along with its sociological, technical and economic aspects. Every member presented his report. Jobs, which included the writing of experiences, were assigned at these meetings, and work assigned in the previous meetings was reviewed and evaluated. This exchange in itself was an enormous learning experience for everyone. It was further enhanced by Akhtar Hameed Kahn's analysis and advice, and the manner in which he related the micro-level issues presented by the staff, which the meeting began, discussed threadbare the negotiations he may have had with international agencies, government officials, and institutions, or with national and local politicians. Accounts were also discussed, and nothing was kept secret from the staff. In addition, every member of the staff was encouraged to write, and these writing were published in magazine of the OPP.

Through these meetings Akhtar Hameed Khan not only managed to pass on his vision to his staff members, educate them regarding the close link between social, economic, and technical issues, and upgrade their skill; but with time he was also able to develop a technical issues, and upgrade their skill; but with time he was also able to develop a strong bond between them. This bond was not only based on a common development vision, but also embodied in it the values of diligence, frugality, modesty, account keeping,

and transparency that he has struggled to uphold throughout his turbulent life.

After the upgrading of OPP into four different institutions in 1988, each institution has separately continued this tradition of weekly meetings, in which the same process is followed. However, Akhtar Hameed Khan is not present in these meetings, although he regularly meets with the heads of the different institutions so as to continue his role as a teacher. Each institution now brings out its own newsletter and progress reports.

### **Capacity building of OPP Staff**

Due to the process described above, professionals, social organizers and technicians' have no difficulty in relating to each other. As a matter of fact, the social organizers have acquired the skill of the technicians, and most technicians have become excellent social organizers. Some of the social organizers and technicians can partly fulfill the role of the social organizers. In addition, technicians and social organizers have also upgraded their skills. Some of them, with OPP support, have taken courses in surveying and mapping, and others have acquired skills in computer sciences. Thus, with its limited manpower, the outreach potential of the OPP has been considerably enhanced.

However, OPP's human resources development has not been limited only to the Orangi staff. Over 5,000 lanes have financed and managed the construction of their own sewerage lines through OPP advice. Each lane elected, selected or nominated its lane manager. These lane managers and their assistants collected and managed the money of the people, and also organized the construction of the sewerage system with the active participation of the lane residents. Many of the lane managers subsequently became involved in other programs of the OPP, and have developed as effective extension agents. They are now promoters of the OPP concept of development through community participation and self-help.

Through this process, people have learnt about sanitation and construction technology. As a result they now prevent government contractors working in their localities, or contractors appointed by them individually or by their community organization, from doing substandard work or work that is technically faulty. This has made the relationship between local government, the informal sector, and the people more equitable. It has also led to the expansion of the health, credit and housing programs.

### **Working with Communities: OPP Principles and Methods**

1. *The community has the resources it need for development: skill, finance and managerial capacity. But it needs support to fully use these resources, to identify further skills that are required and to receive training in these skills.*
2. *A study is not need to identify the projects in Katchi Abadis. But a study is required to understand the people, their process and relationships, and to identify the solutions and methods that are appropriate.*
3. *The role of the NGO is to be a support organization and the technicians develop the advice. The social organizers who "extend" the advice into the settlement need to be drawn from the local community.*
4. *The package of useful advice is developed through interaction with all levels and groups within the community. There is a need for an attitude of mutual respect and learning.*
5. *The role of the activist is critical. Activists are community members, who are already aware of problems, think about them and try to resolve them. The programme needs to identify these activists.*
6. *The smaller the level of organization, the better it will function. In Orangi, a lane of 20 to 40 people is the level of organization.*
7. *The initial process is slow but, after success has been demonstrated, progress rapidly accelerates. The concept and process should not be modified to obtain quick results.*
8. *The people and government are partners in development. Neither can solve all the problems of development alone.*

### **Trainings**

The development of human resources is impressive. But still the OPP finds it difficult to deal with the increasing number of requests for assistance for the replication of its programs that it is receiving from numerous CBOs, NGOs and the Sindh Katchi Abadi Authority (SKAA). To overcome this problem, the OPP has started training young people and students from the settlement where it is working, as technicians. These young people are trained to survey and map the settlements; to develop physical design; and as inoculators for immunization program. They receive training through an apprenticeship with the OPP-TRI for a period of time. Funds for this training are provided by a number of international NGOs. The surveyors and designers being trained will, it is hoped, set up their own offices and become self-sufficient by charging fees from their clients or from the local organizations that will seek their support. Similarly, the inoculators will also become associated with the private clinics which exist in large number in low-income settlements in Pakistan and which experience major difficulty in getting trained staff.

As a result of his human resource development, the OPP-TRI can carry out its training activities and give technical support to NGOs, CBOs, and government agencies. All the staff members (professionals, social organizers, and technicians) collectively participate in the training exercise and where necessary, lane managers and extension agents are brought in. The Orangi area, which has been the scene of the OPP's activities for the last fifteen



years, serves as a demonstration area. As a result, every trainee, irrespective of his social class and educational background, can relate to the trainers at the OPP-TRI.

During the late eighties, a very large number of government officials visited the OPP for orientation or as part of their mid-career training. Akhtar Hameed Khan was also a regular speaker at various administrative training institutes and a faculty member of the courses that they ran. One of the major reasons for this was that he was an old ICS (Indian Civil Services) officer and was respected for his working in Comilla. In addition, many of the bureaucrats in key position in Pakistan were either his friends or had worked with him. He was happy with these visits. He felt that the model that the OPP had developed would be picked up by young officers, and thus the crisis that the state-working-class relationship faced would be overcome.

### 6.7 OPP Strategy

The OPP's strategy is now clearly defined. Its main function is to support small grassroots NGOs, community organizations and young activists to organize and promote the OPP methodology and program. For this the OPP trains and guides them and helps them in acquiring small funds so as to free their staff members and activists from being pre-occupied with earning a livelihood. In addition, OPP helps to arm these groups with knowledge and ideas so that they can monitor, supervise, and keep accounts of the work they and the government agencies are doing in the areas; and by presenting the government with cheap and appropriate options for those aspects of development that they cannot undertake themselves. Although the OPP still intends to continue working with the government, it feels that government departments can only be activated by informed and organized communities, and not by agreements and understanding between government, NGOs, and international agencies. To fulfill this role the OPP institutions are adequate, and with the expansion of OPP work, training of local people, and continued links with academic institutions, the number of people, professionals technicians, and social activists, involved in this work is rapidly increasing. A new and large community is being created.

It is important to place the OPP models in the larger context of Pakistan so that their relevance can be understood. The formal sector in Pakistan provides only 180,600 housing units per year in the urban sector, against a demand of 428,000. The annual deficits of 257,400 housing units are taken care of by the creation of squatter settlements and informal subdivisions of agricultural land. As a result, there are approximately 3,000 squatter settlements, or Katchi Abadis, in Pakistan. They have a population of nearly seven million, which is about twenty-two per cent of the total urban population of Pakistan. In addition, over twelve million people live in settlements created out of the informal subdivisions of agricultural land, ecologically unsafe areas, or wastelands on the city fringes. Conditions in the low-income informal settlements and Katchi Abadis are estimated at over ten per cent per year against a total urban growth of 4.8 per cent. These figures define the crisis.

### **Comparison between OPP Programs and Government Programs**

Government programs for the physical, social and economic development of these Katchi Abadis and informal settlements have failed miserably. The KAIRP manages to regularize and upgrade only one per cent of these settlements every year. As a result, it will take one hundred years before the existing settlements can be developed. On the other hand, the OPP's housing and sanitation program has brought about major environmental changes, and at no cost to the government over eighty per cent of Orangi Township has built its own sanitation system. Due to the sanitation system and the OPP's health program, infant mortality has fallen from 130 per thousand in 1984 to 1991. In the same manner the Orangi schools, without any assistance from government or external sources, to over seventy-eight percent as against an estimated Karachi average of sixty two per cent.

#### **Case Study 6.1**

##### **The Urban Basic Services (UBS) Programme in Sukkur**

*In 1990, the urban basic services programme of UNICEF began to work in the town of Sukkur on the banks of the River Indus about 450 kilometers north of Karachi. Sukkur has a total population of about 500,000. The project area within which the first phase of the Urban Basic Services Programme is being implemented includes three katchi abadis with about 30,000 residents living in 2,958 houses. Piped water supply was available but waste and foul water passed through the settlement in open drains to a large pond of 28 acres. When the project began, the pond was overflowing into the settlement, causing immense physical and health hazards, especially for children.*

*A partnership between UNICEF, Sukkur Municipal Council, the Sindh Katchi Abadi Authority, OPP and the local community was formed to address this situation. UNICEF part-financed the external development and financed the strengthening of local institution. It was also responsible for paying the OPP who were consultants to the development. Sukkur Municipal Council part-financed the development and was responsible for implementing and maintaining the external sanitation. It also paid the costs of two social organizers, one male and one female, who linked the Communities of Gol Tikri, Kaan and Bhusa and the municipality. The Sindh Katchi Abadi Authority was responsible for selling leases to the residents and, in so doing for raising the necessary capital for settlement infrastructure and service development. OPP's role was to train the staff and local residents and give social and technical guidance for external and internal sanitation, a health programme, documentation and monitoring. The community finances and manages the construction and maintenance of internal sanitation and participates in the decision making for external sanitation.*

*The external work at the Sukkur site involved building a pumping station and laying a rising main from the pumping station at Gol Tikri, Kaan and Bhusa to the river 8 kilometers away so that the pond could be emptied. In addition, a trunk sewer needed to be laid along the periphery of the pond to which people could connect their internal*

*sanitation. The work began in October 1991 and draining of the pond was completed in January 1993.*

*Sewerage lines have now been laid in 20 lanes and sanitary latrines constructed in about 200 houses in Gol Tikri, Kaan and Bhusa. Work is in progress at various levels in other lanes. In addition, 13 health centers have been set up in activists' homes in the settlement.*

## 6.8 Finest achievement of OPP

Before concluding this, one must mention that the role of working-class women in this changing world has determined a number of programs that Akhtar Hameed Khan has promoted, and a number of articles in this collection describe these programs and his approach to the issue. He writes: 'under the pressure of the urban-industrial civilization, which the people of Orangi have willingly adopted, and the pressure of the double-digit inflation of our mismanaged economy, the role of women is changing dramatically. It is becoming impossible to live in the old patriarchal style. The people have responded by encouraging their females to be free economic workers rather than confined dependents. Houses are modified into workshops. Family enterprises are sprouting in every lane. In such enterprises, females constitute, if not the majority of workers, at least a substantial minority. He continues, 'I have carefully observed these 111 working women, these female teachers, these girls students; surely they are a new phenomena. They are not purda-nashin like my mother. And yet, in spite of their emancipation, they retain the modesty of their culture. Although they are not wrapped in a chadar, nor confined in a chardiwari, like my mother; yet essentially their feminine conduct is as modest as my mother's. I consider these working women, these female teachers, these girls students, as the finest achievement of Orangi people; as a shining example of belonging to both past and present; as the best preparation for entering the next century. And the twenty-first century is what Akhtar Hameed Khan and his life's works all about (HRDI).

## **Unit Summary**

There are numerous projects being undertaken by NGOs in an attempt to fill the void left by the government's (in) action with regard to shelter issues and the provision of basic necessities. Several deserve special mention; they are; the Orangi Pilot Project (OPP) in Karachi; the Khuda Ki Basti project near Hyderabad; BUSTI in and around Karachi; the Karachi Administrative Women's Welfare Society (KAWWS); urban waste management programme (implemented by the HRMDC) in Peshawar; and the Aga Khan Housing Board for Pakistan (AKHBP) projects in Karachi and in the NWFP. The activities of OPP are provided in greater detail below.

The OPP sanitation, health, and credit programmes are being replicated by a large number of community organizations in Karachi, Gujranwala, Lahore, Sialkot, Faisalabad, and Okara. In addition, the sanitation and health programmes are also being developed in collaboration with donor and/or government agencies in Karachi, Sukkur, and Hyderabad, and in a large number of rural settlements, in Sindh.

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## **UNIT 7**

# **WOMEN'S PARTICIPATION IN COMMUNITY DECISION MAKING**

### **Unit Introduction**

Women through their reproductive function have been defined as nurturers, a role which then encompasses the responsibility of provision of food. In subsistence economies, where the entire dependence of daily existence is on natural resources, women have played the dual role of not only nurturing their families but the environment as well. The well being of the former is heavily dependent on the well being of the latter.

In this unit we will examine:

- Women in development
- Overall approach for empowering women
- Women, population and health
- Women and water
- Five needs which can enhance women's participation in community decision making
- Role of women in NGOs for the protection of environment

### **Unit Objectives**

After going through the unit the students would be able to learn:

- A **community based participatory approach** with an emphasis on organizing grassroots groups can help equip women to analyze and understand their own socio-economic environment. This involves creating awareness, building confidence, and moving towards self-reliance; thus enhancing the capacity to change.
- Assess the status of women with specific reference to Pakistan
- How education and communication are necessary for empowering women
- How five needs can enhance women participation in community decision making

## 7.1 Introduction

Development must improve the quality of life of both men and women and increase equity among classes and sexes. Recently there has been growing awareness of the specific role that women play in the process of promoting social and economic development and of the differences between men and women in the use and management of natural resources. Women have always contributed significantly to primary environmental care: they bring their extensive knowledge, skills and perspective of the environment to both life-supporting activities, including water and fuel collection and household chores, and to productive facilities, such as agriculture and small-scale industries. This means that access to and control over natural resources including land, fuel, fodder, minor forest products and water are critical for women. Biodiversity and the quality of the environment are also essential in this context. Other factors that affect women's environmental management are their decision-making power, their access to appropriate training and technologies, their development options (including employment and income generation) and the macro-micro linkages on policy level.

Since the creation of man, there have always been distinct roles that are performed by youth, man and women in society based on gender. Gender can be defined as a dynamic and culturally determined social pattern created by men and women to define their relationships with each other and with their environment. It is these relationships that determine decisions and activities that in turn have been affected in both the management and utilization of the environment for sustainable development. With time it has been observed and accepted that there is an undesirable imbalance that has developed between men and women and has affected the performance of their roles. In many cases, this has either distorted or hampered development with often-adverse effects on the environment. Efforts have therefore been made internationally and nationally to speed up development.

Women through their reproductive function have been defined as nurturers, a role which then encompasses the responsibility of provision of food. In subsistence economies, where the entire dependence of daily existence is on natural resources, women have played the dual role of not only nurturing their families but the environment as well. The well-being of the former is heavily dependent on the well-being of the latter.

However, with industrialization and globalization, growth centered economic development models have been imposed destroying indigenous sustainable development practices, which has been practiced over many centuries by communities, especially women. Particularly has been strengthened by imposing mechanization of agriculture, shifting power to men by portraying them as the operators of technology and hence major producers, leading to the marginalisation of women from this role. In the meanwhile dual economies of subsistence and industrialization continue to exist. While the latter continues to practice unsustainable levels of extraction, as well as polluting the existing resources, women are forced to continue their role as nurturers at the household level. Extracting what meager natural resources are left. The result is that patriarchy and globalization have several eroded women's role as care takers of the environments.

The massive migration of people resulting from capitalist agriculture, and environmental disasters have led to further degradation and polluting of our cities. Women, torn from their social support have to exist in these new malfunctioning systems, truly victims of the development and environmental crisis. The ultimate irony is that in this new scenario they are considered as a contributing element to unsustainable environmental practices.

Women in the rural environment know their priorities. That they have less power, and are accorded no space to voice their demands is another issue. If given a chance, they are more than capable of asking for and managing the resources to the best interests of all. It is indeed with the drive of a highly ecologically and economically exploitative system, that women have lost control over unsustainable management of resources.

## 7.2 Women in Development

Most women in Pakistan live in rural areas. Women 48% of the nation's population are largely illiterate, usually marry early, bear innumerable children, and suffer from anaemia. In most of the world, women outnumber and outlive men, but not in Pakistan. In addition, they have no say or control over their lives, have low self-perception's and are viewed as dependents.

Despite these low indicators of development, women have traditionally performed the essential tasks of nurturing and serving their families. In rural areas this has meant growing and preparing food, fetching water, gathering fuel, caring for domestic animals, and contributing wherever possible to the family budget. In urban areas, the basic responsibilities are no different. Most of the workwomen do is unpaid and, therefore, unrecognized and unappreciated.

The Poverty of about 40 percent of Pakistan's population and the reproduction of poverty that occurs, particularly in rural areas, has added implication for women. These managers of water, forest, livestock, fuel, sanitation, and subsistence agriculture invariably find themselves bearing the burden of the vicious cycle of resource depletion, poverty, and dependence on the earth and its resources.

Women's low social status precludes any significant decision making in their daily lives. Only when women have achieved some level of development, individually or collectively, through better education, health, and income do they perceive themselves in the position of making key decisions.

Given the state of Pakistan's environment, its general poverty and fast dwindling natural resources, and the reality of women's existence, the challenge is to mobilize women and channel their activities and energies in a manner that enhances their social status as well as ensures sustainable development. Unless development is seen as a process that allows women to express their potential fully and provides opportunities for them to control their own lives and surrounding environment, a transformation of women from passive victims to active participants will not take place. And any conservation strategy will fail.



### 7.3 Overall Approach

Given the objective of empowering women and drawing them into the conservation mainstream, the urgent need is to design special strategies and interventions for women. But the range of constraints on them must be borne in mind. Perhaps one of the biggest obstacles is women's seclusion and lack of mobility, which prevents their access to education, skills, and other resources, including financial. The other major obstacle is the stereotyping of certain roles as appropriate only to women.

Devising a package of projects or programmes to overcome these hurdles requires understanding three fundamental principles.

- First, neither the 'Showroom' nor the 'delivery' approach has succeeded in achieving women's development goals. The former requires potential beneficiaries to locate and ask for the service being offered; the latter offers services as charity. Instead, a different approach is needed, one that can reach out to the neediest in their localities, remove dependency, and create confidence and strength. **A community based participatory approach** with an emphasis on organizing grassroots groups can help equip women to analyze and understand their own socio-economic environment. This involves creating awareness, building confidence, and moving towards self-reliance, thus enhancing the capacity to change.
- Second, the approach has to understand the complexities of the social and economic processes within which a particular community of women resides. As Pakistan is a stratified society, class clan/caste, sex, location, and other factors strongly influence the roles, interactions, nature of work, and so on in communities. Any intervention must vary from villages to cities and towns, from plains to mountains, from poor to better off. Although the deprived and economically underprivileged who have the closest links with and dependence on the environment are priority groups and potential change agents, others have to be drawn into the development process as actors and mobilizers (see table 1).
- Third, the most essential component of this approach is the catalyst -- an individual, officially supported person, or NGO. The role requires sensitivity, commitment, and identity with the women being worked with. Not a conventional role, it will need special training programs for community development work and for methods of organizing women in groups. The catalyst or mobilizer will need to create awareness; help form groups at the village, mohalla, or lane level; set priorities with the help of the group on immediate issues to be addressed; and arrange for any technical expertise needed. In addition, she will need to assist in continuous monitoring and evaluation of the programmes to identify bottlenecks and find ways with the group to overcome them.

Table 1: Integrating Women in Development

Sector	As Actors	As Clients
Education	Teachers' trainers, extension workers; as mothers, instilling consciousness, respect for nature, conservation habits	Students, women trainers
Communication	Media directors, producers, conceptualizes	Special programmes on women and environment issues
Research and technology	Researchers at independent research organizations; women's rights organizations, technical institutions	Impact studies on renewable resources and depletion and pollution on women; learning from women's experiences
Administrative and legislative	Administrators, policy makers, Family Court judges, High Court judges, lawyers	End of discriminatory laws, progressive legislation on family, labour affecting women; affirmative rules of no taxes on widows, single women
General economy	Agricultural workers, industrial workers, piece rate workers, self-employed unpaid family help, service sector	Recognition as wage-earners: minimum wage benefits; incentives for skills, credits, project planning
Grassroot	Social Organizers with greater access inside homes, catalysts	Women's groups around economic, health, education activities
Population	Acceptable population control agents	Rights to control life, to make decisions, to space births

Source: NCS Prescriptive Paper on Women and Development by Khawar Mumtaz.

ing women, the catalysts have the advantage of access to women's homes. They can enter a community to discuss health, sanitation, education, some generation, or a combination of these topics. As external change agents, these field activists need to be viewed as paid professionals and not just as voluntary workers, a term too closely associated with social work of a welfare delivery approach.

In addition to these external agents, religious organizations, teachers, and others can be mobilized and trained to convey conservation ethics. For instance, women preachers (mullanis) can learn to raise consciousness on environmental issues. Similarly, teachers can be used to impart relevant information after being trained. The trainers for women will have to be men. If mothers are to be mobilized, they will need better levels of literacy

as well as hygiene, health, and nutrition; knowledge of and access to family planning; improved skills; and environmental awareness.

The programmes based on these principles must be holistic rather than fragmented, integrating various aspects of women's lives with conservation objectives. Several key steps for implementing such a programme have been identified (see box 1).

#### **Box 1: Implementing a Women in Development Programme**

➤ Identify clearly the target beneficiaries.
➤ Create or strengthen the village, mohalla, or lane organization through participatory activities.
➤ Involve women in conventionalizing programme and putting them into operation.
➤ Understand the specific social situation of the target group for example, the women's mobility, seclusion, or lack of education.
➤ Understand the women's activities and needs from their perspective—whether it be poultry or dairy production, wood gathering, water carrying, cooking, or income generation.
➤ Recognize and respect women's experiential knowledge and abilities, such as their knowledge of local plants or herbs, health system, and skills and crafts.

### **7.4 Programmes**

Given that most environmental issues affect women and that women's perception of these is in direct correlation with their level of development, the focus must be on improving the latter. Fundamental solutions suggested to women in the village meetings and the workshop include the need for systems of equitable development and distribution and realistically planned development policies. Others were for raising women's consciousness and providing opportunities for improving health, education, and income generation.

Here the emphasis is on the importance of each package being an integrated one containing information, technology, provision for raising capital inputs, organizational skills, and self-management system. Each should enable awareness, collective action, and increased production, and should lead to an improved quality of life for women and their families within a sound environment.

### **7.5 Education and Communication**

Education can be valuable for creating awareness and enhancing status and it has tremendous potential to mobilize and empower women.

At the formal level, the immediate requirement is for a sharp increase in the number of girls' schools, especially in rural areas. The Seventh Five Year Plan's commitment to increase primary school enrolment of girls from 4 million in 1987-88 to 5.9 million in 1992-93 (increasing coverage from 47% to 70%) has to be pursued. Similarly, its proposal to make a school available

thin a radius of 1.5 kilometers should help overcome cultural constraints females.

laxing the age limitation and academic requirements for primary school teachers to meet with the shortage of females in this field and incentives such as free books and meals, scholarships, and uniforms to encourage parents to send girls to school are also needed. For women who marry early and later desire to pursue education, the age limit for entering educational institutions should be relaxed. NGOs already involved in adult and women's literacy programmes should be supported to expand into rural areas, where literacy is an abysmal 7%.

For education to become relevant to women and their lives, courses and course contents require considerable restructuring. In addition, curriculum should be able to incorporate regional and local specifics. Similar decentralization initiatives in the Himalayan regions of Garhwal Kumaon linked education to people's life support systems and led to women's involvement in planting tree nurseries and active afforestation, with schools providing seedlings.

At the higher level of education, women, environment, and conservation should be introduced as a focus area in Women's Studies Centers. These centers are being established in the five major universities (one in each province and one in Islamabad). They have been set up, in the initial period, to generate information for materials on the basis of which courses can be formulated in the future and, ultimately, women's perspectives can be mainstreamed into all educational disciplines. Just as conservation and sustainability concerns must be brought into all courses throughout higher education, as recommended earlier, they must be introduced in women's studies.

Open University programmes could be specially designed to educate, inform and mobilize girls and women who are unable to enter formal institutions. Adult literacy programmes and efforts like the Baldia School Teachers' Association in Karachi should also be actively supported and publicized. This group holds literacy classes for girls and women in certain localities to suit the convenience of students and teachers, who are the rate women of the neighbourhood.

The manner in which women are projected in visual, audio, and print media is critical. Women working in the conceptualization and production of programmes can make sure to portray women as active participants in agriculture, industry, community work, and health care, rather than as sex objects.

Special programmes to communicate environmental issues and their relevance to women are imperative for raising awareness. Some of the extra efforts needed are videos, audiocassettes, and special literature to broaden the information base and raise awareness, and workshops for women in areas where existing development projects operate. Such workshops must be designed to elicit the maximum participation of women.

## 7.6 Women, Population and health

*The linkages between gender, population, development and the environment are many and various. Women are among the first to suffer from environmental degradation. Their role as custodians of the environment should be further supported and explored.*

**(Mexico population and environment network)**

*Women have the right to the enjoyment of the highest attainable standard of physical and mental health... Good health is essential to leading a productive and fulfilling life and the right of all women to control all aspects of their health, in particular their own fertility, is basic to their empowerment... However, health and well-being elude the majority of women.*

**(Beijing Platform for Action, paragraphs 89 and 92)**

Population is perhaps the most important factor in any women in development programme because of its implications on women's health, nutrition, and productivity. In theory, women ought to be agents of population control; in reality, they are not. Women's acceptance of family planning is linked closely with their status in society and the control they have no decisions regarding reproduction.

Programmes to increase economic productivity, enhance skills and education, bring monetary returns and control over earning, improve health facilities, and raise awareness regarding the advantages of fewer children and space births can be effective in bringing about a change in population growth. Other important factors to promote acceptance of population control are late marriages and incentives for having fewer children. For greater effectiveness, all the measures to promote population control have to be addressed to men with equal force.

In addition, preventive health measures for women and children need to be introduced. Information on child spacing and the dangers of frequent pregnancies has to be provided to young women and mothers. The role of mothers as key health providers must be recognized. Time saving technologies to alleviate women's workload, which can give more time to health and hygiene responsibilities, should be developed. Trained paramedics and highly trained medical staff, for high risk situations, should be accessible to pregnant women. Community based programmes should be required to have health extension workers.

*If women could their own choices about childbearing, the world would be well on the road to the lowest of the United Nations' projections. That would make a difference of 2.5 billion in population in 2050.*

**(Dr. Nafis Sadik, Secretary-General)**

Given the extremely low literacy level of women in Pakistan and their crucial role in natural resource use and management, programmes for women are a priority. They can train new extension workers who can act as demonstrators and community mobilizers and can increase employment for women.

The provision in the Seventh Five-year plan for training (6,000 initially) has to be actively followed up. This has been conceived as a multi disciplinary course covering community organization, public health, home economics, human ecology, adult education, industrial arts, and agriculture.

Training in the health sector is equally important. Traditional birth attendants, lady health visitors, paramedics, and nurses are in short supply in Pakistan. Similarly, there is a chronic shortage of female veterinary doctors, agriculture and forestry extension agents, and mid level technically trained workers in other fields.

In forestry an extension-training package has already been drawn up by IUCN and the Pakistan forestry Institute for women in forestry. The programme covers establishment of nurseries, selection of trees for family compounds, tree care, seedling production, and transplanting. This should become a regularly offered course of the Forestry Department. NGOs working in the women in development field in rural areas have shown keen interest in sending people to the training. In view of the importance of afforestation programmes, as well as women's own fuel and fodder requirements, forestry related programmes have the potential for expansion.

At the moment, skills training for women have largely been restricted to the schemes of the Social Welfare Departments. Formal schemes leading to certificate or diplomas are available in 107 girls' vocational institutes throughout the country, with facilities for 11,000 women. Thousands more receive non-certifiable training in approximately 1,230 institutions in the country. The Agency for Barani Areas Development operates 19 technical training centers for women in 11 districts of the rain fed areas of rural Punjab. The ministry of industries runs training centers through the provincial small industries corporations and boards.

The National Education and Training Centre in Islamabad is the national scheme of the Women's Division under which training in non-traditional areas is given to enhance the professional skills of women and to create a corp of 'trainers of trainers'. Courses primarily deal with managerial areas, such as running a day care center, setting up community project, increasing community participation, and monitoring and evaluating projects.

Many more institutions are needed for training women to take up income generating opportunities in urban and rural areas. Without waiting for new ones to be established, however, some existing ones can be streamlined. The formal schemes leading to certificates and diplomas (in polytechnics, for example, technical training centers, and vocational institutes for girls) can be radically changed to include courses that contain sustainable development components and enhance women's employable skills. Since formal employment is not always possible (either because of lack of opportunity or cultural constraints), self-employment for women should be one focus.

## 7.7 Women and Water

Women play an important role in water management. They are the most often collectors, users and managers of the water in the households as well as in the fields. Because of these roles, women have a considerable knowledge about water resources including reliability and quality. Despite their importance and multiple roles, women are currently not adequately involved in management. Not enough attention has been given to women as the primary human resource and the ultimate users of water.

In developing countries, women and children often spend eight or more hours a day to fetching polluted water from supplies which, because of drought, become increasingly distant. Women and girls are also responsible for preparing and cooking food, cleaning utensils, washing children, disposing of babies' faeces and scrubbing latrines. Involving women in the planning, creation and maintenance of water and supply facilities is therefore crucial.

Women make multiple and maximum use of water sources and attempt to assure that these sources do not become polluted. Given their multiple and often competing needs, such as water for livestock and for human consumption, as well as time and resources constraint, women often cannot avoid contaminating water supplies. Poor water access and quality affect not only women's crop and livestock production and the amount of labour they must expend to collect, store, protect and distribute water, it also affects their health and that of their families. All types of water related diseases affect their health and that of their families. All types of water related diseases affect millions of people each year. Women are also take care of the people who are ill from malaria, onchocerciasis and diarrhoea and do their own labour and labour of those who are fallen ill.

Involving women in the planning, operation and maintenance of water supply and management is therefore crucial.

- With safe, reliable and convenient water supply, they will be able to rechannel vast amount of time, energy and labour into more productive pursuits.
- With education and provision of a clean water supply, women will learnt that the suffering, diseases and death caused by dirty water can be avoided and family health and hygiene improved by using pure water.

Women are the most reliable source for the identification of water resources. Women should be consulted when investigations for development of water resources are undertaken in a community. Their knowledge of water sources and water quantity during wet and dry seasons, and their assessment of smell, taste, colour and convenience, can assist in the final choice of sites. They may be aware of alternate sources

The health benefits arising from improved water supplies may not fully realized unless there are complementary inputs in the field of sanitation. Since inadequate sanitation or sewage treatment plays a part in the

transmission of many water related infections. In Pakistan, integrated water and sanitation programmes have been successful, partly because women have been trained as sanitation promoters. Their duty is to motivate and help promote latrine building in the villages and while male strangers are not allowed to enter the houses with ease. Not surprisingly, women are the most effective promoters and educators in programmes where they are the primary focus, as they generally understand more intuitively the problems and issues faced by other women and can communicate with them more openly. They are also more sensitive to social pressure from other women to do a good job.

Women can participate in the local water and supply management in four major areas:

- Site management as individual managers
- Care takers
- Local administrations
- Self-sufficient system

### **7.8 Five Needs Which Can Enhance Women's Participation in Community Decision Making**

If project manager were to be asked whether rural women in Pakistan should be involved in decisions affecting rural water supply, in many cases the answer is likely to be "Yes... but". Yes because domestic water supply has traditionally been considered to be within women's domain. They are the ones who usually have to satisfy the family's needs for water for a variety of purposes: cooking, washing, drinking, bathing, sanitation and care of livestock, in some areas of Pakistan women reportedly spend more than five hours per day fetching water over steep mountainous terrain, balancing heavy containers on their heads and by hand, and often carrying children at the same time.

Whether or not the arduous physical task of hauling is done by women alone or is shared with children and other in the village, ultimately it is the women who is responsible for the family's water supply: it is she who determines how much is needed, how it will be stored, how used and by whom. Protecting the water from contamination and rationing its use thus becomes matters of direct concerns of women. The health of the whole family depends on how wisely a women regulates the storage and use of water within the home and this in turn depends on the ease with which she can access the water required for family use, in the quantity needed and of a quality she considers acceptable even if only judging by its taste and appearance.

In all of these actions concerning water storage and use, women are clearly the decision-makers. But are they also involved in community level decisions related to water supply? For example, do they have say in the choice of a site for the pump, or in selecting among technology options or in establishing a tariff system for water use? In most cases, no while their role as the community's main water users is clear, what is not clear is whether and how they can play a broader decision making role outside the family without violating the norms of the socio-cultural context in which they live.



In exploring this matter further, several factors should be taken into account. They are discussed below as a set of "needs" for women's advancement.

***Need # 1: To Recognize Women's Economic Contribution***

As in most developing countries, rural women's work in Pakistan is generally considered to be routine, confined to domestic chores and therefore their contribution to the nation's economy is not adequately reflected in productive labour statistics. In reality, however, they are found to play an important role in the economic life of their village. This is confirmed in a number of formal or informal assessment studies conducted in recent years.

For example, in many parts of the country, rural women are responsible for processing farm products, rearing animals and poultry, keeping gardens, and producing textiles and clothing, all of which is done in addition to fetching water, gathering fuel and fodder, disposing of waste, maintaining building and nurturing and raising the family in statistical terms. Agha Khan Rural Support Program (AKRSP) finds that women provide over 50 percent of the total labour used in farm activities, in the Northern Areas. In the Northwest Frontier Province (NWFP) the Malakand Social Forestry Project notes that the care of livestock is the sole responsibility of women throughout the Malakand Agency, except for a few households where this responsibility is shared. According to a survey conducted by the Barani Agricultural Research and Development Project in 5 districts of NWFP, 85% of the rural women participate in agricultural work and are responsible for 25% of the production of major crops and 30% of the food crops. Women's contribution to the total agricultural income is conservatively estimated to be in the order of 25-40% (World Bank, 1989).

Since the value of women's economic contribution is not fully recognized and appreciated, they are often by-passed in project planning. This tendency can be seen very clearly from the following observation of experience in the agricultural sector in Pakistan.

Despite the fact women do carry out many independent activities in agriculture, their role is usually defined as "helping the men". In fact they themselves tend to define their role in this way. Since their decision-making power is limited, even when it concerns their own activities and time allocation, they are usually not considered independent actors in the production process. This dependency represents a serious constraint on the ability of the project to approach women as a target group, particularly when extension recommendations involve the use of external inputs or adopting new technologies.

Rural women's productive roles are the course likely to vary considerably with differences in the economic situation of their families and with the degree to which ethnic or cultural norms restrict them to the family compound. Various studies have shown that in Punjab the input of females in economically productive activities declines with the rise in economic status as determined by size of land holding. Similarly one study indicates that under equal ecological and economic circumstances, the female

participation rate of rural women is lower in the more conservative Pakhtun areas of NWFP and Baluchistan, as compared to the Punjab. However, regardless of how limited their productive roles may be, even the least of such activities, if it is to be done efficiently and bring returns, requires the use of intelligence, good judgment and basic managerial skills for which the persons involved, regardless of gender, deserve credit. Where such credit is not being given, it follows that fair opportunity for improving skills will not become available. This disparity needs to be rectified.

Male community members must be enabled to see that by acknowledging and attaching value to women's economic contribution everyone stands to gain. A fair minded assessment of gender roles should open the way for women to receive much-needed technical assistance and resources of which, at the moment, they get an inadequate share. Technical and moral support will help to improve women's task performance, resulting in more efficient time use and larger gains to their immediate families. By enhancing women's access to resources, through a credit scheme, the UNICEF sponsored program in Baluchistan has shown that qualitative indicators like women's sense of self worth can be radically improved; thus, giving them the opportunity to become direct beneficiaries of the development process in a non threatening way.

The PAK/German Integrated Rural Development Program in Mardan, NWFP, has followed a strategy of practical demonstration in order to convince the male members of the community regarding the economic viability of women's activities. By initiating a joint credit scheme targeting both male and female, the program has been able to establish the credibility of female borrowers. In the same villages, the repayment rates of female borrowers were observed to be higher than those of male borrowers. Moreover, in the savings program, women have been active partners, and have thus directly contributed towards the financial capacity of the community invest in additional initiatives, both private and collective.

The Orangi Pilot Project (OPP) programme has demonstrated that major strides in the role of women can be made once the community is convinced for the value and importance of women's contribution to development, for example, the self-support activities in the Orangi area have led to the sprouting of hundreds of family enterprise units in the lanes, some with OPP guidance, others spontaneously. Women have become active workers and partners in these enterprises. OPP finds that the quickly multiplying family enterprise units highlight a great social change in the traditional life style of the community. Not only is the number of working females increasing rapidly, but women entrepreneurs are also coming forwards. In fact, among OPP clients, 283 family enterprise units are run by women managers.

### **Need # 2: To Increase Women's Access to Education**

Ideas and idealistic views are commendable for they are the motive for progress, and the world would indeed be a sad place without them. But one has to be realistic and pragmatic too; for instance leaving aside the enlightened sections of the society, our rural community is the worst example where girls are confined to their traditional roles, *whereas* they should have an equal right to education, employment and the most

important thing the right to choose when to give birth to human life, but quite surprisingly they cannot have a say in the planning of their family; to decide when to stop reproducing. As seen, environmental challenges mostly stem from growing population and growing poverty. There is a dire need to control population & eradicate poverty. Both are challenging tasks. The answer lies in empowerment of women: in giving them the right to choose the quality of life striving towards restoring gender balance and consequently sustainable eco-balance in the context of social ecology.

*The alternative is to help develop understanding of the problems associated with unequal gender participation vis a vis ecological management and ecological issues. Socio-economic statistics need to be collected and analyzed so as formulate a cohesive gender strategy for eco-management redefining social responsibilities of both genders.*

The first step towards achieving an alternative ethical culture is a culture where education is accessible for everyone. Without this the effectiveness of other factors decreases. No doubt, gender mainstreaming through policy, political will and collective social responsibility is the answer to create a road towards sustainable development. But no society can become economically sound, socially viable and environmentally friendly unless it is enlightened enough to take drastic and radical steps. Proper education is the pivot, which can take forward the torch of ecological management; which has the capacity to make and break a society - a culture and envision a better tomorrow. Gender sensitization through proper awareness and education is the primary step, which can restore gender balance in executing environmental theories to practice - in moving towards a sustainable environment.

Girls' education generally tends to be of low priority in village communities of Pakistan. As a result, literacy rates among rural women are extremely low, in some areas barely 3 to 4 percent. Two reasons are commonly given for differentiating between girl and boy's education:

- Girls are needed at home by their mothers to look after younger siblings and to help with household chores.
- Schooling involves costs. It makes more sense for low-income families to invest in the education of boys who have better prospects of using their education to salaried jobs.

In certain areas, however, greater value is now being attached to girls' education. It is felt that education will help to make them better mothers and will provide them with greater confidence. In a survey conducted by Action Aid, such positive attitudes towards female literacy were seen to be fairly common in the Kalingar area. In one village, a father who was determined to educate his daughter, was noted as saying:

*"The difference between an illiterate and an educated person is like the difference between a donkey and a parrot. The parrot as a bird is wise and quick to learn, while the donkey will go backward if you push forward and forward if you push backward."*

Although being illiterate is not synonymous with being ignorant, it is easy for an illiterate person to feel inferior vis-à-vis other who have had more exposure to formal education and who are more articulate and better connected. Socialization factors, which create feelings for inadequacy, unworthiness and timidity, can hold back village women from taking an active part in community decisions, especially those involving negotiations and contractual agreements with authority figures.

Traditional method of teaching literacy have often proved discouraging to adult women who have little time to spare and little patience to learn phonetic skills as such. Women's education has to be informal, lively and functional if it is to arouse their interest and sustain their motivation. Available participatory techniques for adult learning need to be fully explored and new approaches designed, keeping in mind the specific needs, constraints and potentialities that apply to rural women in different areas of Pakistan.

Many innovative approaches are being tried to improve literacy among young girls and women. One such program is the LGRDD/UNICEF pilot project targeting cotton pickers in the Multan area. Adult literacy centers have been established to support the organization of female youth groups, which have now become the main implementers of the approach at the field level. The success of this project can be measured by the fact that the female youth groups actively identify and plan the components of the literacy program.

The OPP experience gives encouraging evidence that traditional barriers to girls' education can be overcome. For example, out of 509 schools in the Orangi area, 443 (87%) are now co-educational and only 66 (13%) are segregated. This expansion of opportunities for girls' education has been accompanied and supported by a corresponding increase in female teachers. Out of 1818 teachers in 1991, 1318 (75%) were women and 457 (25%) men.

Furthermore, traditional attitudes can be overcome by involving communities in the selection of teachers. The Basic Education Project for girls, being sponsored by UNICEF in the Thatta district, has shown that constraints like non-availability of female teachers can be superseded if the community is allowed to nominate their own teachers.

### ***Need # 3: To consider Cultural Limitations When Planning Resources Needed by Women***

Special situations arise when services and resources which women need, e.g., clean water supply, access to latrines, medical services, come in conflict with the prevailing cultural norms. For example, in case of illness, women may need urgent medical attention but in the absence of female professional medical staff, health problems may have to go unattended and often become chronic. In addition, when health care facilities are only available outside the village, women may not have access to them (except in emergency situations) due to restrictions on their mobility. The same applies to other services such as agricultural extension, technical training or market for local product. This restriction applies in particular where accessing these services involves direct communication with males.

Similar ethical dilemmas may arise in connection with women's access to water supply. When selecting the site for a new water source, e.g., a hand pump, sometimes a public place may be selected for the convenience of all without taking into account local restrictions which would bar women's use of that site.

The extent to which women's mobility is restricted varies, of course, from one ethnic group to another. In pakhtun areas where the rules of conduct are particularly strict, the siting of a pump poses a problem, as the following observation indicates:

"In Loralai ... due to strict purdah observance, installing a handpump outside the compound will probably mean a constraint for women to fetch water. In theory more people will have access to the pump but practically such a public place may be hardly visited by women; they will prefer to walk longer to an alternative water source if less exposed to possible passers-by. Sometimes a wall around a pump may be a solution to overcome women's hesitancy but certainly not so in many cases. In Kharan and Chagai the village and its direct surroundings is considered not to pose a great risk for a woman. In pakhtun areas similar free movement for ladies is unthinkable."

Since women are in fact the main users of the water source and they are the ones required to observe cultural restrictions of whatever kind, it should make sense to consult women before selecting a definitive site for the improved water source. In a number of sanitation projects, it has been demonstrated that by involving women in the process of technology choice and site selection, acceptance levels and effective use of the facilities can be improved. For example, in the UNIFEC Northern Areas Sanitation project it was found that when women actively participated in the project there was an increase in both implementation through the meeting of targets and in the utilization rates of latrines. To the contrary, in the case of the Mardan Integrated Rural Development Programme, it was found through a field survey, that in one village only 4 out of the total latrines constructed were being used. A major factor that had contributed to this outcome was the oversight on the part of the project staff in terms of including the women's group in planning and implementation. Sensitivity to the need for involving women and the use of simple participatory educational techniques can in fact foster rural women's participation in the comparative assessment of process for helping them gain skills in problem solving.

#### ***Need # 4: To Reduce Women's Drudgery and to free Their Time for Better Uses***

The very heavy workload, which rural women carry, is seldom questioned either by the women themselves or by their community at large. It is generally accepted that this is their destined (or at least socially sanctioned) lot, as daughters, wives, and mothers. The women themselves may not wish to question their lot in life. As one project report illustrates:

"It is very difficult to ask women if they are happy with their situation or not. By saying they are not happy they would implicitly say that Allah has not given them a good life or that their parents or husband is not good for them. For these reasons, women were indirectly asked if they were satisfied with

their position by asking them if they would like their daughters to have the same life as they."

Three types of solutions are being tried by innovative development agencies in Pakistan to both reduce women's hardships and to increase their problem-solving capacity:

- One is to increase women's access to labor-saving technology such as nut cracking machines introduced by AKRSP in the Northern areas. AKRSP's WID and technical sections collaborate in developing and disseminating packages designed to decrease women's workload and increase their earning capacity. However, some problems with acceptance are reported.
- A second solution is to initiate separate demonstration projects for women such as poultry raising and vegetable growing (also by AKRSP) or women's nurseries to produce high value animal fodder (by the Malakand Social Forestry project, NWFP). These activities are carefully monitored so as to assure an experience of success. This practical proof of what they can achieve empowers women to take new initiatives on their own.
- These measures, however, have sometimes run into problems. In some instances, village men have interfered by either appropriating the technology for their own use or by attempting to take over the management of demonstration plots such as women's fodder nurseries. This is where the assisting agency has had to take a firm stand in discussing the problem with the male village leadership.

Most important, women's feeling of powerlessness in being counteracted by promoting the formation of women's organization (WOs), sometimes starting with informal discussion groups at the neighborhood level. WOs are, in most cases, separate entities from the regular Village Organization (VO). However in some areas, due to opposition from the male villagers, no separate WOs have been encouraged but instead VOs have a women's section. Although cultural and religious differences tend to inhibit the spread of WOs to some extent, the principle of encouraging women to participate in development activities is said to be gaining ground.

One such program that can be cited, as an example of successful female involvement is the PAK/German Integrated Rural Development Programme in Mardan. Women's participation in income generating activities like forestry, poultry raising and fruit cultivation was promoted by actively supporting women's organizations through a process based on mutual trust and self respect in terms of initiative taking and follow up, in male village development organization (VDO), e.g. in one village the project had to withdraw support from the VDO due to lack of interest and commitment, while in the same village, the women's section of the programme assisted the women's group to successfully implement income generation projects through poultry breeding and fruit plantation activities and savings and credit schemes.

***Need # 5: To increase the Number of women trained as extension workers and technical staff***

To expedite improvements in rural women's situation, it is imperative that WID programs must be able to attract and retain female staff of the caliber

and attributes acceptable to local communities. This has not been easy for several obvious reasons, such as the shortage of resources and facilities of training female development staff and the difficulties which women extension agents often encounter at the village level i.e. both physical hardships and problems of acceptance by villagers themselves. There are ways to overcome these problems by training more women from within the village itself.

Several agencies are also making special efforts to train female professionals and auxiliary staff to help research and involve rural women in development program. For example, the Pak-German Promotion of PHED NWFP organized a 3-day workshop for Lady Health Educators from the health Department and other agencies to train them in conducting health and hygiene education. The trainees were each provided with a kit of materials that help them initiate village-based training for women. Their function is to promote hygiene education practices in villages where water supply schemes are being implemented by PHED under the integrated concept.

To overcome the shortage of female staff several innovative solutions are being tried:

- Some RWSS agencies have attempted to involve women extension workers from other line departments, e.g., Health of Social Welfare.
- To get around the problem of finding literate women for extension work, one project gets the cooperation of school going boys to help their illiterate mothers in going the paper work required for extension tasks.
- As, the level of literacy for females has improved in the Northern Areas, many male managers of women's organization are now being replaced by female ones.
- In one village, the role of the manager has been expanded to include village accounting activities. Every fortnight, the female manager is now required to audit the records and accounts of different women's organization and male village organizations in the area.

In all instances, the consent and support of male members of the community has been assured from the start. To overcome issues of female mobility, mobile teachers' training unit has been set up in Baluchistan, which focuses on training female teachers within the districts.

Local distrust of outside female workers is also found to decrease with time. The following excerpt from a field report is an example:

"During an in-depth interview a woman was asked to if she has appreciated the hygiene education visit. Her answer was the following: 'It was the first time for us that we were visited by women we did not know at all. First our men did not like it but we said it is good that they come. Then they accepted it. You have made an entry point for us.'"

Further efforts to involve rural women in development will need to start out by confronting some hard questions. For example:

- What are the costs to the sector of female specific constraints as they apply in different parts of the country? What are the costs of these constraints to women and their families?

- What adjustments will need to be made and by whom in order for women to benefit fully from the development program?
- What strategies and measures to involve women in the sector would be both effective for the sector and non-threatening to society?
- What are some indicators of positive change in women's situation (a) as it affects the sector? And (b) as the sector affects women?

## **7.9 Role of Women in NGOs for the Protection of Environment**

### ***All Pakistan Women's Associations (APWA) – Sanitation Project Case study-Pakistan***

During the last ten to fifteen years, thousands of families in search of food and employment have moved to certain areas of Karachi from rural areas of Pakistan and from other countries. They occupied unauthorized land in unplanned settlements. These people suffered from constant health problems due to the absence of sewage systems and sanitation. Poor drainage attracted flies and mosquitoes, causing diarrhea, typhoid, malaria and dysentery among the population. The focus of the project by the APWA was to improve health through better sanitation practices and facilities in the communities.

Money posed a constraint; therefore the first step was to introduce simple improvements such as bucket latrines and soak pits for human sewage. Open pits were dug for the disposal of wastewater. In order to raise money to build more permanent sanitation structures, APWA introduced income generating activities. Women were trained in such skills as pickling and preserving vegetables, embroidery and carpet and rug making to help raise money. APWA and other organization helped communities to save money by helping them build facilities themselves rather than having it done by commercial companies.

Small social welfare organizations developed and community members approached the Karachi Development Authority and the Karachi Municipal Corporation for further assistance when needed. In some communities, latrines have been constructed inside the houses. Aside from improved sanitation and health, another social benefit arose from the implementation of the project: the project instilled confidence in the women of the community. Improvements in the health of women and children has freed up women's time to pursue activities that interest them. Previously, women had spent much of their time caring for sick children. Women participate in income-generating activities as well as contribute physical labor to construction projects. More and more women take out loans from cooperatives and women's banks newly operating in Pakistan.

### ***The Samanalagama United Women's Association- Water Management Case Study- Sri Lanka***

The village of Kinchigune was situated in the hill country in Sri Lanka and was famous for its rice farming. With fertile soil and plenty of water from



clear mountain streams, the village was surrounded by forests that provided medicinal herbs and other forest products to the 40 or so families residing there. The village was virtually self-sustaining. In 1987<sup>o</sup> the residents were given short notice to leave Kinchigune village because a hydropower project was to be developed there. The 40 families were resettled on a tea plantation. Each family was given 1.5 acres of land planted with tea interspersed with coconut to compensate for the loss of their land. The people did not know how to grow or market tea and there were no forests for fuel wood, game animals or medicinal plants. They were reduced to subsisting on purchased rice and dried fish. The new village had only one drinking water well; they had to go to another additional wells, but these were in poor condition, unhygienic or claimed by other people. The other villagers acted hostile towards them; the farm animals they had brought with them were stolen and slaughtered by thieves in neighboring villages.

Kamini Meedeniya Vitarana is the president of *Rut Rakaganno* (The Tree Society) and a senior environment scientist with the Environmental Foundation. As part of a study, she interviewed the resettled women, who were in a state of cultural shock. With her guidance and encouragement, they formed the *Samanalagama* United Women's Association. In first of their joint efforts, the women cleaned up one of the neglected wells and secured the right to common use of the wells. Applying in the name of *Rut Rakaganno*, the society then obtained a plot of land from the government to grow fuel wood and medicinal plants. With advice from the forestry department and the Ayurvedic Research Institute, the women are planting trees and plants for fuel wood and medicinal purposes.

*Rut Rakaganno* provided liaison with government departments; Environment Foundation contacts smoothed the project's way. The families also formed a society to jointly market their tea and obtained help from the Regional Tea Small Holdings Authority. Women are mostly responsible for the tea crop, so they are key players here as well. The women now receive higher prices for their tea, are less despondent and have better access to clean water. Efforts are being made to organize a nursery school so young mothers will be free for part of the day to take part in community activities. Girls from adjoining villages have also joined the society.

**Women have a vital role in environmental management and development. Their full participation is therefore essential to achieve sustainable development.**

(Principle 21 of Rio Declaration 1992)

## Unit Summary

Women are the main victims of environmental degradation as well as they are sound managers of natural resources. Women are close to nature and constant contact with environment so they have to participate in the main decision-making. Women are involved in all social and cultural activities. It is well documented that development programmes that ignore women either fail or have negative social impact, as they are based on an inadequate and only partial understanding of society. Because of women's vital role in production and reproduction, the many programmes and policies targeted at the community have their greatest impact on women. Yet this gender-specific impact is too often ignored by planners, overlooked by field workers, and bypassed in project implementation.

Five needs which can enhance women's participation in community decision-making, are:

1. To recognize women's economic contribution.
2. To increase women access to education.
3. To consider cultural limitations when planning resources needed by women.
4. To reduce women's drudgery and to free their time.
5. To increase the number of women trained as extension workers and technical staff.

*Human beings are at the center for sustainable development. They are entitled to a healthy and productive life in harmony with nature. Women have often played leadership roles or taken the lead in promoting an environmental ethic, reducing resource use and reusing and recycling resources to minimize waste and excessive consumption.*

(Beijing Platform for Action, paragraphs 246 and 250)

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## UNIT 8

# PRACTICAL ACTION

### Unit Introduction

In the last years of twentieth century, change accelerates and the future becomes harder to foresee. As instant communications spread, and power and wealth concentrate, so ideas spread faster. A balance sheet of development and human well-being shows achievements and deficits. Power and poverty are polarized at the extremes, with a global over class and a global underclass. An evolving consensus converges on well-being, livelihood, capabilities, equity and sustainability as interlinked ends and means. Huge opportunities exist to make a difference for the better. The challenge is personal, professional and institutional, to frame a practical paradigm for knowing and acting and changing how we know and act, in a flux of uncertainty and change.

In this unit we will examine:

- Reversals and Reality
- Practical Appraisal for Outsiders
- Field practice and ethics
- Reversals in Learning
- Putting the first last

### Unit Objectives

After going through the unit, the students would be able to learn:

- Reversals, with shifts of orientation, activity and relationships away from past normal professional practice. Six stand out; from closed to open; from individual to groups from verbal to visual; from measuring to comparing; from higher to lower; and from reserve and frustration to rapport and fun.
- PRA and the evolving paradigm imply and demand changes, which are institutional, professional and personal.
- Common and serious errors of practice and ethics.
- Tackling problems by improving rural development tourism; and by developing and using techniques for rapid rural appraisal.
- Putting the last first means reversals in learning.

## 8.1 Introduction

*Nothing is permanent but change*  
(Heraclitus, c.500 B.C.)

The new high ground presents challenges. Nested in other changes, Participatory Rural Appraisal (PRA) confronts the dominance of uppers. Rapid spread top-down as a fashion has brought bad practice; dominant and superior behaviour, rushing, upper-to-upper bias, taking without giving, and arousing expectations which are not met. PRA done well generates synergies; the three pillars – methods, behaviour and attitudes, and sharing and partnership-reinforce each other, participatory training sets the style for participation in the field; and adoption of the behaviour and principles of PRA, like the methods, can spread and catalyze other good changes. Empowerment is through identifying the weak and enabling them to gain in skills, confidence and knowledge. They then analyse, monitor and evaluate, make presentations, become consultants and trainers, organize themselves, and negotiate resolution of conflicts.

PRA and the evolving paradigm imply and demand changes, which are institutional, professional and personal.

- Institutional change needs a long-term perspective, with patient and painstaking learning and reorientation.
- Professional change needs new concepts, values, methods, and behaviours, and new curricula and approaches to learning.
- Personal change and commitment have primacy, and can be sought experientially. Learning to change, and learning to enjoy change, are fundamental.

Responsible well-being for uppers can be sought through altruism and generosity, putting the last first, and through disempowerment, putting the first last. To many uppers, disempowerment seems loss; but often all can gain. As in PRA, disempowerment can liberate uppers from professional prisons and personal stress. More ways are needed for the powerful to gain from less power. For new behaviour, there is no need to wait. There is a vanguard to join and new high ground to explore.

## 8.2 The challenge

The Challenge presented here is to uppers, to the powerful to the structures of power. It is to upend the normal, to stand convention on its head, to put people before things, and lowers before uppers. Imbalance is needed to establish balance. So children come before adults, women before men, the poor before the rich, the weak before the powerful, the vulnerable before the secure. The personal, professional and institutional changes implied entail reversals of much that prevails as normal. The changes are radical. For they are not just-to-put the last first, which is altruism; they are to put the first last, which is disempowerment.

Reversals would be absurd if pushed to anarchy, dismantling the state, abolishing bureaucracy, removing all rules and controls. They would be improbable if uppers have always to lose. They would be immoral if driven to extremes, which made lowers into new uppers. But what is sought is not

revolution. It is reorientation, retaining some hierarchy while loosening constraints and freeing actors. The final theme is that reversals are not stupid but sane, no improbable but practicable, not the low ground, but the high.

The experience and philosophy of PRA are part of this, and a source of learning, insight and inspiration. PRA has spread with alarming speed, across boundaries of disciplines, professions, organizations, communities, countries, and continents. In doing so, it has repeatedly confronted the relations of uppers and lowers. Issues have been raised concerning concepts, values, beliefs, methods, behaviour, and cultures. And there has been much bad practice.

### **8.3 Field practice and ethics**

Many errors occur in field practice. All processes are imperfect. Each of us repeatedly makes mistakes. I have been guilty of all the following common and serious errors of practice and ethics:

#### **8.3.1 Dominating**

Dominant and superior behaviour is the most widespread error. No upper can be free from it. We start with unavoidable marks and signals, which send upper, or lower messages, as with colour, sex, language, accent and age. The issue also complicated because dominant action can be needed, for instance to stop someone being beaten up, to insist on sound accounting or to combat corruption. Decisive leadership has its time and place. All that said, uppers are disabled by their dominant behaviour; verbally, through lecturing, shouting down, interrupting, criticizing, contradicting, preaching, pontificating and putting forward their own ideas, telling lowers what they ought to think, and being boring and overbearing; and non-verbally, through dress, accoutrements, body language, facial expressions or hiding behind dark glasses. Again and again, dominant and superior behaviour damages participatory processes.

#### **8.3.2 Rushing**

The work 'rapid' may have been needed in the late 1970s and early 1980s to offset the long-drawn-out learning of traditional social anthropology and counter that of the large-scale questionnaire. RRA came to be seen as a short cut. But by the late 1980s rapid has become a liability. Rapid is often wrong. Relaxed is better. In practice, PRA facilitators often, perhaps usually, take too little time; they fail to explain who they are, why they have come, what they can do, and what they cannot do; they hurry to get on with the methods, not taking time to earn trust and gain rapport; and later they fail to take time to interview the map or interview the diagram.

#### **8.3.3 Routines and ruts**

Especially in going to scale, repetition breeds regular habits. Routines dig ruts. There are many ways local people can map model, do transects, diagram, rank, and score. But rigidity easily sets in, with idea that there is only one right way, PRA facilitators in any organization, or even region, have

shown signs of slipping into unvarying standard practices, overlooking other options and missing the creativity of inventive interaction.

### **8.3.4 Gender and upper-to-upper bias.**

It is notorious that the community members who can most freely interact with visitors are usually men, and those who are better off and older. Under pressure of time, and for convenience, it is easier to encounter and consult only them, or only a few others. Unless carefully offset, the familiar bias to elites will manifest itself. If it fits is offset only by a generalized and populist concern for 'the poor,' gender-blindness can still neglect women and girls. Differences between genders, groups, ages and occupations are easily overlooked. Those left out are the lower-women the poor, the very old, children, those of inferior status, the marginal, the destitute, the disabled, refugees, outcasts; it is then the reality of local uppers that comes to count.

### **8.3.5 Taking without giving**

PRA methods have frequently been used for 'extractive' research. As uppers, outsiders can often induce local people to give up time to processes from which it is the upper who will mainly benefit. It is true that the lower, the analysts, may enjoy and be empowered by discovering their own abilities and knowledge. But as with all research involving local people, there are ethical questions about unequal relationship and the cost of people's time.

### **8.3.6 Arousing unmet expectations**

PRA methods and processes can engage local people for long periods in intense and creative activities. Again and again, these lead to expectations of future action, especially where appraisal and planning are involved. Again and again, outsiders and outside agencies have been unable to respond, or have failed to honour their pledges. While this is not a new experience to most communities and not peculiar to PRA, it remains an issue for continuous concern and self-questioning among facilitators.

Third-generation problems have also begun to merge; providing training for financially challenged small NGOs overcoming the language elitism of English, French, Spanish and Portuguese; changing donor and government procedures; networking and sharing South-South; approaches and methods for training in behaviour and attitudes; and above all in Ramesh Singh's (1996) words, moving from a 'doing phase' to a being phase.

Other criticisms have less force. That PRA is nothing new impractical, unrigorous, or narrow in scope, much depends on the definition of PRA and the quality of practice. If old methods are relabeled PRA, it will be nothing new; if it is facilitated badly, it will be impractical; if it is used sloppily, it will be unrigorous; if it is seen as little more than appraisal using group visualizations, it will be narrow in scope. As Parmesh and Meera Shah (1995) have pointed out, most writing on these issues has been by academics who use PRA methods only briefly and who neglect process. Many experienced practitioners are striving to achieve another reality of PRA, which is inventive through interaction, practical in application, rigorous through self-criticism, and empowering through process.

## 8.4 Practical Action

### 8.4.1 Practical appraisal for outsiders

A first and obvious point of attack is for outsiders to change the ways they learn about rural conditions. One problem here is the tension between the two cultures over time and timeliness: academics inclined to favour longer, unhurried, appraisals; and practitioners needing instant information to meet the deadlines of seasons, budgets, committee meetings, and ministers. Shortage of time contributes to the antipoverty biases of rural development tourism and to careless and misleading investigation. These problems can, realistically, be tackled by those involved in two ways:

- ❖ by improving rural development tourism; and
- ❖ by developing and using techniques for rapid rural appraisal.

#### 1. Tactics for Tourists

##### Offering the anti-poverty biases

For that majority of outsiders concerned with rural poverty who practice rural development tourism, measures can be taken to offset the anti-poverty tendencies of contact. Urban, tarmac and roadside biases can be countered by going further a field and by walking away from roads; project bias by visiting not only projects but other areas and by non-scheduled stops; biases of personal contact by deliberately seeking out the poorer people, by making a point of meeting women, taking time to see those who are sick at home and not at the clinic, by asking about those who have left or who have died; dry season bias by visiting during the rains, or at least asking about the worst times of the year; the biases of politeness by reading away from the courtesies and making it clear what is sought; professional biases by trying through introspection to see the limitations of professional conditioning, by learning from other disciplines, by being observant, and by asking open ended questions

##### Spending longer and going further

In many ways the poorer people are at the end of the line. They take the longest to reach; they are the last to speak; they are the least organized, the least articulate and the most fearful. They often keep a low profile. Some are migrants. Women sometimes hide from male visitors. In visits that are rushed, the poorer are those least likely to be encountered. It is after the courtesies, after the planned programme, after the tourist has ceased to be a novelty, that contact becomes easier.

##### Being unimportant

The cavalcade of cars, the clouds of dust, the reception committees and the protracted speeches for the VIP's visit generate well-known problems. By contrast, the visitor who comes simply, by bicycle or on



foot, fits more easily and disturbs and distracts less. Unscheduled visits, walking and asking about things that are seen planning not to have a special program, and avoiding the impression of having influence over the benefits, which a community might receive, all reduce the dangers of misleading responses and impressions.

## 2. Rapid Rural Appraisal

Questionnaire, surveys and statistical analysis limit investigations to what can be asked in interviews and what can be counted. The realities of rural deprivation are often missed. The challenge is to question the conventions of academic purity and find better approaches. Rapid Rural Appraisal (RRA) is one family of techniques of cost-effective ways in for outsiders.

These techniques have been widely practiced but until recently little written about. They recognize the trade-off between the cost of information gathering, and its quantity, accuracy, relevance, timeliness and actual use. Using 'dirty' as a term meaning not cost-effective, they try to avoid both the 'quick-and-dirty' of incompetent rural development tourism and the pathological 'long-and-dirty' of some questionnaire surveys.

One danger with RRA is that it will always be rushed. A corollary of Parkinson's Law is that whatever is planned exceeds the time available for doing it. If this occurs, it will once again be the remoter areas and the poorer people who are left out. The opportunity presented by RRA is, by avoiding lengthy methods to save and budget time that the poor are let in, as individuals and as families, to be learnt from and understood in more depth. If the tyranny of quantification can be held in check, there is more time to find out about relationships and processes. Techniques of RRA carefully developed and used, can raise awareness and understanding of rural poverty, and improve actions to attack it.

## 8.5 Reversals and reality

Most of those who have innovated in developing PRA have been practitioners, concerned with what works and what will work better, not academic theorists concerned with why it works. They have been searching not for new theories or principles but of new and better ways of learning and of relating to local people. For them, the power and utility of RRA and PRA, undertaken with rapport and selfcritical rigour, are common experience and empirical facts: they know that they work, and that done well they can lead to better local development. But the why? questions remain, leaving issues of explanation. There is now enough experience to suggest some answers.

At the practical level, much of the explanation can be found in reversals, with shifts of orientation, activity and relationships away from past normal professional practice. Six stand out; from closed to open; from individual to groups from verbal to visual; from measuring to comparing; from higher to lower; and from reserve and frustration to rapport and fun.

### **8.5.1 From closed to open**

The pervasive shift or reversal is from closed to open. This can be expressed as form etic to emic, from the knowledge, categories and values of outsider professionals to those of insider local people. The reversal is like a turning inside out, and expression and presentation of inner personal, family, community and local realities to outsiders and the outside world. These are not knowable by outsiders in advance. In contrast with questionnaire interviews, semi-structured interviews are more open, conversations, more so, and PRA mapping and diagramming, often most open of all. In a semi structured interview there can be a checklist for reference, but not a pre-set sequence of questions; and a value can be set on probing, on pursuing leads, on serendipity. In conversations there can be greater freedom and equality. In PRA methods such as participatory mapping and modeling, matrix ranking and scoring, Venn or Chapati diagramming and wellbeing ranking, insiders can be in charge of the agenda and detail, not only free to express their knowledge and values but encouraged and enabled to do so. The shift is from pre-set and closed to participatory and open.

### **8.5.2 From Measuring to Comparing**

Normal professional training is to make absolute measurements. So if trends or changes are to be identified, or conditions compared between households or between places, measurements are made either at different times, of different things or in different places. Schoolteachers often value correct measurements more than independent judgement in their pupils. Our preoccupations with numbers drive us to ask 'how much.' For sensitive subjects like income, such questions commonly sow suspicion, wreck rapport, and generate misleading data.

Often, though, all that is needed for practical purposes is values, which are relative, not absolute. Comparisons without measurements have advantages: involving reflection and judgements, they are easier and quicker to express; they can be elicited for trends and changes without formal baseline data; and they are less sensitive, as has been shown by wealth and wellbeing ranking, and by seasonal analysis – how income compares between months is easier to gauge and less threatening to reveal than are absolute figures. Comparisons, as with matrix ranking and scoring, can in a short time elicit complex and detailed information and judgements of value inaccessible by other methods without great labour. Moreover, trends, comparisons and weightings lend themselves to visual sharing, with all its potential gains in participation, cross-checking and progressive approximation and learning. Comparing is usually easier, quicker, cheaper and less sensitive than measuring.

### **8.5.3 From Individual to Group**

Normal investigations stress individual interviews. Professionals' need for numbers is met by questionnaire surveys; individual or household schedules generate commensurable statistical data. In PRA, discussions, with individuals can and do take place, but there are relatively more attention to groups and participatory analysis by groups.

Group dynamics can present problems, such as dominance by one person or an influential lineage, faction or ethnic group, or by men. Facilitators do, though, have a repertoire of ways of handling this; sacrificing, one of themselves, who drawn a dominant person out of the group by requesting a separate discussion; social mapping and diagramming to learn about social groups; and sequences of meetings with separate groups, often women. Personal commitment and sensitivity on the part of facilitators is the key. How best to convene and facilitate groups remains an area for learning and invention.

At the same time, the advantages of groups have been undervalued. Typically, group members have an overlapping spread of knowledge, which covers a wider field than that of any single person. Groups can also generate numbers with observable mutual checking through self-surveys, whether verbal or visual.

Contrary to many outsiders' beliefs, sensitive subjects are sometimes more freely discussed in groups, for example topics individuals would not wish to discuss alone with a stranger. Several sources have indicated that village women in parts of India will freely discuss intimate sexual matters in groups. Among Butanes refugees in Nepal, Rachel Hinton (pers. comm. and 1995: 24) found as a social anthropologist that with participatory methods in groups refugees shared sensitive information about illegal activities more willingly and accurately than in the conventional context of participant-observation and semi-structured interviewing.

#### **8.5.4 From Verbal to Visual**

With traditional questionnaire surveys and semistructured interviewing, most of the transfer or exchange of information is verbal, and often one-to-one. This contrasts with participatory mapping and diagramming where the information shared is visual, and often created as a group activity.

With visual analysis, relationships and process change. The topic and method may be determined, or at least suggested, by the outsider, but the outsider's role is not to extract through questions but to initiate a process. The outsider is a convenor and facilitator. The insiders are factors and analysts. The outsider hands over control and insiders determine the agenda, categories and details. Information is built up cumulatively, and cross-checking is often spontaneous. Knowledge overlaps. If a dozen women diagram a census map of the small community, showing women, men, children, handicapped persons, and so on, not everything may be known by any one woman, but each item may be known by several of them. Groups often build up collective and creative enthusiasm, fill in gaps left by others, and add and correct detail. Debate can be lively because everyone can be what is being said. The visuals then present an agenda for discussion, and it is the visuals rather than the people that are interviewed.

Visual methods can also be empowering for those who are weak, disadvantaged and not alphabetically literate. Taking literacy to mean the ability to create and understand symbols, three types stand out; alphabetical literacy, meaning reading and writing; visual literacy, meaning, the way people understand pictures; and diagram literacy, meaning the ability to

understand maps and diagrams. Many local people may not understand the written word, and have difficulty with pictures, maps and diagrams, brought from outside. But almost all local people can map and diagram for themselves. In the words of a Zimbabwean villager: 'one does not need to be able to write in order to be able to translate thoughts into concrete actions'. The faculty of being able to map and diagram may include all except some of the handicapped in community, without privileging those who are alphabetically literate. So it is easier for almost all to take part, and they more or less by definition understand maps and diagrams, which they have made themselves.

Visual diagramming can then be an equalizer. All who participate children, women, men, poor, rich, illiterate, literate – can similarly understand what is being shown. Those who talk a lot dominate less. Describing the experience of the Neighborhood Initiatives foundation (NIF) in the UK, Tony Gibson (1992) has pointed out that in conventional processes 'the talkers nearly always win.' But with a physical model of their neighborhood, to play with, timid people can physically put down their ideas. Often people who put down an idea wait of others to talk first about it, and then say themselves. I agree with you". The unobtrusiveness of the process is particularly important to those in the community who get brushed aside because they are too young or too old. Or the wrong color, or the wrong gender. Similarly participatory mapping and matrices by marginalized groups. Often women, can enable them to express their preferences and proprieties in a physical form, which does not initial personal confrontation with those normally dominant, often, men.

Relations with outsiders are also changed. Good facilitation of participatory mapping and modeling often requires that the facilitator hand over the stick. The action is with those who map and diagram. After the early stages, outsiders have to keep quiet, observe process, and not interrupt. In the NIF experience, roles are reversed. Instead of professionals presenting their plans for residents' comments:

*"the residents are consulting the professionals to establish the range of options, the limitations, the possibilities – so that they can reach their own informed conclusions. The experts are on tap, not on top." (Gibson, 1995: 44, author's emphasis).*

Some contrasts between verbal and visual modes are presented in Table 1.

**Table 1: Verbal and Visual Compared**

	<b>Verbal (interview, conversation...)</b>	<b>Visual (map, model, matrix, diagram...)</b>
Outsider's mode and role	Probing investigator	Facilitating initiator and catalyst
Insider's mode and style	Reactive respondent	Creative analyst and presenter
Investigative style	Extractive	Performative
Insider's awareness of outsider	High	Low
Eye contact	High	Low

The medium and materials are those of:	Outsider	Insider
Detail influenced by:	Etic categories	Emic categories
Information flow	Sequential	Cumulative
Accessibility of information to others	Low Transient	High Semi-Permanent
Initiative for cross-checking	Outsider	Insider
Ownership of information	Appropriated by outsider	Shared; can be owned by insider
Utility for complex analysis	Low	High

The shift from verbal to visual is one of emphasis in PRA. Maps and diagrams are part of the repertoire. They can be facilitated on their own early in interactions. They can also be part of semi-structured interviews or conversations, introduced as a means for local people to express, share and analyze their knowledge. They then present an agenda for discussion. Interviewing the matrix, and interviewing the diagram have proved often the most fruitful, but also the most neglected, stages of a discussion and diagramming process. With the visual, a whole new set of questions and discussion arises which does not in the verbal (pers, comm. James Mascarenhas). The verbal, as shown for example with oral histories, will always remain important. But PRA experience suggests that combinations of visual and verbal, with early primacy to the visual, can help to bring in those normally marginalized, and can express much of the complexity and diversity of local realities, and that verbal and visual combined express more than either on its own.

### 8.5.5 From Higher to Lower

- In both medium of expression, and in physical position, there is a shift from higher to lower. In medium of expression, practitioners of PRA have much debated the relative advantages of paper or ground for participatory visual analysis. One view has been that in mainly literate cultures, as in China, Jamaica, Sri Lanka and the UK, it is appropriate for diagramming and analysis from the beginning to be on paper. Some have argued, before the experience, that the ground is an insult to people who are educated, and that it is patronizing for a facilitator to encourage use of the ground. Cultures and conditions vary but to date these reservations have proven unfounded. Ground and paper both have pros and cons, summarized in Table 2.

**Table 2: The advantages of ground and of paper**

Ground	Paper
Democratic, less eye contact and dominance	Permanent
Inclusive, more can take part	Portable
Friendly for marginalized people non-literates, women etc	Easy to copy
Easy to alter and add to	Easy to display

Size less limited	Updateable
Wide range of materials	Usable for participatory monitoring and evaluation
Can be 3 dimensional	More authoritative (with officials, policy-makers etc)
Fun and creative	
Local ownership	

Note: Advantages only are given, as the advantages of one are disadvantages of the other.

Perhaps most important, the ground is an equalizer. The media and materials are often those of insiders – soil, stones, sand, seeds as counters, sticks as measures, vegetation and so on. Eye contact, and insider's awareness of the outsider, are low, paper often inhibits. It is elitist, valuable and linked with literacy, and pen marks are permanent. All the same, the non-literate can use paper and pens to map and diagram. In Pakistan, in March 1992, several non-literate women drew systems diagrams of their farms and households with internal and external flows and linkages (pers. comm. Jules Pretty). For people who do not read and write, though, the ground is usually better. It invites; it belongs to all and is costless, familiar, fun and easy to alter. With the ground more can take part and take part more easily. Passers-by stop and become involved. Paper is private; the ground is public. Paper empowers those who hold the pen; the ground empowers those who are weak, marginalized and illiterate. There is a democracy of the ground.

In terms of physical position, personal relationships differ when analysis takes place on a wall, a table or the floor. In the VIPP (visualization in participatory programmes), approach, much of the participation is through writing on cards. These are grouped and ordered, usually pinned or stuck on a board or wall. The wall has advantages of visibility and items on it have some permanence. But with analysis on wall, there is a tendency of one person to take over, slowing the process and limiting participation. The process can even become tedious.

In contrast, the ground is freer and faster. When cards are placed on the floor, they are easier to rearrange and more accessible to all. Sitting, squatting or lying on the floor brings people down to the same level. The physically lower the visualization the less participants have eye contact and the easier it is for all to intervene, by work or action, to express their reality, with the flexibility of moving items without having to fix them. Participants tend to think much more about what is being expressed than about who is expressing it.

Sequences are often the key. In terms of medium, the advantages of both ground and paper can often be captured by starting on the ground and then redrawing on paper. In terms of position, the advantages of both the floor and the wall. So a ground map can be redrawn on paper, and cards can be sorted and ordered on the ground. The maps and cards alike can be stuck up and displayed more visibly on a wall. As with other reversals, it is less a question of either – or, and more a question of weighting and of where to start and what sequence to follow.

### 8.5.6 From Reserve to Rapport, and Frustration of Fun

The shifts and reversals outlined so far generate and reinforce a further reversal, that of relations, from suspicion and reserve to confidence and rapport, and often from frustration to fun.

With outsider-insider interactions, there is a scale of formality-informality, from the short-term structured interview with questionnaire, through the semi-structured interview with checklist of subtopics to the open-ended conversation. With interviews, and sometimes also conversations, outsiders ask questions and probe. The outsider maintains control, and largely determines agenda and the categories. Eye contact is common. The interviewee responds, conscious of an interaction with a person who is seeking information.

RRA and more so PRA stress the process of gaining rapport. An initial reserve of local people towards outsiders is a commonplace. Their responses are often prudent in order to avoid loss and hopefully gain benefits. Some social anthropologists have expressed skepticism about the relative speed with which rapport can be established. For their deeper and more fully emic understanding, there is a case for more lengthy immersion. But the experience with both RRA and PRA is that when outsiders behave well and methods are participatory, good rapport can come quickly. This is paradoxically through outsiders taking time, ~~of~~ resting, showing respect, explaining who they are, answering questions, being honest and interested, and asking to be taught, being taught, and learning.

Some earlier participatory research also suffered from being long drawn out. The pilot project in appropriate technology for grain storage in Bwakira Chini village in Tanzania involved an outside team living in the village for eight weeks. This was considered a short period of dialogue. But even so the application of the dialogical methodology was time-consuming and tiresome.

The contrast with RRA is sharp. Professional conversations are mutually stimulating and interesting. Of cattle keepers, in Nigeria who ranked browse plants, Wolfgang Bayer (1988: 8) wrote that: 'Pastoralists were very willing to share their knowledge about browse plants with us and appeared to enjoy the interviews as much as we did'. Reflecting on the comparison between a topic RRA and a questionnaire survey on forestry and fuel wood in Sierra Leone, Andy Inglis (1991: 40) wrote that the RRA approach enabled respondents 'to enjoy a professional chat about their livelihood or kitchen habits, instead of being subjected to an intrusive 278 question questionnaire by bored enumerators'.

With PRA approaches and methods, the contrast is usually even sharper. Data are not collected by outsiders, but expressed and analyzed by insiders. For outsiders, in John Devavaram's words. One doesn't get bored repeating fieldwork. It is always interesting, what is shared is often unexpected and at times fascinating. For insiders, the creative act of presentation and analysis is usually a pleasure, and a process too of thinking through learning and expressing what they know and want. In matrix scoring for trees or varieties of crop, using the ground and seeds, it is a common experience for the

outsider to become redundant as the process takes off. People debate and score on their own, oblivious of the outsiders.

The process is often enjoyed, and found interesting and useful. After village participants had made and analyzed models (*maquettes*) for their environment in Burkina Faso, All., expressed the strong desire to continue the work and to take it deeper'. Quite often, dissatisfied with their first attempt at a map, local people scrub it out and start again with concentrated enthusiasm. Again and again, villagers in India have lost themselves in mapping and modeling, and outsiders have to learn not to interview, not to interrupt, and not to disturb their creativity. There is pride in what has been made, and pleasure in presenting it to others. In the words of a postcard from Pakistan, received as this is written: 'When PRA works well it seems to be a good experience of everyone' (pers. comm. J. Pointing). Fun is often part of PRA.

### 8.6 Reversals in Learning

Putting the last first means reversals in learning. The litanies of rural developers include 'We must educate the farmers' and 'We must uplift the rural poor'. These can be stood on their heads. Outsiders have first to learn from farmers and from the rural poor. But many outsiders are hindered from such learning in reverse by their educational attainment, urban status, and roles as bearers and dispensers of modern knowledge. Staff working in rural areas distance themselves from rural people, showing their separate style and standing through clothing, shoes, vehicle, office, briefcase, documents, and manner and speech. Hierarchy, authority and superiority prevent learning 'from below'. Knowledge of one sort perpetuates ignorance of another. Learning has to start at the other end. The farmer must educate outsiders; the poor must bring outsiders down to earth.

Conventional learning through formal schooling, university courses, and staff training can contribute to these reversals through changes in syllabus. One example is to illuminate the problems and rationality of small farmers through the insights learning in reverse, this is not enough. There are two further methods, which deserve to be developed and included in courses and training.

The first of these is learning directly from rural people, trying to understand their knowledge systems and eliciting their technical knowledge. This is still rare as a part of education and training. The second is trying to experience the world as poor and weak person. The problem here is to enable professionals to step over and see and feel the world from the other end. The humanistic psychotherapies may have methods to offer for this, but their application to the training of rural development professionals has so far been slight.

#### 1. Sitting, Asking and Listening

Sitting, asking, and listening are as much an attitude a method. Sitting implies lack of hurry, patience, and humility; asking implies that the outsider is the student; and listening implies respect and learning. Many of the best insights come this way. Relaxed



discussions reveal the questions outsiders do not know to ask, and open up the unexpected.

Different approaches are possible. The pooling of knowledge and mutual stimulation of a small casual group can be an excellent source of insight. The composition of a group can also be designed for a purpose. It is not only the outsider who holds initiative or who gains, all who take part can influence the direction of the discussion, and be absorbed in learning. Evening meetings may be ideal, going on into the night, when the outsider's presence is less obtrusive and distorted responses less likely.

## **2. Learning from the Poorest**

The poorest are usually considered to be the most ignorant, those from whom there is least to learn. But how much do outsiders know about how the poorest cope? To enable the poorest to do better, the starting point is to understand how they manage at present. And on this the poorest are the experts - they know more than ignorant outsiders who have not bothered to try to find out.

Learning from the poorest is rarely any part of anti-poverty programs and projects; yet it is a key to enabling them to improve their lot.

## **3. Learning Indigenous Technical Knowledge**

All rural people know things, which outsiders do not know, and some know more than others. There are many ways for outsiders to learn from them there is the comprehensive approach of a social anthropologist concerned with knowledge systems, including concepts and patterns of thought. But short of this there are less complicated or abstruse approaches, including compiling glossaries of local terms, and games, quantification and ranking.

## **4. Joint R and D**

Other reversals in learning can come from the location and mode of research. The strong reasons for carrying out much agricultural and agricultural engineering research jointly with farmers in their fields and under their conditions are now widely accepted. Research conducted outside the rural environment (on a research station, in a laboratory) often entails heroic simplifications or gross distortion. In the past, much agricultural research undertaken without the small farm and the small farm family has had the wrong priorities and has generated misleading 'findings'. There are, to be sure, some stages or forms of research, which require stringent controls or special equipment, which only a research station or laboratory can provide. But professional biases weight heavily towards working in research station and laboratory cores instead of field condition peripheries.

## 5. Learning by Working

For many outsiders, there is scope for learning by physically working with farmers and others, and doing what they do.

## 8.7 Putting the first last

Thirteen years ago it was as far as I could get to argue of putting the last first. This meant putting first those who are poor, physically weak, isolated, vulnerable and powerless, and their priorities and the things that matter to them. Norman Uphoff (1992) has taken this further making a case for rehabilitation of the concept of altruism and generous behaviour. He has identified a continuum of orientations toward self and others (Table 1) from aggressive behaviour (destructive of others), through selfish behaviour (in which one's gain is another's loss), to generous behaviour (in which all gain) and finally sacrificial behaviour (which is self-destructive). The generous or altruistic person gains either from the satisfaction, which is seen to be inherently good. Putting the last first is generous or altruistic behaviour in either or both of these senses. It has a positive-sum orientation in which all can gain.

**Table 3: Continuum of orientations toward self and others**

(a)	(b)	(c)	(d)
Aggressive Behaviour (destructive of others)	Selfish behaviour (zero-sum orientation)	Generous behaviour (positive-sum orientation)	Sacrificial behaviour (self-destructive)

Source: Uphoff, 1992:343

### 8.7.1 Disempowerment as loss

Putting the first last goes further. It confronts issues of power. With altruism and generous behaviour, the first remain first: uppers remain uppers. Putting the first last is more radical. For it means that those who are uppers and powerful step down, disempower themselves, and empower others. It means putting the first (oneself) last, or at least lower. It implies that uppers have to give up something and make themselves vulnerable. It sounds like sacrificial behaviour, a zero-sum in which uppers, the powerful, have to lose.

That such loss could be accepted on any scale may seem improbable. In personal terms, it looks contrary to normal self-gard and self-protection. Ideologically, it conflicts with the pervasive ethos of the neo-liberal market and of the materialism and global greed of the mid-1990s. The very language we use expresses a zero-sum mindset. It treats power as a commodity where one's gain is another's loss: it is something we lose.

surrender, give up, are stripped of, or hand over. If we are socialized into wanting more of every thing, then we want more power.

Professionally, reversals can also be seen as threat. For professional uppers, 'lowers can do it', and ask lowers' can be sensed to imply loss of self-esteem, status and control. To recognize and privilege lowers realities can seem a Pandora's box; the expression of complex and multiple realities. Criteria, categories and demands might cause the simple standard bricks of central citadels to crumble. The fear of freedom afflicts not only fascists. It can also daunt those whose dominance is grounded in denials of democratic diversity. Many professionals need the soled structures of their realities, their prisons.

Politically and personally, those most reluctant to give up power are often those who have done wrong. They fear exposure, punishment and revenge, and feel that to protect themselves they must retain control. They are then victims of their own wrongdoing, trapped by fear of retribution for what they have done and been. For them, disempowerment is dangerous. The challenge is to find ways uppers can free themselves from these traps.

### **8.7.2      *Disempowerment as gain: effectiveness, liberation, fulfillment and fun***

Fortunately, disempowerment is often a positive sum, in which all gain. This can take several forms.

#### **Effectiveness**

Instrumentally, disempowerment offers new roles with new effectiveness in development. To facilitate the participation of others is often practical and cost-effective. The errors of "all power deceives" diminish. Local realities, which are complex, diverse, dynamic and unpredictable can be better expressed and local needs better met. Equity can be served in empowering the weak. Good change can be more sustainable when it is locally owned. In many ways, uppers can gain because empowering lowers is so practical. Against expectations, it so often works.

#### **Liberation**

Power on a pinnacle is lonely. Centralized control of more than the minimum is stressful. In contrast, decentralization, spreading responsibility and enhancing trust can defuse tension. In a participatory mode, a boss is not isolated but a team member as well as leader. Relationships are then more equal, with mutual exchanges, learning, partnership, friendship and collegiality. Openness, honesty and realism are foundations of peace of mind.

A striking contemporary example is the extraordinary forgiveness of black Africans manifested in Kenya, Zimbabwe and South Africa after colonial and white domination. Before independence in Kenya, and before majority rule in Zimbabwe and South Africa, many whites in those countries were consumed with fear. They could not believe that 'giving up and handing over' power and control could lead to anything but violence and revenge. As of 1996, they

were almost completely wrong. So far, in several senses, almost all have gained from the disempowerment of the whites. A great gift of Africa to humankind has been to make manifest the healing powers of magnanimity. Like Mahatma Gandhi earlier, so Nelson Mandela today towers as an inspiration.

One can ask then, in how many, other conditions and places, in political systems, organizations, communities and families; similar fears may be tragically unnecessary. Perpetuating pain for lowers and fear for uppers; and how often there is an alternative of positive synergy where lowers' forgiveness generates uppers' relief and gratitude, where disempowerment liberates.

### **Fulfillment and Fun**

As many teachers know, enabling others to learn, grow and fulfill themselves is itself fulfilling. So too, in a PRA mode, is empowering others through facilitating their analysis, planning and action, some of the fulfillment, too, comes from processes which people enjoy. Until recently with PRA, the word 'fun' has scarcely been used in development. Faced with horrors of war and extremes of cruelty and deprivation, fun may sound self-regarding or even frivolous. But creativity, play and laughter are part of what most people value and wish for themselves and for others; and they are quite often part of PRA processes.

The most seminal learning from the RA experience comes from going beyond the altruism and generosity of putting the last first to the exhilaration of putting the first last; to responsible disempowerment, eased by the forgiveness of lowers and enhanced by the fulfillment of uppers. In reversals of dominance – stepping down, handing over the stick, facilitating – uppers have means and opportunities for taking pleasure in empowering lowers to do that, putting the first last, is not a threat but a fulfillment, a liberation, a gain.

For well-being which is sustainable, equitable and responsible, the prison of power is one problem, material possessiveness another. A great methodological challenge for the twenty-first century is to find good ways to enable those with more to be better off with less.

### **8.8 So What? Start**

Development professionals today have access to a different space, open to new insights and behaviour, compared with ten, or even only five years ago. We now know better what local people and lowers can do. It is more than we supposed. We have to hand powerful and popular behaviour, approaches and methods. We know that these are one way to development as better change, to gains by the weaker in ways they will welcome. We know they can enable those in power to be more in touch and up-to-date. We know these behaviour, approaches, and methods can enable poor people, women, children, the vulnerable and the marginalized, to express their knowledge and enhance their confidence and capabilities.

As a result, the question "Whose reality counts" and be answered more and more with "Theirs". The issue is whether we, as development professionals,

have the vision guts and will to change our behaviour, to embrace and act out reversals, and:

- o As economists and bureaucrats to decentralize, destandardize and support local diversity;
- o As staff in NGOs to continue to evolve, apply, share and spread participatory approaches and methods;
- o As teachers in universities, training institutes and colleges, to go with our students to local people learn, to revise our curricula, to rewrite our textbooks, to teach and lecture less, and more to help others learn;
- o As staff in government organization, not to talk down but to listen, learn and facilitate, and to provide choices and responsive services;
- o As political leaders, to promote and sustain decentralization, democratic values, tolerance, peace and the equitable rule of law;
- o As people to be self-critically aware, to respect others, and to value, trust and diversity;
- o As uppers, to disempower ourselves, controlling only the minimum, handing over the stick, devolving discretion, encouraging and rewarding lowers initiatives, and finding fulfillment and fun in enabling others to express, analyze and act on their diverse realities.

We can all think for ourselves, use our personal best judgment, and help others to do the same. We can all define responsible well-being in our own ways for ourselves. We can all celebrate local and personal diversity. Whatever the constraints, most of us, in different ways, some small, some big, can challenge the excesses of centralized power, convention, and uniformity. And most of us have ways to empower others, lowers, and the weak, poor and vulnerable, to express their realities and make them count.

Good change flows from personal decisions and action. There is no need to wait. There is a vanguard to join and new high ground to explore.

## Unit Summary

For participatory appraisal the outsiders has to change their ways of learning about rural conditions. The problem of time and timelessness can realistically be tackled by those involved in two ways: by improving rural development tourism, and by developing and using techniques for Rapid Rural appraisal.

Tactics of tourist include:

- Offering the anti poverty biases.
- Spending longer and going further
- Being unimportant ,
- Rapid Rural appraisal

Reversal in learning:

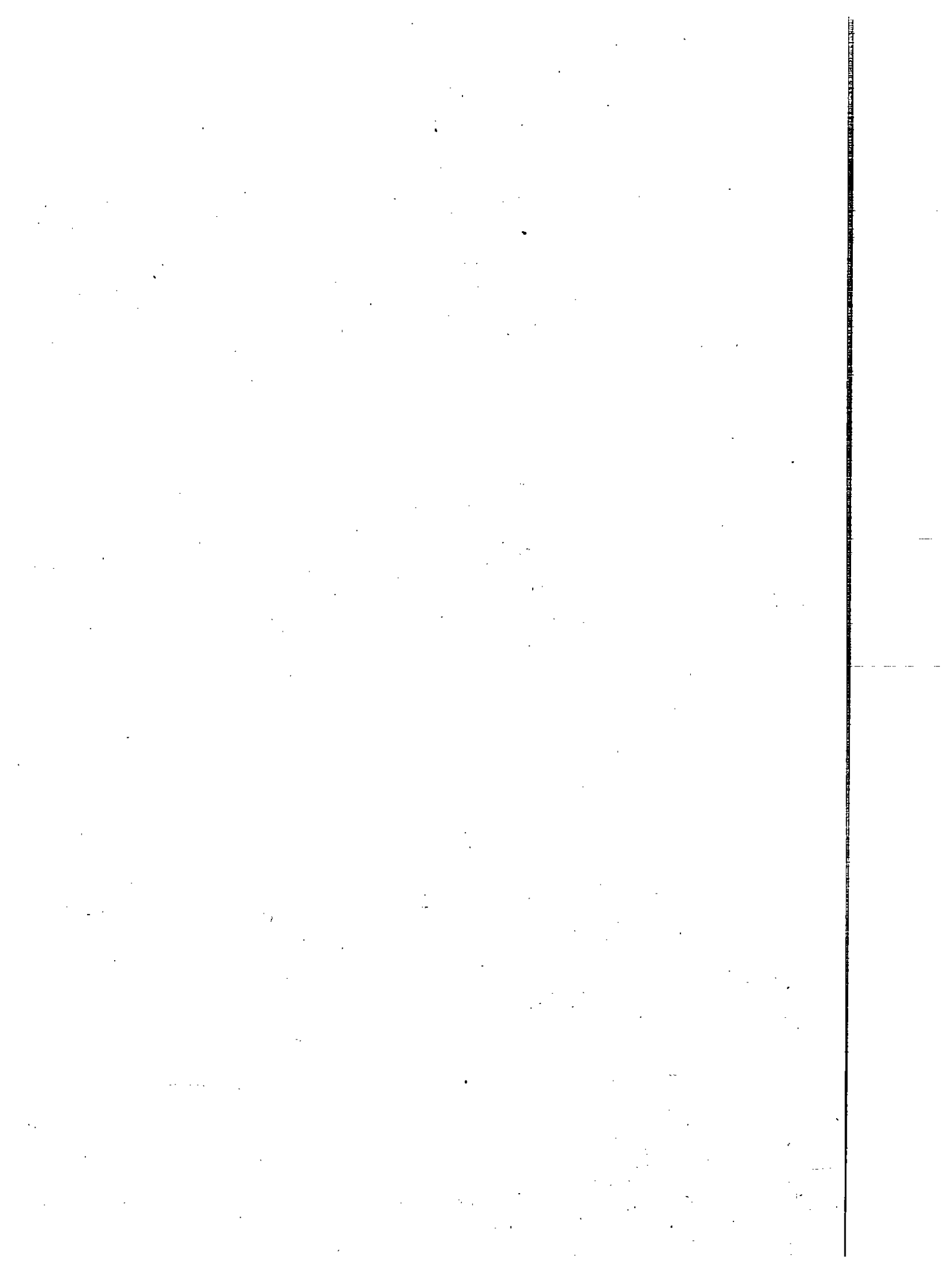
- Sitting asking and Listening
- Learning from the poorest
- Learning indigenous technical knowledge
- Joint R and D
- Learning by working

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# Towards Participatory Management

DRAFT



*Department of Environmental Science*  
**Allama Iqbal Open University Islamabad**

TOWARD PARTICIPATORY MANAGEMENT

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TOWARDS PARTICIPATORY  
MANAGEMENT

**Block**

**3**

**Programmes and Services**

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**UNIT 9**

**Organizational Change for Sustainable Development**

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**UNIT 10**

**Women's Participation in Development**

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**UNIT 11**

**Youth Participation in Development**

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**UNIT 12**

**South Asian Cooperative Environment Programme**

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## **UNIT 9**

# **ORGANIZATIONAL CHANGE FOR SUSTAINABLE DEVELOPMENT**

### **Unit Introduction**

Organizational change is a major neglected task. While its importance cannot be overestimated (and has been underestimated in the past) there are no easy guidelines, which can be offered. Cultures vary greatly in the ways in which the people interact, learn and are motivated and constrained; universal prescriptions about management tend to have limited validity. Organizational changes are needed at all levels within the main actors in the development cycle – grass root/community based organizations, intermediary organizations, both government and non-government, and also policy making levels. Funding organizations also need to be prepared to change their policies and procedures for accountability, monitoring and evaluation and reporting. Some programmes which use participatory methods in the initial phase are unable to continue as time goes on, very often due to the fact that the outsiders and experts are not prepared to accept the reversal in the decision making and resource allocation mechanisms. Invariably it involves changes in power relations. The use of participatory methods to enable development of local institutions is an important first step towards changing power relations. In the organizational adjustment process, experience shows that misfits tend to leave the system and the resulting environment more conducive to a participatory approach.

In this unit we will examine:

- The creation of capacity for change
- Managing organizational change
- Process of organizational change
- Case studies of organizational change

### **Unit Objectives:**

After going through this unit, the students would be able to learn:

1. What are the content and context of change
2. About leadership, required for planned organizational change
3. About effective innovators and organizational culture
4. Through case studies about organizational change.

## 9.1 Introduction

The late 1990s and early twentieth century was an era of substantial change in institutional arrangement and organizational policies. It is an era for radical decisions. One of the skills development managers will need is that of promoting and managing organizational change. This is true in all agencies—donors, governments, parastatals, NGOs and the private sector. In donors, governments and the private sectors, organizational change appropriate to the new paradigm will be heavily constrained by other overriding political and organizational objectives. Part of the challenge will be to influence these wider organizations to change their practices insofar as they have an impact on development. Given the unbundling, which is now characteristic of public sector reform, this should not prove impossible.

It is clear that bureaucracy in either its classic or its degraded form cannot work well in the new paradigm. The possibility of reform is affected by contexts and culture. In South East Asia, where the influence of the private sector is strong, reform of bureaucracy is likely to be more repaid compared with South Asia where a public sector culture dominates even the private sector to a degree. A strong public sector may vary considerably in its culture and functioning. The key difference is the degree to which it is rule and procedure-bound or led by purposes to which the rules are subordinate. Success in development invariably requires a degree of risk-taking (innovation, rule-breaking, etc.) which is very difficult to achieve in a rule-bound working environment. In several Sub-Saharan African countries the public sector has been so decimated and become so donor-dependent, that reform of structures has become a way of life. However, the reforms introduced so far have not done much for development, being aimed largely at other objectives like cost cutting and retrenchment.

A rejection of the bureaucratic mode does not imply rejection of all its features. Accountability is a critical issue, but can be assured in ways other than upward reporting and accounting. Horizontal (peer review) is more important. Balancing accountability upwards and downwards, and mutual understanding between financing agencies and participating groups, communities and organizations is a challenge for organizations working in the new paradigm. Merit recruitment systems are vital, but can be achieved more effectively without the centralized, bureaucratic procedures associated with a massive public service. Criteria such as local experience, trust of local people and use of local language, which are not normally considered appropriate may be of greater relevance.

Hierarchy, as a principle of organizing, however, so rejected. Even the hierarchy implicit in contracting is often inappropriate. Contracts (public-private; donor-NGO; government-NGO; NGO-Community-based Organization, CBO; CBO-group/community) are useful devices for clarifying and regulating inter-organizational relationships. However, the development of trust and partnership in a relational contract is usually important in rural development. Trust is mutual, and implies a lessening of hierarchy, if not a total absence of it.

Organizational change is directed at generating an interactive, outward-looking organization, able to promote the capacity and institutional

development of partners especially at the local and associational levels, as well as its own. Management needs to recognize the requirements of different organizations and avoid tendency to create mirror organizations. Organization should value individuals in key positions giving them high levels of discretion and support. Organization needs to generate, participatorily useful information about their activities: this is the key to their strategic thinking process. The latter sounds very grand, and can be very complex but may also actually be quite simple. It needs to be simple in many situations. An outward-looking organization will seek to involve others in its functioning, through, for example participation on an Executive or Advisory Board, or through establishing an external monitoring team, or simply by participating in discussions and networking. This important not only in renewing the ideas and energies available to the organization, but also in explaining its functioning to others, and in seeking to work with other agencies.

## 9.2 The creation of capacity for change

Organizational change is about the creation and destruction of capacity. It should be recognized that there are negative capacities-the capacity to block criticism, debate and change, delay action, deny access, restrict information, and exclude stakeholders. Change is as much about removing negative capacities as creating the positive ones.

*Change can be seen as a process, with a specific content, in a particular context.*

The content may be straightforward – one simple, easily achievable goal; start easy but get difficult – an initial change which necessarily leads to others; or be difficult from the outset – with multiple goals and purposes which change as time passes. The capacity for change is variable within organizations – between departments and between individuals – as well as among organizations linked in hierarchy or network. Change leaders need to understand why this is so, and develop their strategies for change in the light of this analysis. Content and context interact in a process.

### 9.1.2 Content of change

There are many types of change, none of them is straightforward; most involve sets of interrelated changes, and deep change in attitude and professional ideology as well as in organizational structures and procedures. Such is the nature of a paradigm shift. An example will illustrate some of the problems.

**Case Study 9.1**

Oxfam is recognized as a leading agency in the introduction of gender issues into its own work, as well as in the wider development debate. Its Gender and Development Unit (now Team) was formed in the mid-1980s to derive a process of organizational change. Conceptually, integrating gender issues into development work is not very complicated: knowledge about gender differences and their significance has been widely available for some time. However, it has proved a slow process, even within a reputedly progressive organization like Oxfam. A review of work in 1994 on gender issues in 30 countries where Oxfam operates, claimed many successes, including increased women's participation in Oxfam projects, strengthened women's organizations, and better awareness of gender issues among partner organizations. There were also many lessons learnt from a decade of experience: training staff and getting issues understood by Oxfam staff and partners takes time; the issues challenge people personally, and working through these challenges also takes time. There are powerful religious and cultural forces arrayed against change in unequal gender relationships. And as a result the profile of research and advocacy on issues like women's rights, legal status, and violence against women needs to be raised if there is to be any effect. Men and women need to be involved in, rather than excluded from, each other's projects if changes to be achieved. Gender aware project management procedures are needed. Women were also excluded from debate by the widespread use of English as the only language.

Problems identified by Oxfam staff included;

- a failure to influence men, and the resistance of some male staff;
- a lack of time to carry out the time-consuming work that gender issues require, because workloads in other areas are heavy;
- the difficulty of translating concepts developed in headquarters to different contexts around the world; and
- the repeated failure of women's income generating projects (a key strategy) to improve women's status or access to decision-making and resources (Wallace, 1994).

The risk is that an organization retreats from a problematic change process; a more useful conclusion would be to narrow down what can be achieved to a more practical agenda, and allow time and resources for difficult changes.

**9.3 Contexts of change****9.3.1 Government**

Critical capacities for government in rural development include; a capacity for self-restructuring, and transitional change; a capacity for public education and information, to foster self-regulation; a capacity to abandon the search for control over detail, but to orchestrate consensus behind purposes; a capacity to evaluate together with stakeholders; a capacity to value individuals who are central to networks rather than seeing them as a



threat; and finally, and most problematically for government, a capacity to allow dissension political campaigning, and the emergence of countervailing interests.

But governments have critical incapacities; they are inflexible with respect to staffing and financial management; the pace of work is often too slow due to low productivity and low motivation; unmotivated staff are overly concerned with their own survival and perks; hierarchy and concentration of decision at the top make devolved management impossible; central ministries retain control at all costs. These fundamental incapacities mean that change in government has to be structural as well as cultural. There are very big decisions, which have to be taken at ministerial level. Devolution of development functions to local government is one approach, but beware creating the same incapacities there. Delegation to specialist, autonomous bodies is another approach, much tried in the era of integrated development, but which may gain a new lease of life in the new paradigm, where fieldworkers are highly prized, experienced staff. They may be organized in small autonomous, collegiate bodies, reporting to a devolved government. Each autonomous body may have a small secretariat, but not the armies of office and fieldworkers typical of development project. If extra people are required they will have to be hired, on contract, preferably with local backgrounds as well as relevant skills. Or work may be done through partnership with local associations or NGOs.

The management of organizational change involves various capacities; the capacity to retrench, redeploy and destroy large parts of the public sector. Destruction and retrenchment may sound very negative, but public sector organizations have become so overburdened with the wrong kind of staff and the wrong sort of culture that in many cases retraining, redeployment and restructuring will only bring substantial benefits if accompanied by considerable retrenchment and destruction. This would apply particularly to central ministries and centralized organizations based in capital cities. Only a very small percentage should remain in those locations: senior policy makers, policy analysts, information system managers, and legislative experts. These types of change would affect ministries of agriculture, departments of primary and preventive health, departments of primary and secondary education, rural industry departments, and so on.

The capacity to retrench is complemented by a capacity to develop rolling relational (trust-based) contracts with other agencies or individuals, or even within the organization. Performance on these contracts then needs to be monitored by both or all parties. However the contract culture needs to be tempered with commitment and a long-term perspective on the development of capacity at very local level. In most poor countries' rural areas there is no private sector waiting to take contracts from development agencies: contracts inevitably take on the characteristics of partnerships in this situation.

Radical restructuring would offer early retirement to civil servants, with benefits, especially those without appropriate skills; offer experienced workers responsible field postings with allowances to compensate for hardship, and scholarships for their children: create a framework in which they retire to their villages (early) and work for development organizations in their villages, perhaps competitively; privatize and regulate those services

which can be, for example, veterinary, where demand is strong; move in a phased way towards creating autonomous bodies for extension and research, and service provision (schools, hospitals, clinics, water supply systems), giving networking responsibilities to these decentralized bodies; and create links of accountability to local democratic bodies, as well as direct client groups.

### 9.3.2 NGOs

The call for NGOs in recent years has been to 'scale up' – spread and grow in order to have a wider impact. This may be done through lobbying and advocacy, or by growing organizationally. Unbundling, becoming properly rooted in society, working with partners in networks, at all costs avoiding the errors of past organizational empire-building strategies.

The empowerment of local organizations, CBOs, and associations does not require the long-term presence of a sustainable southern or northern NGO; success in developing the capacities of grassroots organizations and their associations would enable intermediary NGOs (or government departments charged with capacity-building) to disappear, or at the least to change role, or move on. As a contribution to the development of civil society NGOs are clearly often a positive development, but they may be male and elite dominated, and highly opportunistic and career oriented in a situation where careers are hard to come by, and where northern NGOs provide much-needed opportunities. How much better that enthusiastic, skilled individuals find employment with locally rooted agencies.

The intermediary NGO is an unsatisfactory and temporary form of organization, a creature of the aid industry. Much more significant, because rooted and sustainable, are associations, and other organizations which find their *raison d'être* in the political economy, not as semi-outsiders. The real capacity building of southern NGOs is, then, their transformation into rooted organizations, which the northern capacity development strategy outlined above only steps towards. There are few role models here; Grameen Bank is one example. Bancosol another, of NGOs which have become commercial, poverty-oriented banks.

In NGOs the process of organizational change has been characterized by fission, with new NGOs being set up by discontented staff from established NGOs. Such staff could exercise greater imagination as they build their new organization, exploring the scope for rooting the new organizations as a sustainable institution bound to a local membership or client group. There will always be a role for service agencies – agencies which provide services to membership organizations – but the priority today is to build the membership base organizations just as much as, if not more than, the service agencies.

Changing from an organization which provides services to one which builds memberships into the process of provision involves continually identifying demand, adapting identified demand, involving members in decision-making on a regular basis and generating at least some resources internally (i.e. within the membership); the skills of building democratic broadbased organizations managing common properties and providing services. New

attitudes are required of leaders: they must be able to shape membership opinion, but also be disciplined by it. Skills of consensus-building managing when consensus is absent will be at a premium.

## 9.4 Managing Organizational Change

Steps in developing a strategy for change would include:

- a participatory analyses of the present situation (strengths, weaknesses, opportunities threats);
- the formation of focus groups, involving different stakeholders to generate commitment from the beginning;
- a review of the impact of external developments for example, using the Delphi technique of calling in experts to help diagnose these and their impacts);
- a specification of the desired future (formalized in a mission statement, a statement of how the organization wants to be perceived – a vision statement, a statement of core value , or strategic objectives); and
- a strategy for managing the transition.

Managing the transition involves identifying leaders, establishing key tasks (mini-projects) and clarifying responsibilities. Throughout the process there is a need to gain and maintain support for the process. Workshops to define the change, to decide what is included and what excluded, are best carried out in an inclusive way. The organization of change will depend on how big it is, and whether its impact is large or small. A small change with a big impact could be managed by a co-coordinator ensuring that the change is achieved and that everybody knows about it and can handle the impact: a big change with a big impact needs a project team to manage the process. A big change with restricted impact can be handled by a specially assigned project manager.

Change in the public and non-government sector is usually more complicated as organizations tend to have several and sometimes diverse goals. Consensus around corporate goals and values may not be so easy. Incentives and sanctions can often not be manipulated by managers to secure compliance either. People's participation tends to increase the objectives, which need to be fulfilled, as these will vary from one place and time to another.

There is a low level of understanding of the management of change in development organizations. Applications of western theory or practice are much more common than attempts to deepen understanding of change processes. Here we will take some key points developed in western management, and examine their application. The case studies, which follow, are a small attempt to plug a gap.

## 9.5 Leadership

Leadership is at the heart of thinking about planned organizational change. This field is dominated by the 'Excellence' tradition, which suggests that decentralized, project-based organizations, which give central place to the

roles of individuals within the organization, succeed. This tradition is strongest in the "American private sector, but has influenced thinking about management across a wide spectrum of organizations, including those involved in rural development. Leadership is supposed to substitute for rules, quotas and targets. Leaders can be trained to be competent across a wide variety of competences to play different roles. Here is one prescription for the 'master manager'. He or she should be able to play the following roles:

➤ **The director role.**

- ❖ Taking the initiative.
- ❖ Goal setting.
- ❖ Effective delegation.
- ❖

➤ **The producer role.**

- ❖ Personal productivity and motivation.
- ❖ Time and stress management.

➤ **The co-coordinator role.**

- ❖ Planning.
- ❖ Organizing.
- ❖ Controlling.

➤ **The monitor role.**

- ❖ Writing effectively
- ❖ Reducing information overload.

➤ **The mentor role.**

- ❖ Understanding oneself and others.
- ❖ Effective inter-personal communication.
- ❖ Developing subordinates.

➤ **The facilitator's role.**

- ❖ Team building.
- ❖ Participative decision-making.
- ❖ Conflict managements.

➤ **The innovator role.**

- ❖ Creative thinking.
- ❖ Living with and managing change.

➤ **The broker role.**

- ❖ Creating and maintaining a power base.
- ❖ Effective negotiation and influencing skills.
- ❖ Effective oral presentation

These roles tend to focus on the internal environment of change, whereas change may have much more to do with the interactions between leaders or innovators and the external environment. Aspects, since rural development organizations rarely have much autonomy they will need to pay considerable attention to changing the external environment if organizational change is to stick.

Leadership is not only about possessing competence it is also an interactive process. Followers have to be led, willingly, but usually with incentives and sanctions and some support from both the narrow organizational and the wider culture. Effective innovators are rare as a result, and should be cherished.

## 9.6 Innovators and Organizational Culture

The role of the innovator is one of the most compelling, and yet least understood, of the eight leadership roles. Innovators need to be tough skinned, driven by wider objectives, and supported by conviction based on reality that what they are doing is right and feasible. In practice, innovators are often threatening to others, and come under a lot of pressure to work at a more widely accepted pace and in less demanding style. However, there are different cultural styles, which will be appropriate. Whereas the innovator in a western organization will often be quite ruthless in pushing through new ideas, an innovator in a more paternalistic culture will need to combine innovation with a caring, family work orientation. This is an uneasy combination, very difficult to balance. Without it, the innovator loses legitimacy. In either case, support from top management or headquarters organizations is vital.

Innovations may be encouraged or discouraged by factors in the internal and external environments of the organization. These are:

- ❖ the degree to which interest groups identify with that vision, and
- ❖ the degree to which the vision is achievable within given financial and human resource frameworks.

Linked to the development of a shared vision is the evolution of a leadership cadre committed to change. Pressures from the environment – financial crisis, or pressures to proceed in a certain way – can speed up or slow down the change process. The process of change itself can also exert an influence: for example, simplicity and clarity of goals will help widespread understanding, and understanding is perhaps the first step to commitment.

Organizational culture is often an inherently conservative force in the face of necessary change. This is why so much emphasis has gone into developing organizational cultures, which enable learning, adaptation and innovation as a matter of course. In rural development, change is now pervasive. Adapting to pervasive change should be easier for organizations, which are newly established compared with more long-lived agencies with stronger cultures of their own. Many rural development organizations are new, and have less formalized divisions of labour and procedures of operation, where cultures

are better established it is likely that structures, procedures and attitudes will need change. Resistance to change has several sources:

- The preference of staff (and other stakeholders) for stability and predictability. This is probably greatest in economics where uncertainties are also great.
- The cost of change: accountants' cost-conscious views often stand against proponents of change.
- Long-term external agreements and contracts may be seen to restrict, or complicate the process of change.
- Groups perceive change as a threat to their positions and power. Since rural development involves power sharing, this is a critical dimension.

The stronger the culture opposing change the more likely it is that it will be imposed on individuals. This is why changing the culture through training and other activities, which facilitate individual growth, may smooth the way. Involving key players in creating the process of change - bringing out their latent creativity insofar as possible - helps spread the sense of ownership of the change. Getting the material incentives (pay, security, workload) right helps to break resistance. These would include factors, which enable employees to meet social expectations - assistance to family members, for example - if this can be done without compromising organizational objectives.

## 9.7 Process of organizational change

The process of organizational changes likely to go through several stages. The best known models of this in the context of participatory development is Korten's (1980). He talks about phase 1 where the organization learns to be more effective through action research. It learns to accept past errors and learn from them; how to involve people in decision-making, and how to translate learning into action, creating a culture of learning. In this phase, staff work with a small number of communities adjust to using local knowledge, work out the issues behind conflicts of interest and try new approaches both technical and social.

In phase 2 the organization uses the new methods derived from phase 1 more widely, and adapts them to suit available resources. Once 'acceptable levels of effectiveness and efficiency have been obtained' expansion and replication begins. This is phase 3.

In rural development, change in one organization is generally interlocked with change in others: rural development practice is multi-level and multi-organizational. In order to accomplish change several models of 'good organization' may be needed to fit each organization's needs and takes. One organization's change will prompt, demand and support change in another. Change in one without supportive changes in another. Changes in others may be useless, even worse, changes may be mutually contradictory, and in which case negotiations and separation will be necessary strategies, which will also lead to changes.

Rural development organizations are at different stages in the organizational change process. For many the changes to adapt to the new paradigm are quite major: involving what they do as well as how they do it, who they typically interact with and the quality of their external relationships. They are also far-reaching, involving retrenchment, unbundling, redeployment, deskilling, new recruitment and reorganizations than smaller NGOs but aspects of it apply to NGOs too.

The following table shows the kind of organizational change brought about by using a participatory approach in one NGO, the National Development Foundation:

**Table 9.1 Institutional Changes – National Development Foundation**

From	To
<ul style="list-style-type: none"> <li>• Infrastructure output priority</li> </ul>	<ul style="list-style-type: none"> <li>• People and their participation + capacities as an output priority</li> </ul>
<ul style="list-style-type: none"> <li>• Emphasis on project implementation</li> </ul>	<ul style="list-style-type: none"> <li>• Emphasis on going 'beyond projects'</li> </ul>
<ul style="list-style-type: none"> <li>• Implementation guidelines top-down</li> </ul>	<ul style="list-style-type: none"> <li>• Implementation guidelines developed and agreed with farmer organizations</li> </ul>
<ul style="list-style-type: none"> <li>• Implementation managed by field officers</li> </ul>	<ul style="list-style-type: none"> <li>• Implementation managed by Farmer Organization facilitated by field officers</li> </ul>
<ul style="list-style-type: none"> <li>• Planning and monitoring controlled by field offices and head office</li> </ul>	<ul style="list-style-type: none"> <li>• Joint planning and monitoring – farmer Organizations and NDF</li> </ul>
<ul style="list-style-type: none"> <li>• Participation induced</li> </ul>	<ul style="list-style-type: none"> <li>• Participation spontaneous</li> </ul>
<ul style="list-style-type: none"> <li>• Information collected through socio-economic surveys/questionnaires</li> </ul>	<ul style="list-style-type: none"> <li>• Information generated and analyzed by Farmer Organizations facilitated by field officers/villagers</li> </ul>
<ul style="list-style-type: none"> <li>• NDF owner of information collected</li> </ul>	<ul style="list-style-type: none"> <li>• Information shared with Farmer Organization – participatory analysis remains with them</li> </ul>
<ul style="list-style-type: none"> <li>• Funding channelled through field officers</li> </ul>	<ul style="list-style-type: none"> <li>• Funding direct to farmer organizations accounts</li> </ul>
<ul style="list-style-type: none"> <li>• NDF reporting to each donor separately</li> </ul>	<ul style="list-style-type: none"> <li>• Consolidated reporting common to all</li> </ul>
<ul style="list-style-type: none"> <li>• Progress review separately by donors</li> </ul>	<ul style="list-style-type: none"> <li>• Joint progress review and reflection combined with field visits</li> </ul>
<ul style="list-style-type: none"> <li>• Donor-recipient relations</li> </ul>	<ul style="list-style-type: none"> <li>• Partnerships characterized by open dialogue</li> </ul>

## 9.8 Case Studies of Organizational Change

We will briefly examine three cases of rapid and significant organizational change. The Philippines National Irrigation Administration (NIA) is perhaps the best-known and only well-documented case. The approach employed

there has been used elsewhere (e.g. Bangladesh), with some success. Organizational change in the public sector in India has proved much more problematic. NGOs by contrast, if they are not heavily donor dependent, should present a much more conducive organizational environment for change. Some reflections on the recent experience of Plan-Nepal confirm this.

**Case study 1**

The NIA changed from a classic infrastructure development government department to a semi-autonomous, self-financing servant of the farming community over a period of fifteen years. The key change introduced in the development of small and medium scale irrigation was a substantial and participatory planning phase in which the farmers likely to benefit from a NIA investment collectively sort out their differences and agree a plan of action; this is facilitated by a cadre of NIA workers, the Community Organizers. Accommodating this cadre and painstaking preparatory work it performs have been the major changes the NIA has had to adopt to. A key supportive change has been the progressive requirement that the NIA raise more and more of its own revenue from the farmers it serves. This ensures that the work it does is what the farmers want. Even more critical was the formation and persistence over a long period of a group of key leaders and supporters of organizational change, both inside and outside the NIA.

**Case study 2**

Our second case study, the Watershed Management Directorate (WMD) of the Indian state of Uttar Pradesh, presents a different image. Funded by the European Union and government of India, and changed with reducing erosion and raising incomes in the Himalayan foothills, this organization attempted to develop a participatory, gender-sensitive approach, making use of Participatory Rural Appraisal (PRA). In this it has been partially successful in a short period of time. Significant changes in the behaviour of front-line staff with villagers were recorded. The principle of villages-level identification and negotiation of priorities was accepted. Village women were involved to a greater degree than in any previous governmental development effort. However, there were obstacles to radical change. The government strong culture of target orientation and achievement eroded the space, which was available early on for participatory planning: pressure to spend money escalated after the establishment phase. This pressure came largely from the state Finance Ministry and other state-level officials, and was not always resisted by senior project personnel, who are of course assessed by the degree to which targets are achieved. The target culture was reinforced by the common understanding that aid money would be lost if not spent. Retrospectively, the original project plan was also at fault. This gave indicative physical and financial targets, which were quite incompatible with the slow initial rhythms of a participatory approach. These were of course seized on by officers anxious to have targets to fulfill.



### Case Study 3

Radical change was achieved in Plan-Nepal, our third case study, through a combination of changes in personnel, the drawing-up of a country strategic plan, and the opening of the organization to outside influences. Plan-Nepal was a very conservative NGO, like its international parent; providing services to the families and communities of sponsored children in a reactive and dependency-creating way. The appointment of two women to senior posts, and a regional director from outside the organization, paved the way for a significant move towards a more thoughtful, participatory and gender-sensitive approach. The geographical and topical focus of the agency's work has changed significantly, with a new willingness to work in poor, remote areas and to confront difficult social issues like child prostitution. Again the use of PRA has significantly changed project-level operations. Nevertheless, with its incredibly successful child sponsorship financial treadmill, which has supported unprecedented organization growth during the last decade, there are pressures to spend money in Plan-Nepal too: these will undoubtedly limit the freedom of Plan-Nepal staff to retain the quality of their new approaches.

### Activity 9.1

Readers are encouraged to go to the original sources for two of the case studies for details.

A wide variety of organizations are involved in rural development: only a tiny selection is represented here. What is impressive in all three cases is that positive change can be accomplished even in large bureaucratically managed organizations. The implementers' degree of autonomy clearly makes a big difference to the extent that change can be implemented: the NIA and Plan-Nepal having much greater autonomy than the WMD. In all three cases a key element of success was the existence of a group of people who realized the need for change, and whose thinking about the direction of change was complementary. These groups have to be created, need to be seen as legitimate, and their influence needs to be accepted. Without support from key organizational processes – like finance, changes in rules and regulations or legislation, and strategic management – these groups will not prevail over skeptical opponents who can mobilize a hostile organizational culture. External orientation is vital – to rural people through their associations and via participatory planning and evaluation techniques; and to the wider development community of movements, intellectual forces and media which can help to influence decision-makers with power over the key organizational processes mentioned above.

The NIA experienced has been influenced elsewhere in South East Asia and beyond the irrigation sector. In the rural sector, forestry bureaucracies have been especially interested in facilitating local management of forest resources by community groups because staff and financial resources are so limited while forest areas are so enormous. In the process, forest bureaucracies have had to give up some of their authority in order to

empower local groups; this has required a high level of commitment to devolution of power. Increasingly community involvement is sought in the core business of the forestry organizations: protecting and developing the state forests. This has required shifts in policy and law, procedures and attitudes.

In the Philippines, Indonesia and Thailand these changes have been achieved though a combination of factors. Both insider and outsider facilitators have been employed by organization where there is already some awareness of the need for change. These facilitators get things going – meetings between insiders and resource persons. Discussion groups to exchange ideas. Insiders are key in determining the pace of change: they will build the necessary coalition to support change among colleagues, and will represent the changes to the outside world. Outsiders usually need time to adjust to the realities of the organization before they can make a useful contribution. Some outsiders may be suspicious – staff from NGOs, for example asked to work with a government agency. Above all, the interaction worked better where no one claimed superior expertise in how to do it: all can work with the idea that joint exploration is required.

### 9.9 Working groups

The forestry bureaucracies took up the use of working groups following the example of the NIA, and with the assistance to the Ford Foundation. The composition of these groups changed as their role changed: in particular, university researchers in the early phases ere replaced with rural development practitioners in the later phases. Working groups commonly experienced communication problems among members, and with remote areas; regular meeting schedules could be difficult to maintain.

The function of the working group is to learn from the field, digest the learning and offer suggestions to management. Learning mechanism include field research. In particular looking at the existing relationships between agency and community; routine review of field reports; and process documentation, which produces regular reports on the agencycommunity interactions in the field. The working group can also create situations in which junior staff can communicate field problems directly to senior staff; if this process can be institutionalized it is probably the biggest single contribution facilitators can make to the process of organizational change. Exchange visits to neighboring or especially selected projects can also be helpful.

For a successful expansion process, communication with staff is vital. Staff needs to understand and believe in the new approaches. Training and workshops help middle-level managers to keep up with the change; senior managers interacting enthusiastically with field staff during the learning phases. The performance of field staff is critical in the new approach: they must be carefully selected, retrained, and training curricula need to be revised. Good staffs need to be reward, and career opportunities opened for them. This may involve difficult changes in criteria of hiring and promoting. For example, forestry bureaucracies often excluded women and non-foresters who proved the most successful community organizers.

It helps the expansion process if pilot projects are designed to be implemented under as normal as possible management conditions. This allows the testing of new ideas without excessively favorable condition. Senior decision-makers need to be in command of the expansion process so that changes made are consistent with policy. The speed of change needs to be carefully gauged; too rapid change can lead to dilution of results. Too slow change leads to loss of momentum. In the cases reviewed, the collapse or poor performance of previous systems meant that managers were generally faced with intense pressure to speed up change before they could properly cope with it.

Working groups represent one method of achieving change: others include technical assistance teams, newly recruited staff, and co-opted staff from other agencies. What is impressive about the working group approach is the amount of learning these groups were able to achieve; probably because of the good institutional links with research organizations, whose facilities could be used in research this probably a factor which makes distinguishes the South East Asian experience from that in South Asia.

One of the reasons why NGOs may be gaining such an important place in rural development is their greater capacity to change rapidly. Comparing Plan-Nepal with the Indian Integrated Watershed Management project one can sense that this capacity is partly the result of the comparative autonomy of an NGO with its own sources of funds. The external environment of the public sector organization is much more complex, and in the context of Indian government structures, much more inhibiting of change. Consequently, a successful public sector strategy of change would need to rely much more on a positive external orientation than is the case with an NGO.

## Unit Summary

Organizational change will be a major issue for development in years to come. Skills in managing organizational change are now at a premium: Would-be leaders can to some extent learn these skills, though there is a dearth of documented experience to learn from. Both internal and external environments are critical, and both have to be managed in rural development. Some aspects of the external environment may be extremely difficult to manage: a stakeholder analysis would suggest that it has merely to be 'appreciated'. However where the changes are radical, organizations need to develop a strategy for exerting influence externally - through alliances with significant resource persons or movements, use of the media getting aid donor to exert pressure on government or vice versa.

In dealing with change in the public sector, internal and external environments are, of course, not completely distinct. Personnel may work under general civil service rules, and the organizations culture may be informed by general practice as much its specific objectives and strategies. Hence the inevitable attempt to get away from civil service regulations by setting up autonomous bodies. Change in an NGO context is likely to be more achievable: though even there the example of introducing a gender dimension to Oxfam's work indicated the limitations and difficulties. And NGOs strongly committed to organizational growth may find that they become hierarchical and centralized in the process, which could in turn inhibit more positive forms of change.

Overall, we can conclude that while there are no well-researched recipes for organizational change, it is a vital aspect of the wider shift to the new paradigm, an aspect that urgently needs researching documenting and public debate.

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## Unit 10

# WOMEN PARTICIPATION IN DEVELOPMENT

### Unit Introduction

Women have a vital role in environmental management and development. Their full participation is therefore essential to achieve sustainable development (Principle 20, Rio Conference on Environment and Development). The central issue of women's development is women's empowerment: to enable them to take an equal place with men and to encourage them to participate equally in the development process in order to achieve control over the factor of production.

The **'equality of access'**, is obtained by ensuring the principle of equality of opportunity, which typically entails the reforms of the law and administrative practice to remove all forms of discrimination against women.

The **'equality of participation'** in all the stages of a project cycle (need assessment, project formulation, implementation, and evaluation) means involving the women and men of a community in the same proportion in decision-making.

Finally, it is important to ensure not only the participation of women in the decision-making process, but also the utilization of this participation through consensus and mobilization to achieve the **'equality of control'**, over the factor of production and the distribution of benefits.

In this unit we will examine:

- Women participation in development
- Linkages between women and environment
- Women in environment and development
- Role of women in development
- Enhancing women participation in economic development

### Unit Objectives

After going through the unit, the students would be able to learn:

1. Role of women in development
2. How the women participation can be enhanced in economic development
3. What are the gaps and barriers in women participation
4. How these barriers can be reduced

## 10.1 Introduction

The environment is integral to the overall process of development. It includes the relationship and interdependencies that exist between people and natural resources. Environmental change is thus the product not only of natural events, but also of the application of development models, practices and life-styles. In turn, any modification of the physical environment has important socioeconomic consequences that affect the quality of life. As gender issues are linked to environment, so are environment issues.

Women, as agents of change, have developed their own strategies to cope with environmental degradation. Their first reaction is often to put more time, energy and effort into the supply of natural resources. But their responsibilities are limited in this respect. They also economize the use of resources or look for alternatives, such as using dung and crop residues instead of fuel wood. Women organize themselves and start networks to prevent further degradation of their environment. An example of this is the political Chipko-Andolan movement, which protects the forests in India. As individuals, but even more often, as a group, women initiate specific activities, including wastes disposal and recycling in urban areas, soil conservation, reforestation and intercropping or the establishment of collective biogas plants.

In Pakistan, the literacy rate for women is 16 percent. For rural women, it is a 7.7 percent. This situation is unacceptable. According to official statistics, only 3 percent of the women participate in the labor force outside the home. Women are not only fully represented in the nation's parliament, in the bureaucracy, in the corporate sector, in the universities. This must be changed. The capacity to invest in the socio-economic uplift of women must form the core of any programmes for social change. A society neglects these goals has reneged on its commitment.

Development organizations need to modify development and environmental conservation processes, strategies and activities so that women actively participate in them, and so that women's needs are properly reflected in these efforts. An analysis of inequalities between the sexes is central to an understanding of the ways in which resource users and managers relate to the resources and to each other. Initiatives that could have a negative impact on the environment and on women have to be prevented, and the social consequences of environmental programmes and projects have to be assessed and monitored closely.

We have learned from the study of successful societies that the full and active participation of women in decision-making is essential for the achievement of virtually every important social goal—be it economic development, the provision of basic human needs, or the conservation of the environment. Nothing can be achieved without the full contribution of women.

Women's work burdens can be lightened through the development and introduction of appropriate technologies. Their employment and income generating options could be broadened by promotion of credit, educational



and training facilities for women. Information on environment-development relationships and sustainable management methods should be made available to women, and their organization and empowerment should be promoted. Finally, environmental opportunities in the area that women and their families depend on should be promoted, and their access to and control over natural resources should be increased by environmental conservation and rehabilitation measures in which local women's needs and views are properly integrated.

*Women have often been called traditional natural scientists. We know that in our society women, particularly rural women, used to have the detailed knowledge of health, nutrition and hygiene. They knew how to manage water resources and collect fuel and fodder. Their detailed knowledge of the local flora and fauna helped them as gatherers of food, fuel and fodder, as preparers of nutritious food and herbal medicines and as subsistence agriculturists. All this knowledge is gradually dying out and our societies as well as the environment is poorer because of this. Women have also held the role of informal teachers. Historically, they are responsible for the continuation of life and for the survival of Cultural traditions. They have been the nurturers of society as healers, doctors and nurses. All these are environmental responsibilities. Our environment is becoming degraded because we ceased to respect these activities and ceased to respect those who had always taken responsibility for these activities.*

**(Anwar Saifullah Khan, Federal Ministry of Environment)**

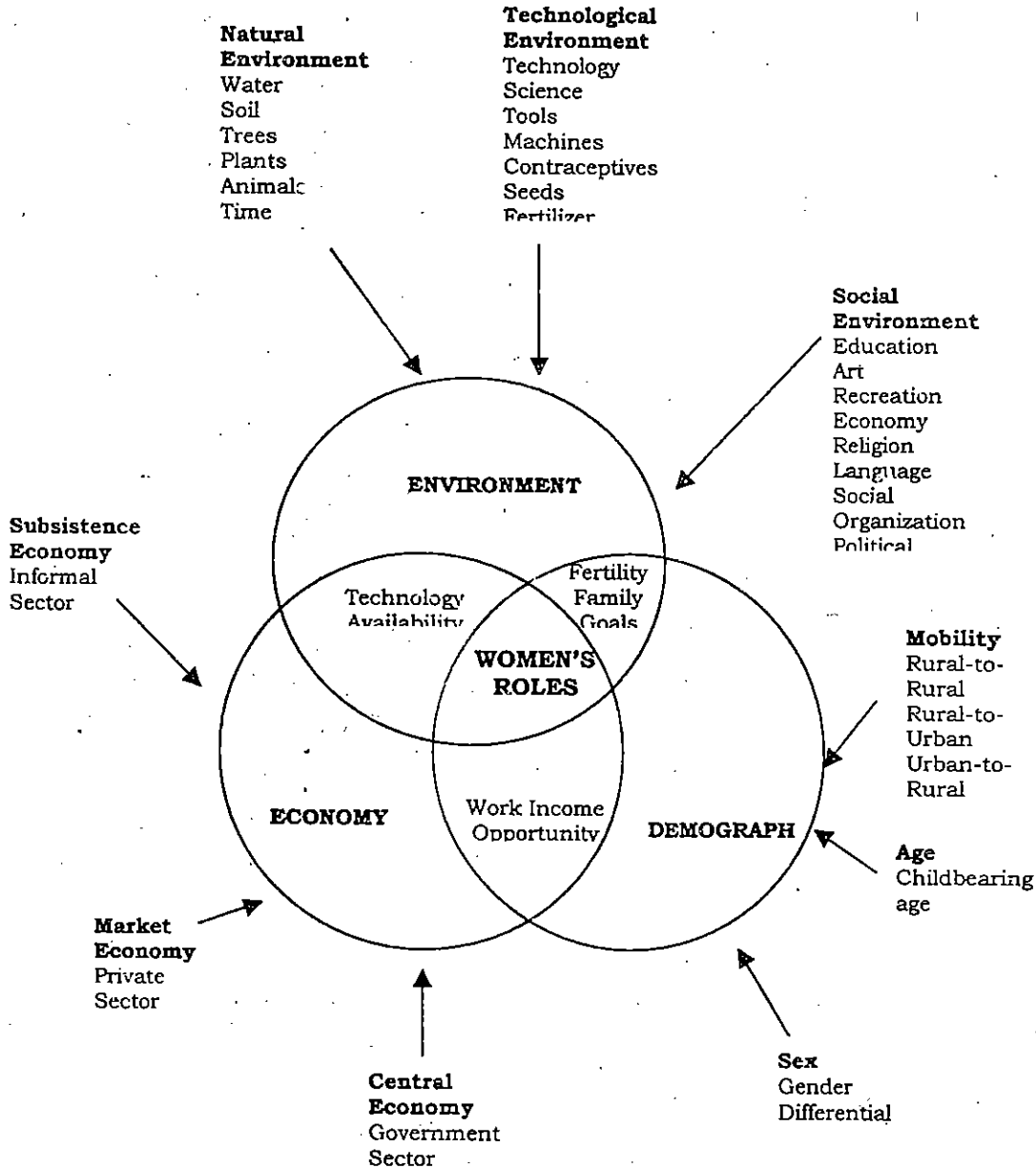
So for Gender, Environment and Sustainable Development, empowerment of local and community groups with the participation at the grass root levels and the participation of the most vulnerable group like women as well as the role of NGOs is necessary for achieving sustained environment.

*Human beings are at the center of concern for sustainable development. They are entitled to a healthy and productive life in harmony with nature. Women have often played leadership roles or taken the lead in promoting an environmental ethic, reducing resource base and reusing and recycling resources to minimize waste and excessive consumption.*

**(Beijing Platform for Action, paragraphs 246 and 250)**

## 10.2 Linkages between Women and Environment

(Impact of Women on Environment and Environment on Women)



## 10.3 Women in Environment and Development

While there are many other factors, which worsen the impact, population growth certainly contributes to environmental degradation. In Sri Lanka it is clear that there is a direct correlation between population growth and

deforestation which as we have seen leads to depletion of the water, lack of fuel wood, soil erosion, siltation of rivers, floods, etc. crucial to population control are women. Evidence from many countries shows that in poorer families the women have babies earlier and also produces more children. Women's poverty, lack of education and limited economic opportunities and resources, all contribute to high fertility rates. In poor families children provide labour for basic survival and household income as well as insurance against old age. Sri Lanka is a good example to show that as female literacy rates go up fertility rates goes down; child and maternal mortality rates too go down. Education of women broadens the opportunities of income earning thus providing options other than child bearing and care.

Educated, income-earning women have more decision making authority within the household and could be more assertive about family planning. With the phenomenal strides in female education the average age of marriage in Sri Lanka has gone up to 25 years which should result in women having fewer and healthier babies. Maternal education appears to have a greater effect on child health and survival than does paternal education. Fewer pregnancies reduce the risk of death from maternity related causes and long term physical stress. Just as women are central to population control, women's health is a critical component of sustainable development. Only healthy mothers could produce and breast-feed healthy babies yet more women than men suffer from malnutrition especially in Africa and Asia. In India and Bangladesh females from birth get less and poorer quality food than males, thus endangering the health of the future generation.

The "ecocrisis" has gripped the attention of the world community and aroused the attention of every living being today. Research, legislation conferences, seminars, publications are taking place all over the world; but this is not just one more problem which can be solved by scientific research. It must draw upon us in the most disturbing manner that in the conquest of nature, the unbridled technological advances and industrial growth; not to speak of nuclear proliferation man has placed himself in danger of losing his own humanity. Various measures have been taken by national and international authorities to prevent further environmental degradation. Despite limited success, these measures remain mere cosmetic devices, whereas the problem is far more fundamental.

Modern industrialized societies assume that happiness and well being lie in the satisfaction of our material needs and sensual desires and nature must be conquered and exploited to satisfy those desires. What is needed most today is a change of values. The ecocrisis is not a solely technological problem. Have we realized that alternative energy technologies, better management of resources, population stability are all effective emergency measures and may suffice as short term solutions?

So long as man retains his insatiable greed for pleasure and acquisition of wealth and continue to exploit nature to realize his aim no permanent solution to the ecocrisis can be found. Buddhism with its philosophic insight into the inter-dependence of all conditioned things, its major dictum that happiness is found through the control of desire and not through the proliferation of desires, the injunction, "santhutthi paraman dhanam - contentment is the highest gain;" as preferential attitude towards all forms of

life which in the case of monks include plants life as well; its condemnation of wastefulness, and miserliness could form the basis for a sound environmental ethic.

### **10.3.1 Eco-Feminism**

Sri Lanka in common with the rest of Asia has seventy five per cent of the female population living in the rural areas and engaged in agricultural activities. In addition to their farm work, their daily task of processing and preparation of food, gathering firewood, fetching water and tending animals, bring them close to nature and thereby make environmental concerns of prime importance to women. The association of women with nature has given rise to a new term "eco feminism", coined by a French feminist writer in 1970, Francoise d' Eaubonne, who points out the interconnection between feminist and ecological concerns. Eco feminists believe that women and nature are both victims of patriarchal power structures. The term also serves to highlight that the cause of environmental conservation and protection is one that will appeal to women because it is in the nature of women to nurture, protect, provide and most important of all, bring forth life. Nature is feminine and referred to as "she" and the Earth as Mother. All development activities whether in the urban or rural areas affect the environment and any environmental degradation has an adverse impact on women.

### **10.3.2 Women and Food Production**

Women are and have always been central to food production. Robert Knox a British ship wrecked sailor who lived in the Kandyan Kingdom of Sri Lanka for 19 years (1660-1679) as a prisoner noticed that the women provided all the food that was necessary for the household other than rice and salt. Since the Kandyan Kingdom was in the interior of the island the salt was brought by merchants who come from the coast. In the case of rice the women contributed their labour in weeding, transplanting and harvesting the grain and also carrying it to the threshing floor. From this point till it reaches the table to be eaten, the women were responsible for the entire process. Robert Knox also mentioned that the women were very thrifty and could prepare a tasty meal from the produce of the garden. Women's contribution to the nutrition of the family and her dependence on the environment is seen in a lullaby sung in Sri Lanka to put the Babies to Sleep. It means your mother will come soon with her hands full of berries picked from the woods, with herbs tied round her waist and her head laden with firewood.

This picture is applicable to the whole of rural Asia even today. A study conducted in 1988-89, in Laos found that all village women in the area in question did some form of forest gathering; some relied entirely on forest products to support their families during droughts. It is clear that any degradation of the environment affects women in many ways specially the poor women who have the primary responsibility of providing food for the family. Besides subsistence agriculture women are engaged in the production of cash crops on their own account and also as hired labourers.

Despite their being the world's agriculturists and produce more than half the world's food, according to UN statistics, women own no more than one per cent of the world's land and even if they have access to it their tenure is

uncertain and costly. In pre-colonial Sri Lanka women had the right to own land and could sell or bequeath it to any one they pleased without let or hindrance from their husbands. During centuries of colonial rule certain changes introduced in the guise of modernization and economic development adversely affected the position of women. Customary law, for example, recognized women's legal status and property rights independent of father or husband, but these concepts were alien to English Common Law, which integrated the legal identity of a woman with that of her husband. In the course of colonial rule, British policy and legislation undermined women's relatively independent position

### 10.3.3 Land Tenure

As in many parts of the world in Sri Lanka too the colonial past still profoundly affects land tenure. Europeans grabbed valuable land and its resources all over the world. An alien law sanctioned the land grab and removed from the colonized the right to their own land. With a view to expropriating the land of the Kandyan peasants of Sri Lanka the British rules in 1840 introduced the Crown Lands Ordinance also known as the Waste Lands Ordinance. Thereby all lands which the British rules considered "waste lands", such as forests, chenas (which are forest lands used for 'slash and burn' agriculture) uncultivated and unoccupied land were presumed to be the property of the Crown until the contrary was proved. According to the traditional concepts of ecology there were no "waste lands". The forests, chenas, marshes were all an integral part of the village ecology. Those were the made idam or wet lands where rice was grown; the goda idam or dry land where the women mainly grew vegetables, coconut and arecanut palms and the Val or forests which though unoccupied or uncultivated were an essential part of the ecosystem from which the women collected firewood, fruits, edible and medicinal herbs and honey. The forests were used as pasture for the cattle and sometimes forest patches were cleared for "slash and burn" agriculture in times when the rice harvest failed. The marshy lands provided the rushes and reeds from which the women wove baskets and mats for household use. When the Waste Lands Ordinance was implemented the peasants were helpless in the face of the inroads made by the Crown. They were deprived with no compensation of what they thought was their inalienable right to the use of the land creating a landless, and impoverished peasantry deprived of a means of sustenance.

The land thus grabbed were subsequently sold to British Planters at 5 shillings an acre paving the way for the massive foreign owned plantation industry based on the growing of cash crops, such as coffee and tea. The change from food crops to cash crops preceded by large deforestation adversely affected the position of women. When cash crops were grown the men took the produce to the market place and got the cash thus depriving the women of the food as well as the cash, resulting in the economic dependence of women and malnutrition in the family.

#### 10.3.4 Women and Agriculture

Large-scale monocrop cultivation not only caused deforestation and taxed soil fertility but has also been detrimental to the interests of women. Cheap labour was imported from South India to work on the estates of Sri Lanka and this system still continues. The men prepare the land, plant and prune the tea bushes while the women always pluck the tea leaves from the bushes that grow on the hill slopes. Before coming to work at 8.00 a.m. the women have to cook the midday meal for the family, feed the children and send them to school, that they have done half day work before starting work on the estate. They work longer hours than the men but until recently were paid less. In some instances the woman's daily wage was collected by her husband. Sri Lankan estate women have been lobbying to obtain joint husband wife ownership to plots of land and dwellings allocated by estate owners. Evidence from the rest of Asia and Africa has shown that securing women's access and tenure to land and resources is crucial to improving their productivity and economic well being.

Even when women remain in subsistence agriculture their position is ignored by development economists. Agricultural extension work is rarely targeted towards women. Women are especially vulnerable to the injudicious use of pesticides spraying of fields and local storage of unsafe chemicals. In Sri Lanka there are frequent reports of accidental deaths and also suicides due to the indiscreet storage of dangerous chemicals. These dire consequences on women and children are overlooked by planners and statisticians whose only focus is on the yield per acre.

It is clear that women, as the world's major food producers are directly dependent on the environment; they are conscious of their dependence and they know a great deal about it. Their practices adapt to the environment and are sustainable without long-term damage to the land. In Sri Lanka it is noticed that women used household refuse and made compost pits, collected dried leaves, coconut husks and burnt resiniferous wood to eradicate pests. But these traditional environment friendly methods such as rotation of crops, and recycling of organic nutrients were abandoned because they were considered backward and not scientific enough for modern agriculture, although they served to enhance the self-reliance of the woman farmer.

In many parts of rural Asia women carrying pots of water on their heads is a picturesque sight, but how many realize the fact that their task is becoming more and more laborious everyday with shrinking forests and depleting water supply. Women have to find water for family use, for domestic animals and home gardens. When supply is limited women do hit the hardest have to manage with less and less. Throughout the centuries women have developed practices regarding the collection and preservation of water, and the source of water, the village well or tank is their informal meeting place where they both wash clothes and exchange views. Yet their knowledge in this area is ignored in rural development programmes even with regard to water supply. Since it does not concern them directly, men tend to overlook the proximity of the water source even when selecting a family home. If the time and energy spent on water collection is saved women could use it profitably for the welfare of the children so that the quality of life of the whole family could be improved. Women need water for economic use as well. In the dry zone villages of Sri

Lanka the women complain that the lack of water precludes them from home gardening, animal husbandry and many other income generating activities.

Irrigation, deforestation and over grazing have changed fertile land into deserts. In many Asian countries inefficient irrigation methods have resulted in a great deal of water being wasted. It is mainly the women who suffer from the consequences as in the Indian State of Rajasthan now on the brink of desertification; wells and rivers are dry, due to the cash cropping of sugar cane.

### 10.3.5 Deforestation

Since independence in 1948 Sri Lanka has lost 50% of her natural forests. Statistics show that deforestation is accelerating worldwide at an alarming rate due to unplanned and environmentally hostile development but little is known of the daily pressures that deforestation places on women. Forests play a crucial role in the lives of poor women. In ancient Sri Lanka there were the "tahansi kele" or prohibited forests where felling of trees was illegal and women could collect fuel, fodder, honey, herbs, berries, medicines, building materials and cane, rushes and reeds for weaving mats and baskets.

The environmental degradation caused by deforestation is detrimental to the interests of poor women. Women's work within and outside the home depends on energy specially firewood. Women rarely cut down entire trees; they often collect twigs, smaller branches and often-dead wood; so destruction is limited. Unlike men who see the commercial potential of timber women see trees and forests as unlit-functional. Less fuel means less cooking and the family might consume uncooked or dangerously undercooked meals. Firewood, which was once freely available, has now to be purchased. Poor quality firewood makes cooking more of drudgery while the smoke emanating from the lack of firewood may damage the housewives eyes and respiratory tract. Faced with the problem of increasingly severe environmental stress in their communities, a growing number of women in the Third World are initiating projects or playing leadership roles in programmes introduced by outside agencies, aimed at improving environmental conditions and thus the quality of life.

#### Case Study - India

The Chipko Movement in India shows how women have fought bravely to preserve their forests and introduce successful tree planting programmes. Women have realized the value of the forests in the substance of life. Forests are essential for a regular and clean water supply. The Chipko Movement articulates in song the value of the forests to provide man's multiple needs.

*What Forests bring us  
Soil water and clean air  
Soil water and clean air  
The basis of our life*

In 1974 the women of the Chamoli district in Uttar Pradesh were faced with the threat of their forests being destroyed for commercial purposes. When the contractors arrived to cut the trees, the women who were alone in their homes organized themselves, and marching into the forest encircled the trees. Chipko means to hug. The women informed the woodcutters that they would just have cut off their heads. The contractors who were intimidated by the joint protest withdrew. In the forests of Rajasthan too the systematic felling of trees had caused major ecological instability resulting in soil erosion and catastrophic flooding. The women rose to action resisting state and private agencies that were causing the destruction. They fasted, guarded the forests and wrapped themselves round the trees to be felled. Their silent protests were so effective that Indira Gandhi issued a 15-year ban on the commercial felling of trees in Uttar Pradesh. The Chipko movement which arose in a particular area has gained momentum and now spans the whole Himalayan region covering as much as 5000 km across in India, Nepal and Bhutan. There had been instances in India where the women protested against destroying forests for potato farming and mining even though their husbands and sons were given employment in the new development projects. In the face of strong opposition from the men folk, the women continued their protest refusing to walk extra miles a day in search of fuel and fodder. The Chipko Movement has now branched into taking positive steps to rehabilitate the environment by tree planting campaigns.

In Andhra Pradesh in India where much rainfed cropland is exhausted, women organized themselves at village level to revive the land with traditional farming techniques. They received no support from Banks but the Deccan Development Society provided them with loans. The project involved 400 women in 20 villages. Within 3 years, over 280 hectares of cropland was returned to production and more land was added every year. Both international agencies and the Indian government have endorsed the programme as a good example of sustainable development.

In Sri Lanka one has only to see the tragedy of Wellassa where massive deforestation preceded the establishment of the Pelawatte Sugar Company, a major development venture. The valley was filled with medicinal trees, Aralu, Bulu and Nelli, grown very likely by the Kandyan kings. It was rich in flora and teeming with wild life. Three waterways giving life to the dry South East originated in the Wellassa valley; Kumbukkan Oya, Kuda Oya and Menik Ganga. On the banks of the Kumbukkan Oya roamed the wild elephant the pride of Lanka. Today, the rivers run dry. The elephant herd is dispersed all in the name of development.

Since most of the world's remaining primary forests are in the Third World and tropical forests are especially valuable for biodiversity conservation it is clear that a solution to the deforestation crisis lies with us. Sri Lanka's rate of deforestation is the second highest in Asia exceeded only by Nepal.



Community management of local forests has emerged as the most promising alternative to imposing a state administered centrally managed system. Communities living in or near natural forest would protect them if clearly authorized by the government and if the latter provides them with economic returns on their time. Women should not be considered as beneficiaries or hired laborers but integrated into the planning and management process. At present women are not visible at the top-level administration or at the level of implementation. Their traditional knowledge and their land rights should be accommodated.

The depletion of the forest cover due to unplanned economic activities aimed at short-term gains and its adverse impact on rural women cannot be overemphasized. It is said that they have to carry 35 kilos of fuel wood for over 10 kilometers leading to spine damage, headaches, backaches and knee problems. In many countries girls start this work at an early age. In some parts of Africa and South Asia they spend the whole day doing this kind of work at the expense of their education.

In Sri Lanka the vast majority of the households use fuel wood for cooking and home based small industries. Activities in which women are involved are pottery, brick making, and extraction of coconut oil. Due to lack of fuel these income-generating activities are neglected.

### **10.3.6 Women, Urbanization and Industrialization**

Whether it is in the village or city, poor women work and live close to the environment. Industrialization gathered momentum in Sri Lanka during the last 15 years, and 80% of the industries are in the Western province. Though urbanization is less of a problem in Sri Lanka than in the rest of Asia, still a drift towards the urban centers, especially Colombo is apparent. Landless people from the villages drift to the cities, build shanties on the fringes of the towns. These people who have no toilet facilities or garbage disposal cause damage to the city's health, housing and sanitation standard and pollute the city's water supply.

The creation of the Free Trade Zone and the other local industries which sprang up in the area have caused many problems to the residents in the area, specially when factories spring up in residential areas. Even in the suburbs of Colombo small scale industries have arisen with no proper plan to dispose of their effluents. There is the danger that the industrial effluents will seep into the sources of drinking water. For instance dyes used in the textile factories, discharges from tanneries and soap factories can pollute paddy fields, marshes and wells. In all these instances the women suffer the most because they spend more time at home and they are responsible for the health of the family and the sanitation in the home.

Women from 90% of the labour force in Sri Lanka's garment factories. Due to substandard working conditions these women are the victims of noise and heat pollution. The latter is due to overcrowding in the factory and lack of proper ventilation. Employees could complain to the management or make representations to the Department of Labour. However, it is rarely that remedial action is taken. There is also high incidence of female labour in the

pesticide packaging industry and pesticide inhalation is particularly harmful to pregnant women. Since the pesticide workers are recruited on a contractual basis, the Labour Department is unable to monitor their health status because only permanent employees come within its purview.

Air fouled with automobile exhausts and industrial emission, belching buses and lorries sending carbon dioxide and lead product into the air – this is the price that city dwellers in Asia are paying to satisfy their urge for a higher standard of living. In addition many particles are thrown into the air by cement factories, quarries, and saw mills causing respiratory problems. The screeching of vehicles, the screaming of machines and the endless whirring of power loom textile mills, the blasting of quarries can cause severe mental and physical exhaustion. A recent study has highlighted cases where women had been severely affected by air, water and noise pollution from neighboring industries, damaging the health and habitats of their families. Very often the women concerned do not have the resources to go to courts. It often happens that the offender is a wealthy entrepreneur who has influence with the police and politicians of the area, and could therefore silence the victim, or even resort to thuggery.

Discussing the impact of the environment on women's health Dr Bonnie Lee Kettle shows how the health of women and the biophysical environment are linked and also this fact has been unrecognized. Women are the primary users and managers of the environment and they manage the health care of the household and families. Many diseases that kill women are environmental in origin. Evidence has been found that women who live in areas with chemical waste dumps are six and a half times more likely to have breast cancer in their life times than women who live in communities that do not have chemical waste dumps. Obviously one of the factors that lead to the high incidence of breast cancer is environmental. Kettle has used the concept of "life space." Although men and women occupy the same household their "life spaces" are different. This has an implication for environmental health. Women are often assigned the messy jobs. Even the cleansing agents used to keep the home clean are health hazards. A good example of women working in extremely unhealthy environments is found in the southern sea coast of Sri Lanka where women work knee deep in stagnant putrid water, processing coconut fiber inhaling the unbearable stench of rotting husks.

#### **10.4 Role of Women in Development**

According to 21 of the Rio Declaration on Environment and development states that: Women have a vital role in environmental management and development and that their full participation is essential to achieve sustainable development.

One of the questions that will be asked from time to time is: why focus on women? In the following discussion, we will consider a few of the issues, which make that focus important.

##### **Women as the majority of the world's poor**

Women suffer many inequities and as a result are the majority of the world's poor. Any suitable development project, which aims to alleviate poverty,

must have, built into it, the involvement of women in the decision-making; planning, advising and extension work in the field.

**Activity 1**

Do you know the percentage of women who are living in poverty in your country? If not, try to find out.

Women's poverty has been linked to inequalities in their:

- Situation in the market
- Access to credit
- Treatment under social welfare systems
- Access to health and education services, and
- Status and power in the family.

In each of these areas, more opportunities are available to men.

Access to credit is crucial for any women who play a dominant role in agriculture, for example managing small farms. Such women are left to deal with problems such as poor output and crop loss through diseases. However, they rarely receive the benefit of agricultural training or technical assistance from extension services. Even when faced with these inequalities, women constantly strive for a better quality of life.

The quality of life for women and children can be quantified and used as an index of the effectiveness of sustainable development programmes. This index tells us a great deal about the relative social positions of men and women. It manifests itself in the struggle of women for a better livelihood, comprising access to:

- Sanitation and proper housing
- Health care and education
- The right to live in a healthy and balanced environment and satisfy the demands of life.

It is mainly through their battle against the deterioration of their living conditions and those of their families, that women have been playing a major role in sustainable development issues. For example, women have always played an active role in demanding improvements in their environments. As a result, it is often felt that the quality of life issue links women and sustainable development.

**Women as educators**

As children's first teachers, women have an important and far-reaching role to play in instilling in their children, through reasoning and example, concern for the environment. In this role, women teach best by example.

**Women as users, managers and conservers of environmental resources**

In carrying out domestic duties, women are in intimate, daily contact with their immediate environment as users and /or collectors of fuel, food, water etc.

Women in many parts of the world collect fruits, nuts, leaves etc. from forests for food. In places like the Caribbean, women still largely make choice of food in the market place. In a real sense, women determine a crucial part of the nutrition of the country. They also grow much of the world's food: 70% in Africa, 50-60% in Asia, and 30% in Latin America.

Women manage water supply in the home. They are responsible for safeguarding health by providing potable water and water for hygiene. They are also responsible for conserving supplies, in many parts of the world; women are also carriers of water. This is a tiring and time-consuming task.

Women are conservers. In this role, women play a vital part in conserving fuel, food, and water. They also play an important role in protecting other environmental resources. For example, they can contribute to halting ozone depletion by choosing environmentally friendly products. In addition, they can contribute to halt the depletion of natural resources such as corals and wild animals by choosing fashions, which do not require their destruction.

Women are controllers of population growth. Through family planning, women help in controlling population growth. Therefore, there is need for an increase in efforts to educate women on family planning. To be effective, all such efforts must take into account traditional practices and views about contraception, and the relationship between population growth and resource consumption.

As the foregoing discussion shows, women are in a position to influence attitudes to, and use, of, the environment. Their choice in using natural resources affects not only the environment but also their own and their families health. However, if their influence is to be positive, they need training, land, credit and simple conservation technologies.

When women's needs are not met, the results are detrimental not only to the environment but also to their families' health. For example, if appropriate technologies for cooling are not provided, women may have one of two options:

1. to rely on trees for firewood and charcoal, thus contributing to deforestation.
2. to conserve fuel by not boiling water or cooking food long enough to destroy any water borne diseases. Thus contributing to ill health in their families.

Neither of these options is desirable. When women's needs are met, the results are generally beneficial. For example, if alternative fuel sources are available and appropriate training is provided, many women around the world could get involved in replanting trees and managing forests. This is particularly true for women in Asia and Africa (Bynoe, P. 1998).

**Self-Answering Question 1**

Explain the importance of involving women in sustainable development activities in your community.

## 10.5 Enhancing Women's Participation in Economic Development

### *The rationale for investing in women*

Women produce half the food in some parts of the developing world, bear most of the responsibility for household food security, and make up a quarter of the work force in industry and a third in services. In addition to income-generating activities (in cash and kind), women's household activities include caring for the sick, house maintenance, and such vital work as caring for children, preparing food, and fetching firewood and water. Yet, because of more limited access to education and other opportunities, women's productivity relative to that of men remains low. Improving women's productivity can contribute to growth, efficiency and poverty reduction--key development goals everywhere.

Investing proportionally more in women than in men--in education, health, family planning, access to land, inputs, and extension--is, thus, an important part of development strategy, as well as a matter of social justice. It directly reduces poverty through substantial economic payoffs in higher productivity, and more efficient resource use. It contributes to environmentally sustainable development. It produces significant social gains, lower fertility, better household nutrition and reduced infant, child, and maternal mortality. The intergenerational gains are particularly striking: a mother's education has a stronger impact on the health and education of her children than does the father's. Studies also show that income controlled by women is more likely to be spent on household needs than income controlled by men.

### 10.5.1 Gaps and Barriers

#### **Education and health**

The payoffs notwithstanding, the gender gap remains substantial in many countries. Girls' school enrollment rates lag behind those of boys'. Women are channeled into disciplines with low payoffs. In many countries, dropout rates are higher for girls than boys. In a few countries in South Asia and Africa, owing to discrimination in food intake and health care, women's natural health advantage at birth is quickly eroded--if not reversed resulting in lower life expectancies for women than men. Pregnancy and childbirth remain major killers.

The worldwide progress in social and economic development over the past three decades has not translated into proportional gains for women. The reasons: limited options and formidable barriers. The barriers begin with low investment in their education and health, continue with poor access to services and assets, and are made worse by legal and regulatory barriers that restrict their options. As a result, many more women than men are in

low-paying, low-skilled informal activities. Those in the formal labor force fare no better: occupational segregation channels them into less productive and less remunerative segments of the labor market.

Parents in developing countries are less likely to send their daughters to school than their sons: the direct and indirect costs of education are higher for girls than for boys, and the benefits to parents remote and uncertain. Lower educational attainment, in turn, places women at a disadvantage in the labor market, perpetuating the cycle of low earnings and low investment in education. For similar reasons, families spend less on health care for girls.

Women in developing countries lack access to family planning services. The combination of poor education and poor access to services can be deadly--as prevailing high maternal mortality rates testify.

### ***Limited access to agricultural extension and credit***

Women who brave the odds to operate as farm managers and agricultural workers rarely benefit from extension services. Few extension agents are women, and overloaded extension systems tend to concentrate on men's crops and activities.

Lack of access to credit for female entrepreneurs limits the profitability and growth of their enterprises. Limited education and mobility and, in some cases, cultural barriers restrict women's contact with institutions that offer financial services as do the high transaction costs and collateral requirements associated with making small loans.

### ***Legal and regulatory barriers***

Legal and regulatory barriers to women, which do not apply to men, exacerbate the inefficiencies of inequity. Property, especially land--the universal collateral--is usually registered in a man's name. Some countries have laws that prevent women from entering into contracts in their own names, or from owning or selling land. In other countries, legal and regulatory restrictions prevent women from participating in the labor force on equal terms with men.

The need to balance home and market responsibilities is a major constraint on women's earnings, productivity and accumulation of human capital. The lack of affordable childcare forces women into jobs with flexible hours and locations--jobs that frequently result in lower earnings, discontinuities in work, limited mobility, and lower levels of skill.

## **10.5.2 Reducing the Barriers**

Several effective strategies for reducing the barriers to women's economic participation have emerged from the past two decades of project experience. It should be stressed that the experience so far gained is inevitably country-specific. However, evidence of what works is particularly strong in five areas: education, health, wage labor, agriculture, and financial services.

**Education.** Strategies for expanding girls' enrollment include reserving places for girls, establishing single-sex schools or classrooms, recruiting more female teachers, and designing school facilities to conform to the cultural standards of the community. In some countries, it may also be necessary to reduce the direct and indirect costs of education in order to persuade parents to send their daughters to school as well as their sons. Scholarships for girls, flexible hours to allow them to complete home chores before or after school, and the provision of child care for younger siblings have proved successful in raising attendance among girls. Projects that improve home technologies and reduce the time required to provide the household with water or fuel have also freed girls to go to school.

**Health.** Community-based health services have been cost-effective in improving women's health. Integrated services, which combine nutrition, family planning, maternal and child health services, and primary health care, tend to be the most effective in reaching women. Certain interventions have proven particularly cost-effective, including iron and iodine supplementation, calorie supplementation for pregnant women, family planning, and safely ending unwanted pregnancy, where it is legal. In some settings, the availability of women as health providers is especially important.

**Wage labor.** The principle strategies for increasing women's participation in the formal labor force include removing legal and regulatory barriers, raising women's productivity, easing the constraints on their time, and improving the efficiency of the labor market by providing information on job opportunities. Legal reform, education and training, improved access to information, and affordable child care are the keys for enhancing women's participation in formal labor markets.

**Agriculture.** Because most poor rural women work in agriculture, the main strategy is to help women obtain title to the land they farm and open the door to services and government assistance. Women also should be enabled to exercise the full range of land rights to sell or mortgage the land and to get the full benefit from crop sales.

**Financial services.** Innovative programs have demonstrated that financial services, mainly credit and savings, can be provided to poor women at competitive cost. Group lending has broken down the barriers of high transaction costs, high-perceived risks of default, and the lack of collateral. Institutions that experimented with such innovative strategies such as the Grameen Bank in Bangladesh have much higher repayment rates than national commercial banking systems.

### 10.5.3 *The Bank's strategy*

#### *From women in development to gender and development*

The World Bank's early "Women in Development" programs tended to treat women as a special target group of beneficiaries in projects and programs. The policy framework is now broadening to reflect the ways in which the relations between women and men constrain or advance efforts to boost growth and reduce poverty for all. This focus characterizes the "gender and

development" approach, which the Bank will promote to enhance women's contributions to development. The Bank's future analytical work will focus on gender differentiation and the factors underlying the structure of gender relations within households.

The Bank will support member governments in designing and implementing promising policies and programs, concentrating on the areas where accumulated experience provides clear and unambiguous operational direction. Effective program delivery depends on careful design, monitoring, evaluation, and staff training areas in which the Bank has now gained some experience. The Bank can also help governments mobilize other donor resources to address gender disparities.

### ***Mainstreaming gender***

The Bank is committed to integrating gender issues into the mainstream of its own approach, including focusing special attention on countries and areas where under investment in women has been acute. Gender issues will be systematically addressed in country assistance strategies and in the design and implementation of lending programs. The Bank's policy-oriented analytical work will continue to advance the conceptual and operational knowledge of the gender and development approach.

### ***Building staff capacity***

Successful implementation of this strategy will require intensified staff training, some shift in the skills mix, and some degree of resource reallocation within country departments and possibly, across departments or regions. Bank staff needs to be sensitized to the importance of integrating gender issues into Bank operations; there is also a need for dissemination of analytical work, operational tools, and good practices to staff and member countries. Carrying out gender assessments, pilot programs, and impact evaluations may also imply a need for specialized staff skills that may not be adequately available at present. Finally, particularly in countries where acute gender disparities exist, it is likely that operationalization of the strategy will imply significant resource reallocations within the country departments.

### ***Interagency coordination***

The Bank is only one of the contributors to the international scene in advancing women's status and participation in economic development. Other donors and international institutions play important roles in closing the gender gap. The Bank will continue to learn from, and collaborate with, other agencies and capitalize on a wide range of expertise that exists in advancing gender issues on the development agenda. All these efforts, however, will be fruitful only with governments' leadership, commitment, and collaboration.



## **Unit Summary**

Women are the main victims of environmental degradation as well as they are sound managers of natural resources. Women are close to nature and constant contact with environment so they have to participate in the main decision-making. Women are involved in all social and cultural activities. It is well documented that development programmes that ignore women either fail or have negative social impact, as they are based on an inadequate and only partial understanding of society. Because of women's vital role in production and reproduction, the many programmes and policies targeted at the community have their greatest impact on women. Yet this gender-specific impact is too often ignored by planners, overlooked by field workers, and bypassed in project implementation.

Women, as agents of change, have developed their own strategies to cope with environmental degradation. Their first reaction is often to put more time, energy and effort into the supply of natural resources.

Human beings are at the center for sustainable development. They are entitled to a healthy and productive life in harmony with nature. Women have often played leadership roles or taken the lead in promoting an environmental ethic, reducing resource use and reusing and recycling resources to minimize waste and excessive consumption.

### **Answer to Self-Answering Question**

- 1 We should involve women in sustainable development because.
  - The daily activities of many women bring them into close contact with the physical environment
  - Environmental problems impact on women's ability to fulfill their responsibilities, thus own have a vested interest in sustainable development
  - They are among the first to be affected by economic changes
  - Since they are the main decision-makers on areas such as choice of foods, fuels and households cleansing agents, they need to be aware of environmentally sound practices in each of these areas.

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<http://www.worldbank.org/gender>



## **UNIT 11**

# **YOUTH PARTICIPATION IN DEVELOPMENT,**

### **Unit Introduction**

We have observed that there is widespread destruction and degradation of the environment. As a result, there has been a global call for the integration of environmental protection and development. To many people who are concerned about the environment, some of the answers lie with sustainable development, and young people have a major role to play because youth possess energy, creativity and insights, which should be tapped in efforts to promote sustainable development. Moreover, involving youth in sustainable development activities will raise their level of awareness of important environmental issues, ensure their active participation in the conservation and the protection of environment and lay the foundation for more widespread interest in sustainable development over time.

In this unit we will examine:

- Youth in development work
- Models and Approaches to youth in development work
- Social change in youth in development work
- Youth participation
- Opportunities for young people to participate in sustainable development projects

### **Unit Objectives**

After going through this unit, the students would be able to learn:

- What concerns young people as we examine some of the issues that were raised at a World Youth environmental meeting, Juventud (Youth)'92, held in San Jose, Costa Rica and what action young people can take?
- What are the functions of youth in development work?
- What skills do youth workers need when adopting the models in development work?
- How young people can play a role of community development worker?
- The role of youth as initiators and activists

## 11.1 Background

Young people have been a fundamental force for change throughout history: they speak the truth, they act with passion on the things they believe in and they take risks. It was in this spirit that many youth activists from around the world became involved in the United Nations Conference on Environment and Development (UNCED). They were at the UNCED in unprecedented numbers to demand action on the part of the world community in answering to the world's social, economic and environmental crisis. The process leading up to the Earth Summit was marked with a sense of urgency among youth activists who came together to discuss the environment and development issues throughout the world. Youth felt that, not only did they have something to contribute, but also that their failure to contribute would result in the failure of what the Earth Summit has set out to achieve. They came to Rio demanding and exercising their right to participate in determining their future and that of the planet, and they came with a sense of responsibility to act in the search for solutions.

All of the youth NGO statements since the Earth Summit have called for social and economic justice, sustainable development that includes the fair distribution of resources, equal participation in decision-making, peace, and respect for human rights, access to education, among many other issues. A common theme for all the global conferences has been a call for the inclusion of youth and their perspectives in decision-making. This is reflected in Chapter 25 of Agenda 21 titled 'Strengthening the Role of Children and Youth in Sustainable Development', which states that:

*It is imperative that youth from all parts of the world participate actively in all relevant levels of decisionmaking process because it affects their lives today and has implications for their futures. In addition to their intellectual contribution and their ability to mobilize support, they bring unique perspectives that need to be taken into account (Woods, Z. 1997).*

Chapter 25 of agenda 21 recognizes that youth comprise 30% of the world's population. It also indicates that their involvement in decision-making about the environment and development, and the implementation of programmes for sustainable development, is critical to the long-term success of agenda 21.

### Self-Answering Question 11.1

- Explain why it is important for youth to participate in the process of sustainable development?

## 11.2 Youth in Development Work - History and Traditions

The work that is now done in this field is inevitably forced to make continual changes because of the impact of the global economy on the social and economic life of every part of the world, small or large. However, a lot of the practices of youth in development work are deeply influenced by a long history.

There are five main international traditions of youth in development work. They are:

1. Youth in development in families and communities
2. Youth work as social and leisure provision
3. Pastoral work and out-of-school education
4. Youth work for development
5. Youth welfare work.

### 1. Youth in development in families and communities

The earliest traditions of youth in development work are related to changes in the role of adult family members and community elders who traditionally cared for, supported, educated and controlled young people.

With the recent increase in family breakdown and the erosion of traditions, community structures have changed. Traditional methods have become less and less effective in helping young people make the transition to adult life, so they have been supplemented by professional advice and help, and in many wealthy countries, replaced by these.

Rapid social change often causes role difficulties of the youth in development worker who has to become ultra-sensitive to the feelings and expectations of the family and community while working in a close relationship with them.

### 2. Youth work as social and leisure provision

Youth work that includes social and leisure provision for young people is one of the oldest traditions of youth work in developed countries such as Australia, Britain and Canada. It developed strongly there because early industrialization and urbanization created a lot of free time for those not in work, and who were, if poor, without the means and knowledge to use that free time productively. Rising crime rates, mental illness, and drug taking, tend to be associated with this condition.

If you come from a reasonably prosperous rural area, this will probably seem strange to you, but global economics are beginning to create these conditions in many formerly settled and harmonious communities.

Youth work as social and leisure provision developed for four main reasons:

1. to help young people meet and enjoy themselves
2. to allow young people to have a space of their own
3. to protect young people from the dangers of society, and

4. to protect society from troublesome young people.

The types of programmes offered through this tradition may include:

- informal social gatherings
- clubs offering structured activities such as photography, fishing and sports, and
- powerful social organizations such as Malawi's Young Pioneers which ran businesses, organized festivals, educated illiterate people and so on.

The emphasis in this area usually focuses on instilling a sense of proper character in young people, rather than on competitiveness. Values such as loyalty, fair play, social and national responsibility are promoted through the various activities of groups such as the Scouts and the Boys' Brigade, although more covert political values might also be consciously or unconsciously transmitted.

### **3. Pastoral work and out-of-school education**

Pastoral work and out-of-school education are superficially similar to and overlap the leisure tradition. However, they may be deeply committed to ideologies and agenda of a social and spiritual nature.

Religious, sporting and international organizations have established extensive structures and activities for youth in development work in many developing and developed countries throughout the world. These organizations include scouts, girl guides, missionaries, benevolent groups and churches. In many cases, these organizations had clear educational and /or religious goals, and distinct ways of working with young people.

### **4. Youth work for development**

Youth work for development has played an important role in official national development efforts. It has been used to promote national fitness, military training, political mobilization, democracy struggles, community development and citizenship education.

The principle concerns usually include the development of young people's:

- political knowledge
- political skills
- abilities to create an identity with a particular social movement.

Examples of youth work for development are organizations such as the Co-operative Youth Movement, Young Socialists, Bangladeshi Youth Leagues, and Malawi's young Pioneers.

Some youth work for development has centred on working alongside government in a supportive role, while other youth work for development has focused on directly tackling the broader structural problems in society, such as working to help women in rural areas gain access to credit and to technical expertise.



Central to youth work for development has been helping young people to understand the entrenched nature of oppression as a force built into the structure of society and of the economy, as well as being personal and political. As a consequence it has generally aimed to help young people take an active role in the political arena through community activity, political parties and organizations, unions and national and international movements.

## 5. Youth Welfare Work

Welfare has come to mean the support of people who have been put into a situation where they find it very hard to get what we now consider to be the basic requirements to live in an acceptable way. This might be because of structural poverty such as inequities in the distribution of resources (handling the resources of education, health, land and so on), or personal problems due to community or family breakup, or illness.

The tradition of youth welfare work varies significantly across the Commonwealth. In most countries, youth welfare work relies on the sponsorship of philanthropic nongovernmental organizations. It is usually only in developed countries such as New Zealand, Australia, Britain, Canada, USA and in some European countries such as Norway and Germany the youth welfare work is sponsored by the government.

The welfare tradition has its roots in the Victorian era of 19<sup>th</sup> century England, with the notion of rescuing. This approach saw young people as needing to be saved from the dangers of society, and in need of moral and religious instruction. In many cases, this approach was adopted by volunteers guided by their own personal values, evangelistic Christian or other moral codes. These values have an influence on how effective the work will be if the values are not acceptable to the recipients. Many organizations play down their own value systems so that they do not interfere with the work itself.

As the welfare approach became professionalised, certain young people were identified as being 'at risk', 'in trouble' or 'deprived'. Professionals were employed to provide counseling, material relief, accommodation and/or training. Welfare workers within a pluralist tradition assist young people to identify their problems and then to act on them within the law.

For example, the Hare Krishna Hindu religious sect has organized welfare accommodation and education for homeless street children in Nairobi. The Save the Children Fund organizes welfare work for and with children throughout the world.

A further development of the welfare tradition has been the emergence of organizations that provide information to young people and also act as advocates, with legal know-how, on their behalf. It is important to try and understand the economic environment in which welfare work takes place.

**Activity 11.1**

There will be a variety of welfare activities in your country. Find out about three that are concerned with young people.

Who runs them? What are the aims and objective of the agency that you consider to be a good one? What does the agency offer to young people?

Pick out one good one and one not so good, and say why one is more effective than the other.

Discuss with others and write notes in your learning journal.

**11.3 What is youth in Development Work?**

The central purpose of youth in development work is to empower young people to play an assertive and constructive role in the regeneration of their communities.

A youth in development work has three distinct roles:

1. working face to face with young people in a variety of settings including clubs, projects and outreach work
2. managing and supporting other paid and volunteer workers
3. formulating and developing policies on governmental and non-governmental organizations (NGOs).

Youth workers undertake their roles across a wide range of settings. The type of work they engage in will differ depending on:

- the organization they work for
- the country they work and live in
- the type of young people they work for
- their philosophical approach; and
- the resources they have available to work with young people

Youth in development work is often described as a process of increasing the participation of young people in national development and decision-making, or promoting youth empowerment. Like human rights and democracy, they are about ways of interacting with young people. Fundamentally, participation and empowerment are both about letting young people have more control over their personal development and the directions of their lives.

**11.3.1 Participation and Young People**

Participation in democracy, in employment, in education, in cultural development - these are enshrined as individual rights in the Universal

Declaration of Human Rights. They are also included in the Harare Declaration as priorities of the Commonwealth.

Traditionally, young people have been excluded from active participation in many of the decisions that affect their lives. When we are very young, our parents, family members and other adults regularly make decisions on our behalf. Ideally, they are genuinely concerned with our interests. But as we grow into adolescence, the period of transition for childhood to adulthood, we usually begin to develop our own sense of what our 'best interests are', and we may not have the same perspective as the adults do not always want to relinquish their role as decision-makers, and do not always recognize when young people are able to begin to make their own decisions, and take responsibility for the consequences of those decisions. This struggle for greater influence and autonomy takes place not just within our families, but also at school and in community contexts, where adults may be even more way of giving up some of their traditional power.

### **11.3.2 Empowering Young People**

As a youth and development worker, your role is to create an enabling and empowering environment for young people. At the same time as you are trying to do this, there are likely to be other forces working in the other direction, such as troubled home environment, negative mass media images (particularly affecting young women), or shrinking employment markets. It is also more difficult for you to create an enabling environment for others if you do not feel empowered in your own personal or professional life.

### **11.3.3 Functions of Youth in Development Work**

The Common Wealth Youth Programme (CYP) has defined three main functions that are central to the practice of all youth in development works. They are the enabling, ensuring and empowering functions.

#### **1. Enabling**

*Enabling* is about creating the conditions in which youth people can act on their own behalf, and on their own terms, rather than relying on other people and professionals to do things for them.

The enabling approach assists youth in development works to ensure that young people:

- understand and value the cultural values and traditions of their group, society and country.
- are themselves valued as a key part of their country's national, social, economic and political life.

A youth worker using the enabling approach would encourage young people to:

- develop new skills
- develop self-confidence
- raise their aspirations

- speak for themselves
- take the initiative in making a creative contribution to their communities.

They might work in a team with other youth workers to:

- address young people's needs
- analyse and evaluate different ways in which this could be done
- design and develop new ways of implementing policy.

If they are experienced and have thought a lot about this, they might work with other organizations:

- to mainstream young people in policy formation and implementation
- to always keep young people in the forefront of thinking to ensure delivery of programmes that are relevant to young people.

## 2. Ensuring

*Ensuring* is about always working in harmony with the core Commonwealth values and principles (democracy, liberty, justice and equity) because these are systems, which give a sense of meaning, and moral and social purpose to the ways in which young people can use their skills and knowledge.

The ensuring approaches is meant to assist youth in development works to:

- maintain the principle of equity as the essential underpinning of all youth programmes, activities and outcomes.
- develop an awareness and moral commitment to the ideals of the Commonwealth and in the tradition of the groups that founded it.

An ensuring approach could include helping young people, no matter from what social background, to:

- secure the opportunity of redeveloping their learning abilities
- acquire ways of making themselves into valuable and contributing members of the community
- express their needs and ideas to those with power.

It might involve the youth worker learning to network with other development workers to:

- develop collective understanding and skills in this work
- learn together how best to mainstream youth policy and particular issues of equity
- to work collaboratively and share technology to optimize the efficiency of the work.

If she/he is very experienced, the youth worker might be involved in collaborative work with other organizations, to encourage:

- awareness and sensitivity to young people's issues
- allocation of resources to young people
- them to run programmes for young people.

### 3. Empowering

*Empowering* is about putting the democratic principles (*which are pluralism/diversity, citizenship and respect for human rights*) into action with young people so that they can play an assertive and constructive part in the decision-making that affects them at all levels of society.

The empowering approach assist youth in development works to ensure that young people:

- understand deeply and internalize democratic principles and practices
- have the insight and skills to influence the decisions that affect them and their communities.

A youth in development worker who is trying to empower young people, aims to:

- help young people develop much more of their open-ended potential as thinkers, interactors and doers
- become involved creatively in social change
- gain access to resources
- play a full and active part in social and economic development
- organize self sustaining initiatives
- assert their and others human rights
- practice Commonwealth values and principles
- participate fully and actively in democratic processes

They might work with other youth in development workers to practice advocacy with and for young people. With more experience they might also work with other organizations to improve youth related social policy and its implementation.

**Self-Answering Questions 11.2**

In your own words, write what you consider to be the key elements of the three approaches we have been discussing:

*An enabling approach is about:* .....

.....  
 .....  
 .....

*An ensuring approach is about:* .....

.....  
 .....  
 .....

*An empowering approach is about:* .....

.....  
 .....  
 .....

*Compare your answers with those provided at the end of the unit.*

**11.4 Youth in Development Work as a Profession**

In the above section, we stated that there are five main traditions of youth in development work. Partly because of their integration into activities funded by government, aid agencies or NGOs, **youth welfarework** and **youth work for development** tend to be largely professionalised. This is not to say that there are no professionals in the other traditions, but that the origins of these traditions are in voluntary movements within families, communities, churches, missionary groups and other philanthropic groups, which are low budget, largely low paid organizations.

Youth in development work and youth welfare work have a longer professional history with the work usually practiced by occupational groups such as youth workers, welfare workers and social workers. In more recent times, the other traditions such as pastoral and out-of-school education, leisure and community work have increasingly employed professionals to undertake work with young people.

**11.4.1 Developing Professionalism in Youth in Development Work**

In the youth in development field, education and vocational training can make the difference between:

- a worker who analysis the problems s/he is dealing with and has the skills to improve things significantly, and

- a worker whose approach is memorized from a book or simply applied commonsense', and whose influence on problems is very poor.

There are of course situations where commonsense is appropriate, but these situations do not require a professional to deal with them. There are some things that are common to having a professional approach to youth in development work. These include:

- seeing ourselves as knowledgeable **partners** rather than mere experts in our work with young people
- distinguishing between the necessary **professional detachment** of objectivity and sheer indifference
- **avoiding the control** of access to information and control of people by specialist language (jargon)
- **working cooperatively** with other professionals and other agents rather than competing with them.

To ensure credibility, we must treat our jobs, our own on-going learning and our staff's development professionally. One way of achieving this is through a commitment to life long learning. Another important way is to take on the role of active, reflective practitioner.

### 11.4.2 What is an active, reflective practitioner?

An active, reflective practitioner is a professional who:

- is in control of her or his thinking and learning
- analyses circumstances and situations
- applied problem solving skills
- recognizes the social context in which individuals operate and respond to these
- has a thorough grasp of a range of youth work models and skills, and deployed them flexibly and appropriately

#### Self-Answering Question 11.3

Briefly describe the key features of a youth worker who has a professional approach.

.....

.....

.....

.....

.....

*Compare your answers with those provided at the end of the unit.*

## 11.5 Models and Approaches to Youth in Development Work

Four models of youth in development work are:

1. The treatment model
2. The reform model
3. The advocacy model
4. The conscientisation model

### 1. The treatment model

The treatment model defines the problems of social groups as normal, human and reasonably healthy social reactions to the necessary constraints that living in society imposes. Those who work within the treatment model framework say that we must recognize these problems as useful indicators of the need to make social adjustments, not as evidence of something deeply wrong with society. In the treatment model young people who do not conform are seen as a threat to the stability of society.

#### What skills do youth workers need in a treatment model?

Youth workers need the following skills to apply a treatment model in youth in development work:

- controlling young people
- demonstrating high standards of personal conduct
- planning and designing programs
- establishing and setting rules and limits
- presentation skills
- counseling
- group or team building skills.

### 2. The reform model

The reform model of youth in development work sees young people as disadvantaged by their social environment or family upbringing. If young people have had a poor or unhappy upbringing, this causes them to act in negative ways. The reform model argues that if young people are disadvantaged by their family upbringing or their social environment, then it is difficult for them to make the changes necessary to fit into society.

#### What skills do youth workers need in a reform model?

The role of youth workers employing a reform model tends to be that of person-centred experts who have become professional youth workers because they feel they can help young people to:

- make the best out of opportunities available to them
- build positive relationships with older generations and the social system
- identify their life goals, and



- change themselves to achieve those goals

### 3. The advocacy model

The advocacy model of youth in development work **sees** that many of young people's problems are a result of their social rights not being respected, because either young people are not aware of their rights and/or do not have the skills to use them or society has failed to protect their rights.

#### What skills do youth workers need in an advocacy model?

The skills a youth worker needs to implement an advocacy model of youth in development work include:

- ability to use the legal and bureaucratic system
- networking with bureaucracies system
- case work skills
- campaigning skills
- media skills
- motivational skills
- negotiation skills
- lobbying skills.

### 4. The conscientisation model

The majority of young people in the world are structurally disadvantaged by rich and powerful people through the organization of social institutions such as banking, ownership of business and property, and the structure of education. This is fundamentally unjust and contrary to the notion of human rights.

#### What skills do youth workers need in conscientisation model?

The skills a youth worker needs when adopting a conscientisation model include:

- community education skills
- community development skills
- negotiating skills
- social research skills
- the ability to help young people overcome apathy, low self-esteem and fear of authority
- a practical understanding of the implications of social analysis
- campaigning skills.

## 11.6 Social Change in Youth in Development Work

Youth in development work can aim to bring about social change. Not all youth in development work can be classified as social change. Some forms of youth in development work are concerned with maintaining the status quo. Both the treatment and reform models of youth work are aimed at

maintaining the status quo, whereas the advocacy and conscientisation models both aim to create change in the community and/or society.

Social change can occur on three levels:

- Policy change
- Social relations change; and
- Political action

### 11.7 Applying Freire's ideas to Youth in Development Work

Paulo Freire was born in Brazil in 1921. He was a Christian who was committed to fighting poverty in his country. A lot of his work involved working with poor people and teaching them to read and write.

There are two main ways his ideas can apply.

The first is for us to be aware of our own unconscious capacity to oppress young people by the ways we relate to them. We have to trust young people and have confidence in their ability to think creatively and evaluatively and to make their own decisions and act on them.

The second way is to apply Freire's methods when working with young people. This means that there are three phases to our work with young people:

1. The first step is to **listen**. Spend time getting to know young people and learn about their culture and values. Learn to see things from their perspective and identify those themes that are important to their lives. Learn to decode what they say to grasp the real underlying quality of their ideas, as they are often at first unable to articulate them.
2. The second step is to enter into **dialogue** with young people. Ask young people to share experiences through telling stories, drawings and using photographs. Encourage young people to share their problems and identify a need for change.
3. The final step is to engage young people in **action**. Work with young people transform their situation by deciding on particular courses of action, help them act on their decisions and then reflect on their actions.

Youth in development work strategies such as community development and social planning are most likely to bring about change for groups at a local level. To achieve social change in the broader requires youth in development work to the social structures, which affect all disadvantaged young people in society.

Freire offers one way for youth in development workers to achieve change with young people and help us to identify the ways in which we can avoid acting as oppressors of young people.

Some of the dominant class ... talks about the people but they do not trust them; and trusting people is the indispensable precondition for revolutionary change. A real humanist can be identified more by his trust in people. Which engages him in their struggle, than by a thousand actions in their favour, without that trust (Freire, P. 1993).

## 11.8 What Concerns Young People?

At a world youth environmental meeting, *Juventud (Youth) '92*, held in Costa Rica, young people from all over the world discussed their concerns about the environment. This issue rose at that meeting included:

- Poverty and the environment
- External debt
- Population growth
- Natural resource degradation.

As you explore some of these complex and inter-related issues, consider the following question:

How can young people bring about a change?

### 1. Poverty and the environment

*Poverty as an environmental pollutant*

Poverty lessens people's capacity to use natural resources rationally. Therefore, poverty intensifies the pressure on the environment. Poor people, who are unable to meet their needs, are forced to exploit natural resources for income, or for their own use. In countries with large populations of poor people, this can be devastating to the environment.

#### What can young people do?

1. In the spirit of the current GATT agreement on the terms of trade, lobby international and government institutions to encourage economic growth can be attained if industrialized countries reduce trade barriers against goods from developing countries. The reduction of tariffs on agricultural produce would be especially beneficial.
2. Your national youth division, with support from your national government, can create special financial initiatives that will provide seed money and training for youth to become self-employed so that they can generate their own income.

The bottom line is that the poor in societies have become both the agents and victims of environmental degradation, although not the cause. The cause seems to lie with international trade agreements, the free market approach to development and external debt.

### 2. External debt

At *Juventud '92*, young people expressed their fears and concerns about:

1. the cause and impact of external debt
2. their dissatisfaction with the approach of developed countries to development. That approach includes using financial institutions such as the World Bank and giving priority to transnational companies and the International Monetary Fund (IMF) which have contributed, in part, to the depletion of the resources of developing countries.

At the Juventud meeting, it was observed that the heaviest burden in international economic adjustments has been carried by the world's poorest people in Latin America, the Caribbean, Africa and Asia.

### **Causes of external debt**

The young people at Juventud '92 felt that a combination of factors has contributed to the rapidly growing debt that confronts many developing countries:

- gaining political independence without corresponding economic independence
- local autocrats
- corruption
- flawed development strategies
- the fact that poor countries are encouraged to imitate the free market development model of industrialized nations.

### **What can young people do?**

1. Lobby for debt forgiveness.
2. Begin to research and discuss among yourselves the possibility of creating alternative models of development, which take into consideration the cultural, social, economic and political values of the people. What is needed is a model that respect and nurtures the environment while delivering economic benefits to the people.

### **3. Population growth**

One of the factors that adds to the problem of poverty, external debt and their effect on the environment, is that poor countries tend to have large, rapidly growing populations of people who are competing for limited resources. Approximately 80% of the world's population lives in poorer, developing countries. The growth rate in these countries is much faster than in developed countries. It is estimated that it will double in the next few years. This will put an immense strain on countries that are already finding it difficult to support their people

### **4. Natural resource degradation**

One of the most devastating forms of natural resource degradation is deforestation. Combined with air and water pollution caused by industrial waste, deforestation compounds the problem of ozone depletion and global

warming. It results in erosion, the loss of topsoil so necessary to agriculture, and has many other environmentally harmful effects.

It is, however, an issue that young people can become involved with directly, and it can be rewarding because every tree that is planted is a positive action.

### What can young people do to protect forests?

1. Support local organizations concerned with protecting forests and planting trees.
2. Plant a tree whenever an opportunity arises.
3. Lobby your government and local authority to protect the forests in your country.
4. Become involved in the various awareness campaigns and spread the word about the need to protect the earth's forest.

#### Activity 11.2

Research the situation in your own country and write responses to the following in your journal. Discuss this issue with your family, Peers, colleagues, tutor or tutorial group.

Does your country have a fast growing population?

If no estimate the growth rate and talk about the consequences for your society.

If yes, what do you think should be done about it? Are there any population control programmes being run? How effective do you think they are (gave reasons)? Do you think these programmes are being run with respect for the rights of the people involved?

## 11.9 Opportunities for Young People

The foundation for the inclusion of youth in decision-making has been established and endorsed by nations around the world through different convention, including the Convention on the Rights of the Child. In addition, the International Conference on Population and Development, the World Summit for Social Development, the fourth World Conference on Women and the Habitat II Conference, all highlighted the importance of youth participation in the implementation of their plans of action:

*Each country should in consultation with its youth communities, establish a process to promote dialogue between the youth community and government at all levels and to establish mechanisms that permit youth access to information and provide them with the opportunity to present their perspectives on government decisions, including the implementation of Agenda 21.*

There are numerous organizations that provide opportunities for young people to become involved in environmental activities, either directly or indirectly. The following are just three of many.

### **1. International Youth Federation (IYE)**

The International Youth Federation for nature studies and conservation was founded in Salzbrug, Austria in 1956. It is the advocate for the interests of youth environmental groups.

*According to its statutes, IYF shall: ... seek to organize and encourage all that might increase the knowledge, understanding and appreciation of nature and the awareness of environmental problems among young people throughout the world. This is in order to promote the commitment of youths to the principles of environmental conservation and to stimulate young people to voluntary action for the protection and enhancement of the environment and for the natural use of the Earth's resources.*

IYF operates in Asia and the Pacific; Africa; Latin America and the Caribbean; and Europe. It involves over 15 million young environmentalists in some 150 to 200 environmental organizations.

The work programmes varies from environmental education to strategy and action. The focus over the years has been on appropriate technology, technology transfer, energy, tropical forests and the use of pesticides, in industrial countries and developing countries. The organization has held a number of youth exchange programmes and meetings around the world and has produced a number of publications.

### **2. The Caribbean Youth Environment Network (CYEN)**

The Caribbean Youth Environment Network (CYEN) is a non-profit making youth organization dedicated to the promotion of appropriate development through education, regional integration and community development. These are aimed at changing the attitudes and behaviour of young people in order to popularize the conservation and protection of human and natural resources within the wider Caribbean. The goal of the organization is to promote meaningful youth involvement in the conservation and protection of resources through education for awareness, integration and community action. Some of the concerns of the Caribbean Youth Environment Network are solid waste management, sewage disposal, coastal zone degradation, the depletion of biological resources, and the agro-chemical pollution of ground and surface water resources.

At the community and national levels, CYEN members work with young people to address some of these issues. An established focal point in each country is responsible for coordinating activities at the national level and reporting to the executive boards. CYEN members have also been engaged in, among other things, public awareness campaigns on the protection of the leather back turtles, tourism development and its impacts, and solid waste management using the 3 Rs (Reduce, Reuse, Recycle). The organization strives to meet bi-annually to share ideas, knowledge and experiences on a particular theme (Bynoe, P. 1998).

### 3. The Commonwealth Youth Programme (CYP)

One of the overarching principles that the Commonwealth Youth Programme has adopted to guide its work is to 'promote the Commonwealth values of social justice, democracy and human rights amongst the young people of the Commonwealth'. Since its foundation in 1974, CYP has worked to promote youth empowerment through education and training, expanding employment opportunities and increased participation in decision-making. As some of the early discussions leading to the formation of CYP took place at the Singapore in 1971, it was quite natural for the Commonwealth Principles to be proposed as a key focus for the youth programme.

#### CYP's Mission

The Commonwealth Youth Programme's vision and mission statement is as follows:

CYP works towards a society where young women and men are empowered to:

- *develop their potential, creativity and skills as productive and dynamic members of their societies and*
- *participate fully at every level of decision-making and development, both individually and collectively, successfully promoting Commonwealth values.*

In addition, the Commonwealth Youth Programme:

1. Supports the efforts of member governments in the formulation of policies and development of programmes, which effectively address the issues, and concerns of young women and men.
2. Assists member governments in establishing and strengthening youth ministries and independent youth networks to support policy and programme development based on the active participation of both young women and men.
3. Enhances the involvement of young women and men in all CYP's planning and decision-making processes.
4. Supports the efforts of youth non-governmental organizations (NGOs) and collaborates with international organizations in the promotion of youth development activities.
5. Enable young women and men to participate effectively in the planning and decision-making processes of their own countries, and in regional and international fora.
6. Supports and recognizes initiatives by young women and men for their own social and economic development and for the development of their communities.
7. Promotes greater awareness amongst young people of the role of the Commonwealth in international relations.

(From CYP brochure titled *Youth Representatives*, Commonwealth Secretariat, May 1996.)

### **CYP Focus**

While the kinds of programmes administered by CYP have changed since it began in 1974, its overall goal to promote youth involvement in and benefit from social and economic development has remained constant. Currently, CYP programmes emphasize:

- education and training
- providing support to youth enterprise and self-employment initiatives
- promoting national youth policies
- addressing youth health concerns including HIV/AIDS
- increasing the participation of young women in all aspects of development
- promoting literacy at a local level
- increasing youth awareness about sustainable development (Humble, M. 1998).

### **CYP Regions**

The four regions covered by the Commonwealth Youth Programme (CYP) are; Asia, The Caribbean states, the South Pacific and Africa. This enables CYP to reach more young people, and to offer a wider variety of training programmes and projects tailored specifically for the needs of young women and men in each region.

The details of CYP of Asian region are as follows:

#### **ASIA**

##### **Background**

The Asian region of the CYP is made up of Bangladesh, Brunei Darussalam, India, Malaysia, Maldives, Pakistan, Singapore and Sri Lanka. Many issues for young people in Asian commonwealth countries are historically the result of colonial rule and the breakdown of traditional life.

##### **Regional problems**

While the breakdown of traditional life is a long-term issue for young people in Asian Commonwealth countries, participation in the global market economy and greater emphasis on materialistic values have caused problems more recently. Coupled with this is the growing population, which has outpaced economic development. The combination of these factors has resulted in the region facing growing poverty, unemployment and other social problems.

The break from traditional life and the influence of materialistic values has caused a shift in culture from emphasis on the family to emphasis on self-interest. When young people are not able to achieve materially because of poverty and unemployment, their sense of powerlessness and alienation can lead to crime, violence and drug abuse.



Many Asian commonwealth countries have had a history of youth exchanges to promote intercommunity harmony and national integration.

Youth services in Asian are also confronted with major youth needs and issues such as:

- rising religious fundamentalism
- rising communalism
- the spread of AIDS
- deep poverty
- unemployment
- high illiteracy rates in some regions
- inequitable class, caste and gender access to education
- the marginalisation of young people social class, caste and gender inequality
- youth health problems
- easy availability of drugs
- increase in crime.

### **Youth policy**

The Asian Commonwealth countries respond to these problems in a myriad of ways, for example, in countries such as Brunei Darussalam and Singapore many Youth services have an emphasis on citizenship. In India youth programmes also focus on values such as unity, national integration, spirituality and culture. In Bangladesh, Sri Lanka and Pakistan the emphasis of youth programmes is on education, employment and training, In the Maldives the focus is on sports, recreation and culture.

The role of NGOs and government in youth services varies from country to country in the region. For example the governments in India, Pakistan and Sri Lanka rarely consult with NGOs. However, at the same time they use NGOs to undertake limited programmes in specific areas such as employment. In place such as Malaysia, there is a strong relationship between NGOs and the government. In Singapore the government has no central agency for coordinating youth affairs.

In most countries, the youth sector has not been given priority despite political statements conveying the opposite. As a result youth organizations often not receive the resources they need to encourage young people to participate in national development. Some youth organizations in Asia have substantially contributed to the social and economic development of countries. These initiatives are usually run by youth leaders.

### **Youth services and programmes**

Many NGOs in the Asian region work together to address social and economic problems and mobilize young people to become active in the process of change.

A range of youth in development work models and programmes exist in the Commonwealth countries of Asia. The challenges for youth in development work practice in the next decade for the region include:

- working towards democracy
- environmental sustainability
- using communication technology to help young people
- the widening gap between the rich and poor
- population issues
- dealing with the process of urbanization
- youth participation.

Most Asian Commonwealth countries have encouraged young people to participate in sports, recreational and cultural activities and rural and community development activities.

### Case Study 1.1

The following case study is about the All Pakistan Youth Federation.

In 1985, the Government of Pakistan formed a National Co-ordination committee on youth to celebrate the International Youth Year. The government consulted with leading youth organization to plan a programme.

NGO youth organizations were given specific projects. Pakistan Crescent Youth Organization (PCYO), a leading youth organization was asked to arrange some workshops and seminars.

In early April 1985, PCYO held a national workshop on the problem of unemployment among young people. Youth leaders from all other organizations were invited to attend this very important workshop. Mr. Tariq Haleem Chaudhry, the PCYO's founder, suggested that youth organizations should unite and form a common platform. He also suggested a title of the new common organization: the All Pakistan Youth Federation.

Initially 13 youth organizations joined and the Youth Federation was established on April 20, 1985.

It made rapid progress and within a year the number of youth organizations affiliated with the APYF rose to 53. By the end of 1986 more than 150 youth organizations became its members. The numbers grew to 195 in 1987, 210 in 1988, 285 and in 1989, 315, the latest position is that almost all the youth organizations in Pakistan are its members.

The provincial branches of the APYF did commendable work and soon became a nucleus for the youth organizations in their respective provinces.

In 1989 elections of the provincial youth cabinets took place in all the provinces of Pakistan and Azad Kashmir. The APYF is a democratically elected body and works in close consultation with youth organizations. The APYF will continue to play its role in the social guidance of Pakistan's youth.

The broad aims and objectives of the All Pakistan Youth Federation are to:

- work for the development of the youth community in
- Case Study 1.1 (cont'd)

Pakistan through seminars, workshops, training programmes and debates.

- provide guidance, information and training to the youth organizations to improve their functioning
- act as a liaison between the government agencies and the youth organizations

- promote national integration amongst the people of Pakistan
- promote youth tourism within Pakistan
- open youth centers to teach the unemployed youth various skills
- hold youth training camps and work camps in different areas of Pakistan promote the welfare of the youth community for the conservation of our environment
- promote international understanding and brotherhood by providing total local hospitality to visiting foreign youth delegations, and by sending youth delegations abroad on a reciprocal basis
- co-operate with international agencies working for the uplift of the youth community.

### Activity 11.3

After reading the case study, answer these questions in your learning journal:

- Why do you think the membership of the All Pakistan Youth Federation grew so rapidly?
- Do you have a similar organization in your country?
- If yes what are some of the similarities? What are some of the differences?
- If no, why do you think that such an organization does not exist?
- Do you think there is a need for it?
- What would be some of the benefits of organization like this in your country?
- How feasible would it be to establish?

## 11.10 Youth ----- Our Goals in Working with them

The concept of youth well being is taken from work done under the Social Development Research Program (SDRP) conducted by two Canadian organizations: the Faculty of Human and Social Development at the University of Victoria and the Social Planning and Research Council of British Columbia. The project was concerned with developing a conceptual framework for well-being and included developing indicators of youth well being.

### Activity 11.4

From your involvement with and observations of youth, what would you say are some of the indicators of youth well being? List them and compare them with the themes outlined below.

### 11.10.1 Indicators of youth well being

Researchers in a project on the issue of youth well-being found nine recurring themes. These themes were grouped into two main categories:

#### Categories:

*The interpersonal aspects of youth wellbeing*

and-

*The institutional aspects or changes needed for youth well-being.*

The themes that fell into the first category - the interpersonal aspects of youth well-being were:

- Theme 1: More independence and autonomy.
- Theme 2: Better relationships/More interaction between youth and several groups including their parents, teachers, law enforcement officers and other young people.
- Theme 3: Better communication.
- Theme 4: More community involvement.
- Theme 5: Ending discrimination and barriers to equality.

The themes that fell into the second category - the institutional aspects or changes needed for youth well-being were:

- Theme 1: More places for youth.
- Theme 2: More youth services and activities.
- Theme 3: More job creation/skill training for youth.
- Theme 4: Improve the educational system.

Organizing the ideas in this way is useful for us as community development workers. It reduces the tendency in many youth development programmes to focus on the delivery of services to young people (doing for rather than doing with). The approach highlighted here puts the empowerment issues in the forefront. Services for youth are still important of course, but even here every effort should be made to include young people in designing and operating them.

### 11.10.2 Goals

The perspective on youth well-being developed by the SDRP team also brings to light two important community work concepts- the idea that there are *process goals* and *product goals*. Knowing that there are two different types of goals will help you set out the goals to be accomplished.

#### Process goals

According to Twelvetees (1991):

*Process goals are to do with changes in people's confidence, knowledge, technical skills and attitudes.*

Therefore they have to do with enabling people to take control over events, and to make sound decisions. The theme of more independence and autonomy for youth or better relationships is linked to some of the process goals of working with young women and men.

### **Product goals**

*Product goals are to do with the changed material situation like the establishment of youth-run drop in centers or a revised curriculum in schools, which are services designed to meet some of the practical needs youth have.*

Both types of goals are important in youth in community work, although some workers tend to emphasize one or the other depending on their particular interest and context. For example, a youth worker in a remote rural community may be of the view that services and activities for youth, as well as job creation and skill training (product goals) are most important in order to tackle the problem of rural-urban migration. However, another worker in exactly the same situation could well argue that the promotion of youth organizations (a process goal) through which young people can advocate for these services themselves is the most appropriate goal. Obviously these goals are not mutually exclusive and there is usually a process element in most product goals.

### **11.10.3 Youth Participation**

The best community work highlights the importance of working with and through community organization. It emphasizes the importance of involving the intended 'beneficiaries' in the following steps:

- the definition of the problem
- the identification of possible solutions
- the choice of the final approach to be taken
- its implementation
- the monitoring and evaluation of its progress and success or failure.

### **The role of the community youth worker**

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<sup>1</sup> Twelvetrees; Ibid., p.11.

Worker Role	Description
<b>Enabler</b>	Asking questions to help to clarify a situation, and/or deepen participants' understanding of issues; actively listening; giving encouragement; providing a model for others.
<b>Facilitator</b>	Similar to enabling; can involve putting people in touch with agencies and resource people; creating environments for learning and action.
<b>Broker</b>	Sometimes called mediator. A moderately active role where the worker secures resources or concessions for the group. Engages in resolving disagreement within and between the community (group) and the agency and other external bodies.
<b>Advocate</b>	Can be an activist role involving making representation usually to secure policy or institutional change for the benefit of the client system. Involves research analysis, negotiation, bargaining and sometimes more coercive measures such as demonstrations and strikes.
<b>Teacher</b>	Involves the structured development of skills (interpersonal and organizational).

#### 11.10.4 Role for different situations

You will find that in your job as a youth and community worker, you will be called to wear many caps. For instance, there will be some occasions when you will be required to assume the role, of, let's say, an advocate rather than that of a facilitator. Henderson and Thomas describe several of the roles played by youth workers and suggest that the following factors may influence the choice of role:

- the type of work to be done.
- the phase or stage of development of the work.
- the goals that you, the worker, have
- the worker's own personal preferences and competence
- the host agency's view about appropriate worker roles.

#### 11.10.5 Participation

As a youth and community development worker, you know that you need to be responsive to your clients' needs and perspectives. It's also important to try to engage the active participation of your clients. You need to understand that participations and consultation are about sharing power, often even giving it up completely.

You will appreciate that those who have been accustomed to taking decisions (having a monopoly on power) may be reluctant to relinquish it. This in fact is often the source of the rationalizations we make or hear for a lack of participation: the people don't really know what they want; they don't have the knowledge or skills required to participate effectively; participation and consultation are too time consuming and costly.

### The many faces for participation

Let's now look at the many forms that participation can take. You will find these examples relevant to your work.

- Beneficiaries are seen to participate because they receive some material benefit from the programme.
- Beneficiaries are informed about the programme after it has been designed, and they are mobilized to contribute voluntary labour, and possibly materials.
- A selected group of beneficiaries is invited to participate in monitoring programme implementation, but have no delegated authority, i.e. can only recommend but not authorize change.
- The policy frame is established, intended beneficiaries are invited to make comments about the proposed programme – but there is no guarantee that their comments will be taken into account.
- The policy framework is established, comments are invited, but this time a guarantee is given (and honored) that beneficiary comments will be taken into account.
- Intended beneficiaries are invited to give advice on policy framework, while the actual programme design is done by experts.
- Intended beneficiaries also have delegated authority in monitoring evaluation.

As you can see there are many different ways people can participate, sometimes we are tempted to think that only programmes showing the last 3 or 4 characteristics (faces) are truly participatory. But it's important to bear in mind that beneficiaries are not the only stakeholders in any policy and programming context. So it's not always possible to delegate full authority to them.

Normally, the degree of participation should follow this principle; that decisions be taken at the lowest level that is feasible, i.e. at the level closest to the people most directly affected by them. But of course, this is more easily said than done.

Moreover, to stress the importance of participation and inclusion does not mean you may not take a directive approach in particular situations. Some community groups, particularly of very young or inexperienced people may lack any idea of how to proceed and be in danger of losing a valuable opportunity if the worker fails to intervene. He or she may offer expert advice or suggest a possible solution.

#### 11.10.6 Promoting participation

##### Defining terms

Participatory methodologies and participatory techniques; these mean the same thing. Here is a definition:

*Participatory methodologies and participatory techniques* are used interchangeably to explain the methods used to engage people in an



interactive process of involvement and dialogue. The participatory process draws on techniques such as those practiced by Freire,

### **Participation Principle 1: Understand human behaviour**

Good participatory methods rely on an understanding of individual human behavior and group dynamics.

#### **Basic human needs**

We have basic human needs for food, clothing and shelter, in addition, each of us wants, to:

- Feel safe
- Have a sense of belonging
- Be treated with respect
- Have a sense of dignity
- Experience growth.

These are essential elements of the Ladder of Human Needs developed by Abraham Maslow (1957) in his theory of Human Motivation. It is now acknowledged, however, that these needs do not fall as neatly into place as a Maslow had originally thought.

Admittedly, our physical needs are important, and their satisfaction cannot be postponed. But even as we pursue the satisfaction of our physical needs, the remaining higher order needs also demand attention. An essential principle of participatory methodology, therefore, is that it should respect the needs which people have. In fact, you could use Maslow's hierarchy of higher order needs (the ones beyond food, shelter and clothing) as a checklist against which to measure your participatory techniques.

### **Participation Principle 2: Take into account the stage of the group**

Participatory methods should also take into consideration the stage of development of the particular group. A group may not always be able or want to participate at the level you have planned, this lack of interest could have several causes. Be careful however to ensure that a seeming lack of interest may not actually be cynicism based on prior experience, or simply a lack of familiarity with participatory processes.

#### **The five stages to group development**

Groups themselves go through different stages of development. Here is a well-known and very simple method for describing the different stages in the development of a group. Groups do not necessarily go through all stages in a perfect sequence. They may progress through the first two and then start all over again. There are also wide variations in the amount of time a group will take to negotiate a particular stage of its development.

<b>Stages in the development of a group</b>	
<b>1. Storming</b>	The potential members of group are just coming together. You may find here that people drop in and drop out. This is not the time to begin making long range plans.
<b>2. Forming</b>	Some cohesion and identity begin to emerge. Membership and participation become more stable. People are getting to know each other.
<b>3. Norming</b>	A group now exists. It has arrived at some consensus about what its purpose is and is establishing a culture – its own way of doing things. This is a good time to elect leaders and make plans.
<b>4. Performing</b>	This is the stage where the action begins. Whether it is a sports club or an environmental action group, the group gets on with it.
<b>5. Adjourning</b>	Something interesting occurs at this final stage. Some people think that groups should last forever and are very unhappy when members start to drift away. If the group's purpose has been served (or is no longer being satisfactorily met), then the group needs to come to closure. A challenge for a worker is to help the group to adjourn in a positive and productive way.

### **Participatory Principal 3: Use small group work – if appropriate**

In addition to understanding the different stages in the development of groups, the worker also needs to understand the ways which small groups can be used in the various stages of thinking, learning, planning and acting.

The small group is a popular instrument in the participatory process. Among other purposes, it can create a place of safety where those who have been silenced or silent up to this time are able to express themselves. Remember, however, that the unthinking and inappropriate use of the small group can in fact prove to be counter-productive.

#### **11.11 Youth as initiators**

It is important to explore the role of youth as initiators on the larger national stage. For youth to function in this role the government must have a generally sympathetic approach to youth and realize that using the idealism, energy and new thinking of the young is one of the few ways in which developing countries can make that qualitative jump essential for sustainable development.

**Activity 11.5**

1. Find out about youth organizations that are involved in environmental and/or sustainable development activities in your country.
2. Describe two approaches that these youth groups have adopted in an effort to promote sustainable development.
3. Discuss two ways in which you (and/or your group of young people) can become involved in the activities of any of the organizations.

**Or—**

Outline the plan to form a youth organization to deal with sustainable development issues in your country. Your plan should identify:

- the proposed philosophy of the organization
- objectives of the organization
- target group.

**11.12 Youth as activists**

What can young people do to participate in the process of sustainable development? They can become activists. Here are a few ideas gathered from international reporting on this matter.

- Make your voices heard by ensuring that you are consulted and integrally involved in your country's decision-making processes, which relate to environmental protection, natural resource management, and development.
- Encourage policy makers at both regional and national levels to adopt the strategies, which are recommended by international, regional and local youth conferences that offer perspectives on sustainable development.
- Get involved in educational and training efforts, which are designed to increase environmental awareness. (The knowledge and skills, which you gain, will empower you to contribute positively to sustainable development.)
- In addition, lobby your government to make sustainable development a compulsory aspect of school curricula and vocational training programmes.
- Get directly involved in project identification, design, implementation and follow-up.
- Organize fund-raising activities such as eco-fairs, walk-a-thons etc., that would produce seed funding for some of your own environmental/sustainable development projects.
- Agitate and collaborate to prevent more environmental degradation in your community and country.

- Enhance your ability to activate, organize and mobilize by seizing opportunities for education and employment. As agenda 21 states, *Education is critical for promoting sustainable development*. It is a prerequisite for participation in decision-making and for improving the capacity of people to address environment and development issues.
- Lobby your leaders for a continuous flow of information on the environmental so that you can keep abreast with environmental issues and problems.
- Network with youth in your community and country to exchange information and to strengthen your environmental activities at the local level. Networking will lessen the degree of duplication and save much-needed resources.
- Form yourselves into groups and discuss each of the 27 principles of sustainable development. Pay special attention to their implications for the youth in your country.
- Share, with other youth, your knowledge of and skills in environmental protection at summer camps, school, public forums and youth organizations

#### Activity 11.6

Can you suggest any other ideas, not mentioned above, that may be more relevant to your country or community?

As an initial foray into the area of social action:

1. Discuss with your group of young people, which of these strategies are most relevant to your situation.
2. Together, start to plan a project that you can put into operation over the next few weeks.

In your plan, you will need to include:

- a brief description of the problem you want to address
- your objective (what you want to achieve)
- a timeframe (planned start and duration)
- the strategies you want to use (how you want to achieve your objectives)
- an action plan (the tasks or steps you need to do or take).

*It's probably best to test the waters with a small project to begin with; it might grow into something bigger later as you and your group become more experienced.*

Or—

1. Identify an existing organization and project that you and/or the group can participate in.
2. Describe the project (problem, objectives, timeframe, strategies, action plan).

## Unit Summary

It is important to understand that programmes aimed at youth or youth serving organizations can in no way substitute for youth projects and organizations, which lead to greater youth empowerment, allowing them to run their own programs driven by their own priorities, needs and perspectives. The concept of 'for youth, by youth' has resulted in projects and programmes being more successful, such as peer education in areas of health, environmental issues and youth rights. There is a need that policies are examined in consultation with young people, ensuring a youth analysis and participation in setting up the direction and the vision for projects and programmes, youth are not targets of developments; they are participants in the process leading to sustainable development.

Countries and the United Nations agreed through Agenda 21 to the promotion and creation of mechanisms to involve youth representation in all United Nations processes in order for the young to be able to influence those processes.

An effective youth policy will have to recognize and adequately analyze the current social, cultural and economic environment that determines the livelihoods of young people. And those impacts cannot be ameliorated simple by adding a few youth projects to the pot. Young people's basic rights need to be respected – the basic rights to a home, clean water, enough to eat, a safe environment, protection from violence, equality of opportunity, a say in their future, an education, a livelihood and health care. The prevailing attitude that their time will come needs to be shed. Youth need to be part of the solution here and now. The absence of youth from policymaking is hindering the much-needed revitalization of countries, the creativity need in the search for alternatives and the renewal of leadership to take us into the next century.

In many cases, it has not been difficult to make an argument for the benefits of involving youth, the incoming generations, those who will inherit the world. What has been difficult is implementing the stated intentions – how and where does intergovernmental equity begin? The first step is a commitment to have youth themselves determines the ways in which they wish to be involved. The types of activities that are appropriate to them and, most importantly, that they are given the space, to implement their own initiatives.

## Answers to self-answering questions

### *Self-answering question 11.1*

Youth possess energy, creativity and insights, which should be tapped in efforts to promote sustainable development. Moreover, involving youth in sustainable development activities will raise their level of awareness of important environmental issues, ensure their active participation in the conservation and the protection of environment and lay the foundation for more widespread interest in sustainable development over time.

### *Self-answering question 11.2*

An *enabling* approach is about creating conditions that help young people to become more independent rather than relying on others to do things for them.

An *ensuring* approach promotes the core Commonwealth values and principles (democracy, liberty, justice and equity) because these give a sense of meaning and moral and social purpose to the ways in which young people can use their skills and knowledge.

An *empowering* approach encourages young people to think about democratic principles and practices and to have the insight and skills to influence the decisions that affect them and their communities.

### *Self-answering questions 11.3*

A professional approach to youth in development work involves:

- Seeing ourselves as knowledgeable partners rather than mere experts in our work with young people
- Distinguishing between the necessary professional detachment or objectivity, and sheer indifference
- Not controlling access to information and controlling people by language (jargon)
- Working cooperatively with other professionals and other agents rather than competing with them
- Having a commitment to lifelong learning
- Taking on the role of active, reflective practitioner.

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## Appendix 1

### Quotations

**There are only two lasting bequests we can hope to give our young people. One of these is roots; the other is wings (Hodding Carter).**

**For your country,**

**If you plan for a year - sow paddy**

**If you plan for a decade - plant trees**

**If you plan for a future - nurture youth.**

**(Proverb quoted in National Youth Policy of India)**

**"The day will come when the progress of nations will be judged not by their military or economic strength, nor by the splendor of their capital cities and public buildings, but by the well being of their peoples; by their levels of health, nutrition and education; by their opportunities to earn a fair reward for their labours; by their ability to participate in the decisions that affect their lives; by the respect that is shown for their civil and political liberties; by the provision that is made for those who are vulnerable and disadvantaged; and by the protection that is afforded to the growing minds and bodies of their children." (Jim Grant, Former Director, UNICEF)**



## UNIT 12

# SOUTH ASIA CO-OPERATIVE ENVIRONMENT PROGRAMME (SACEP)

### Unit Introduction

South Asia is the second largest growing region in the world, and their efforts to develop put extra pressure on resources and environment. Most of the south Asian countries shares similar problems stemming from poverty and over population resulting in unmanaged natural resource use and environmental pollution.

The South Asia Co-operative Environment Programme (SACEP) is an association of eight member states namely: Afghanistan, Bangladesh, Bhutan, India, Maldives, Nepal, Pakistan and Sri Lanka. It came in to being with the adoption of the Colombo Declaration and the Articles of Association at the Ministerial Meeting held in Colombo in February 1982. SACEP fulfill the need of sharing information, knowledge and efforts for tackling common environmental problems. This unit briefly describe about the

- Aims and objectives
- Functions
- Organizational structure of the SACEP and
- Programs and activities

### Unit Objectives

This unit will help you understand

1. How regional cooperation can help in human development and environmental management.
2. How participatory and cooperative efforts and sharing of knowledge and information at regional level could be use for better management of environment.
3. Being the first regional organization to be established in the sub region, what role it has played and how it could be a landmark for other organizations.

## 12.1 Introduction

The 1972 Stockholm conference had drawn the attention of the world to the environment issues that would change the life styles of the people and in many ways would threaten the future well being of the world if the continuing pattern of resource consumption was not changed to a more sustainable pattern. The warning echoed by the Stockholm Conference and the establishment of the United Nations Environment Programme was taken seriously by the developing world and in particular by the leaders of South Asia.

The initiative to establish an organization for the protection, preservation and management of the South Asian Environment was taken by the United Nations Environment Programme; Regional Office for Asia and the Pacific in the late seventies and the result was the establishment of the South Asia Co-operative Environment Programme in 1982 by the Governments of South Asia. The mission of the SACEP is to promote and support conservation and management of the environment, both natural and human, in the member states of the South Asian region in a cooperative manner to achieve sustainable development. South Asia Co-operative Environment Programme (SACEP) is an inter-governmental organization, of eight countries, namely; Afghanistan, Bangladesh, Bhutan, India, Maldives, Nepal, Pakistan and Sri Lanka, who has ratified the Articles of Association of SACEP.

All member countries of SACEP belong to the developing world, and five have been classified as least developed covering one twentieth of the earth surface and a home for about one fifth of the world's population. Most of these nations share many similar environmental problems, stemming from poverty, over population and its consequences on natural resources. According to the World Bank, during the past decade, South Asia has been the second fastest economically growing region in the world, and their efforts at increased production have put increasing pressure on natural resources and the environment. Significant natural resource concerns in South Asia include depletion of water quality and quantity, dwindling forests and coastal resources, and soil degradation resulting from nutrient depletion and salinization.

### Activity 12.1

Research about the environmental problems of your country and write few lines in your notebook about role of regional cooperation for managing these problems.

In most of these countries, much work has been undertaken for the protection and management of the environment in the face of the need for accelerated development. They are also party to several international agreements, covering many aspects of economic development and environmental conservation. However, the progress and achievements in the field of environment in these nations were not much known to each other and therefore, SACEP fulfilled a long felt need for a regional arrangement for the sharing of information and knowledge as well as for a common effort on tackling environmental problems.

The SACEP was established to fulfill a vision based on following five assumptions:

- 1) The types and scales of environmental degradation taking place in the South Asian Region are positively dangerous not only to economic development but also to the survival of the humans inhabiting it.
- 2) The greed of the rich and the needs of the poor continue to cause irrevocable damage to the fragile ecosystems and their ability to regenerate themselves.
- 3) There is an urgent need to reduce environmental degradation and pollution, while giving equal emphasis to the elimination of the root causes of environmental degradation such as poverty, over population, over consumption and waste production.
- 4) Environment and development are two sides of the same coin and therefore integration of environmental concerns in to development activities should be recognized as an essential prerequisite to sustainable development.
- 5) The ecological and development problems of the South Asian Region transcend national and administrative boundaries; hence co-operative action is needed to effectively deal them.

## 12.2 Aims

As set forth in the Colombo Declaration, the aims of SACEP are:

- (a) To promote and support the protection, management and enhancement of the environment, both natural and human, of the countries of South Asia, individually, collectively, and co-operatively;
- (b) To make judicious use of the resources of the environment towards removal of poverty, reduction of socio-economic disparity, improve the quality of life, and prosperity on a continuing basis;
- (c) For these purpose, to make the fullest use of the organizational arrangements and facilities for cooperation under SACEP.

## 12.3 Functions

The functions SACEP perform are:

- (a) To promote cooperative activities in priority areas of environment of mutual interest;
- (b) To ensure that these activities result in benefit individually or collectively to the member states;
- (c) To extend support as needed through exchange of knowledge and expertise available among the member countries;

- (d) To provide local resources towards implementation of projects and activities; and
- (e) To encourage maximum constructive and complementary support from interested donor countries and other sources.

It should be noted that, this was the first regional organization to be established in the sub region even before the coming into being of the South Asian Association for Regional Cooperation (SAARC) a couple of years later. Due credit should be given to the leaders of South Asia for their far sightedness in establishing this specialized agency.

#### **12.4 Organizational Arrangement of SACEP**

In accordance with the Articles of Association, the Organizational arrangement of SACEP is made up of five main sub units;

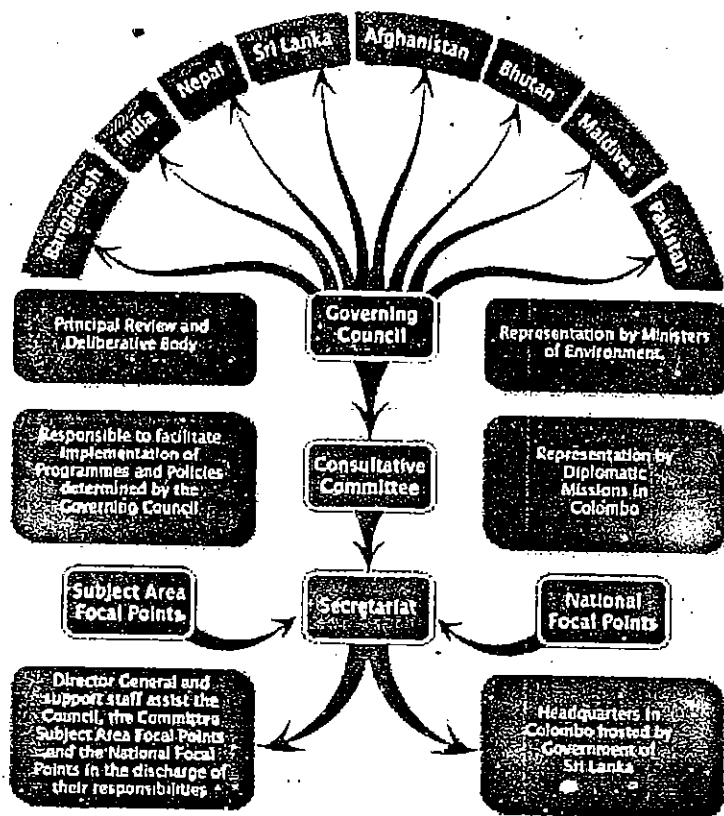
- a) The Governing Council,
- b) Consultative Committee,
- c) National Focal Points,
- d) Subject Area Focal Points and the
- e) The Secretariat

##### **a) The Governing Council (GC)**

The Governing Council is main principle review and deliberative body, responsible for determining policy and programmes of SACEP and it oversees these activities by meeting regularly to review the ongoing programmes and to endorse new recommendations put forward by the Secretariat. It consists of one representative from each member states who will be of Ministerial rank. Since becoming a legal entity in 1982, SACEP held eight GC Meetings.

##### **b) The Consultative Committee**

The Consultative Committee comprising of the representatives of the diplomatic missions in Colombo and the Secretary, of Ministry of Forestry and Environment of Sri Lanka is responsible for facilitating the implementation of policies, strategies and programmes approved by the SACEPs Governing Council. The Consultative Committee meets regularly to provide guidance to the Secretariat in its activities and up to May 2001, 79 Consultative Committee Meetings has been held. Presently the Indian High Commission in Sri Lanka is the Chair of the Committee.



Organizational Structure of SACEP

### c) National Focal Points

Each Member State has designated a National Focal Point to facilitate the work of the Secretariat and to function as the main communication link between the Secretariat and the respective country. National Focal Points are expected to implement and monitor national programmes in co-operation with the Secretariat.

### d) Subject Area Focal Points (SAFP)

The Subject Area Focal Points are expected to co-operate with the Secretariat in project identification, formulation, implementation and monitoring. The country, which is responsible for a particular subject area, designates a center of excellence in that subject and appoints a liaison officer. The member countries were assigned as the focal points for the following subject areas at the 7th GC Meeting of SACEP in 1998;

**Bangladesh:** Management of Freshwater Resources,

**India:** Conservation of Biodiversity, Energy and Environment, Environment legislation, Education & Training, Waste Management,

**Maldives:** Management of Coral Island Ecosystems, Sustainable Tourism Development

**Nepal:** Participatory Forestry Management,

**Pakistan:** Air Pollution, Desertification, Science & Technology for Sustainable Development

**Sri Lanka:** Sustainable Agriculture & Land use, Sustainable Human Settlement Development,

#### ***e) The Secretariat***

The Secretariat consists of the Director General, professional, administrative and supporting staff. The Director General is appointed in rotation from the member states in alphabetical order and the appointment is for a period of three years. Presently Mr. Mahboob Elahi from Pakistan occupies the position. The main function of the Secretariat is to assist the Governing Council, the Consultative Committee, National Focal Points, and Subject Area Focal Points in the discharge of their duties and responsibilities. It is based in Colombo, Sri Lanka and the Sri Lankan Government provides financial support for its existence.

## **12.5 Financial Arrangements**

SACEP currently receives three types of financial assistance for its activities:

- Annual country contributions from the member countries on a agreed scale of assessment
- The hosting and support facilities provided from the Government of Sri Lanka as the host country of the Secretariat.
- Financial assistance by donor/funding Agencies to implement projects and programmes
  - i Multilateral - UNEP, UNDP, IMO, ADB, ESCAP
  - ii Bilateral - NORAD, SIDA, & the Netherlands Government

The decision of the leaders of the SACEP member countries to commit funds from their tight national budgets to an organization to protect and preserve the environment just 9 years after the Stockholm Conference shows their commitment to preserve our natural resources for the benefits of present and future generations.

SACEP is the brainchild of the High Level Meeting of Ministers of the South Asian Countries held in February 1981. SACEP became a legal entity on the 7<sup>th</sup> January 1982 when the required number of countries ratified the Articles of Association. To date, 8 countries; Afghanistan, Bangladesh, Bhutan, Maldives, India, Nepal, Pakistan and Sri Lanka have ratified the Articles of Association of SACEP

## 12.6 Program and Activities

Since its inception, SACEP has promoted sustainable development in the region by implementing a number of projects and programmes in the fields of environment education, environment legislation, biodiversity, air pollution, and the protection and management of the coastal environment with the assistance of various bilateral and multilateral funding agencies. UNEP's Environment Assessment Programme for Asia Pacific (UNEPEAP.AP) made use of SACEP as a sub-regional partner in the field of environment assessment, reporting, data management and capacity building by establishing South Asia Environment and Natural Resources Information Centre (SENRIC) with the assistance from Asian Development Bank

In consultation with member governments the following areas have been selected for priority attention.

- (a) Capacity Building and Awareness Raising
- (b) Systematic Information Exchange and Intra-regional Technology Transfers
- (c) Environmental Management for Training and Institutional Development for Training
- (d) Regional Co-operation in Management Plans for Mountain Ecosystems, Watersheds and Coastal Resources
- (e) Wildlife and Wildlife Habitat Conservation in the Region

### **SACEP's Strategy and Programme-1 (SSP-1) 1992-1996**

A number of projects and programmes have been implemented since 1982. In 1992 SACEP with the assistance of UNEP reviewed progress and came up with a Strategy and Programme for the next 4 years titled:

It was formulated keeping in mind the conclusion of the 1992 Earth Summit in Rio de Janeiro and in particular, Agenda 21, the Rio Declaration and the Biodiversity and Climate Change Conventions and other relevant Environmental Conventions. The criteria for the formulation of this programme were as follows;

- collective regional priorities and interests;
- consistency with Agenda 21;
- current programmes of international, other regional and national organizations
- Agencies and prospective availability of donor funding for various programmes and projects.

Under SACEP Strategy and Programme-1- (1992-1996) the following major programmes are currently under implementation with assistance from UN and Bilateral donor agencies:

- a) Assessment of Faunal Biodiversity in the SACEP Region
- b) Co-operation in Environmental training in the SACEP Region
- c) Framework Legislation for Environmental Management
- d) SACEP Environmental & Natural Resources Information Center (SENRIC)

#### **12.6.1 Coastal and Marine Environment Management**

Coastal and Marine Environmental Management was one of the fifteen priority subject areas identified by experts of the region and SACEP since its formation has been actively involved in various programme activities in this subject area.

The Stockholm Conference of 1972 on the Human Environment was the spiritual father of the United Nations Environment Programme. The Conference underlined the vital importance for humanity of the seas and all the living organisms, which the oceans support. UNEP at its very First Governing Council in 1973 set the "Health of Oceans" as one of this priority concerns. Even today this remains as one of its major concerns. For a variety of historical reasons, a Regional Seas Programme for the South Asian Seas could not be initiated until the inception of SACEP. The quest for the launching of a regional Seas Programme for the South Asian Seas, initiated by the SACEP Member States at UNEP's Governing Council in 1982, led a year later to the designation of the South Asian Seas Region as a part of UNEP's Regional Seas Programme.

Before the South Asian Regional Seas Programme, was formalized there were four meetings of National Focal Points, a meeting of Experts and a meeting of legal and technical Experts. At the meeting of Plenipotentiaries of the Member States concerned, which was held in New Delhi on 24<sup>th</sup> March 1995, SACEP was designated as the Secretariat for the implementation of the South Asian Seas Programme. Since the date, SACEP has been involved in revising the Action Plan and getting necessary documentation from the member states to implement the programme.

#### **12.6.2 SACEP Environmental and Natural Resources Information Center (SENRIC)**

The other important programme that is being implemented by SACEP is SACEP Environmental and Natural Resources Information Center (SENRIC). The project was initiated with initial grant from ADB. The NORAD assisted Project Cooperation on Environmental Training in South Asia was successfully completed in February 1996.



### **12.6.3 Assessment of faunal biodiversity**

This project is implemented with assistance of NORAD. Under this Project, a Manual for use in the field for identification of species has already been developed and will be published after completion of the meeting. The final meeting would review and revise the regional report and approve the action plan for the assessment of Faunal Biodiversity in the South Asian Region.

SACEP with UNEP-EAP has also carried out the initial work for the UNEP Global Outlook, which will be published by the United Nations Environment Programme. SACEP with UNEP has successfully conducted a Workshop on Framework Legislation for Environment Management in the South Asian Region.

### **12.6.4 Capacity building of officials for management of coastal and marine environment**

Based on the 14 priority Subject Matter Areas: activities have been prioritized for implementation in 1996-1997 by the Secretariat. Under the area of Capacity Building & Awareness Raising, a Project was formulated in Capacity Building of Officials in charge of Managing the Coastal and Marine Environment. This was done in consultation with the Subject Area Focal Point and in line with the recommendation given by the Ahmadabad Workshop on Regional Training in Environmental Capacity Building. The project is titled "Regional Training for Management of Protected Areas and Coral Islands Ecosystems in the Indian Ocean." First phase of this project will concentrate on drawing up of a 4 week syllabus and modules for the training course. This will be done through a meeting of the member country Official experts and 4 international Consultants.

With regard to the South Asian Regional Seas Programme, immediately after the meeting of Plenipotentiaries, IMO was requested by SACEP Secretariat to give an estimate for a Final Review of the Oil pollution Contingency Plan for the Region. IMO estimated that the updating and a final meeting at ministerial level to adopt the Action Plan would cost US\$ 35,000. An immediate request was sent to UNEP Nairobi and it is envisaged that this meeting can be held towards the end of the year.

### **12.6.5 State of Environment Report**

In the project that was concluded in New Delhi on Framework legislation for Environmental Management in South Asia, one of the recommendations was the setting up of a national task force for the review of the framework environmental legislation. Based on this recommendation and in close consultation with Legal Section of UNEP/ROAP, a project was developed to carry out this task in the member countries.

After the Earth Summit in Rio, UNEP was given the task of assisting national Governments through sub-regional bodies to build up capabilities within national governments to annually prepare their own State of the Environment reports and co-operate with sub-regional organizations to prepare the Sub-Regional State of the Environment Reports. Under this

mandate, UNEP in co-operation with sub regional organizations have to fulfill this task by the next earth summit, which will, held in 2002.

The objectives are:

- a. Increase awareness and understanding of environmental trends and conditions;
- b. Provide the foundation for decision making at all levels and
- c. Facilitate the measurement of progress towards sustainability.

Under this task, UEP/EAP has in co-operation with the sub-regional organizations initiated activities for the realization of these objectives. Under the 1st phase of the programme being implemented by SACEP, India and Pakistan has been allocated US \$ 20-25,000 each for activities to implement the programme and work has already commenced. In this regard, the data for state of Environment Reporting has been collected by the Indian Government's designated Agency; the Tata Energy research Institute. A Workshop for the officials of the Indian Ministry of Environment & Forests concerned with the subject has already been held in AIT, Bangkok in July 1996. With regard to Pakistan, the National Focal point for the activity has been notified at the Ministry of Environment, Forests and Urban Affairs and computer equipment for the purpose has been supplied by SENRIC to the Pakistani Focal Point.

The State of the Environment Report for South Asia has been finalized and is awaiting the approval of the ministers of member countries for some time. However, many of the ministers were unable to attend the meeting last year. This meeting is now being planned by UNEP/EAP/AP and SACEP for late 1996 or early 1997.

Subject Area Focal Point was identified in consultation with the governments and they were to play a crucial and active role in formulating projects on the subject matter of which they were in charge. Only few Subject Area Focal Points have been active as a result of which activities in certain Subject Areas have been minimal.

## Unit Summary

The South Asia Co-operative environment Program (SACEP) is an association of eight member states namely: Afghanistan, Bangladesh, Bhutan, India, Maldives, Nepal, Pakistan and Sri Lanka. It came into being with the adoption of the Colombo Declaration and the Articles of association at the Ministerial Meeting held in Colombo in February 1981.

SACEP aims to promote and support the protection and enhancement of the environment of South Asia individually, collectively and cooperatively to encourage the judicious use of the resources of the environment with a view to alleviating poverty, reducing socio economic disparities, and improving the quality of life of the people.

Among the key function of SACEP are; to promoting co-operative activities in environment la protection an management which are beneficial to the member states; facilitating sharing of knowledge and expertise and providing resources for project implementation through donor assistance and support.

Organizational arrangement of SACEP is divided in to five subunits: The Governing Council (GC); The Consultative Council, National Focal Points, Subject Area Focal Points and the Secretariat. Currently SACEP receives financial assistance from governments of member countries, government of Sri Lanka and from donor/funding mulilateral and bilateral agencies.

SACEP is working in the domains of capacity building and awareness raising, systematic information exchange and intra-regional technology transfers, environmental management for training and institutional development for training, regional co-operation in management plans for mountain ecosystems, watersheds and coastal resources, wildlife and wildlife habitat conservation in the region.

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<http://www.sacep.org.com>

# SAFLI

South Asia Foundation  
Learning Initiative



# Towards Participatory Management

DRAFT



*Department of Environmental Science*  
Allama Iqbal Open University Islamabad

TOWARD PARTICIPATORY MANAGEMENT

# **Block IV**

## Participatory Resource Management

*Post Graduate Diploma*

Environmental Sustainable Development  
South Asia Foundation Learning Initiative



Uttar Pradesh  
Rajarshi Tandon Open University

**PGD-ESD-02**

TOWARDS PARTICIPATORY  
MANAGEMENT

**Block**

**4**

**Participatory Resource Management**

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**UNIT 13**

**Participatory Forest Resource Management**

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**UNIT 14**

**Participatory Management of Mountain Ecosystems**

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**UNIT 15**

**Participatory Coastal Resource Management**

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**UNIT 16**

**Participatory Irrigation Management and  
Wetland Conservation**

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## UNIT 13

# PARTICIPATORY FOREST RESOURCE MANAGEMENT

### Unit Introduction

The focus on energy forced attention on the rest of the world where most people are dependent on wood as their main fuel for cooking and heating. Participatory forestry emerged as a new world-wide practice for forestry development and was promoted by international organization and sold in programme and project packages. Although the types of interventions diversified, the profession continued to embrace those traditional practices of forestry which were dominated by the twin dogmas of timber primacy and sustained yield. Forestry was claimed to be the unique vehicle by which the needs of local people could be met and the quality of rural lives enhanced. This was seen as the means by which social change could be affected.

This unit provides a critical analysis of the strengths and weaknesses of these new approaches and considers whether participatory forestry provides a new paradigm for forest management or whether it is another fashionable, but soon to be marginalized, development trend.

### Unit Objectives

After completing this unit, the students should be able to learn:

1. the concept of participatory forestry,
2. the origin of this new approach,
3. the trends in this direction, and the
4. paradigm shift in forest management from centralization to decentralization



### 13.1 What is Forestry?

Although this may seem to be a trivial question its answer provides many of the reasons why decentralization and the role of participatory have become such important and all-pervasive questions in the forestry sector.

Forestry encompasses many objectives; commercial rural development (poverty alleviation, employment creation, empowerment of marginalized groups -- in particular, women), tourism and amenity, and conservation. Conflicts often arise between these objectives and the priority assigned to each in a given area. Research disciplines required for the support of forestry include; economics microbiology, history, increasingly political science, anthropology. Sociology, law ecology, chemistry (soil science) zoology botany among many others. Forestry, alone among the professional disciplines, derives its power base from ownership of large areas of land. It is highly centralized with a diversity of roles and products, where internal conflicts and contradictions often dominate. Its practice has required the development of multi-disciplinary skills and their accommodation within a framework that allows their full expression. The power base derived from its landholdings has also made it vulnerable to attack by a number of environmental and human rights groups who contend that this power has been wrongfully wrested from those local groups whose livelihoods are deeply associated with the forests.

Timber, logging concession, government officials local forest users, democratic institutions, corruption-- all these words link up in different forms of open and unhidden relationships. As early as 1975, Jack Westoby, reflecting on 20 years of development assistance to the forest sector questioned its contribution to the economic and social life of underdeveloped nations. Still, in many countries of South-East Asia, the nexus between timber, the state, and the trade is seriously undermining the development of any form of local democratic institution for the management of forest resource; the practice of dealing out logging licenses to members of the state legislature to secure their allegiance is so commonplace a currency. Thus the potential impact of decentralization on the formal and informal institutions is dramatic. As forest Departments have been forced through economic and political expediency to adjust the structures certain features of these institutions have become more apparent.

From the catapulting of forestry on to the international stage, in the early 1980's to the grassroots questioning of the role of the profession, the response has been a defensive one of seeking new forms of partnership that will help to deflect some of this criticism. Together with the global climate of decentralization and bureaucratic divestment, this has led to the current situation where forestry (so long impervious to the decrees of the outside world) has been forced to respond to these changes and examines its own institutional framework. This framework now contains responsibility for a wide range of often conflicting local management objectives as indicated above. Structures that were established to fulfill the primary objective of revenue maximization are now redundant in a world that insists that forest lands be managed for a multiplicity of benefits.

*The change from primary objective of revenue maximization to multiple objectives ranging from conservation management to development of local organizations for forest management has profound consequences across the forestry sector.*

The debate about decentralization is by no means confined to the developing world but is live in every country.

The implementation of decentralization process has brought issues of ownership and control to the forefront of debate. In forestry, the historical development of state control over forestlands has meant that the land base held in trust by the institution for the public good is enormous. The following statistics provide an indication of the extent of forestry estates in Asia. In India, Forest Departments control 22% of the national territory (Agarwal and Narain, 1989); in Nepal forests and shrub lands comprise some 4/3% of the total land area (Nield, 1985). In Indonesia, 74% of the territory is controlled by the Forest Department; and in Thailand, the Royal Forest Department; and in Thailand, the Royal Forest Department administers some 40% of the nation's land (Colchester, 1994) These extraordinary figures underline the fundamental challenge posed to these departments by the call for devolution of some of this control to the millions of people living in forest areas. The means by which this is being done needs considerably more analysis and the form of the linkages between state and people needs to be critically assessed (see Chapter 4 and 5 for further discussion).

### **13.2 What is Participatory?**

The panoply of terms spawned by new development interventions requires careful assessment and use, since they have as many meanings as there are users. This is particularly the case with participation, which over the last 10 years has become one of the most widely used words in the development dictionary. However as indicated, what is meant by participation is highly contest specific and its effects range from coercion to full local control. The cynical view of participation lies at the coercive end of this continuum.

At root many of the problems currently being experienced in both India and Nepal can be traced back to the form of participatory practice developed by the project or programme. Criteria developed for assessing the effectiveness of participatory processes and of the local organization formed as formed the basis for policy formulation.

### **13.3 What type of partnership?**

The arguments surrounding the decentralization debate involve discussion of what is an appropriate institutional form to manage forest resources. As the following sections indicate, there is no one solution to those questions, but rather an array of arrangements according to the particular requirements of the forest users. How far the forest bureaucracy can or will divest itself of some of its authority remains to be seen.

However, in an atmosphere of increasing intolerance of bureaucratic ineptitude, there seems little doubt that forest services will be forced to divest some of their authority, at least at the margins of their power base, with the release of some degraded lands to joint management schemes with local people.

Just as questions are being asked about the role of the state in regulation and management of natural resources, so too are questions being asked about the nature of local organizations being developed by governments and the interests of those they represent. Policies in Thailand that have encouraged the penetration of the state into regions previously managed by indigenous institutions have produced questionable benefits for the majority of local people. These participatory institutions which purportedly give the village a role in making rural development decisions are the facilitators of a paralyzing bureaucratization of village procedure which has replaced the old more informal institutions reflecting on community development practices of the 1960's and 70's echoes these sentiments:

Only very much later did it dawn on the development establishment that the very act of establishing new institutions often meant the weakening, even the destruction, of existing, indigenous institutions which ought to have served as the basis for sane and durable development; the family, the clan, the tribe, the village, Sunday, mutual aid organizations, peasant associations, rural trade unions, marketing and distribution systems and so on.

It is disingenuous to characterize development as the two simple alternatives – decentralization or centralization, local people versus government together with the contention that grassroots environmental movements are necessarily going to lead to more wide-spread benefits, this has to be carefully evaluated.

The calls for grassroots development brings into question the conditions under which it is appropriate. As the vast literature on collective action shows that there are many conditions under which collective actions has broken down and resources have degraded. The defining features under which such action is appropriate remain elusive in the forest sector, although certain patterns are emerging – must particularly those seen in resource-scarce situations, well illustrated in the Middle Hills of Nepal (see also examples into the African rangelands).

At one extreme of the public to private sector continuum lies the New Zealand Forest Department, where probably one of the most far-reaching restructurings of the sector has occurred. Here, the forest service was abolished and separate organizational structures were established. This deconstruction of a monolithic organization in favour of several discretely functioning units has been one mechanism to cope with the conflicts of multiple objective management engendered within one organization. The major reasons which led to the restructuring of the New Zealand Forest Service were an inability to provide the transparent accountability for the mix of function.

By identifying and separating out these objectives and forming distinct organizations each with primary responsibility for a major objective, conflicts become public (i.e. intra-departmental wrangling is more visible than intra-departmental disputes). Such an approach may also recommend for South Asia.

Demarcation of territorial responsibility and therefore also accountability is easier to attribute. As such, the advisor and regulatory functions are the responsibility of a Ministry of Forestry Conservation, a subject that has frequently brought forestry professionals into conflict with environmentalists, and which is considered by many to be irreconcilable with practice of commercial forestry, has been assigned to a Department of conservation (primary responsible for natural forest conservation). The state-owned forestry Corporation was made responsible for commercial, plantation resource-based forestry activities. In addition, the great power base of a forest service – its land – has also been largely privatized.

The strong message that emerges from the New Zealand experience is that there is no blue-print for institutional change; the structure of organizations necessary to meet international, national and local imperatives must emerge from the particular circumstance of each nation. The principle of decentralization, although global, does not necessarily lead to a globally uniform response. These responses need to be discussed where the implies is of the transition for public to private sector operation and the degree to which divestment can and should occur are assessed for Nepal and India.

### **13.4 What Are The Origin of Participatory Forestry?**

Throughout much of the last 20 years, international attention has focused on the plight of tropical forests, issues of resource degradation, declining biodiversity and the impact of decreasing forest resources on global climate. As indicated in many studies, the forest sector has adjusted national policies and practices in response to number of internal and external factors.

At the international level, proportionately less attention has been focused on local issues of decreasing access to forest resources, and the implications for local people dependent on forests for securing their livelihoods. In recognition of this, local forestry programmes have sought to improve the well-being of forest dependent villa

#### **13.4.1 The eco-crisis and the basic needs debate**

The post-war period from the mid 1940s was a period of increasing prosperity, rapid industrialization and full employment within the core countries of the Western world. The economic climate was strongly relaxed in modernization theories, which held that poor countries could follow the stages of growth experienced by developed countries if industrialization and modernization were stimulated by capital investment. The central concerns of modernization theory were the dichotomy between tradition and modernity and the assumption that the advance from tradition to modernity is a simple unilinear progression. The so called 'Third world' was supplied in the form of large infrastructure packages to develop an economic base from which to promote industrialization and thus economic development in the expectation of diffusion or 'trickle-down' of benefit to urban and rural poor.

Modernization theories permeated all sectors, including forestry. It has been argued by many authors argument that industrial forestry would stimulate development in underdeveloped countries. He held that forest-based industries had strong forward and backward linkages with the rest of the economy because they furnished a wide range of goods and services and used mainly local inputs.

The demand for forest products was forecasted to rise rapidly following the rapid industrialization of all economies. This provides a useful critique of the analysis and contends that the drive to an effective economy can only be achieved through the sound development of a productive rural economy rather than by imposition of a modern industrial framework.

These arguments provided the basis for forest policy development in both developed and less developed countries. They strongly influenced the form of forestry development proctored by the new international aid agencies such as the world Bank and the Food and Agriculture Organization, among many others (for further references to this era. At this time in Nepal, working plans were being drawn up for the extensive Tarai Sal (*Shorca robusta*) forests, In India too, the increased demand for forest products era met through heavy investment in plantations for the production of industrial wood-based products. Capital was invested in large forest industries supported by the raw material form plantations and intensively managed natural forests.

The boom in Western economies ended abruptly with the economic crises of the early 1970s. Inflation, fuelled by the United States spending on the Vietnam War, soared further when the OPEC cartel of oil-exporting nations secured a four-fold increase in the price of oil. The economic crises led to a realization that industrialization did not necessarily lead to the economic or social development of underdeveloped countries. Rural and urban poverty became the focus of development theory, with sustenance of basic needs forming the objective Of development.

The focus on energy forced attention on the rest of the world where most people are dependent on wood as their main fuel for cooking and heating. A series of reports highlighted the linkages between the millions of people dependent on a rapidly dimensions. At the same time as these concerns were emerging. These research reports were influential in revealing the growing gaps between rich and poor. He showed how the inadequacy of modernization theories and the policies thus derived from theory has contributed to the increasing poverty of many countries, The debates within development theory pursued the path of fulfilling the basic needs of the poorest and focused on securing the economic advancement of rural populations, This scenario of eco-crisis and livelihood degradation was well developed and has been formative in the construction of forest policy and practice in both India and Nepal.

Forestry, as a follower of development strategies evolved in wider fields, straggled behind the changing modes of development policy. The shift away from industrialization as the vehicle for development slowly percolated through the forestry sectors of aid agencies. The late, 1970s saw a spate of conferences and policy statements. He looked back in 1978 at the policies fo

industrialization and modernization that he has so ardently advocated in 1960s and found that very few of the forest industries that have been established in underdeveloped countries have in any way promoted socioeconomic development. At the 1978 Eighth World Forestry Congress (Forests for People). Where he admitted his disappointment, he elucidated a new social role for forestry, a form of forestry which became known as social forestry and embraced notions of communal action by rural people. The new model to be promoted and followed internationally was stated by FAO was (note the male orientation):

"Forestry for local Community Development is a new people oriented policy ... the objectives of which is to raise the standard of living of the rural dweller, to involve him [sic] very existence and to transform him [sic] into a dynamic citizen capable of contributing to a larger range of activities than he [sic] was used to and of which he [sic] will be the direct beneficiary. Forestry for local community Development is therefore about the rural people and for the rural people".

This statement heralded the beginning of a major programme launched by FAO and the Swedish International Development Administration to help the development of community forestry programmes around the world. In the same year, the World Bank issued a Forestry Sector Policy Paper which also indicated a major change in direction away from support mainly for industrial forestry to forestry to meet local needs.

During the last two years, there has been a significant change in ... Bank activity in preparing forestry projects. Whereas only four of the 27 projects financed between 1953 and 1976 were specifically intended to benefit rural people, over half of the 40 projects in the Banks forward lending program are people-oriented as opposed to industry-oriented.

Participatory forestry emerged as a new world-wide practice for forestry development and was promoted by international organization and sold in programme and project packages. Although the types of interventions diversified, the profession continued to embrace those traditional practices of forestry which were dominated by the twin dogmas of timber primacy and sustained yield. Forestry was claimed to be the unique vehicle by which the needs of local people could be met and the quality of rural lives enhanced. This was seen as the means by which social change could be affected.

Although much attention was focused on the drudgery and increasing difficulties of fuel wood collection, the social and political problems relating to resource access and property rights were largely ignored. It was naively assumed that increasing physical supplies would provide widely distributed benefits. The size of the presumed fuel wood deficit is not the critical factor; rather it is the quality of the impact on individual and the amount of labour each household has available to use for fuel collection. As with most issues, the actual response to crisis at the local level is compel and is determined by a number of interlinked issues.

### **13.4.2 Property Rights and Participatory Forestry**

At the heart of participatory forestry lies the battle for ownership of forest lands. Property rights structures have for the last century been skewed in favour of the state, at the expense of local people's needs. Under recent forestry initiatives, new tenure arrangements have been introduced. It is not clear how ever, that these changes alone have made a sustainable difference in villagers well-being. In some cases, villagers has de facto use rights to forest lands already (and formalization of these rights has in fact led to a diminution in the benefits available). In other cases, the rights were more short-lived than expected. The history of communication of rights in Nepal and India is discussed in.

Villagers themselves in several countries have raised questions about the security of their claims in the face of political instability and shifting government policies at the national level. Although use rights have been important in increasing villagers security of access to land, there continues to be debate about whether they should press for full ownership. Advocates of indigenous people's rights feel that these communities should have their original land claims recognized by the state. Such views underpin Principle 22 of the Rio Declaration – a Declaration which guides (or should guide) the approaches of governments to local communities and management of natural resources. The principle is reproduced here as it describes the new philosophy and provides the ideological backbone for interventions in the forestry sector.

“Indigenous people and their communities, and other local communities, have a vital role in environmental management and development because to their knowledge and traditional practices. States should recognize and duly support their identity, culture and interests and enable their effective participation in the achievement of sustainable development.”

In the following sections the background to the development of participatory forestry approaches in South Asia is considered, including an analysis of the global context in which policies of decentralization and divestment of public sector authority have become the currency of action. This provides the context in which to consider in detail the major defining features of the policy and implementation differences between India and Nepal.

## **13.5 The Decentralization Debate in the Forestry Sector**

Why has participatory forestry become such an important initiative within the forest sector? One of the major reasons results from the desire of the international community to achieve sustainability and efficiency through decentralization and public sector reform. Participatory forestry represents the major attempt to achieve this aim. The new management method talks about clients, stakeholders and interest groups, and asks the private and public sector to identify their client groups and their needs, and to respond with services that will support these groups. This new managerialism is mirrored by political theory, where decentralization also requires, with these groups, with government bureaucracies restructuring to support their clients. The institutional change implied by these approaches is far-reaching.

Elements of these changes are still unexplored within the forest sector, although as is discussed forestry projects charged with facilitating institutional change are now beginning to address these issues.

Forest Departments in common with other government agencies across the world, are facing hard questioning concerning their future role in the sector. In New Zealand, for example, government took the radical step of privatizing the Forestry Commission. In the UK the form of forest sector management is still to be seceded, but undoubtedly there will be some change as indicated by the split between a forest authority and a forest enterprise. In the USA the Gore Report in 1993 has equally far-reaching impacts on the domestic forest service and also on the agency charged with over seas development. In India, public sector reforms is emerging onto the public arena, prompted and in part by the actions of the World Bank.

This unit considered the following questions surrounding the impact of decentralization as it is manifested through participatory management practices within the forestry sector.

- What are the impacts of this process on to formal and non-formal forestry institutions?
- Under what new institutional arrangements should forests be managed?
- How central is a restructuring of the property rights framework to enable effective decentralization?
- Who are the winners and losers?

### **13.5.1 Decentralizations versus devolution**

There are many questions still to be addressed about the effectiveness of decentralization as a political tool to ensure devolution of power as many authors indicates:

“Decentralization has been seen as a means by which the state can be made more responsive, more adaptable, to regional and local needs than is the case with a concentration of administrative power and responsibility in the central state... But decentralization of government in itself does not necessarily involve devolution of power. The extension of the state outwards and downwards can equally serve the objective of consolidating the power of state at the center as well as that of devolving power away from the central state; it can both extend the state's control over people and well as the people's control over the state and its activities. Decentralization is a two-edged sword.

Although the calls for devolution of power to the local level are pervasive across the international community, and all recognize the central role of local users of resources in management, how effective has this devolution been? As discussed, is it necessarily such a good thing? Since much of the experience gained with the implementation of new forms of forestry is



relatively recent, it is perhaps too soon to be able to pronounce definitively on success or otherwise. However, early indication as discussed in this book, do indicate that rhetoric and reality remain far apart. Thus although major donor organizations and international agreements may all subscribe to the following view, the reality of such a goal is still distant.

The pursuit of sustainable development requires a political system that secures effective participation in decision-making. This is best secured by decentralizing the management of resources upon which local communities depend, and giving these communities an effective say over the use of these resources. It will also require promoting citizens, initiatives, empowering people's organization and strengthening local democracy.

The World Bank, FAO through its Tropical Forest Action Programme, ITTO and IUCN all share this central tenet of local participation in the management of resources (see recent policy documents such as the World Bank, 1991). The extent to which such principles can and should direct development policy in the forestry sector is still to be questioned. At the root of this rhetoric is there a real quest for a new world order where actions are assessed in the light of their impact on individuals and where governments, and their agents are held accountable at the most local level. Some would contend that this should be the underlying thrust of the approach while others see it as a means through which to decrease the costs of government, and enhance the participation of the private and other. Is it a call for a new democratic structure that allows those at the local level control over their destinies? Furthermore, is forestry an appropriate vehicle through which to challenge the existing form of governance?

Do decentralization and devolution lead to greater equity? Is this an obtainable goal? Is the obverse of this centralization and inefficiency, accountability of public organizations. Divestment, privatization, an appropriate response to the needs of villagers wanting to gain greater control over the use of and access to natural resources? Some influential commentators on the political economy of countries such as India. Question the validity of a direct transfer of Western ideology (Ghosh, 1994). This chapter, and indeed the study Guide as a whole, does not attempt to answer these questions but tries to assemble some evidence to indicate the complex nature of the impacts of decentralization (Whether partial or total). Forestry approaches that can match the complexity of environments in which it is being developed.

### **13.6 The Development Sustainable Forestry Context: South Asia**

South Asia has been witness to a series of dramatic experience in the participatory management of forest resources, Since the 1970s social and community forestry programmes in both India and Nepal have attempted to transform the relationship between a powerful state bureaucracy and local people directly dependent on forest resources. These programmes represent the realization that a large proportion of the population depends heavily on forest resources for subsistence, energy, nutrition, income and the maintenance of farming systems. They acknowledge the failure of traditional custodial management of forests by government to halt the loss an

degradation of the sub-continent's forests, without the active participation of local communities.

The inadequacy of government based approaches to forest protection and management led to the search for alternatives, and experimentation with a number of approaches. These can generally be classified into social forestry, farm forest, community forest, joint forest management and rural development forestry. In this Guide, the umbrella term used to refer to all these approaches is participatory forestry, accepting the diversity of interpretations of participatory. Although as some have contended the use of the word participatory is probably more problematic than some of the more clearly focused terms such as collaborative or as Johnson suggests, good forest management it is used here, however, because the breadth of interpretation associated with it is one of the main characteristics that this Study guide explores.

The earliest mention of social forestry was in India where several States pioneered tree-growing programmes outside the traditional forest boundaries. For example, in India, the State of Gujarat in 1970 set up a community Forestry Wing in the Forest Department and Tamil Nadu started a tree-planting programme for local employment generation on tank foreshores and village wastelands as early as 1956. After 1973 half of the proceeds from these plantations were given to local panchayats (the lowest unit of local government administration) and local people were allowed to collect fodder from the plantation areas. Under some interpretations of social forestry it could be considered that its formal origins lie in government programmes of the late nineteenth century where village forests were demarcated. However under other interpretations this would be considered to have been a programme of removal of local people's rights to manage forests. Indeed many commentators in both India and Nepal would assert that participatory forestry has been implemented, informally and unrecognized, by local people over many decades and generations, and that the so-called new approaches are merely reproducing (often badly) indigenously derived systems of forest management.

Thus, by the early to mid-1980s it was possible to make some assessments of the social and community forestry programmes. The dichotomy of understanding the meaning of 'social' in social forestry has interesting and long-running consequences for participatory forestry. In the early years of external funding was given on the basis of poverty alleviation where forestry was seen to be the appropriate entry point to reach the more marginal groups in society. However, as evidence from India indicates this ideal was far from realized through the social forestry programmes and in many instances poorer groups were dispossessed from the land they had been using, particularly those groups whose livelihoods were dependent on access to grazing lands. The mix of objectives ascribed to social forestry doomed the programme to difficulties from the outset, with a multiplicity of target groups to be reached but only one model – that of woodlots.

Although there is evidence to indicate that farm forestry in certain parts of India proved to be immensely successful in the initial stages, as demonstrated by the demand for seedlings which far outpaced projects or supply private tree growing on a large scale was confined to parts of North western India, Gujarat and Karnataka, resulting in localized over-production

of poles and a consequent depression in prices, Perhaps because of falling prices and local surpluses, the initial boom in farm forestry has slowed.

Reviews of social forestry programmes, which had objectives of developing the common property resource, have been far less positive, one of the common factors identified in tier failure was the absence of people's participation in planning and management, which led to poor survival rates and the reluctance of community institutions to take over responsibility for the management of plantation. Furthermore, even though both these programmes shared the common objective of reducing pressure on forest lands through crating alternative sources of fuel, fodder and forest products, degradation still continued. The intense focus of funds and energy on private and common lands in India redirected attention away from investment and management of natural forests. It is this background that led to the emergence of a fundamentally new practice – community forestry in Nepal by local people, or joint forest management, as it is known in India, involving local people actively in the protection and management of state forest lands, While community forests are being managed in Nepal, joint forest management arrangements are being explored in India between local people an State Forest Departments, in the process many self-initiated and indigenous forest management systems are being documented and are gaining recognition. Social forestry and farm forestry were the first new practices in recent history to bring foresters out of the forest and into the villages and farms of the people who are the forests primary users, New community forestry programmes seek to ago to stop further , recognizing the role of these users in the management of natural forests – bringing the people back into the forests.

In a workshop to exchange experience between practitioners of social and community forestry in India and Nepal the outcome suggested that, although there were many similarities in experiences, there were also some major differences In many cases , failures in one country were mirrored at a later date in the other indicating that although these two notions may have many points of interaction there has been little or no sharing of experiences in the forestry sector. It is estimated that over \$2 billion has been invested by donors alone on these programmes over the last 15 years. National and state forest Departments are now allocating or re-directing substantial funds, often with large donor assistance, for community /joint management. Yet these new forestry experiments are still evolving, and their focus on local institutions and equity make them more process-oriented, and less amenable to rigid target-based development planning. People's participation, reorientation and training of forest staff, building local level institutional participatory micro planning, equitable benefit sharing, and gender-sensitive programming have all become new development imperatives. Community forestry in Nepal and joint forest management in India are beginning to take on these challenges in different ways.

The essence of current changes in forest management in both Nepal and India lies in the attempt to shift control and management of forestland form centralized Forest Departments to decentralized people's organizations. The historical background and legal basis to the two programmes are unique to each country although they do share certain similarities (particularly in recent years with the new hegemony of aid programmes. The types of

community institution though they are still evolving and share many features, are distinct and differ between countries and within states in India. The nature and extent of the shift of control from State/national to local/community level also differs considerably. It is in the implementation at various levels that a greater degree of overlap exists, although the sequence of planning and ownership of management varies significantly. Ironically, the programmes in both countries have focused more attention on initiating community protection (India) or simple operational plans (Nepal) than on making the more dramatic shift to active co-operative forest managing and to addressing the technical social and economic issues which accompany such a transition. Many of the problems, faced by both countries, are therefore very similar.

### **Useful Forestry Terms**

Forestry calls an area of forest a stand, and they classify stands on the basis of tree composition. The two major kinds of commercial stands are **even-aged stands**, where all live trees began growth from seeds and roots planted in about the same year, and **uneven-aged stands**, which have at least three distinct age classes.

In even-aged stands, trees differ in height, girth, and vigor. A forest that has never been cut is called a virgin forest; one that has never been cut and has regrown is called **second growth**. **Old growth**, a term that has gained popularity in several well-publicized disputes about forests, is not a scientific term and does not yet have an agreed on, precise meaning. In popular usage it often refers to virgin forest. Another important management term is rotation time, which as applied to forests, is the time between cuts of a stand. Trees are divided into the dominants (tallest, most common, and most vigorous), co dominants (fairly common, sharing the canopy or to part of the forest), intermediate (forming a layer of growth below dominants), and suppressed (growing in the undestroyed).

## **Unit Summary**

Forestry, as a follower of development strategies evolved in wider fields, straggled behind the changing modes of development policy. The shift away from industrialization as the vehicle for development slowly percolated through the forestry sectors of aid agencies. The wise management of forests is a major environmental priority. Many new plans and programs have been proposed, especially for tropical forests. As explained in this unit, a major goal of forest management is sustained yield; some forests are managed like mechanized farms. Indigenous people and their communities, and other local communities, have a vital role in environmental management and development because to their knowledge and traditional practices. States should recognize and duly support their identity, culture and interests and enable their effective participation in the achievement of sustainable development." The lesson learnt from this unit is that there is no blue-print for institutional change; the structure of organizations necessary to meet national and local imperatives must emerge from the particular circumstance of each nation. The principle of decentralization, although global, does not necessarily lead to a globally uniform response. These responses are the transition from public to private sector operation.

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## **UNIT 14**

# **PARTICIPATORY MANAGEMENT OF MOUNTAIN ECOSYSTEMS**

### **Unit Introduction**

Mountain conditions, being different from conditions on the plains, need special consideration. However, these conditions have been disregarded by both conventional development strategies and by mountain people themselves (within the changing demographic, institutional, and technological settings), leading to the breakdown of production systems that are resource-regenerative and diversified, indiscriminate resource use intensification, and degradation of environmental resources. This has resulted in various forms of resource degradation reflected by decreasing resource availability and productivity, and general deterioration in the economic conditions of most people depending directly upon mountain resources, especially land-based activities.

In this unit, we will examine:

- Fragility of mountain ecosystem
- Ecological role of mountains
- Socio economic considerations
- Sustainable mountain development
- The long term vision of sustainable development of the Hindu Kush-Himalayas

### **Unit Objectives**

After going through this unit, the students should be able to learn:

- Environmental importance of mountain ecosystems
- Participatory management of mountain ecosystems
- High priority issues in Hindu Kush Himalayas
- Long-term goals for sustainable development of the Hindu Kush-Himalayas



## 14.1 Introduction

Mountain are ecosystems with a distinct identity just like the flood plains, deltas, mangroves, wetlands, and deserts, When we attempt an overview, of the mountain ecosystem of South Asia, we find a fascinating variety from the high mountains of the Karakoram, Himalayan, and Hindukush ranges starting from Iran and Afghanistan and ending in Nepal, India and Bhutan to the low flung hills elsewhere in Pakistan India, Bangladesh and Sri Lanka. Thus we have the Zagross in Iran and Sulaiman and Central Makram ranges in Pakistan; the Arrival's, Sivaliks, Vindhychal ranges, the Khasi, Naga and Mizo hills and the Western and Eastern Ghats in India; the Chittagong hill tracts of Bangladesh which are like a spur from the Himalayas and the central mountains of Sri Lanka. The highest mountains of world are in the Himalayas with Mount Everest being the highest.

## 14.2 Fragility of Mountain Eco-systems

Most of the mountain ecosystems are fragile in the geological sense, prone to seismic movements, and lands slides and are highly erodible. Volcanic activity has been noticed in the Andaman group of islands in India. The rocks are often loosely held together and there is evidence from the fossil findings in the Himalayas and even in the rock formations in the Deccan that many of these mountains rose from the ocean floor millions of years ago. Such movement implied the existence of sand, shale, limestone and other marine substances. Hard rocks like granite predominate. Still there is some evidence of activity, particularly in the Himalayas where the plate movements below seem to suggest that the mountains are rather young.

## 14.3 Ecological Role of Mountains

The mountains of South Asia as in other areas have a definite role to play in the climate of the rest of sub region. They act as windbreaks or stop the march of the desert. The mountains do have a bearing on the climatic conditions in the plains. The salubrious climate and the mountain air combined with lovely landscapes draw tourists to these mountains and hills. Their role as water conservers and moderators of water flows is however better understood and appreciated. Thus, melting snow from the Himalayas keeps rivers like the Indus, Ganga and Brahmaputra perennial and help in irrigation of the plains below. In this context it is worthwhile quoting the Words of Dr. M. S. Swaminathan, the well-known agricultural scientist in his first G. B. Pant memorial Lecture. He said, "the destiny of nearly 40% of our population inhabiting the Gangetic plains depends on the management of the Himalayan hydrological estate. One of the urgent tasks facing us is the conservation and wise use of this extensive hydrological estate, spread over an area of about 6,0,000 sq. km". Innumerable springs, streams and waterfalls in most mountains help in storing water for drawals in emergencies like long period of drought. There are many lakes among the mountains, which help stabilize the water regime helping the fauna as well as the flocks of the nomads. Some of the most beautiful wetlands of the world like the Dal Lake are fed by the waters of the mountains.

## 14.4 Soil, Vegetation and Agriculture

The mountains ecosystems store a great deal of soil and also add constantly be processes of erosion of the rocks to the silts of the river and deltas enriching food production potential downstream. Excessive run off of soil occurs when the diverse forests on steep gradients are removed. There are cold deserts too in parts of the mountains like Himalayas, which have different types of vegetation and with impacts on climate of the rest of the region. There are grasslands or rangelands too in the mountains like the Alpine meadows, which support large populations of domestic and wild animals. In the Nilgiri mountains of south India the grassland forest ratio is a matter of considerable debate. Recent efforts to convert grasslands into forest plantations have encountered resistance from the indigenous population of Toda tribals living there as they have a pastoral tradition. The South Asian mountains have the special feature of having to harbour, high human and animal population densities. This dictates a great deal of diversion of land for agricultural settlements and allied activities. When the agrarian practices are not oriented to soil and water conservation, a vicious cycle sets in, denuding a lot of mountain slopes of soil cover facilitating a quicker run off of water, often resulting in weaknesses in recharge of water in mountain springs. As the process continues, people go for extensive cultivation to support themselves, in the process destroying the forests and compounding the problems. The mountain regions of South Asia are subject to the greatest amount of shifting cultivation, which involves opening up bio diverse areas having long duration forestry crops for monoculture and short duration crops like cereals. Absentee landlordism is noticed in several areas resulting in fallows and neglect of crop rotations. Intensive cultivation couple with population pressure has resulted in very small land holdings. Thus the average size of holding in Himalayas is smaller than elsewhere and that of the country as a whole.

## 14.5 Biodiversity

This leads us to consider the biodiversity and vegetative productivity in mountain ecosystems. The mountain systems in South Asia largely lie in the latitudes nearer the Equator and thus have very rich tropical biodiversity. The Himalayas have a mixture of diversities, both tropical and temperate. They also have, in pockets like northeast India some of the richest biodiversity, entitling them to the sobriquet of a "hot spot" of biodiversity. Due to the past geological events, there is vegetation of Indo Malayan origin in these areas. There is tremendous species richness and endemism. In South India, the Western Ghats mountains are considered another hot spot. Mr. J. P. Pascal of the Rensch Institute, Pondicherry has this to say: "But it is not in terms of the number of species that the forests of Western Ghats are so interesting but in terms of quality. As a matter of fact, following the marked climate changes in the wake of the uplift of the Himalayas, the evergreen forests witnessed shrinkage in their area, continuing to thrive only in the wettest zones. The evolution of the species in the forests of the Ghats has taken place in selective isolation, which has resulted in the appearance of endemic species not found anywhere else, nearly two thirds of the tree species in these forests are endemic to the region and confined to these hill ranges " But the advent of roads, industrial projects, townships and mining are destroying the biodiversity; a matter for considerable worry. This is true

of the entire Himalayan Hinduskush belt and of mountain systems like the Western Ghats has taken place in selective isolation, which has resulted in the appearance of endemic species not found anywhere else. Nearly two thirds of the tree species in these forests are endemic to the region and confined to these hill ranges". But the advent of roads, industrial projects, townships and mining are destroying the biodiversity; a matter for considerable worry. This is true of the entire Himalayan Hindukush belt and of mountain systems like the Western Ghats of India and those of Sri Lanka. Here pristine rain forests are being replaced by tea plantation and short duration agricultural crops with no tree cover, exposing the soil to the direct impact of rains on steep slopes, Referring to the forests of the Western Ghats J. P. Pascal says " when it is clear felled the surface horizons of the soil are rapidly carried away by the torrential monsoon rains, the steep slopes hastening the process. The chances of reinstating such dense forests on the poor soil that is left are not bright at all". Agro forestry practices that could partially help redress the balance are also rare in the South Asian mountain ecosystems.

#### 14.6 Socio Economic Considerations

The population concentration in South Asian mountains was already mentioned. The mountains here harbour nearly 10 % of the population of the region except in a few countries. Of course more than 50 % of the rest of the population depend on the bounties of the mountains like river waters, river sediments, timber and non-timber forest produce and agricultural and horticultural produce. There are also paradoxes like a land tenure system, which perpetuates, absentee Landlordism and poor agricultural practices. Landless unemployed are growing in numbers, leading to "money order" economics. This also has increased the burden of work on women who have shouldered the brunt of the household chores for centuries due to social structures and the phenomenon of out migration of able-bodied males. This has been well brought out by T. N. Dhar " the whole question ultimately boils down to the fact that in Chamoli we have reached a stage of disequilibrium between rate of change in population; human and cattle, their life styles etc., and resource availability and environment and development. The basic reason is that in the context of rising population, the natural resources are being depleted at a much faster rate than they are regenerated. A direct result of the disequilibrium in resources and population is that many able-bodied males migrate to the plain in search of work. Knowledgeable observers are of the view that the extent of out migration from Kumaun and Garhwal hill areas is higher than that from any other part of the country. Migration by itself is neither good nor bad but its impacts can be positive or negative. The migration from Chamoli has a specific characteristic i.e. the able bodied educated and skilled manpower goes out of the rural areas leaving their families behind. The migration, which in itself is a result of disequilibrium between resources and needs courses further disequilibrium in the society in the form of skewed occupational pattern and heavy burden on females."

Gender issues are coming to the fore as literacy spreads, albeit slowly. Also women find the environment increasingly hostile even as forests on which they depended vanish and they walk longer distances to collect fuel and fodder. The medicinal plants in which they depended for dispensing

'grandmothers' medicines are also disappearing when they are exploited commercially, rather recklessly. The conditions of health and sanitation are below par and again women and children suffer more, due to malnourishment, infant mortality and maternal mortality. It is interesting to read the observations of Dr. M. S. Swaminathan in this context; "the neglect of traditional food crops like amaranthus, chenopodium and buck wheat has not only weakened the household nutrition security system of the hill people, but also prevented the Himalayas becoming the home of the health foods of the future".

Religious sanctions and superstitions abound in hill societies. The simplicity of the peoples lives and stoicism are remarkable but inroads are being made into them by the advent of forces of development which are bringing roads, transport, telephones, television and new diseases too to remote villages. The economic development of the mountain systems has resulted in distortions in area planning and welfare of the hill people. Projects like dams generating hydel power often evacuate the power to the plains. Roads connecting villages and farms in the hills take away more produce and goods than they bring in. All this is breeding restlessness in the air. The 'Uttarakhand' agitation in the U.P. Hills of India is an example. There, the people want fully-fledged autonomy and a complete say in managing their own affairs. In the Eastern Ghats of South India the tribal in the hills are agitated about non-tribal people from the plains taking away their lands and assets both by fair means and foul. The fact that many of these complaints are sometimes rooted only in perceptions does not take away from the problem.

Urbanization and industrialization are features which are developing to the point of bringing in air and water pollution as well as waste accumulation in the hill economies, which always enjoyed clean air and good quality water, and where all wastes: predominantly organic used to be recycled. Cities like Kathmandu in Nepal, Shimla and Udhagamandalam (Ooty) in India, Thimpu in Bhutan are growing, ringing alarm bells of loss of natural beauty and onset of pollution.

#### 14.7 Environmental Awareness

The awareness among the hill folk of the growing problems due to the fragility of the ecosystem itself, the growth of population and the new forces of modernization and development is not yet based on detailed empirical study. Most of the anxieties are based on one-off perceptions and some limited studies. The institutional strengths are not there in most countries of the regions to study the ecosystem as a whole and its carrying capacity to chart a path to sustainable development. The few institutions that do exist have to traverse long distances to make their work percolate to the people. Their studies too, with the aid of tools like satellite imagery have to reach the stage where they can influence policy makers to act in time to manage the mountain ecosystems better. The awareness has to increase in the mountain ecosystems people but equally in the non-ecosystems people and others using the produce of the mountains as well. Unless the others appreciate the problems of the mountains and the mountain people, there will be no congruence of objectives of policy, legislation etc. Areas of mutual concern should be highlighted especially the need for water conservation, protecting

medicinal plants, and preserving the sanctity of places of, Religious Worship to name a few.

#### **14.8 Legal and Institutional mechanisms**

There are no specific regulations to cover mountain development. Regulations from the plains areas are applied mechanically to the mountains. This results in mining leases being granted in areas where they ought not to be and in opening of mines without precautions. The floor space area index for buildings in the plains is adopted in the hills, adding to the congestion and loss of the mountain skyline. There is hardly any protective legislation focusing on the fragility of the mountain ecosystems. Even where they do exist as in the Aravalli hills north India the follow up and implementation is weak. Very often courts of law have been forced to intervene. In the Dehara Dun Limestone mining lawsuit, the Supreme Court of India had to step in to stop the mining in mountain areas and appoint a Committee to oversee rehabilitation of closed mine areas. The same august court has intervened in the Delhi Ridge, which is part of the Aravalli mountain system that was being overrun by encroachments injurious to the ecosystem. The poor awareness and weak institutional base have not helped in putting in place a proper policy and legal regime under which sustainable development only can be encouraged. Area planning concepts with focus on mountains, which are the critical part of watersheds, being at the top and nursing the catchments are yet to catch up.

#### **14.9 Socio-Economic Priorities**

In terms of priorities, it is clear that solving the socio-economic and related conditions of the mountain people ranks very high. The degradation of the natural resources is partly a function of natural factors and partly or mostly those caused by human interventions. Such interventions occur because the mountain people and the non-mountain people use its resources, and the uses are often unsustainable. The proximate causes are the interventions of the mountain people themselves. It is their demand for food, fodder, fuel, fats, and fibre, from the mountain sides and the changes in their lifestyles that make the immediate demands on the flora, fauna, water and land of the mountains, if they have to avoid degradation and engage in sustainable utilization of natural resources, amelioration of their poverty, betterment of the lot of their women and improvement in their knowledge of the environment and of their health base should be revamped. Also they should be made to play an effective role in managing their own resources. To achieve this, the population has to be literate, healthy and reasonably well off economically. Programmes for eradication of illiteracy especially among women, and promotion of child welfare, health and sanitation should go hand in hand with poverty alleviation programmes tailored to the situation in the mountains.

In relation to gender issues, we should endorse the findings of the Regional Conference on Sustainable Development of Fragile Mountain Areas (SUDEMAA) at the meeting convened by ICIMOD in December 1994. They are; undertake additional research in law and how it affects gender relations; ensure that the economic contribution of women is reflected in national

accounting; advocate joint ownership of resources; and document case studies on the relatively higher status of women in mountain areas and incorporate them into the mountain agenda.

The cultural attributes of mountain people, which are conducive to sustainable development, should be protected. Ethno knowledge is one of the key attributes requiring careful attention with a view to documenting it and recording it too. One of the powerful ways to doing this is to empower communities especially women in the political, social and economic spheres. All programmes should be devised after full dialogue with the local people and this should be village based.

#### **14.10 Sustainable Agriculture**

Promotion of sustainable agricultural practices is the second major plank of both policy and people's response to the problems of management of mountain ecosystems. Transfer of appropriate technologies for soil and moisture conservation is a must. In this context Sloping Agriculture Land Technology (SALT) and Sloping Watershed Environmental Engineering Technology (SWEET) are two technologies to be studied and used as models. They were started in the Philippines and is now practised in China and other countries and ICIMOD is playing a key role in this. They are being tried out by G. B. Pant Himalayan Institute Of Environment and Development as a package for regeneration of degraded lands in Indian Himalayas.

Measures like organic farming and agro forestry have to supplement the mechanical measures for reversal of soil degradation. Areas of degradation and areas suitable for agriculture or pastures should also be mapped using GIS and other techniques in order to determine the most appropriate package for a particular area. This area specific approach must also go with a people specific approach determining what part of sustainable or traditional practices already being used by people to some advantage (and which they understand better than techniques involving mere extension) can be conveniently grafted into programmes or new techniques. Absentee landlordism which results in unnecessary fallows and neglect of conservation of slopes thus impacting on other cultivated holdings must be tackled both by the application of the law and persuasion by communities.

#### **14.11 Management of Biodiversity**

There is no gainsaying the effect that scientific research to document biodiversity and to increase productivity of traditional crops or trees as also of acceptable exotics should be put on a firm footing and scientists should ensure this is done without destroying the base of biodiversity. There should be no compromise on protection of biodiversity in the mountains and for this purpose full use should be made of the provisions of the Convention on Biodiversity.

Research and extension methods with the co-operation of scientists, technologists, government, farmers and industry should find ways of providing additional incomes and employment in mountain villages by ensuring value addition in the collection and processing of medicinal plants. Successes on this can be replicated with foods like honey, fruits, and

flowers. But care has to be taken that this is in-step with human resource development and total conservation of natural resources. Any wild swings in standards of living that will promote excessive consumerism and creation of wastes should be guarded against.

#### **14.12 Infrastructure Industry and Energy**

On the infra structural and industrial fronts, the fields of energy deserves to be looked at closely with a view to developing alternate energy sources like solar, mini hydro and wind in a big way. They should be entrusted to communities and smaller organizations in a decentralized manner. They can also act as real alternatives to the creation of large power projects on mountain sides which may pose extreme environmental risks.

In this context it is necessary to look at the issue from a perspective different from that in non-mountain areas. Kamal Rijal puts it well when he says, "the slow pace of energy transition in the Hindukush Himalayan region can be attributed to the slow rate of growth in economic activities due to prevailing development barriers. These barriers are caused by mountain phenomena, which are manifested by inaccessibility, marginality and fragility. Besides these constraints and the niche imposed on the energy sector, the numerous barriers it faces with regard to policy, planning, technology, cost, financing, institution and information pose a serious predicament for the development of the sector. However, a more positive strategy would be to capture the opportunities generated by the mountain specific characteristics rather than harping on the constraints. It can therefore be concluded that energisation of mountain communities can be made feasible out of appropriate technological interventions, in terms of energy sources, technologies and institutional mechanisms that are conceived and translated into reality. Energy technology interventions with increased economic activities will lead to breaking down the vicious cycle of poverty and environmental degradation. If energy transformation is implemented appropriately, even the poor can contribute to it in a significant way, which would affect their lives as well as the overall economy.

All industries that are to be developed must have energy and water conservation as the main plank. It is desirable that industries creating wastes, especially hazardous wastes are totally avoided in the mountains. For this purpose, a very detailed environmental impact assessment must precede the setting up of every industrial or infrastructure project in the mountains and a public hearing must be mandated in such assessments. It is worthwhile remembering observations of Dr. Harka Gurung at ICIMOD "the main agenda of highland development revolves round reconciling land-use conflicts, reducing demographic pressure and developing alternate sources of energy. The last item has much relevance to the protection of natural vegetation. Programming of activities will be more realistic through a better understanding of traditional resource management systems. Since the highlands are generally away from the centers of economic and political power, successful implementation will be contingent on the full involvement of local institutions and beneficiary participation. In regard to area specific infrastructure development it is necessary to look at ways of avoiding man made landslides in roads or building constructions by proper risk

engineering. Proper housing and road laying in seismic areas also deserves attention.

### 14.13 Tourism and Urbanization

As regards tourism, not only areas for tourism should be determined using GIS and other techniques to avoid locating them in very fragile areas, but also whatever tourism does get promoted should have a wholesome ecological content. In an interesting finding of a research project of ICIMOID it was observed, "the impact and implications of mountain tourism tend to differ according to the nature, magnitude and seasonality, lack of concern for 'carrying capacity' and an impact monitoring framework and the overall neglect in relating tourism to community development, local institutional development and gender concerns."

Strategic intervention by the government through local community groups was seen as an essential aspect in making mountain tourism a vehicle of local economic, environmental and community development. There were also issues specific to each country and region.

It must also be realized that due to tourism and associated economic development the dangers of indiscriminate urbanization and build up of solid waste has already reached the mountain ecosystems. A recent study by A.P. Jain and J.C. Kunival has shown that problems of solid waste have invaded the high Himalayas in places like the Valley of Flowers. Mountaineering expeditions to the high peaks are leaving piles of junk behind. If that be so, the growing towns in the mountains will also soon be among the most polluted. The municipalities here should be strengthened to act soon on such issues.

### 14.14 Networking

In the countries themselves, both the national institutions studying or looking at mountain development and the NGO's working in the mountains do struggle against odds. This is not surprising given the nature of the subject and the conditions of work, which do not always attract the best talent. This is compounded by rather low priority given to this even in area planning or national developmental planning. A change in this approach is essential for better management of the mountain ecosystems. A strong networking of all the institutions working on this, both in the mountains and plains, can achieve more than fragmented or individualistic thrusts. This should be coupled with full dissemination of scientific findings on the dangers ahead on account of natural and man made disasters etc., as well as potential for sustainable growth. This should be done by all, whether government, communities, institutions, experts, industry or NGO's. A greater thrust should be given to NGO activity in this direction and in ensuring proper spread of success stories as they start manifesting.

### 14.15 Sustainable Mountain Development

Mountains are important sources of water, energy, minerals, forest and agricultural products and area of recreation. They are storehouses of



biological diversity, home to endangered species and an essential part of the global ecosystem.

The fate of mountain ecosystems affects half the world's people. About 10 percent of the Earth's population lives in mountain areas, while about 40 percent occupies watershed areas below. From the Andes to the Himalayas, and from Southeast Asia to East and Central Africa, there is serious ecological deterioration in these watersheds. Causes include deforestation, excessive livestock grazing and cultivation of marginal soils.

Mountain ecosystems are susceptible to soil erosion, landslides and the rapid loss of habitat and genetic diversity. Among mountain dwellers, there is widespread unemployment, poverty, poor health and bad sanitation. Most mountain areas are experiencing environmental degradation.

The proper management of mountain resources and the socio economic development of people need immediate action. There is need to develop land use planning and management for mountain fed watersheds by the year 2000. It should aim at preventing soil erosion, increasing the amount of tree and plant life, and maintaining the ecological balance in mountains.

There is also a need to provide services, such as education, health care and energy, for local communities and indigenous people. The people also need more opportunities to earn livelihoods from such activities as sustainable tourism, fisheries, environmentally sound mining and cottage industries, such as the processing of medicinal and aromatic plants.

Government should:

- Promote erosion - control measures that are low cost, simple and easily used.
- Offer people incentives to conserve resources and use environment-friendly technologies, help them to understand what kind of development is environmentally sustainable in mountains and involve them in resource management.
- Produce information on alternative livelihoods involving, for example, crops, livestock, poultry, beekeeping, fisheries, village industries, markets and transport.
- Create protected areas to save wild genetic material.
- Identify hazardous areas that are most vulnerable to erosion, floods, landslides, earthquakes, snow avalanches and other natural hazards and develop early-warning systems and disaster response teams.
- Identify mountain areas threatened by air pollution from neighboring industrial and urban areas.
- Create centers of information on mountain ecosystems, including expertise on sustainable agriculture and conservation practices where

people can turn for help in learning about sustainable mountain development.

*The fate of mountain ecosystems affects half the world's people*  
(Micheal Keating, 1993)

## **14.16 The Long Term Vision on Sustainable Development of the Hindu Kush-Himalayas**

### **14.16.1 Overall trends**

Development of the Hindu Kush-Himalayan mountain region (covering all or parts of the eight countries, i.e., Afghanistan, Bangladesh, Bhutan, China, India, Myanmar, Nepal, and Pakistan) poses a serious dilemma.

At present, there is a very real danger that the ecological balance of this mountain may be irreversibly disrupted. In the past, policy-makers did not pay adequate attention to mountain areas. It was generally believed that mountain areas had limited potentials for development. Consequently, the resources of mountain areas, such as cheap labour, abundant water, and forest resources, were used to support plains / urban-oriented development strategy. To some extent this is understandable, but this generally overlooks the needs of mountain people and the major environmental role of mountain areas.

Neglect of mountain areas in the past has resulted in a general lack of understanding of the biogeochemical and human resources, characteristics of the mountains and, consequently, the natural and human processes affecting these mountains, development intervention without proper understanding of these processes can lead to unsustainable development, as experience has shown. Thus the development dilemma facing this region is that, whereas natural resources have to be used to their, optimum potential, information and knowledge on such natural resources and the processes affecting them remain poor. These considerations are reflected in Table 1.

Considering the great variation in conditions across the region and over short distances, a careful assessment of constraints and opportunities is required in all cases. Mountain people in the Hindu Kush Himalayas must live within the carrying capacity of the mountain environments. The resources of the mountain areas must be used without destroying the fragile environment upon which survival inevitably depends. Temporary relief from outside will not restore life-supporting systems once these have been destroyed. Lifestyles and the development path in mountain areas, while continuing to benefit from growing external linkages and modern science and technology, must now operate within the limits set by the needs of conservation. The history of development in mountain areas of the HKH countries is very recent and, consequently, the changes needed to integrate conservation and development may be less drastic than for many other areas. However, mountain areas are also more fragile and, given the recent pace of rapid change, enduring commitments are needed at all levels to move mountain communities towards and sustainable style of livelihood that is harmonious with the mountain environment.

### 14.16.2 Mountain Areas in Different Countries of the HKH Region

#### Afghanistan

Afghanistan has been the meeting place of four ecological and cultural areas—the Middle East, Central Asia, the Indian Subcontinent, and even the Far East, for the Pamir Mountain intrude into Chinese Sinkiang. Dominated by the Hindu Kush, the westernmost extension of the Karakorum Mountains; and the Himalayas, the ranges stretch across 960 kilometers literally. Many passes cut through the Central Hindu Kush Mountains and, in the past, provided the main routes to and from the north and south. Out of the eleventh geographical zones in the country, the first six zones (the Wakhan Corridor-Pamir Knot, the Badakhshan, the Central Mountains, the Eastern Mountains, the Northern Mountains and Foothills, and the Southern Mountains and Foothills) belong to the Hindu Kush Mountain system. The remaining five zones embrace the deserts and plains that surround the mountains from the north, west, and south-west (Dupree 1980). Afghanistan is a landlocked country with a wide diversity of habitats and ecosystems, ranging from steppe, semi desert, desert, riverine forest, to mountain areas. The natural vegetation of a significant proportion of the country was originally woodland and forests, but centuries of destruction have resulted in an almost complete disappearance of the forests from the plains and valleys.

Over 80 per cent of the country's energy comes from forest and range resources (ICIMOD 1994). Sustainable development of mountain areas requires rehabilitation of degraded land based resources, their sustainable use, and improvement in the living standards of the people.

*Rangelands on which the majority of Afghans depends directly or indirectly have been severely degraded on account of improper grazing practices, drought, and fuel collection.*

#### Bangladesh

Bangladesh's hilly region is known as the Chittagong Hill Tracts (CHT) and covers about 10 percent of the land area with about one percent of the population. The CHT are at present inhabited by 13 tribes, each speaking its own distinct dialect. In 1991, the population was 967,420 (Rahman, 1993). The Chittagong Hill Tracts (CHT) have a predominantly agricultural economy. Owing to the subsistence economy, the tribal people, apart from cultivation, are involved in other productive activities to meet their basic needs. The CHT at present constitute a food deficit area. With relatively higher population growth rates in the tribal areas and poor sustainability of the land, more productive farming practice, diversification of agriculture, and generation of environmentally friendly off-farm activities, need to be explored.

*The CHT people's economy is in a stage of transition from a Sweden peasant economy to a wet rice peasant economy and plough agriculture is becoming the dominant mode (Rahman 1993).*

## The Kingdom of Bhutan

The Kingdom of Bhutan is a small, landlocked country situated on the southern slopes of the Eastern Himalayas, bordering Tibet in the north and the Indian States of Sikkim Assam, and Arunachal Pradesh in the west, south, and east respectively. It has an area of 46,500 sq. km. and a population of 600,000 (in 1992) (NES/PC 1992). The country covers the southern slopes of the southern boundary, which is situated approximately where the Himalayan range rises suddenly from the North Indian plains. Bhutan is a country, which almost totally depends on its own natural resources base. No change in this dependence is likely in the coming decade, although population growth and diversification in employment trade, and consumer patterns will place a heavy strain on this interdependency (NES/PC 1992).

The major environmental concerns in almost all developing countries reflect the close interaction between population growth, poverty, and environmental degradation. Although these three major factors are all relevant concerns for Bhutan they do not at present form the kind of interlinked vicious circle, which, in so many other countries, impedes forward planning towards sustainability. It is the policy of the Royal government of Bhutan to ensure that the development of the country is sustainable and will remain so in the future to avoid this vicious circle (NES/PC 1992).

*With its small population, largely consisting of farmers living on their own land depending on a complicated traditional system whereby farm, forests, and alpine meadows all contribute to farming productivity, Bhutan is a country which almost totally depends on its own natural resource base.*

## India

The Indian Himalayan region, which is more than 2,800 km in length and 220 to 300km wide, is spread over the states of Jammu & Kashmir, Himachal Pradesh, Sikkim, Arunachal Pradesh, Nagaland, Manipur, Mizoram, Tripura, Meghalaya, and part of Assam, along with eight districts of Uttar Pradesh and on district of West Bengal. It has a total geographical area of approximately 591,000 sq. km. (18% of India inhabited by 51 million people (6% of India) (GPIHED 1992). The region, in general, is characterized by a sparse population; undulating terrain; farflung small villages which are difficult to approach; tiny and scattered landholdings, more so on slopes with shallow and gravelly soil; an agro pastoral economy; scanty irrigation; little use of modern technology and inputs; and low productivity. These, coupled with almost no industrial development and, thereby, low employment potential, encourage the local young males to seek employment away from their homes. The problem of youth moving away becomes aggravated in areas where an inhospitable climate outweighs the sentimental attachment of people to their native land. Agriculture is the primary occupation of the people all through the region, but the agricultural land use patterns vary from region to region. While in the north-eastern region, shifting cultivation continues on the slopes, settled agriculture on terraced

slopes dominates in the central and north western region. All through the region valleys are characterized by settled agriculture and intensive cropping.

A close association of man, forest, and environment, observed all across the Himalayas, implies a strong perception of ecological principles in the traditional management systems. These systems, however, are becoming weak and are being lost in critical areas. Historically, forests had been treated as a common property resource and thereby freely accessible to those inhabiting the region. Development programmes in the past have not been successful in adequately improving the food fodder energy problems of the area.

**Since land and water resources have already been degraded to an alarming extent, restoration of the degraded ecosystems has to be the core thrust of all development policies**

### Nepal

Nepal, situated in the Central Himalayas, is a landlocked country having both physiographic and climatic contrasts compared to its small area of 147,181 sq. km. The country's economy depends largely on the use of its natural resource base. About two thirds of the country is occupied by hills and mountains with steep to very steep slopes. Nepal's lowland *terai* and the mountains are mostly erodible. Erosion have worsened in areas where agriculture is practiced, especially on the steeper slopes.

Thirty-seven per cent of the country's area is under forest cover, while that under agriculture is about 20 per cent. Seventy-five per cent of the country's energy requirements are met by fuel wood. Over 5,400 species of vascular plants, including over 245 species of endemic plants, 700 species of medicinal plants, 175 species of mammals, 850 species of birds, 170 species of fishes, 600 species of butterflies, 50 species of moths, and 180 species of dragonflies, have so far been identified in this country. These species are being protected and conserved through national parks, wildlife reserves, and conservation areas covering 12 per cent of the country's areas (HMG/N 1992).

Rising population pressure on the land and deterioration of the environment have been recognized as major challenges for sustainable development in Nepal. The major environmental problems in Nepal are caused by land degradation, deforestation, and pollution. Poverty is the root cause of environmental degradation. Land and forest resources are overexploited because of heavy dependence on the natural resource base, whereas water and mineral resources are under-utilized owing to lack of financial resources and infrastructure.

**Soil erosion, decline in soil fertility, sedimentation, and floods have degraded and continue to degrade scarce land resources.**

## Myanmar

Myanmar's highlands are along the border areas and are inhabited by national races, which include the *Shan, Kachin, Loila, Wa, Kokang, Akkha, Palaung, Pa-O,* and *Rakhine* groups who live in the north, north-east, east, and western areas of Myanmar (NCEA 1992). A total of 135 ethnic groups are located in these areas. On account of various factors, these border areas and national races have been deprived of development programmes in the past. More recently, the government has been making a major effort to improve the living conditions of the people in these border areas through different development activities.

Shifting cultivation is practiced by about 2.6 million people, mostly living in the Kachin, Kayah, Kayin, Chin, and Shan states. Most of the shifting cultivators are unaware of any damage to the environment caused by their traditional farming system.

*In the absence of any other viable alternative in their ecological setting they consider their farming an appropriate mode of food production, although in the process they destroy the valuable timber species and their regeneration, causing soil erosion and depletion of soil fertility.*

## Pakistan

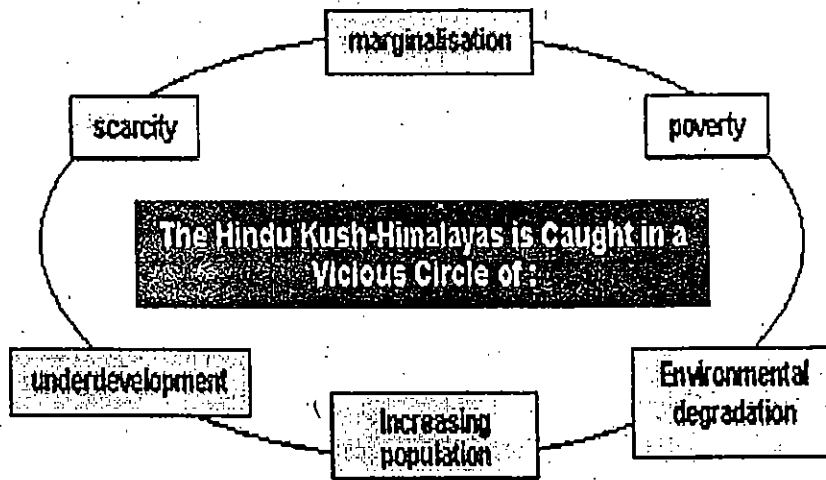
Pakistan has two mountain areas - the Northern Mountains, and the Western Dry Mountains, the Murree-Kahuta tehsil(s) of Rawalpindi District covering 96,340 sq. Km. and which has a population of 7.82 million in 1993.

Land in the region is used either for arable farming, pasture, or forestry, depending upon the altitude, climate, physiography, soil moisture, and socioeconomic conditions. Over 90 per cent of the areas is comprised of steep to very steep mountain slopes having only a thin and patchy soil mantle. These slopes, being unstable, are generally unsuitable for arable crop production and support natural vegetation that varies from place to place. Large tracts of mountain slopes from between 900 to 3,300 m, they are grazed during summer only. In winter, animals are fed on hay made from the grasses cut from the areas. The majority of the population is subsistence farmers who manage to meet only the barest needs of food, fodder, and fibre for the household.

The Western Dry Mountain region makes the core of the arid land and covers by far the major part of upland Baluchistan, excepting for a narrow coastal belt along the Arabian Sea. The potential population-supporting capacity of the region is low. However, the total sum of population growth and consumption patterns to produce food, manufactures goods, and provides housing leaves the region with a highly impoverished environment.

A rangeland-based livestock industry is the major economic activity in the region. About one-third of the region is used as rangeland by dominantly transhumant, nomadic, and sedentary agro-pastoralists. Less groundwater resource, The region exports coal, gas, mutton, hides, temperate fruits, and

vegetables to other regions and imports staple food and manufactured goods from the irrigated plains, soil erosion is a major component of the desertification in the region. The main cause of soil erosion is the reduction of plant cover.



**Table 1: Interactions and Implications of Unchanged Biophysical and Rapidly Changed Socioeconomic Circumstances in Mountain Areas**

Socio-economic Changes Interacting with biophysical factors, i.e., human interventions in mountain area	Biophysical factors (mountain specificities) and their imperatives			
	Inaccessibility (Semi-closedness, limited dependability of external support, local resource focus of activities)	Fragility and Marginality (Incompatibility with high intensity uses, focus on diversified, low cost, low risk activities)	Diversity (High potential for diversified, interlinked activities)	'Niche' (Products, activities with comparative advantages including human adaptation measures)
Population growth; Changed expectation levels/attitudes; per capita increased activities guided by greed or forced by poverty	Excess pressure on local resources with limited outlets; resource use intensification, over extraction, degradation	Indiscriminate resource use intensification; disregard of resource extensive, diversified practices; reduced resource regeneration; discard of usage regulation, group action	Pressure of food needs; reduced diversification and narrow specialization; resource regeneration	Pressure of food needs, disregard or misuse of natural potential
Market forces, trade links, pressure of external demand; changes in people's attitudes and expectations	Integration with mainstream market situation despite low physical accessibility, additional pressure on resources; market driven corridors of change	Distant demand induced over use of resources, backlash of selective commercialization, decline of environment sensitive local concerns and practices, poverty of ethnic minorities and women	Market driven narrow specialization, reduced diversification; marginalisation section of traditional knowledge practices	External demand induced over exploitation; marginalisation of petty 'niche', local concerns, traditional small scale activities
Public interventions	Reduced isolation, increased integration and level of activities;	Direct and side effects on fragile/marginal	Resource use intensification; reduced	Over exploitation of area with high potential products;

a) Generalized development strategies, including investment priorities, technology choices, macro economic policies price, tax, trade, resource extraction, etc	unmanageable increase in pressure on resources	resources, increased use intensity; degradation	diversification and access determined narrow specialization; backlash on food supplies	disregard of side effects and local concerns; emergence of a dual sector economy
b) Infrastructure for accessibility; integration; market driven harnessing of 'niche', etc	Application for improved mobility, integration; priority to areas with high potential; regional inequities	Priority to production over conservation; indifference to resource limitations; and long-term consequences; excessive subsidization	High cost external input use; narrow specialization and focus on limited product attributes; disregard of traditional know how and institutional arrangements for diversification	Market drive over extraction; disregard of side effects on environment, people's survival strategies, traditional know how
c)- Technological and institutional support: narrow focus, directed to short term needs, sectoral orientation, external origin/orientation	Inaccessibility-induced invisibility of problems/opportunities, development measures as inappropriate impositions	Focus on current production; high-use intensity; disregard of resource limitations and long-term consequences, sustained through subsidies; neglect of local concerns and consequences	Narrow specialization, through incentives and support systems; technologies disregarding organic linkages and performance of total system; marginalisation of traditional systems; increased dependency, subsidization	Focus on revenue generation meeting external demand; extraction levels disregarding the side effects; locally useful, area specific potential given low priority

- a. Based on the synthesis of evidence and inferences reported of (Jodha *et al.* 1992; Banskota and Jodha 1992a, 1992b; ICIMOD 1993; Sharma and Partap 1993; Sharma 1993; Sanwal 1989; Singh 1993; Banskota 1989; Blaikie *et al.* 1983; Dev 1992; Bjonness 1983; Lall and Moddie 1981; and Ives and Messerli 1989)

### 14.16.3 Differentiation of Mountain Areas

Mountain development problems and options can be differentiated within mountain areas based upon various environmental and development characteristics. Such an approach is useful for focusing on the critical problems in specific mountain areas. The following is only an indicative scenario and underscores the future work needed in this area.



#### 14.16.3.1 *Developing and Depressed Mountain Areas*

Although large parts of mountain areas show rampant signs of acute poverty, environmental deterioration and low levels of development, there are a number of pockets within the Hindu Kush - Himalayas that also show dynamic signs of economic prosperity. Such pockets are found in all the countries of the region and their indicative conditions include good access, commercialization of agriculture, dynamic market centers, development of human resources, economic diversification, and growing external linkages.

The problems of these areas are more akin to other developing non-mountain areas and are related to sustaining development that is pro-people, pro-women, and pro-environment with adequate measures to cope with rapid urban growth and congestion, pollution from industries and vehicles, chemicalisation of agriculture (fertilizer and pesticide use), management of solid wastes, and educated unemployment.

The depressed areas, lacking in most of the characteristics of developing areas, demonstrate problems of poverty, degradation of resources, poor quality of human resources and infrastructure, and a limited capacity to generate internal resources.

Environmental problems are related to agriculture and the use of natural resources. The major challenge in these remote areas is to help identify measures to improve the quality of life of these people and to promote development options that are sustainable.

#### 14.16.3.2 *Ecological Variations and land-use Options*

Ecological zonation of mountain areas provides a territorial basis for determining overall development potentials and identifying ecological sensitivity. Greater efforts are needed to undertake the zonation of mountain areas to provide an ecological basis for development decisions. Different ecological factors, such as slope, altitude, temperature, soil conditions, etc influence land-use suitability in mountain areas and the extent to which limits posed by these factors are understood could determine the effectiveness of development interventions. With increasing slope and altitude, land-use suitability moves from seasonal crops to perennials and, finally, to protection of natural vegetation. In spite of high moisture in high altitude areas, the limitations of temperature and low soil depth hinder crop growth. Ecological zonation, based on the factors indicated above, for specific mountain areas are immensely helpful for identifying appropriate development activities, and for identifying the nature of environmental problems that may be encountered.

Analysis of the type that integrates different aspects of the mountain environment and economy will be critical for identifying the overall constraints and opportunities for development.

#### 14.16.3.3 *Locational variations*

The Hindu Kush-Himalayan Region covers a wide area consisting of different ecosystems and economic activities. Specific regions can be identified along

with their overall and specific problems and opportunities. A very broad regional picture is provided below with some of these man economic and environmental issues. This type of analysis must be developed more fully in the future.

Problem such as poverty, soil erosion, soil fertility, deforestation, and overgrazing are common, while desertification and shifting cultivation are specific problems, There is a need to develop approaches that take into account both common as well as unique problems of mountain areas. More work of this type is needed in the future.

### **Hindu Kush-Region**

- Population density relatively low
- Poverty, inaccessibility
- High priority to controlling desertification and protecting pastures and grazing land
- Water and fuel wood scarcity
- Vegetable/horticultural development and biodiversity conservation.

### **Karakoram Region**

- Conditions change significantly with slope and altitude
- Population density slightly greater than in the Hindu Kush.
- Poverty and access problems
- Water scarcity
- Soil erosion control and soil fertility management
- Deforestation
- Good for tourism and high-value crops with irrigation

### **Eastern Himalayas**

- Population density low but growing very fast
- Shifting cultivation; soil erosion and soil fertility management
- Good reserve of forests, but deforestation very rapid
- Monsoon flooding
- Priority area for biodiversity conservation

### **Northern Himalayas (Tibetan Plateau and its adjoining areas )**

- Population density low
- Poverty and access problems
- Cold arid where agricultural opportunities are limited
- Protection of pastures
- Good for tourism

### **Western and Central Himalayas**

- Conditions change significantly with slope and altitude
- Population density very high
- Poverty, access, and communication problems
- Soil erosion control and soil fertility management
- Deforestation and overgrazing
- Seasonal water scarcity problems

- Monsoon flooding
- Good for tourism
- Considerable scope for horticultural development and other high-value crops

### **Hengduan Mountains of China Joining the Himalayas**

- Population density low
- Poverty access, and communication problems
- Soil erosion and soil fertility management
- Flooding, debris flows
- Deforestation and overgrazing
- Good for tourism and has potential for cash crops

## **14.17 High Priority Issues**

### **14.17.1 *There are more poor people in the Hindu-Kush Himalayas than in most other ecosystems***

The acute poverty of the mountain people has been recognized as a major problem by most of the countries of the Hindu Kush-Himalayas. Poverty has been exacerbated by many different factors, amongst which the important ones are stagnant agriculture, rapid growth in population, limited development of human resources (see Table 2) and infrastructure, and degradation of resources. Migration in search of alternative employment and income opportunities has been a continuing strategy of mountain people throughout the HKH Region, and in recent years this has accelerated in response to the monetary needs of families living in even the most remote areas.

In the battle against poverty, development experiences in different parts, of the Hindu Kush-Himalayas are beginning to highlight a number of critical areas for intervention. These are as follows.

#### **Development of Human Resources, with particular emphasis on improving conditions of women**

Provision of basic education, Health, and drinking water have not only improved living condition but also have enhanced household capacities for socioeconomic improvements on a gradual basis.

#### **Improving Physical Infrastructure and Availability of Economic Services:**

Improving access is almost a primary precondition for harnessing comparative advantages of mountain areas. Where access conditions have improved, and have been accompanied by improved condition of human resources and availability of improved technology, credit, and extension, economic opportunities have greatly multiplies through harnessing of mountain comparative advantages.

### Promotion of Participatory Development

Promotion of participatory development and decision-making that is sensitive to the needs of the disadvantaged groups has also been an important component of successful anti-poverty activities. In the mountain areas where conditions are more difficult, participatory and decentralized approaches have an even greater role.

In many mountain areas that are unlikely to experience any major improvement in access conditions for a long time to come, the focus should continue to be on improving the condition of human resources and economic services that will play an important role in improving the quality of life.

#### ***14.17.2 The deterioration of the resource base in the HKH is more rapid than in many other ecosystems because of its highly fragile nature.***

Environmental problems are most evident in three major areas - deforestation, soil erosion, and problems of water management. All these problems are highly related to changes in mountain agriculture. Deforestation is related to the growing food, fodder, and firewood needs of hill households and, while a lot of soil erosion is attributable to natural causes (steep slopes and intense monsoon rains), the role of human factors is also believed to be increasing.

Cultivation of marginal lands (slash and burn steep slopes), deforestation, abandonment of old terraces, livestock management systems, and other cultivation practiced have also contributed to increasing soil erosion in the mountains. Loss of forests and vegetation cover, has reduced biodiversity, increased runoff, reduced soil moisture, and increased water management problems. The main resources affected are given below.

- *Cultivated Land:* declining fertility, fragmentation of land holdings, loss of land, increasing soil erosion, partial desertification, and severe soil fertility and water management problems.
- *Pasture:* large-scale overgrazing and degradation of pastures, landslides, and livestock management patterns that focus on numbers rather than on quality.
- *Forests:* reduced forest areas, decreasing crown cover, continuing encroachment, over-harvested, and very poor a forestation and weakened local systems for protection and management.
- *Water:* increasing shortages and flash folds, as well as water quality problems.
- *Flora and fauna:* increasing loss of biodiversity as human needs and reckless exploitation destroy habitats.

A concerted effort is needed to reduce the pressure on these resources through appropriate policies, technologies, and management systems because continued loss of these resources will mean the growing inability of the ecosystem to support any type of human survival.

### **14.17.3 The institutional experience of and capacity to manage sustainable mountain development in the Hindu Kush Himalayas are relatively limited**

If experience and the capacity to integrate environment and development are generally limited, it is even more so for mountain areas where the history of development is relatively new. Given the poor performance in reducing poverty in more favorable planes, areas, the difficulties of formulating appropriate programmes and their effective implementation are even greater in mountain areas where overall conditions are more unfavorable.

Historical marginality, a difficult environment, and unfavourable linkages between mountain areas and the wider market economy make mountain development a very knowledge-intensive process. This is one of the principal gaps in terms of institutional capacity at present. A determined effort is needed in this field if the other problems of mountain development are to be satisfactorily tackled, not just at the national but also at the sub national level. Any attempt to strengthen the institutional capacity for sustainable mountain development should acknowledge the vast scope of indigenous knowledge systems and traditional structures for resource management.

## **14.18 Long-term Goals for Sustainable Development of the HKH**

To respond to the rightful aspirations of the people of the HKH and the need for sustainability in natural resources management the following broad goals have been identified for national governments, local authorities, NGOs, and the international donor community during the next ten years.

### **Goal 1:**

**Promote the well-being of mountain people by overcoming poverty, inequality, and marginality through:**

- development of sustainable mountain farming systems;
- promotion of new income and employment opportunities;
- improving the status of women and promoting gender-balanced decision-making;
- improving access to basic physical infrastructure;
- improving access to basic education and health services; and
- participatory systems of decision-making and development of strong, autonomous local organizations.

### **Goal 2:**

**Improve the conditions of mountain natural resources and environments through:**

- sustainable use and management of arable lands, forests, pastures, ranges and grasslands, and water resources
- promotion of local organizations in natural resources management;
- protection of biodiversity.
- enhancing women's participation and capabilities to improve their management of natural resources;

- better understanding of mountain hazards and identification of mitigation measures; and
- better understanding of mountain climatic changes.

### Goals 3:

**Improve the capabilities of institutions and organization to promote sustainable mountain development through:**

- Promotion of participatory development focusing on the poor, women, environment, and local organizations;
- Development of policies that address mountain-specific problem and opportunities;
- Development of guidelines and monitoring mechanisms for involvement and benefit, distribution of women and other marginalized groups;
- Development of appropriate planning methodologies for sustainable mountain development, at both the macro and micro level;
- Promotion of national capacities for research in mountain-specific development opportunities.
- Support to training in mountain-specific subjects.
- Promotion of linkages and collaborative arrangements between institutions and organizations concerned with mountain development; and
- Improving awareness and networking in and among mountain development agencies, locally, nationally, regionally, and globally.

## 14.19 The Roles of Different Agencies and Institutions

The goals that have been identified represent critical areas for sustainable mountain development. The items listed for action under each goal are only indicative of the wide range of activities to be undertaken for achieving an integrated approach to mountain development. No one agency can be expected to be responsible for all of these concerns, although all agencies that are concerned with the mountains should demonstrate their full support and commitment by promoting the areas of their competence and supporting others to do their part:

- National and sub-national agencies are the most critical ones in developing and implementing policies and programmes that are responsive to local aspirations and potentials for sustainable mountain development. They should be in the forefront of identifying; and promoting the opportunities for development within national and local institutional, cultural, and ecological contexts. Key agencies are:
  - ✓ National planning commissions,
  - ✓ National line agencies,
  - ✓ District-level agencies in mountain areas, research organizations,
  - ✓ Non-government organization, community based organizations in mountain areas in particular, and
  - ✓ Educational institutions.

- Donor organizations should give a special focus to the Hindu Kush-Himalayas and provide support to the national agencies identified above. Through regular consultations with the key staff of National Planning Commissions and key line agencies, they are in a unique position to guide donor funding to mountain areas. In view of their neglect of mountain areas in the past and the scale of interconnected problems and opportunities, donor assistance should be accelerated and be long-term in nature.
- International agricultural research centers, with their specific orientations and expertise from a global perspective, can play an important role in providing scientific information on the limitation and opportunities mountain areas have for specific food crops. Linking international centres with a global scientific research mandate to national and regional agencies with an instructional mountain mandate should be a high priority.
- The role of the International Centre for Integrated Mountain Development is determined by its mandatory functions of
  - a) information exchange,
  - b) research,
  - c) training and
  - d) advisory service.

It will concentrate on those areas in which its limited resources can be put to best use and wherever ICIMOD countries share common concerns. Its comparative advantages lie in working in those areas not generally focused on by national agencies those dealing with concepts, methodologies, strategies, innovations, and lessons of experience. Most of all it will provide a regional perspective on national and local sustainable mountain development.

## Unit Summary

Any discussion of mountain development without a substantial commitment to augmenting the levels of investment in critical areas becomes quite pointless. When considering options for investment, care must be taken to ensure that such investments reduce poverty, restore the environment, and diversify the mountain economy in the long run.

International efforts to deal with mountain development problems have been very limited both in coverage and support. Chapter 13 of UNCED's Agenda 21 represents the first global recognition of the plight of mountain areas and their critical environmental role in different parts of the global. The initiative of Chapter 13 must now be sustained through wider efforts by NGOs, National governments, and international agencies, if mountain areas are to receive the attention and support they deserve. Centres, such as ICIMOD, have a very important role to play in developing concepts and strategies for sustainable mountain development as well as methodologies for assessing mountain-specific problems and opportunities. Other agencies must develop mountain-specific initiatives within their own mandates if the attention of the global community on mountain areas is to be further strengthened in the future.



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# UNIT 15

## PARTICIPATORY COASTAL RESOURCE MANAGEMENT

### Unit Introduction

Some 60% of the world's population lives within 60km of the sea and the social, economic and environmental significance of the boundary between the land and the ocean is now widely recognized. The ecology of coastal lands and coastal waters provides numerous livelihood opportunities, encouraging concentrations of population and development activities in the coastal zone. Earlier conceptions of infinitely abundant aquatic resources, the infinite capacity of the ocean for dilution of waste products, and the unlimited productive capacity of coastal lands have been shown to be wrong. The livelihoods of many people in coastal areas are based upon the exploitation of both terrestrial and aquatic resources. However, expanding markets have driven such exploitation to extremes, where levels of investment create imbalance between alternative uses for the same resource. In such circumstances, the poor can be made poorer. Sustainable livelihoods for coastal communities are therefore dependent upon effective management of all interrelated activities in coastal areas to achieve sustainable use of both living and non-living resources, and equitable distribution of the benefits arising. In this unit, we will examine:

- Major anthropogenic effects on the coastal zone in South Asia.
- Integrated Coastal Management as a tool for sustainable development.
- Essential elements of integrated coastal management.
- Integrated coastal resource management in South Asia.
- A future vision of ICM in South Asia.

### Unit Objectives

After going through the unit, the students would be able to learn about:

- the management of coastal resource for their sustainable, its important in South Asian region;
- the concept of integrated coastal management (ICM), and
- history of exploitation of coastal habitats in South Asia and its common weaknesses.

## 15.1 Introduction

Over the last decade the management of coastal resource for their sustainable use has become a critically important issue for the South Asian region. Included among these resources are some of the most extensive mangrove areas in the Indian Ocean and also some of the world's least disturbed coral reefs. These coastal ecosystems have been subject to increasing exploitation particularly over the last 20 years. For example between 1975 and 1983 the area occupied by the Chakoria Sundarban mangroves in Bangladesh has been reduced by 60% through conversion to shrimp ponds. In the Maldives, over the same period, more than 200,000 m<sup>3</sup> of live coral was extracted for construction purposes and tourism increased by almost ten fold from 8,000 to 75,000. Such pressures in the tropical coastal zone are not unique and the decline in status of coastal ecosystems worldwide, as a result of non-sustainable use, has become an issue of major international concern.

Recently, the global values of services obtained from coastal systems (defined as the benefits human populations derive from ecosystems) has been estimated at a total US\$ 12 trillion per annum equivalent to the estimated combined value of the world's terrestrial and freshwater services. This factor is often given too little weight in policy decisions and for developing countries like those in South Asia, with large and increasing populations; the issue assumes even greater significance since it is the poorer members of society, which are forced to generate income from the coastal areas. It is these sites which are most accessible to the disadvantaged, and which offer some prospect of support and livelihood though the adjacent land may be marginal and the inshore water bodies degraded as a result over exploitation of resources.

A regional meeting for countries in South Asia was held in November 1985 in the Maldives and cosponsored by the Department For International Development UK, the Government of the Maldives and the United Nations Environment Programme. A major output of this meeting was to identify options for a regional policy and action framework. In particular the meeting served to reinforce the South Asian Seas Action Plan in which delegates from member states outlined the following key activities needed in the region:

- Promotion of research and monitoring, and exchange and sharing of data and information among member States.
- Promotion of methods and practice for the management of human activities that safeguard environmental quality and utilize resources rationally and on a sustainable basis.
- Assessment and evaluation of causes, magnitude and consequences of environmental degradation.

At the regional meeting, country delegates recognized four major anthropogenic influences affecting the coastal zone in South Asia. These were:

- sedimentation (from dredging, land derived run off and land reclamation);

- marine resource exploitation (sand, coral, mangrove, fisheries);
- pollution; and
- tourism.

The relative significance of each factor varies from country to country as shown in Table 1.

**Table 1. Major anthropogenic influences (listed in order of importance) in the coastal zone of South Asian countries: as agreed at the 1995 ICRI meeting.**

Sri Lanka	Maldives	India	Bangladesh	Pakistan
1. Sedimentation (land development and mangrove clearance)	1. Marine resource exploitation	1. Sedimentation (Poor land practice)	1. Marine resource exploitation	1. Marine resource exploitation
2. Marine resource exploitation	2. Sedimentation (from dredging)	2. Marine resource exploitation	2. Sedimentation (Mangrove clearance)	2. Pollution
3. Pollution	3. Tourism.	3. Pollution	3. Pollution	3. Sedimentation (Mangrove clearance)
4. Tourism	4. Pollution	4. Tourism	4. Tourism	

## 15.2 Integrated Coastal Management - In Theory and in Practice

Countries included in the South Asian regional seas include Pakistan, Bangladesh, India, Sri Lanka, the Maldives, and the British Indian Ocean Territory (BIOT- the Chagos Archipelago). Apart from all having coastlines which are bathed by the Indian ocean, these countries also share the problems of increasing population pressures and resultant increasing demands on the coastal zone, at a level which is almost unprecedented elsewhere in the world. For example in the island states of the Maldives and Sri Lanka population numbers are expected to reach 280,000 and 21 million respectively by the year 2000. This represents a 3-4 fold increase over the 50 year period 1950-2000. While the entire population of the Maldives can be described as coastal dwelling, approximately 50% of population of Sri Lanka is located in the coastal zone. In India the population is estimated to reach 900 million by the year 2000 with 25% of this number living along the coast; in Bangladesh population numbers are projected to reach 145 million by 2000 with 80% of these inhabiting coastal areas. Unlike other countries in the region, the coastal lands of Pakistan are sparsely populated; nevertheless population numbers are rising with population estimates of 150 million anticipated by 2000. These problems are further aggravated by the fact that coastal populations in South Asia include some of the poorest members of the community - artisanal fishermen, the landless and nomadic pastoralists. Because of the accessibility of the coast and its aquatic

resources the coastal zone becomes a focus for settlement by poor people whose lot is not improved by non-sustainable use of resources. Population increases and the attraction of the coast for settlement by the poorest members of the community represent considerable challenges to the countries of South Asia and to the sustainable exploitation of resources in the coastal zone. These challenges may be met, at least in part, by an **integrated management approach** to the use of coastal resource. Conventional sectoral management is not effective in addressing the complex management issues of the coastal zone. These issues are **cross-sectoral** in nature with the activity of one sector often adversely affecting the development of the others.

### 15.3 Integrated Coastal Management a Tool for Sustainable Development

The term integrated coastal management (ICM) is used to describe a continuous and dynamic process that unites government and the community, science and management, sectoral and public interests in preparing and implementing an integrated plan for the protection and development of coastal systems and resources (after GESAMP 1996).

ICM is a framework, which involves comprehensive assessment, setting of objectives, planning and management of coastal systems and resources, while taking into account traditional, cultural, and historical perspectives and conflicting interests and uses. It is an interactive and evolutionary process for achieving sustainable development and implementing a continuous management capability that can respond to changing conditions. ICM includes the following:

- Integration of programmes and plans for economic development, environmental quality management and land use
- Integration of programs for sectors such as food production (including agriculture and fishing), energy, transportation, water resources, waste disposal and tourism.
- Integration of all the tasks of coastal management from planning through to implementation, operation and maintenance, monitoring and evaluation performed continuously over time.
- Integration of responsibilities for various tasks of management among levels of government - local, state/provincial, regional, national, international and between the public and private sectors.
- Integration of available resources for management (i.e. personnel, funds, materials, equipment).
- Integration among disciplines (e.g. geomorphology, geochemistry, marine biology, economics, engineering, political sciences and law).

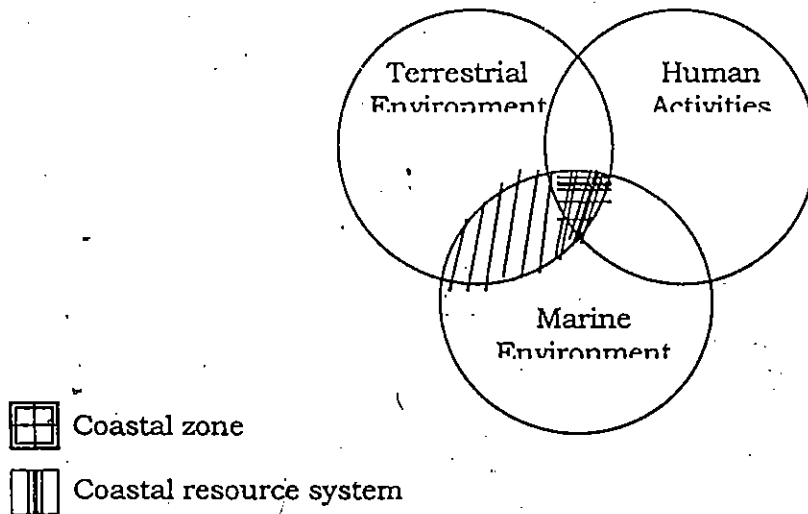
## 15.4 Defining the Coastal Zone

An in depth understanding of the functions of the coastal resource systems and their characteristics is fundamental to a better appreciation and application of ICM. Before describing such characteristics we should first attempt to define the coastal zone. They include the functional definition of 'that space in which terrestrial environments influence marine environments and vice versa'; the international legal definition of the 200 nautical mile limit from land over which coastal nations exert sovereignty (economic exclusive zone) and scientific definitions which depend on the nature and scale of the processes that characterize the land ocean boundary. For most purposes the coastal zone represents an area of transition where terrestrial and marine environments interact to form unique environmental conditions the coastal zone embraces inshore waters, intertidal areas and extensive tracts of land.

So much emphasis can be placed on defining the coastal zone for legal and administrative purposes that the environmental processes, linking terrestrial and marine components of the coastal zone, are often ignored. A good example is the maintenance of hydrologic linkage between upland catchments and coastal wetlands, which are essential if wetlands are expected to function as feeding, nursery or spawning grounds for commercially valuable fish species. This is very well illustrated in Pakistan where flows of freshwater down the Indus have been reduced by 70% over the last 100 years with silt deposition in the delta being reduced by three quarters as a result of dams, barrages and irrigation schemes. Such altered conditions, together with over exploitation of mangrove wood, have led to a significant decrease in both mangrove cover and biodiversity in the Indus Delta. Clearly many of the processes, which sustain the health and productivity of the Indus mangrove community, extend a long way beyond any convenient definition of a 'coastal zone'.

We should therefore not feel constrained by developing a precise and rigid definition of the coastal zone. The definition will vary depending on the purpose for which it is used and we should view the concept of the 'Coastal Zone' as a means of focusing attention on the emergence of an innovative framework for planning and management to help make wise and sustainable use of resources. For example, the management boundaries for dealing with lowland flooding will be different from those considered for coral mining thus management boundaries need to be issue/problem-based rather than be rigidly defined. Although the coastal zone is an interface between land and sea, the area of real concern is that region where human activities are interlinked with both land and marine environments. This area has been defined as the coastal resource system in Figure 1.

**Figure 1. Relationship between the coastal zone and the coastal resource system (after Chua 1993).**



#### 15.4.1 Characteristics of coastal zones

Coastal zones have the following characteristics:

1. They may encompass a wide variety of diverse habitats and ecosystems (e.g. estuaries, coral reefs, seagrass beds, mangrove swamps, creeks, lagoons, bays)
2. Such ecosystems have key inbuilt features, which have described as 'functions' when regarded in the context of a coastal resource system. For wetlands these might include primary and secondary production, which sustain the flora and fauna; storage of sediments and organic carbon, which may enhance productivity; linkages between ecosystems, which are essential to the maintenance of food chains, migration routes, and increased production. For coral reefs these 'functions' would include high primary productivity and high rates of carbon fixation ultimately leading to significant reef accretion; and biological and physical erosion leading to the generation of calcareous sediments.
3. In turn these 'functions' generate 'goods' (e.g. fish, oil, gas, minerals) and 'services' (e.g. natural defense against storms and tidal waves, recreation and transportation). Such 'goods' and 'services' have an economic value some can be traded using market mechanisms but other or equal value do not lend themselves to such straightforward evaluation. Good examples are the valuation of a coral habitat damaged as a result of ship grounding or valued pastimes such as swimming, boating, recreational fishing or simply gazing at the ocean. For mangroves, consideration has been given to these resources that are not marketed and also to the valuation of 'goods' and services' that

might be used some distance from the actual ecosystem in question. Box 1 in table 1 represents the products derived from a mangrove that have a recognized market value while boxes 2,3, and 4 represent 'goods' and 'services' that are generally excluded from analyses of the value of mangroves when decisions are taken to develop alternative uses (e.g. conversion to shrimp ponds). The Table also indicates 'goods' and 'services' which are located on and off site.

**Table 1. Valuation of 'goods' and 'services' from a mangrove ecosystem (after Hamilton and Snedaker 1984).**

		Location of 'goods' and 'services'	
		On-site	Off-site
Valuation of goods and services	Marketed	1. Usually included in an economic analysis (e.g. poles, charcoal, woodchips, mangrove crabs)	2. May be included (e.g. fish or shellfish caught in adjacent waters)
	Non-marketed	3. Seldom included (e.g. medicinal uses of mangrove, domestic fuel wood, food in times of famine, nursery area for juvenile fish, feeding ground for estuarine fish and shrimp, viewing and studying wildlife)	4. Usually ignored (e.g. nutrient flows to estuaries, buffer to storm damage)

4. There is a direct link between environmental 'functions' and the generation of 'goods', which may be used by more than one form of human activity (e.g. coral rock for building and for lime production). As in a factory the system will not continue to produce products unless attention paid to the amount and quantity of inputs required to maintain productivity and functional integrity of the system.
5. Within the coastal zone where there is competition between various stakeholders (where stakeholders are defined as groups in the community which have a special interest or involvement in the use of the resources as common property) for land and sea uses which often result in severe conflicts and destruction of the integrity of the resources system.
6. Activities in the coastal zone of many states make a significant contribution to the GDP of national economies. For example in Sri Lanka the coastal zone occupies 24% of the country's land area yet it contributes 40% of the nation's GDP, with 50% of the population



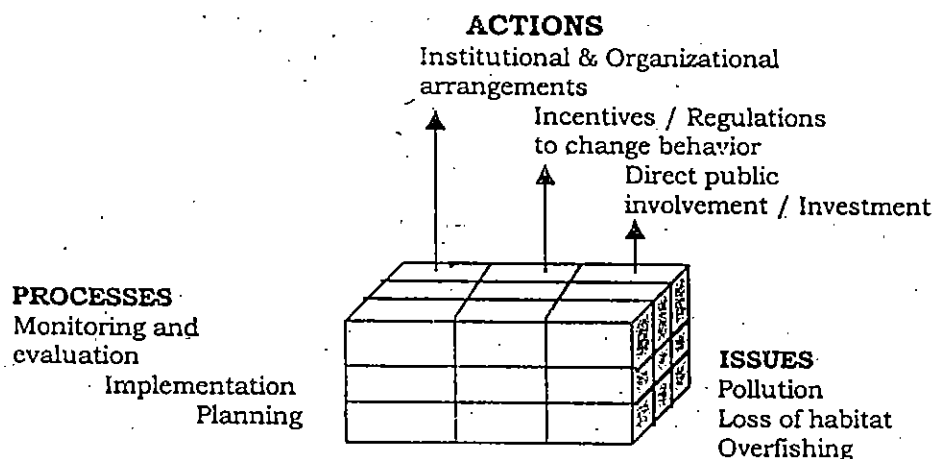
living there. Many coastal communities in South Asia depend upon the oil and shipping industry, coastal tourism, fisheries and primary industries.

7. The coastal zone has a high concentration of human settlements and is the preferred site for urbanization. Most of the major cities of South Asian countries are situated on the coast and many like Karachi in Pakistan are currently experiencing significant population expansion e.g. the population of Karachi is expected to almost double from 7 million in 1986 to 11-13 million by 2000.
8. The coastal zone will be a focus for future development in the next 50 years as coastal populations expand and countries extend their shipping, industrial and trade bases, while maximizing their tourism potential. Such developments will lead to increased social and environmental conflicts, which will require the implementation of integrated management planning.

### 15.5 Essential Elements of Integrated Coastal Management

The essential elements of integrated coastal management are **integration** and **co-ordination**. Any policy and management action which has been designed to address coastal development conflicts must be founded on a sound understanding of natural processes and ways in which these may be disturbed; on political socio cultural and economic conditions; on present and future demands, as well as social costs involved. The management of the coastal resources system has been likened to a cube consisting of three mutually supporting dimensions. These are **processes, issues and actions** and each forms an axis of the cube (figure 2). The three dimensions are closely intertwined and to consider only one may lead to collapse of the whole management system. This approach to integrated coastal management follows closely that adopted for the countries of South East Asia as

Figure 2: A coastal area management system (after Chua 1993).



Management processes identify and analyse management issues and develop the necessary policy and management options. In this model management processes consist of four essential sequential components, namely planning, implementation, and monitoring and evaluation. The planning component constitutes the basic layer of the cube. The management issues embrace the conflicts resulting from resource exploitation (e.g. over fishing, coral mining) and use (habitat loss, pollution) and form a second dimension to the cube. Management actions constitute the third dimension and include direct public investment (e.g. restocking, fisheries enhancement, education and public awareness); incentives and regulation, which might change behaviour (e.g. permits, quotas, rights, monitoring and enforcement). Unlike sectoral management, which is represented by only one sector of the cube (e.g. over fishing), the spell-over effects of one form of development on all others can be addressed in this integrated approach.

### 15.5.1 Management Processes

The management processes consist of integrated planning, implementation, monitoring and evaluation:

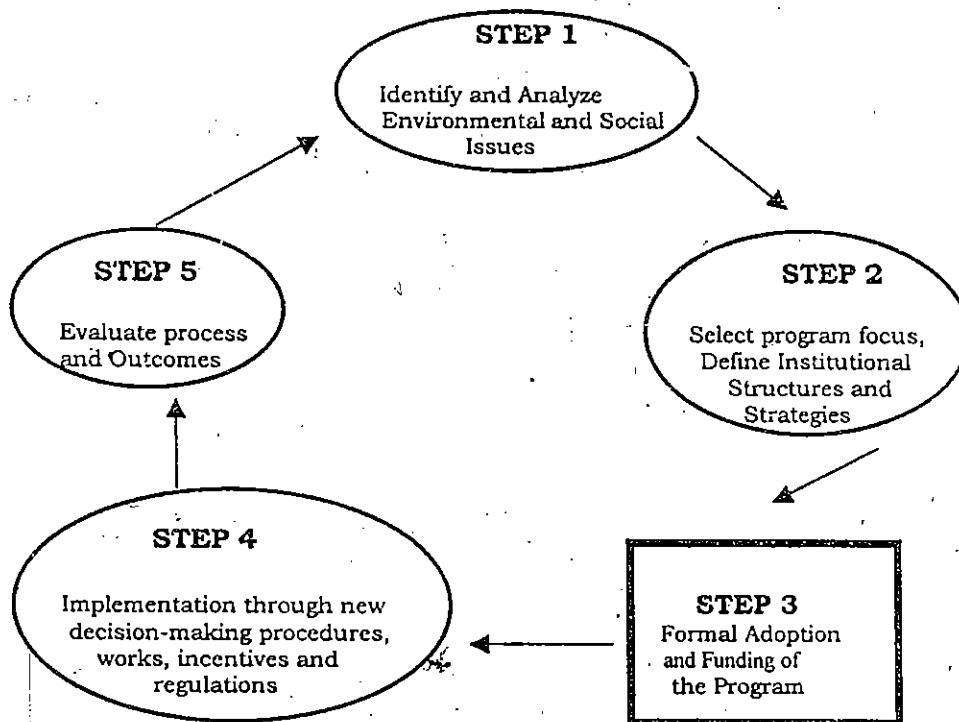
- Integrated planning involves inception, research/analysis, programme formulation, adoption and execution. While the detail and level of planning may vary according to the conditions at the site and the experience of the planning team, the fundamental steps are essentially the same. They are:
  - a. Establishing a multidisciplinary planning team to provide a framework for the management programme, initiate the planning process and identify the key participating agencies. Core staff might include a coastal management expert, a regional planner, a resource economist, an ecologist, a sociologist and an environmental engineer. Obviously the composition of the team will vary depending on the type of project in hand or the management challenge.
  - b. Adopting a planning process, which should take on longer than 1-2 year to execute. In principle the planning process involves the evaluation of secondary data and also any formal targeted research with a view to the production of a strategic management plan and an area profile. The actual planned life of the project should be between 5-10 years to permit the development of skilled human resources, plans and other measures needed to allow the project to be self-sustaining beyond the limit of donor funding and technical support. Clear goals should be apparent and acceptable to all participants.
  - c. Collection of research data. Such data will include secondary information but may also involve instigation of focused research needed for a specific coastal management programme. The research will be multidisciplinary in character and should include attempts to evaluate the 'assimilative capacity' of a system/ecosystem, resource evaluation, and legislation as appropriate. Assimilative capacity can be defined as 'the ability of a receiving system or ecosystem to cope

with levels of waste discharges or human activity without suffering any significant effects.'

- Implementation requires funds and human resources and primarily depends upon project design and the capability of the implementing agencies.
- Monitoring is an important component of the management process and should be incorporated at an early stage of the programme. The aims of monitoring are to see how the projects are progressing; to explore opportunities that could be developed and to assess the impacts and the lessons learned.
- Evaluation is critical since it enables corrective action to be taken where management plans are not producing the desired results. As a result of evaluation changes in plans and management strategies may be initiated and mistakes corrected at an early stage of the management process. In this way integrated coastal management becomes iterative with scope for learning from mistakes made early in the management programme.

Because the planning, implementation and monitoring and evaluation are sequential they can be depicted as a cycle, often described as the policy cycle (figure 3).

**Figure 3. Steps in the evolution of each generation of a coastal management programme (after Oslen 1993)**



The most difficult transition occurs between planning and implementation. Each cycle of the policy process for a coastal management programme can

be considered a generation. The procedures adopted in many mature coastal management programmes are substantially redesigned in subsequent generations as a result of earlier experiences and such exercises have been termed 'adaptive management'. In this way constructive use is made of lessons learned from successes and failures in the management process.

### **15.5.2 Management issues**

Management issues include resource use (over fishing, tourism potential, destruction of habitats etc.); environmental quality (population, coastal erosion) and institutional concerns (conflicts in legislation, intersectoral conflicts, ineffective law enforcement etc.). While depicted in the cube modal as individual issues, many clearly overlap and serve usefully at this point to highlight another aspect of coastal management that of multiple use of coastal environments. At the heart of this concept lies a recurrent problem in coastal management described as a sectoral approach to resource use. This approach favours a single purpose and exclusive use of land and water resources. However share coastal systems generate a wide variety of 'goods' and 'services' it has been argued that we should be looking for the optimal mix of uses that generates the greatest economic benefit to society. That optimal mix is hard to achieve and demands an effective and integrated coastal management policy if resource conflict is not to occur. In Sri Lanka coastal lagoon areas are frequently sites, which suffer from multiple resource conflict (fishing, mining and tourism). Such locations have been considered under the heading of special area management sites where collaborative management plans have been set up to resolve conflicts. It is clear from a large number of case histories that the diverse range of 'goods' and 'services' cannot be managed adequately through private ownership or control by sectoral agencies.

### **15.5.3 Management actions**

Management actions provide the most important dimension of a coastal management programme since they involve the application of measures directed towards achieving the desired changes e.g. maintaining the functional integrity of the ecosystem, improving water quality and changing human behaviour. They include:

- International and organizational arrangements, which clarify legal rights and obligations; strengthening enforcement capability and undertaking monitoring and evaluation.
- Incentives and regulations to change human behaviour which might involve establishment of subsidies, fishing permits or quotas, taxes, fishing and mining bans, regulations of vessels and fishing activities.
- Direct public involvement which would involve investment by a government into increasing public awareness, conducting appropriate research, providing basic infrastructure (e.g. waste disposal systems) and technical assistance where needed.

## 15.6 Putting Theory into Practice: Examination of Coastal Zone Planning in the Indus Delta, Pakistan

### *Background*

The Indus delta is one of the largest areas of arid climate mangroves in the world. Approximately 160,000 ha are covered with mangroves, of which the most dominant species is *Avicennia marina*. The area receives only 220 mm of rain a year and so the growth and development of mangroves depends very much upon run off from surrounding land and flows down the Indus River. The flow has been significantly reduced in recent years because of construction of dams, barrages and irrigation schemes. Freshwater outflow to the sea is now restricted to only 2-3 months per year.

There is evidence that the extent of mangrove coverage in the Indus Delta has decreased significantly in recent time. In addition there has been a reported decrease in biodiversity with only three of the original eight mangrove species recorded in the delta now occurring naturally. These changes have been attributed to altered environmental conditions (increased salinity and decreased silt load), pollution from industry, port development and pressures from human use of mangrove wood for fuel and fodder. The effects of loss of habitat and fish nursery grounds, as well as over fishing, might be expected to have resulted in decreased fish catches but there is little quantitative information available. One of the main reasons for this is that the mangrove related fishery is diverse, both in terms of catch and gears used which range from a single man walking a push net through the mangrove margins to an 18m shrimp trawler operating with a crew of over 20. The collection and analysis of meaningful fisheries data is therefore a complex task. Discussion with fishermen suggest that there are early warning signs of over fishing with species such as shrimp, pomphret, hilsa and barramundi showing a decline in catch per unit effort and average size and many fishermen comment that most fish are to be caught in mangrove lined creeks. Fishing effort will continue to rise as a result of a population increase of over 3% per annum in a community, which has no traditional employment other than fishing.

### *The management process in this case history*

The development of a coastal zone management plan for the Indus Delta has been a major goal from the outset. The project proposal for Korangi/Phitti Creek had the following long term and short-term goals:

#### *Long-term goals:*

1. To develop environmentally sound management policies, institutional capability and action, and in particular the improved coordination of scientific, technical, economic and industrial aspects in the development planning process.
2. To demonstrate the economic value of conservation and sustainable use of natural resource both at the local and national level.

3. To promote improved management of the Indus Delta mangrove ecosystem as a natural resource with multiple functions and benefits including, but not restricted to, immediately quantifiable economic benefits such as fish nurseries, fuel, fodder, construction materials, storm protection and siltation protection.

*Short-term goals:*

1. To support a productive, profitable and expanding fisheries programme based on environmentally sound management of a renewable natural resource base.
2. To initiate projects, which will bring measurable benefits of conservation and sustainable development of natural resources to poor people in terms of economic welfare, income-generating activities during the closed fishing season, living conditions and public health.
3. To make proposals on improving economic returns through mariculture, improvement of export earnings, development of improved closed season fishing regulations more attuned to ecosystem realities and the development of the specialized tourism potential of the mangrove wetlands.
4. To determine the sources of polluting and devise means for its monitoring and control.
5. To determine the effects of pollution and the indirect effects of human activities on the ecosystems of the delta.
6. To improve, through training, the environmental capacity of individuals and institutions concerned with management.

The goals here are clearly defined and embrace the need for solutions to management issues to be both interdisciplinary and well integrated.

Funding is a major part of programme implementation. In the Indus Delta case history initial funding was insufficient for the development and implementation of an integrated coastal zone management plan. A number of the proposed projects on fisheries and analysis for freshwater flows into the delta were not been taken up by donors and as a result the practical initiatives focused on a single sector (forestry) rather than a broader multi sectoral approach. The effectiveness of the programme was therefore significantly restricted

**What were the management issues in this case history?**

- Habitat loss
- Pollution
- Overfishing and resource exploitation
- Ineffective law enforcement (both environmental legislation and fishery bans)

- Institutional issues (sectoral interests with at least 20 different organizations having some direct interest in management, development or research in the area)

### **What were the management actions in view of the above?**

#### *Rehabilitation of mangroves*

Over the last 10 years the main ecosystem initiative in the Indus Delta has been directed at rehabilitation of degraded areas of mangrove. Three major projects have been involved in this endeavour, namely, the UNDP/UNESCO research programme on mangrove rehabilitation carried out by the Sindh forest Department from 1986-1990; the IUCN Karangi Ecosystem project which included an assessment of environmental pollution, development of a coastal zone management plan and mangrove rehabilitation and a world bank assisted project for rehabilitation of an extensive area of mangroves in which it is projected to plan up to 20,000 ha of mangroves by 1998.

In the IUCN project about 600 ha of mangroves were replanted over a five-year period, using mainly *Avicennia* and *Rhizophora*. The project also assisted in institutional capacity building by training a number of graduate forestry officers in mangrove rehabilitation and management. The first established mangroves are now 10 year old and it is clear that both *Avicennia* and *Rhizophora* are well established. While growth rates are comparatively slow compared to more humid areas in the tropics the plants are reported to be healthy and producing viable seed which will provide for future planting programmes in the area. One issue that still remains to be addressed is the loss of mangrove biodiversity in the area and the need to re create conditions, which will sustain the former wide diversity of mangrove species.

#### *Control of pollution*

Port Qasim is one of Pakistan's major ports, being the focus of considerable industrial and shipping activity. The port is situated approximately 40 km from the open sea up the Korangi/Paitti creek system. The Port Qasim Port Authority was identified as being central in any plan to improve environmental water quality in the area since the high biological oxygen demand and suspended matter from industrial and domestic discharges has led to severe pollution problems. An environmental evaluation of port Qasim was carried out with recommendations to set up an environment and safety unit in the authority, together with training for oil spill clean up procedures. A series of workshop was also held with tanners and other polluting industries and as a result the Pakistan Tanners Association have been taking steps to recover chrome compounds and also design a combined treatment plant for effluents.

#### *Over fishing and resource exploitation*

A ban has been operational since 1983 for a two month closed season during June and July for catching shrimp in Sindh province. This was not well received and only 35% of the fishing community observed the legislation. The

ban continues to operate, although poorly enforced, and during these months economic gains by the fishers are reported to be greatly reduced.

Coastal community initiatives have been taken to provide alternative income sources but these have generally been small-scale operations. They have included the promotion of handicraft skills, mangrove honey production and possibilities for ecotourism. Another initiative included the introduction of improved efficiency cooking stoves, which would reduce the demand for mangrove wood as fuel.

### *Adaptive management during the programme*

Throughout its ten year history the project has expanded from purely forestry rehabilitation trials to embrace other issues such as pollution control, coastal community involvement and fisheries. Attempts were made to seek funds to evaluate the minimum flows of freshwater down the Indus that would be required for survival of the mangrove ecosystem and also to address other integrated coastal management issues. However limits to human and financial resources have meant that these projects have not been taken on and the programme has retained a sectoral base in forestry. Nevertheless both Port Qasim Authority and Sindh forestry Department are using IUCN resources for technical backup in their quest to promote more sustainable management of the mangrove resources of the Indus Delta.

The case of the Indus Delta is one of a series of case histories collated by the World Bank as examples of management practise. In this example Peter John Meynel lists the main lessons learned from the early part of the programme as the following:

#### *Ecosystem management effectiveness*

1. Successful techniques for mangrove rehabilitation.
2. Ecosystem management often means management of human activities, rather than of the ecosystem itself.
3. Ecosystem management must take into account realities of climate change, pollution growth etc.
4. Planting strategy should take account of ecological conditions rather than working only to targets.

#### *Ecosystem project logistics*

1. Need for greater co ordination between agencies.
2. In difficult access and working conditions, adequate attention must be given to provision of transport.

#### *Community involvement*

1. Community development and management is difficult in complex coastal communities.



2. Community development is time consuming.
3. Importance of awareness raising and education.
4. Develop alternative income sources.

### **15.7 General Integrated Coastal Management Practice in South Asia Region**

Integrated coastal management practice is currently being developed throughout the region. In most countries legislation requiring coastal states to prepare coastal management plans is relatively recent; in others such as Sri Lanka coastal management has been a concern since 1963. In 1979 a lead agency, the Coast Conservation Division (CCD), was set up to help co-ordinate sectoral activities between relevant agencies and government department in Sri Lanka. The implementation of the Coast Conservation Act by the CCD in 1981 was an important first step in the evolution of a Coastal Zone Management Plan, which was finally approved in 1990. This plan was concerned primarily with coastal erosion and shore front construction. CCD's planning and regulatory programme for the coastal zone is complemented by research and planning activities for the National Aquatic Resources Agency (NARA) established in the same year as CCD. Looking to the future CCD activities are projected to broaden to cover wider issues of concern in the coastal zone. The agency itself will aim to transform its primarily regulatory function to one of a service-orientated organization, which facilitates locally based planning and implementation efforts. The lessons learned from the 18 years of experience of the CCD should be recognized at an early stage during the development of ICZM programmes in the region. They may be summarized as follows:

1. Coastal management in Sri Lanka has evolved a necessarily supportive national framework but has not yet focused on how to involve coastal communities and local government in the resource management process.
2. Coastal management activities are presently too restricted to coastal erosion management and regulatory development along the shorefront.
3. Resource management that focuses on regulation is too narrow in scope and cannot meet the complex needs of coastal communities. Regulation alone tends to alienate the coastal residents affected.
4. Facilitating co-operation between sectoral interests has not been easy. Strong leadership by a coordinating agency is needed if it is to be effective in pro-active approaches to coastal management.

The lessons learned from Sri Lanka and Pakistan have many common features, namely the need for investment in seeking alternatives for coastal communities dependent on artisanal fisheries; the need for community involvement at all stages in the development of a management plan; the need for a multisectoral approach to management of the coastal zone and a formal strategy to effect such a proposal; the need to combine both regulation and

incentives in any management action and finally the need for targeted, interdisciplinary research on specific problems in the coastal zone.

## 15.8 Integrated Coastal Management: South Asia

South Asia Regional Seas contains an extensive area of marine and coastal habitat of considerable diversity and productivity. In a recent listing of world marine habitats of especially high diversity, by the World Wide Fund for Nature (Global 200 Ecoregions), as much as 75% of the marine and coastal areas of South Asia were included, namely Maldives and Chagos archipelagos, the Laccadives and Andaman islands; the Sundarbans and the Indus Delta. Remarkably, given the population densities in parts of the coastal zone and recent tourism developments, many of the listed areas are minimally disturbed—a factor governed in most cases by the scale of the habitats and their relative isolation from major centres of population. Yet pressures on these habitats are already considerable and likely to increase as coastal populations expand and coastal tourism escalates in the region.

### 15.8.1 Good Coastal Management Practice

At this point it is worth reiterating what constitutes good coastal management practice. Essentially there is no generalized prescriptive recipe for the management of coastal resources; each case, each site brings with it its own unique set of issues for consideration. There is however a general framework within which coastal resources can be sustainably exploited through appropriate policymaking, management, and technological intervention - this framework is integrated coastal management (ICM). It is most effective when it is pro-active and the process of developing ICM can be described as a series of steps. These are

#### 1. Awareness

- Developing awareness of the value of coastal resources within national economic and social development programmes
- Developing awareness of the ability of coastal ecosystems to sustain more than one economic activity.
- Developing awareness of the common dependence of different groups of people on the availability of goods and services generated by coastal systems.

#### 2. Cooperation

- Promoting cooperation among different sectoral agencies, the private sector and community groups, to achieve common objectives.

#### 3. Coordination

- Developing coordinated policies, investment strategies, administrative arrangements and harmonized standard by which performance can be measured.

#### 4. Integration

- Implementing and monitoring policies, investment strategies, administrative arrangements and harmonized standards as part of a unified programme, and making adjustments where necessary to ensure stated objective are being met.

ICM can operate at all levels of governance. It is not always necessary to wait until national guidelines are in place before attempting to use the ICM principles. Key elements of good practice in ICM, which apply to all coastal management situation, include the following:

- The adoption of a systematic, incremental approach to developing and implementing ICM projects and programmes.
- The involvement of local communities in the ICM process.
- The establishment of mechanisms for integration and coordination.
- The establishment of a sustainable financing mechanism.
- The development of ICM capacity at all levels.
- The monitoring of the effectiveness of ICM projects and programmes.
- Integrating environmental, economic and social information from the very beginning of the ICM process.

What lessons are to be learned from the exploitation of coastal habitats in South Asia thus far and what elements of good coastal management practice need to be reinforced in the region? These aspects can best be assessed by summarizing the problems, causes of the problems, and actions that should be taken.

#### Case history 1: The extraction of coral and sand resources in the region

##### PROBLEMS:

- Removal of large quantities of dead and living coral reef for construction purposes, leading to reduced coral cover and long-term damage to the reef. Because of changed conditions at mined sites coral fail to re-establish themselves. Thus the reef habitat is degraded with consequent loss of associated fish, and sea defense potential of the living reef.
- Considerable quantities of sand have also been removed from marine habitats where sediment budgets are unknown. Problems of land erosion have been reported as resulting from such extractive processes.

##### CAUSES:

- A failure, until recently, to encourage the use of and improve the quality of alternative building materials.
- An increasing demand for construction materials as a result of increased population pressures and tourism.

**ACTIONS:**

- To develop alternative building materials and encourage their use through education of local residents and through improvement of the quality of the product by education of those in the construction trade.
- To provide more detailed estimates of sediment budgets on coastlines earmarked for sand extraction, before sand is removed.
- To encourage collaborative, participatory projects between coastal communities and government departments whereby participants actually regulate resource extraction themselves.

**Case history 2: The conversion of mangrove areas to shrimp farms.****PROBLEMS:**

- These have been significant loss of mangrove habitat in countries in the region as a result of conversion of mangrove areas to intensive shrimp farming. Consequent on their loss is a reduction in biodiversity, nursery and refuge areas for fish and shellfish of economic importance, sea defense potential and a whole range of other goods and services.
- Because of poor aquaculture practice in shrimp farms, problems of disease and environmental pollution have led to low yields, chemical alteration of pond characteristics and ultimately abandonment of ponds.
- Without supply of nursery fry there are major demands on wild fry, which can lead to high mortality of other shrimp and fish larvae during their capture.

**CAUSES:**

- The high financial gain from exploiting shrimp worldwide and high demand for the product.
- Inappropriate siting and inadequate management of shrimp ponds.

**ACTIONS:**

- Appropriate evaluation of sites selected for shrimp culture including a chemical, assessment of soil type prior to establishment of ponds, realistic economic evaluation of mangrove areas and cost-benefit analyses of conversion.
- Improved environmental management of ponds through better education of site managers and workers.
- Rehabilitation of damaged areas through remediation of abandoned ponds and restocking of mangroves.

**Case history 3: Effects of environmental pollution in the coastal zone.****PROBLEMS:**

- Sewage from domestic urban areas and tourism facilities and the absence and/or inadequate collection and treatment of sewage.
- Industrial pollution from urban areas and run off from agricultural lands.
- Tanker and ship bilge discharges in coastal waters.
- Dredging activities in inshore waters.

**CAUSES:**

- Increased urbanization by rural people of coastal areas and in some cases informal settlements that compound environmental pollution associated with discharge of water and disposal of garbage.
- Inappropriate siting and construction of outfalls and poor treatment of existing discharges.
- Intensification of world tanker traffic in the region.

**ACTIONS:**

- Invest in low cost sewage collection and treatment facilities for local communities.
- Enforce regulations and standards of tourism development in terms of waste water discharges.
- Demand EIA procedures are followed prior to the modification of the site. If possible a general environmental assessment, which should be seen as a pro-active process, should precede EIA. The former would enable environmental information to be incorporated into the planning process before development of a coastline is even contemplated.
- Develop oil spill contingency plans based on oil spill trajectory predications and sensitivity mapping of sensitive areas.
- Create a response network and training for clean-up operations.
- Ratify existing conventions and other instrument, which provide protection and assistance when marine pollution occurs.

**Case study 4: Reef-related fisheries in South Asia****PROBLEMS:**

- Over fishing is taking place in the coastal zone of many countries.
- The MSY of certain aquarium fish, groupers has already been exceeded and beche de mer and giant clam have also been over exploited.

**CAUSES:**

- Lack of enforcement of regulations and legislation.
- The high market prices paid for products such as beche de mer, giant clam and grouper.
- The high numbers of rural poor, which depend on fisheries as a last resort.
- Inadequate education to assist fishers in the use of more sustainable fishing methods.

**ACTIONS:**

- Development of fishery management plans within the framework of ICM.
- Analysis of standing stock, catch data and socio economic issues.
- Development and implementation of regulation of fishing activities.
- Promote suitable mariculture.
- Protective zoning of critical ecosystems such as mangroves and coral reefs.
- Increase returns from fisheries by minimizing post harvest losses and improving storage and processing.
- Involvement/education of fishers, and local communities.

**Case history 5: Coastal tourism****PROBLEMS:**

- Deterioration in coastal water quality and coastal erosion.
- Degradation and loss of habitats such as mangroves and coral reefs
- Increasing traffic noise and congestion.

- Social conflicts between tourists and local communities.

**CAUSES:**

- Rapid increase in the number of tourists in the region, exceeding the 'carrying capacity' of some sites.
- Ill-conceived development of resorts in the coastal zone and lack of appropriate management strategies in controlling tourism development.

**ACTIONS:**

- Environmental education of tourists, tour promoters, resort owners and dive guides.
- Implementation of codes of practice for environmentally sensitive tourism development enforcing set back, landscaping, adequate water supply and waste disposal, and good diving practices.
- The enforcement of regulations of building construction and environmental protection.

**Case history 6: River basin management and the coastal zone.****PROBLEMS:**

- Increased or reduced siltation of rivers, reduced river flow, salinisation of ground waters.
- Deterioration in the status of coastal ecosystems, particularly mangroves and coral reefs.
- Consequent loss of livelihoods and habitation of coastal communities.
- Increased susceptibility of coastal communities to the effects of natural and man made perturbations e.g. cyclones and sea-level rise.

**CAUSES:**

- Increased population pressures and the need to establish habitation in marginal areas.
- Increased abstraction of water upstream; the creation of dams and flood embankments.
- The lack of freshwater flow and nutrient supply to mangrove ecosystems.
- A potential increase in silt load to ecosystems such as coral reefs.

**ACTIONS:**

- The integration of river management plans into a broader management programme which includes the coastal zone, where appropriate.
- Support for international agreements, which promote management of river basins.
- The greater coordination of agencies dealing with management of river basins and the design and implementation of management policies that deal with activities from source to sink in the river basin.
- An improvement in the understanding of river sediment budgets as they might affect coastal dynamics.

**15.8.2 Common weaknesses**

It follows from the above case histories that the marine habitats of South Asia are subject to a wide range of uses by man, with resource exploitation a major concern for every country in the region. In some instances the lack of sustainable extraction is all too evident, e.g. coral mining; intensive shrimp farming; beche de mer, grouper, and giant clam fisheries. Despite the very varied nature of case histories described there are five common weaknesses evident in almost every example. They are:

1. **A lack of enforcement of existing legislation.**
2. **A need to involve greater community participation in management of resources.**
3. **A lack of relevant scientific information needed to underpin sustainable management, and a requirement to improve dissemination of what is already known throughout the region.**
4. **A complex array of institutional agencies involved in the management of a single resource with often an inadequate coordination of environmental policy by the nominated lead agency.**
5. **Few truly integrated coastal management programmes, apart from one or two exceptions in the region.**

It is worthwhile considering briefly each of above weaknesses in turn

**1. Enforcement of existing legislation**

Enforcement of existing legislation is often a universal problem in many management programmes. Countries in South Asia have been among the first to recognize such weaknesses and have adopted practices, which encourage compliance with bans and licensing schemes. Their experiences show that too much reliance on regulatory measures can lead to hostility and a breakdown of relations between the enforcing body and local



community. In Sri Lanka, a failure to regulate coral and sand mining in the 1980's by bans and licenses led to an alternative approach being adopted by the Coast Conservation Department. This involved public education of adults and schoolchildren of the importance of sustainable management of marine resources, and also community based collaboration in management of resource extraction. More effective management of mining activities followed, proving that penalties and incentives used together can provide valuable tools in achieving compliance of enforcement. Incentives might include economic benefits (tax incentives, tradable permits, user charges) capital investments (construction of public works, acquisition of land rights) education and training programmes and participation in policy and decision making processes. It is quite clear that such an approach works very well where the geographical area of jurisdiction is small and where the goals of the policy are well understood and accepted to be fair, both by public officials and coastal residents. However, even considering the vast geographical extent of islands in the Maldives there is scope for greater effectiveness of public education and community management. Such a programme could be effected through the Ministry of Atolls Administration, and the network of respected chiefs in each atoll, with the same positive consequences as those achieved in Sri Lanka. Land based projects in India, such as the social forestry programmes in West Bengal and other States, have also proved to be successful in both rejuvenating and raising new forests through community participation. Encroachment and felling are minimized as local communities experience the economic benefits of locally managed forest resources in cooperation with the Ministry of Environmental and Forests.

## 2. Community participation

It is clear that public participation in management programmes is fundamental to their successful implementation. Perhaps the single greatest weakness in all the case histories cited above has been the failure to involve local people in resource management decisions, whether it be alternative coral mining strategies in the Maldives, conversion of mangroves to intensive shrimp farms, EIA procedures, fishing bans, improved fish processing, tourism conflicts, and flood action plans in Bangladesh. Underlying such involvement is the need for meetings to educate and explain relevant issues and ultimately the election of respected individual to advisory committees that truly represent community views.

One of the central concerns of ICM is to integrate participatory mechanisms into decision-making processes and into the planning, implementation and evaluation of ICM programmes. Stakeholder participation is a process whereby stakeholders those with rights (and therefore responsibilities) and/or interest play an active role in decision-making and in the consequent activities which affect them. A participatory approach to management increases the probability that the rights and interests of stakeholders are fairly reflected, thereby encouraging ownership, and improving the likelihood that local stakeholders will cooperate in any proposed management scheme.

Participatory processes may operate at all levels with government departments in which regulation of resources may be devolved to the local community and where management policies may be derived from community involvement, to collaborative research projects between government

scientists and local fishers/farmers. A model for the former is described in the following integrated management case history (see under integrated coastal management in the region on page ) while a model for the latter has been developed in East India and Bangladesh. These projects concerned the integration of aquaculture into agricultural practices and involved the selection, testing and development of innovations relevant to local need and conditions. Research scientists worked in collaboration with local farmers and farm based trials were integrated with on site research. Such models could be very easily transferred to the coastal zone, particularly in the case of mariculture of beche de mer, and giant clam, where participatory projects between scientists and local communities may reverse the non-sustainable extraction of these species. Similar collaboration, between scientists involved in marine algae culture and local fishers, could also yield benefits. Such initiatives should develop closer partnerships between those living in the coastal zone and those (locally and remotely) directing their efforts towards support of sustainable management through research. In this way strategic research becomes focused on relevant problems.

### **3 Applied science underpinning management.**

A lack of scientific knowledge of coastal ecosystems and their linkages (as they affect management decisions) is a common problem worldwide and its mention might be seen, by some, as an excuse for failing to take action when conflicts of interest become difficult to resolve. In the case of South Asia, where the marine habitats are both extensive and remote, it is not surprising that many areas have not been studied. Indeed there was greater scientific interest in the distant habitats (Chagos, Maldives, Laccadives, Andamans and Nicobars) in the late nineteenth century than ever since. Thus there remains, with the limited trained manpower available, considerable ignorance of both the extent and status of marine resources in the region. The inadequate scientific database is a significant limitation, both in identification of priority issues and strategies to cope with them. Much of the science practiced in the region continues to be descriptive and there is a need to identify applied problems, which can be tackled by interdisciplinary teams, of scientists, engineers, economists and social scientists. Some of the relevant scientific questions raised are highlighted below.

- Assessment of status of key ecosystems (coral reefs, mangroves, sea grasses).
- Are these ecosystems in good or bad condition? Are there indicators of ecosystem 'health' and if so what are they?
- What are the effects of human disturbance on these ecosystems and how can they be measured? i.e. How do we establish cause and effect in both the field and laboratory?
- How can a damaged ecosystem be restored? What timescale is needed for restoration? What scientific information is needed for the most effective restoration? (i.e. growth rate, reproductive cycle, predation and grazing pressure, time of planting/establishing an artificial structure, scope for natural regeneration). Which function of a

degraded ecosystem can be feasibly restored and which cannot? What are the financial costs of restoration?

- What is the abundance, distribution and biology of species of economic importance and what scale of fishing pressure can be sustained by their respective population? Is there scope to evaluate the effects of protection on these populations?
- Can the linkages (nutrients, productivity) between mangroves and surrounding waters be quantified? Do they vary on a seasonal basis? Where could these linkages best be demonstrated in the region? Are the linkage characteristics site-specific or do some general principles apply?
- How can aquaculture methods be optimized with least cost to the environment? What is the scope for introducing ranching and cage-culture of species in the region and how may environmental effects of such actions be minimized?
- What are the sediment budgets of rivers draining into to the Bay of Bengal and what is the data? (Projects have already been proposed which involve extracting sediment cores of 3-8m depth in the floodplains to assess (using radio-isotope techniques) seasonal and annual sedimentation rates as well as extracting cores of 20 m+ to evaluate sedimentation patterns since the last glaciation).
- Are there coastal or lagoon areas, which might be suitable for sand extraction? Can estimated sediment budgets for these areas be calculated? What level of sediment extraction could be sustained from these locations and with what environmental consequences?
- What are the likely effects of global climate change on the low-lying countries of Bangladesh and Maldives? Can international efforts to improve the General Circulation Model provide better predictors of likely sea level rise scenarios? In particular how sensitive, adaptable and vulnerable are marine ecosystems in the region to changes in climate?

These are all regional issues, which still need to be addressed by scientists drawn from appropriate disciplines. The incorporation of findings from these studies into management plans require inputs from many others disciplines e.g. what institutional, socio-political and economic factors should be taken into account when planning rehabilitation projects? At an early stage, therefore, it is necessary for scientists to liaise with engineers, economists, sociologists, policy makers and community representatives. Inevitably there will be many cultural and communication barriers to overcome between the disciplines scientists and engineers and economists do not share a common technical language but the greater the opportunity for interaction the sooner mutual respect will be established. Whatever expert advice is given it should be both objective and balanced to suit both regional and local needs; it cannot be given in isolation. Management strategies which are adaptive and in which science is a significant part of the planning, evaluation and modification of the programme, offer a valuable forum for interdisciplinary

interaction and are likely to yield more effective environmental policy as a result.

#### **4 Institutional problems**

Specific institutional obstacles to ICM include sectoral bias toward planning and management of human activities, fear on the part of agencies of losing control over resources and revenues they may generate, lack of clear mandates for a role that different agencies should play in coastal management, lack of clear mandates for a role that different agencies should play in coastal management, lack of policy direction to foster interagency cooperation and coordination, lack of funding to implement ICM, failure to integrate scientific information into policies and plans and a focus on short term financial returns.

A valuable lesson that has been learned is that total reliance on sectorally based management can lead to competition for the allocation and exclusive use of areas and resource. Many coastal systems are capable of directly and indirectly supporting the developing of different sectoral activities and integrated approaches to the management of coastal areas can reduce adverse economic, environmental and social impacts from development. Experience has shown that agencies can be encouraged to cooperate with one another in resolving common problems and working towards a consensus on how to improve the allocation and use of coastal resources. Already in certain coastal management issues in South Asia e.g. coral and sand mining in Maldives and Sri Lanka, tourism in Maldives and Sri Lanka lead agencies have been appointed. The number of agencies involved in these issues is still considerable and coordination between all involved could be improved.

#### **5 Integrated Coastal Management in the Region an example of good practice.**

Every country in the region can boast isolated examples of good management practice but the case histories described illustrate that these practice are rarely fully integrated in the true sense. One exception is a major initiative in Sri Lanka, which was undertaken in 1989 as an integrated coastal development for an estuarine system (Muthurajawela Marsh and Negombo Lagoon) on the western coast of the island, north of Colombo. This project involved several Sri Lankan Government agencies with outside assistance from the Netherlands Government.

##### **The Case of Muthurajawela Marsh and Negombo Lagoon (after Samarakoon and van Zon 1996)**

The estuarine ecosystem is situated in a heavily populated urban location; it provides livelihood to about 3000 fisher families, and serves other multiple uses with a high annual economic value (Table 1). About 80% of families, who are dependent on fisheries, have a monthly income of less than US\$ 15. Pressure on the fishery resources is high, and destructive fishing methods are used. Unplanned landfill, mangrove encroachment and the siting of illegal housing all impose additional pressures on the environment.

**Table 1. Estimated annual economic value of multiple uses of the estuarine ecosystem**

Direct Use	Value (US\$ million)
Lagoon fishery	3.0
Coastal shrimp fishery	0.5
Coastal small pelagic fishery	1.5
Discharge outlet and sink value for 45 industries in Ekala Industrial Zone	6.0
Discharge outlet and sink value for local domestic and municipal waste	3.0
Recreational value for tourists	0.1
Amenity value	2.0
Anchorage for marine fishing craft	6.0
Land for housing in Muthurajawela Marsh	0.3
Intertidal sand shoals as land for housing	1.1
<b>Total</b>	<b>23.5</b>

The coastal wetland is 6,232 ha in extent and consists of a lagoon (3164 ha), which is connected to the sea by a single narrow opening in vicinity of Negombo town. The marsh (3068 ha) extends southward from the lagoon. The main inflowing river drains a catchment of 727 km<sup>2</sup> and discharges at the junction of the lagoon and marsh. The entire wetland is separated from the sea by a sand barrier on beach rock formed during past sea level changes. Some of the major management issues in the area include:

- Changing land use patterns affecting watershed vegetation, run-off rates, hydrology and use of agrochemicals.
- Land-use control by local government officials who have little understanding of the environmental linkages between elements of the wetland complex.
- Rapid population growth with an expected land need for new housing to exceed 4,000 ha in the next 10 years.
- Illegal encroachment of poor families onto the marsh areas.
- A potential labour force projected to be 50,000 by 2001 while the number supported by fisheries will decrease.

The first step taken was to develop a Master Plan for the estuarine area based on four characteristics of the ecosystem, namely;

- a. linkages,
- b. structural complexity,
- c. resilience and,
- d. dynamic stability.

Since scientific knowledge of the system was minimal, an ecological and mapping survey was conducted, together with an evaluation of the socio economic status (occupation, land tenure and use and other perceived problems) of the community and an evaluation of potential investors/projects for the area. On the basis of this information a zoning plan was drawn up which addressed the issues of development, ecology and equity. Four zones were recommended and a range of scenarios (in terms of size of zones) was proposed. A series of open meetings were then held to negotiate allocation of land areas to different uses. As a result of this open negotiation, land apportionment was as follows: a conservation zone (91% of the continuous wetland), a buffer zone (6.4% of the continuous wetland) a mixed urban zone (2.5% of the continuous wetland), and a residential zone (41.7% of the total planning area).

The Master Plan was approved by the Cabinet of Ministers in 1991 for implementation, though the cabinet did not approve a 'management authority' with legal powers. Instead a multi agency steering committee without legal power was convened for supervision and monitoring of implementation. This committee included both community and non-governmental representation. The plan was prepared in such a way that separate components could be implemented independently by each responsible agency, but with co ordination by the steering committee. Over the period 1991-94 five major activities were planned. They were:

1. **Developing a relocation and community development package for encroacher communities living on Muthuragawela Marsh.**

A package for 200 households, in the first instance, was prepared in consultation with target families. These families were relocated to a site where they were given legal ownership of land, financial assistance for house construction and improved amenities. Responsibility for the relocation was given to a local respected Non-Governmental Organization (NGO). The initial relocation proceeded successfully and was to serve as the template for all remaining encroacher communities. However a change in the presidency of Sri Lanka in 1993, (the former president had been a supporter of the Master Plan), opened the doors for interference and obstruction by local politicians whose constituencies included the encroachers. Ultimately the contrasting needs of local communities were accommodated in the Conservation Management Plan.

2. **Preparation of an EIA for sand filling the area designated as a mixed urban Zone, followed by a land use plan and marketing plan for the new land.**

An EIA report for a 4 million m<sup>3</sup> sand fill was made available for public enquiry and subsequently approved by the Central Environmental Authority. The sand fill has been completed, drainage installed and an arterial road

constructed. Land use and marketing plans for the Mixed Urban Zone were prepared with a major focus on employment generation.

**3. Preparation of a detailed conservation management plan for the conservation zone.**

This area comprised a multiple use area that included a segment of the marsh and the lagoon. The marsh provided housing and served as a flood buffer while acting as a habitat for range of plants and animals. The lagoon provided a livelihood for fishers as well as a source of leisure activities for more affluent individuals. A major problem foreseen for this zone was the integration of community groups (fishers from 26 villages) into the planning process. In order to do these workshops, were held on environmental education and the need for sustainable exploitation of resources. Data obtained in the earlier scientific surveys were used in the management plan, which emphasized the important ecological linkages between watershed - marsh - lagoon and sea. Ultimately community representative agreed that lagoon productivity had to be safeguarded. The resulting conservation management plan included four basic tenets:

- that sustainable use of the lagoon resources was a basic condition.
- that community involvement in management was essential.
- that measures for pollution control should be instigated.
- that alternative job opportunities be created which included development of environmentally sound recreation and eco tourism.

**4. Preparation of a land use plan and screening of investment proposals for the buffer zone.**

Planning for the buffer Zone was not straightforward with a range of different ideas on potential land use and control. Views ranged from those of developers who suggested total control by the private sector to protect their investment, to those of local communities who wanted right which would not be influenced by politically powerful groups or individuals. A draft land use plan, incorporating the viewpoints of all sides, has now been produced which aims at recreational use by both private and publicsectors.

**5. Development of a cost recovery system for conservation management**

The Central environmental authority identified a visitor centre that would provide information and excursion to national and international tourists, nature education for children and a place for studies and community activities as a viable mechanism to earn money to pay for conservation management activities. The visitor centre has been highly successful, attracting over 1000 visitors per month, well above anticipated usage. It currently employs 25 staff who are engaged as guides, rangers, and in general maintenance duties.

This case history highlights the importance of community participation management process. Since the beginning of the project, the fishing communities have become increasingly active in planning the protection of lagoon resources. The lagoon fisher folk have organized themselves into the Negombo Lagoon Integrated Fishermen Organization (NLIFO) and have met

and presented the Minister of fisheries with a draft Conservation Management Plan. Community participation is not only providing momentum to plan implementation but it has also contributing to greater coherence and environmental awareness in the coastal community. NLIFO is currently collaborating with the local administration to address one of the most difficult tasks for management of the area boundary demarcation of the lagoon to prevent further encroachment. Such collaboration is a particularly good indicator of institutional strengthening, since for decades fishers and the local administration criticized each other, rather than working to prevent further encroachment. In 1997 a boundary was constructed along the most critical area, using monies raised by the local community organization. The boundary has enabled the CCD (in partnership with government agencies) to begin to take firm action against illegal land filling with community support.

Progress with further management of the area is not without its problems, however, some local NGO's oppose tourism as an alternative livelihood; the Ministry of Fishers plans to develop a major anchorage in the outlet of Negombo Lagoon, while other groups object to the increased power of community participants. Despite these setbacks the present Government has approved the continued implementation of the Master Plan and already there are already direct socio economic benefits to be seen from its implementation. These include:

- Sustained income and employment for about 3,000 fishing families in the Negombo Lagoon.
- Improved living conditions and secures land title for 2000 local families, with new job opportunities in eco tourism and resource management in the marsh and conservation areas.
- Housing for 9,500-16,500 new residents and permanent employment in industry, transport, trade and service for 14,000-28,000 workers in the mixed urban zone.
- Permanent employment for about 250 workers at a future golf course and another 300-500 in potential activities associated with a marsh botanic garden, urban park, sports complex and herbal garden.

The weaknesses identified in other case histories described earlier have been avoided here. Scientific information was gathered and fed into the management process at an early stage, thus allowing the plans to evolve around the principles of ecosystem function. Community participation at all stages of the management process has led to self imposed regulation of less damaging environmental practices. A particularly good example of this is the use of push nets and other fishing methods which result in habitat degradation; regulation of these activities will be covered in a new fishery management plan drawn up with the collaboration of representatives of the local fishing communities. The department of Fisheries and Aquatic Resources is now preparing to implement the fishery management action plan.

In early 1997 future plans for the project and much of the good work achieved so far appeared to be in jeopardy. Plans for a major highway - the proposed Colombo - Katunayake Expressway were revealed with a route that took the highway through the marsh sanctuary and Negombo lagoon. Emergency meetings were immediately called, ultimately at the highest level



with the president, the Ministry of transport and highways and all relevant agencies in June 1997. As a result of these negotiations the highway will now be rerouted to the east and will not intrude into the marsh area. In addition it was decided that only the southern sector of the highway will be built in the first phase, allowing public comment on an EIA report concerning the northern section (routed via Negombo lagoon) to be received and evaluated. A 5-year (1998-2003) project proposal for the continuation of the management programme is under consideration by the Netherlands government and if it is successful it should see consolidation of the gains made thus far.

### 15.8 A future vision of ICM in South Asia

While highlighting the Muthurajawela Marsh Negombo lagoon case history in Sri Lanka as an example of good practice, it is recognized that there are likely to be other examples in the region that may be also used as models of integrated management. Such successes should be better disseminated and opportunities created for visits to such models by agencies across the region. As projects develop, other models might include the ICUN project on mangrove restoration in the Indus Delta, joint forest management in West Bengal; marine park management in the Andamans; environmental awareness in the tourism industry of the Maldives and integrated 'river basin' management in Bangladesh.

There are considerable skills in the South Asia region, not only in the multiplicity of disciplines needed for ICM but also in negotiation and conciliation with both scientists and policy makers. These skills should be recognized on a regional basis and opportunities provide for greater interaction between scientists, practitioners of ICM and policy makers on a regular basis. The ASEAN Australian Marine Science Project on living Coastal Resources (part of the ASEAN-Australian Economic Cooperation program), which operated over the period 1984-1994 in neighbouring South East Asian countries, is a good example of how regular meetings, technical workshops, symposia and newsletters, fostered valuable interdisciplinary exchange and cross fertilization of ideas on the status and management of key coastal ecosystems.

An extension of this model will be developed in the Global Coral Reef Monitoring Network (GCRMN) for South Asia, which is shortly to be initiated from the IUCN office in Sri Lanka (funded by the Department for International Development, UK). The aim of this initiative is not only to support environmental assessment of coral reef ecosystems but also to link such assessments with the solution of key managerial issues as they affect coral reefs in the region. Ultimately it is the aim of the international Coral Reef Initiative (of which GCRMN is a part) that other ecosystems, such as mangroves and seagrasses, are considered in a similar way to coral reefs and that a network of expertise is built up in the region.

The South Asia Cooperative Environment programme (SACEP) has a central role to play in regional coordination of integrated coastal zone management. Such a role was recognized in 1994 when the Economic and Social Commission for Asia and the Pacific (ESCAP)/UNEP/SACEP Intergovernmental Meeting in New Delhi endorsed integrated coastal zone

management as a priority element for sustainable development of marine and coastal areas in the region. The Action Plan proceeding from that meeting highlighted the need for regional cooperation and proposed that pilot activities in ICM should be initiated in individual countries. The guidelines for the development of pilot projects were very ambitious, involving preparation of coastal profiles, analysis and forecasting, definition of goals and strategies and implementation of management plans. In the early stages of development of ICM capabilities it is perhaps wise to begin with existing small-scale projects, to learn from the lessons that they provide and to expand from a solid foundation, which recognizes the centers of expertise within the South Asia Region.

The challenges in ICM for South Asia, like any other region in the world, are considerable. However, unlike other parts of the world, ICM is recognized by all those countries bordering the Indian ocean as a high priority; project are already underway which demonstrate successful integrated management that relies on community participation; and programmes have been initiated which will begin to coordinate regional expertise. The future success of ICM in the region rests not in elaborate, over ambitious plans but in solid achievements at the local level using the many and increasing skills of personnel in the region.

## Unit Summary

The water is essential for life of human being and other organisms. Although water exist in substantial quantities on earth however human activities are continuously affecting this resource both quantitatively and qualitatively. Effective use of water and associated resources is essential.

Coastal resources are one of the important resources of water and continuously affected by human activities at coasts. An integrated coastal management programme involves integration of government and community, science and management and policy and legislative framework.

The essential elements of integrated coastal management are **integration** and **co-ordination**. Any policy and management action which has been designed to address coastal development conflicts must be founded on a sound understanding of natural processes and ways in which these may be disturbed; on political socio cultural and economic conditions; on present and future demands; as well as social costs involved.

The challenges in ICM for South Asia, like any other region in the world, are considerable. However, unlike other parts of the world, ICM is recognized by all those countries bordering the Indian ocean as a high priority; project are already underway which demonstrate successful integrated management that relies on community participation and programmes have been initiated which will begin to coordinate regional expertise. The future success of ICM in the region rests not in elaborate, over ambitious plans but in solid achievements at the local level using the many and increasing skills of personnel in the region.

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## APPENDIX

**Oil Spill at Karachi Coast**

IUCN-Pakistan team visited the site of the oil spill on the Karachi coast on August 15, 2003. The Greek-registered oil tanker *Tasman Spirit* carrying 67,000 tons of crude oil for the Pakistan National Shipping Corporation (PNSC) ran aground in the Karachi Harbour channel on Sunday, July 27, 2003. The tanker started leaking oil immediately afterwards, though the quantity was originally quite small. The Karachi Port Trust (KPT) deployed booms and other oil containment equipment immediately. They also tried removing the ship from the channel. However, all such efforts proved futile and the tugboats available with the KPT and other agencies were unable to move the tanker. A smaller tanker was called from Dubai to remove some oil from the *Tasman Spirit* to make it lighter and able to float again. Around 16,000 to 20,000 tons of oil were removed leaving around 50,000 tons of oil still on the grounded vessel. But this measure too proved to be ineffectual.

On the morning of August 13, 2003, the *Tasman Spirit* developed a crack in the middle and two of its cells started leaking oil. The tanker is splitting into two and a major oil spill disaster is inevitable. In view of the unavoidable impending catastrophe, the 14-kilometers of affected coastline has been closed to the public. Pollution control equipment including booms has arrived from England and an aircraft loaded with 10 tons of chemical dispersant is expected from Singapore. But in view of the scale of the calamity, concerned officials were not very hopeful of positive results.

The residents of the affected beach area have been plagued with the smell of crude oil and fumes, which when inhaled are injurious to human health. Headaches, nausea, irritation of the eyes and infections of the throat are being experienced by the people in the vicinity of the spill. They anticipate a host of problems and diseases as the uncontrolled spillage spreads inland via the coastal creeks. Contaminated marine fish and shellfish will pose a significant health hazard if consumed. Experts say that people should avoid going close to the area due to the strong hydrocarbon fumes that are irritants of the skin and the respiratory tract.

Due to the prevailing southwesterly winds the oil remains on the eastern side of the beach at present. However, if the wind direction shifts drastically, the West Coast may also come under threat. This is where the Sand Spit beach is located where marine turtles have already started coming for breeding purposes. The already degraded mangroves along this section of the beach have been most adversely affected. The concerned organizations do not possess adequate equipment and machinery to deal with a disaster of this proportion. There has been high fingerling and young fish mortality. The extensive pollution of marine waters would also jeopardize boating, fishing and some industrial activities along this section of the coast, which are dependent upon clean sea water for cooling purposes.

## **UNIT 16**

# **PARTICIPATORY IRRIGATION MANAGEMENT AND WETLAND CONSERVATION**

### **Unit introduction**

Water is marvelous substance, flowing, rippling, swirling around obstacles in its path; seeping, dripping, trickling and constantly moving from sea to land and back again. The earth is the only place in the universe where liquid water is present in substantial quantities. Water performs a number of direct and indirect functions in the ecosystem.

In this unit we will examine:

- Participatory irrigation management
- Irrigation and poverty
- Gender and participatory irrigation management
- Participation in the irrigation sector (benefits, cost and risks and conditions for success
- Water management (A case of Pakistan)
- Wetland resources
- Integrated wetland management and conservation
- Integrated wetland and river basin management  
A Case Study of Loktak Lake, India

### **Unit Objectives**

After going through this unit students would be able to learn about the:

1. Problems in irrigation management.
2. The participatory approach for irrigation management.
3. Benefits, costs and risks and conditions for success in participatory approach for irrigation management.
4. Integrated management and conservation of wetland resources through participatory approach by studying in detail the case study of Loktak Lake in India.

## 16.1 Introduction

*A new approach to irrigation is user-oriented*

Water is absolutely fundamental to life; it is difficult even to imagine a form of life that might exist without water. The earth is the only place in the universe, where liquid water exists in substantial quantities. Ocean lakes, glaciers and other bodies of liquid or solid water cover more than 70% of our world's surface. The total amount of water on our planet is immense.

The distribution of water often is described in terms of interacting compartments in which water resides for short or long times. Human concerns regarding water can be divided into two categories; quantitative and qualitative. Quantitative refers to such issues as, is there enough water to meet our needs? What are the impacts of diverting water from one point of the cycle to another? Qualitative refers to such issue as; Is the water of sufficient purity so as not to harm human or environmental health?

Sources of irrigation water include ground water; nearby watercourses, such as rivers and streams, natural lakes and rivers and artificial reservoirs. Large-scale irrigational project cause environmental problems such as construction of reservoirs changes the local environment. Some habitats may disappear; stream pattern changes and erosion rates increase in the watershed of the reservoir.

Around 40% of the world's food crops are produced by irrigated agriculture. The performance of irrigation and drainage is critical to the food supply and to farmers' incomes, as well as to the environment. The ultimate goals in managing irrigation water are efficiency, equity and sustainability. Efficiency has been achieved if every drop of water has been properly allocated and used, without any waste. The goal of equity means that water is fairly distributed among users. Some farmers may have an advantage over others. Those at the head of a canal have an advantage over those living downstream, as they have first access to water. Influential farmers may have better access to water than poor farmers. In some cases, ideals of efficiency and equity may be in conflict. The goal of sustainability means that the users of today should maintain the quality and quantity of water resources for the use of future generations.

## 16.2 Problems in Irrigation Management

Managing irrigation, so as to achieve efficiency, equity and sustainability is very difficult. Market mechanisms are not enough. High prices for water when it is scarcest mean that low-income users may lose their access to water. Unrestricted use if prices are low may lead to pollution, waterlogging and over- use of groundwater.

Given the special characteristics of irrigation water, there is good reason for governments to intervene, and even directly manage irrigation systems. However, when a centralized agency is in charge of planning and operating an irrigation system, the result is often too much bureaucracy. Too much money is spent on staff salaries. As a result, the cost of water is high, and yet the irrigation service is poor. Users are unwilling to pay their irrigation

fees. The result is a vicious circle of high costs, poor services and low payment of fees, leading to inadequate funding and further deterioration of services.

One way out of this difficult situation is the participatory approach to irrigation management. Users are involved at all levels, including construction and operations. It seems to give greater efficiency at a lower cost.

### **16.3 The Participatory Approach**

Since 1994, the World Bank has carried out a program of Participatory Irrigation Management (PIM). One of the first countries where it was applied was Mexico. By 1995, more than two-thirds of the nation's irrigation network had been transferred to 316 irrigation associations. Following Mexico's lead, other countries, including Turkey and some Indian states, have adopted similar systems. PIM is not a new idea. Irrigation associations have existed in many parts of Asia for decades, including Japan and Taiwan. Other countries, including Vietnam and Pakistan, are in the process of implementing PIM-type reforms. Governments benefit from PIM by being able to reduce subsidies for irrigation. Farmers are also usually winners, since they enjoy a sense of ownership and improved services. The irrigation department may be a loser, as its budget, staff and authority are all likely to decrease.

#### **16.3.1 What is Participatory Irrigation Management (PIM)?**

Participatory Irrigation Management (PIM) covers a variety of different ways in which water users can be involved in the planning, construction, operation and maintenance of irrigation systems. Participation ranges from being informed and able to express views to situations where users and their representatives jointly or solely hold authority to govern irrigation systems and determine the irrigation services to be provided.

#### **16.3.2 What are some good examples of PIM?**

The majority of irrigation systems around the world were originally built and managed by local communities, and so constitute examples of PIM. This includes centuries-old locally governed irrigation systems in most regions with irrigated agriculture, including Asia, Europe, Africa and North and South America. During the twentieth century, government agencies took an increasing role in directly building and operating larger scale irrigation systems, often in ways that limited the scope for user participation. More recently, initiatives in many countries have sought to reverse this process, making agencies more responsive and giving users a greater voice in management. Initiatives in the Philippines and Sri Lanka during the 1970s became well known for demonstrating the potential to improve local participation in irrigation. During the last few decades Mexico, Turkey and the Indian state of Andhra Pradesh have all transferred management control to local bodies within large scale systems irrigating millions of hectares, and similar initiatives are now underway in many places.



For PIM as with other kinds of reforms, there is sometimes a tendency to idealize "models," exaggerated success stories that obscure the messy complexity that characterizes any change as significant as PIM. Increasing participation in irrigation management requires compromises and tradeoffs, building coalitions, effective management, dealing with political and financial constraints and continuing learning and adjustment. Nevertheless, the examples above, and others described illustrate some of ways in which participation in irrigation management can be improved, and offer information, which can be useful in developing participatory irrigation management, customized to diverse local conditions.

### **16.3.3 Who benefits from PIM?**

Participatory irrigation management can result in more responsive irrigation services, which may include more timely, adequate and reliable water delivery. Canal cleaning and other maintenance tasks are often done more effectively, due to more productive use of available budgets and increased provision of resources by irrigators. When other conditions are suitable, PIM can facilitate more efficient and profitable irrigated agriculture.

PIM is often advocated as a way for farmers to take over more responsibility for paying the costs of irrigation, and often does result in farmers providing more resources in cash and kind. However it should be remembered that farmers' incentives and financial capacity are shaped by the profitability of irrigated agriculture, and by the institutional arrangements available for financing major repairs and improvements. If effective mechanisms are not in place to provide for maintenance and rehabilitation, then any apparent savings in government subsidies for operation and maintenance risk being more than offset by losses due to deferred maintenance and infrastructure degradation. Overall economic benefits to farmers and society depend on increasing the efficiency and productivity of irrigation management.

The distribution of benefits from PIM depends on how the benefits of irrigation itself are distributed. In many countries, benefits of aggregate investment in irrigation are largely received by food consumers rather than farmers, in the form of lower prices resulting from food production surpluses. Gains from increased returns to land and water often become capitalized into land prices, benefiting landowners. Increased yields and cropping intensity can provide more employment for cultivators and agricultural laborers. If reforms are not well designed they risk perpetuating or reinforcing inequitable distributions of resources and power. Reforms to promote PIM do offer an important opportunity to make management more democratically accountable to stakeholders, strengthening their rights to irrigation water and their participation in governance of a vital resource.

### **16.3.4 Is there a difference between PIM and Irrigation Management Transfer (IMT)?**

Irrigation management transfer (IMT) involves a particular kind of change, to a form of PIM where user representatives have not just a voice in management but hold the power to choose what services they will receive. This often takes the form of a body of farmer representatives who determine key policies and plans for irrigation system management. IMT is thus a

particular form of PIM, which typically requires a comprehensive set of institutional changes in order to be effective.

### **16.3.5 Can Farmers Really Manage Irrigation?**

A common question is whether farmers actually have adequate technical knowledge and skills to manage irrigation. A first simple answer is that in many cases farmers can and do manage irrigation. This is even clearer if one looks at the large role farmers' play, sometimes informally, even in large irrigation systems. Practice in the field often differs from official policies that may formally restrict farmers to roles below tertiary level outlets. PIM provides a way to draw on the knowledge and skills that water users have concerning all levels of management. However the most important part of PIM concerns involvement of farmers in key governance decisions, which can then be implemented by farmers or specialized technical staff. Where specialized skills are needed, agency-governed or farmer-governed organizations can hire engineers, gate operators and others with technical skills.

### **16.3.6 What are Problems with PIM?**

Like any significant change, PIM may be difficult, requiring formulation of new policies and procedures, retraining of those involved in managing irrigation, rearranging irrigation finance and other structural changes in irrigation institutions. Many of the newsletters, reports and other documents on this site discuss the challenges of shifting to more participatory forms of irrigation management.

The opportunities and obstacles facing PIM and IMT are sometimes simplistically seen as just a matter of government withdrawing or reducing resources for irrigation. However long run success requires good communications and facilitation during a transition to new management arrangements, proactively developing local organizational capacity, ensuring that necessary technical and financial services are available from the public and private sector, and focusing government agencies on carrying out suitable regulatory roles in basin water resources management.

The concerns of farmers, irrigation managers, water resource management agencies and other stakeholders need to be addressed to develop policies that will continue to receive broad support through a process of learning and adjustment. Institutions need to be developed so that benefits are not captured by a few people, but instead are equitably responsive to the interests of all water users and other stakeholders.

If responsibility and institutional arrangements for financing major repairs and improvement are not well worked out, then farmers may be discouraged from investing in good maintenance, which may then threaten the sustainability and benefits of PIM reforms.

As competition grows for scarce water resources, it becomes increasingly important to clarify and strengthen the access of farmers to water.

PIM is not a panacea. By itself, PIM cannot overcome adverse crop prices, drought, corruption, poor governance, highly skewed distributions of land and political power, or other problems, but PIM can strengthen the capacity of farmers to cope with such problems.

## 16.4 Irrigation and Poverty

**Issues and opportunities:** Irrigation is an important means by which poor people sustain and improve their livelihoods. Participatory irrigation management can enable the poor to have greater voice in decisions. Conversely if poor people are excluded and their interests neglected, then irrigation development may disrupt livelihoods and increase inequity. The poor may suffer disproportionately from irrigation performance problems such as water shortages in tail-end areas, and so may also stand to benefit more from performance improvements. Experience shows that participatory irrigation management offers important opportunities to empower the poor in good governance and to provide benefits for the poor.

**Irrigation impacts on poverty:** Irrigation can affect the livelihoods of poor people in many ways. These include not just direct impacts on income, expenditures and nutrition but also other dimensions that poor people themselves perceive as important aspects of poverty including vulnerability to shocks, access to resources, social capital and the status that comes from being informed and included in making decisions. Some of the main ways in which irrigation may affect the poor include:

- Increased employment for agricultural laborers,
- Higher agricultural productivity for small-scale cultivators,
- Reduced vulnerability to drought and more stable yields,
- Multiplier effects in local communities from increased demand for agricultural inputs, processing of outputs and greater demand for other goods and services,
- Lower food prices, including for the many poor rural households
- Environmental effects, positive or negative, on aquatic habitats, groundwater, and soils, including water logging and salinization.

**Making labor more productive** Examining the linkages between irrigation and the poor highlights the importance of how irrigation can help make poor people more productive, including enhancing the security of their access to the resources they need to be productive. Just as increasing concern with basin management has shown the need to look more closely at water productivity, not just land productivity, "more crop per drop," concern for irrigation as a tool for alleviating poverty points out the importance of "more jobs per drop." Simply increasing yields may deliver gains to landowners which are capitalized into land values, while poor people only benefit if their most important resource, their labor, becomes more productive. This may come from increases in knowledge and skills (human capital) and better

access to opportunities (through social capital of organizations and linkages to opportunities.

**Targeting:** Government assistance to irrigation can do more to help the poor if it is effectively targeted. Untargeted assistance may help large landowners and urban consumers while providing fewer benefits for the poor. Self targeting mechanisms often use labor-intensive technologies and relatively low wage rates to make assistance available to those most in need while reducing the incentives and risk those others capture benefits. Geographic targeting to apparently poor and more disadvantaged locations may be appropriate in some cases, but usually much larger numbers of poor people live in areas that on average appear wealthier, so other targeting mechanisms may be more effective. Asking the poor themselves about their priorities is an important starting point in identifying how participatory irrigation management can best help the poor. Community meetings, walkthroughs, participatory rural appraisal and other activities should pay special attention to ensuring that the poor, both women and men, are included and able to voice their concerns.

**PIM and poverty:** PIM is often introduced as part of policies intended to reduce government subsidies to irrigation and increase beneficiary contributions to the costs of irrigation. This raises questions about the profitability of irrigated agriculture and the distribution of financial responsibilities. The poor would only gain if improvements in irrigation performance and agricultural productivity are sufficient to offset any increased costs they must bear. Gate guards, laborers and others irrigation field workers may lose employment (or try block reform), so attention should be paid to reducing and mitigating labor impacts, particularly for poor workers. Greater reliance on local management may facilitate use of more labor-intensive methods for operation, maintenance and construction, benefiting rural laborers. Further study and experimentation is needed to explore ways in which PIM can best help poor people.

## 16.5 Gender and Participatory Irrigation Management

**Issues and opportunities.** Efforts to promote participatory irrigation management create opportunities for improving women's participation and gender equity in irrigation management. Attention to gender roles can reduce the risks that gender biases and stereotypes lead to women being ignored, disadvantaged or marginalized. Attention to the influence of gender roles on irrigation management can make activities more effective, inclusive and equitable.

**Women as stakeholders.** Women use water as farmers, and in other livelihood activities. Changes in irrigation management may have very different impacts on women and men, and depend on women's roles as decision makers, landowners, wage laborers and unpaid family workers. Increased social and economic change in rural areas, particularly temporary labor migration and diversification in household livelihood strategies (e.g. "part-time farming") bring a need to adjust irrigation management accordingly. In many cases women make key decisions about irrigated agriculture, but cultural stereotypes may lead to their situation and needs being ignored or misunderstood. In addition to irrigated agriculture, most

irrigation systems do not only deliver water for field crops, but supply water for domestic use, whether washing and bathing in canals or using shallow wells which rely on irrigation water to replenish groundwater aquifers, bringing in a wider range of interests and stakeholders concerned with the management of irrigation.

**Gender analysis.** A variety of methods are available for analyzing how gender roles affect irrigation management. These may benefit from the involvement of experts in gender and development. However a central part of the process is the involvement of local women in analyzing their situation and concerns regarding ways to improve irrigation management.

- The FAO's Socioeconomic and Gender Analysis Program prepared handbooks on gender analysis and a specialized field guide that "combines irrigation issues and practices with socioeconomic and gender analysis concerns.

**Gender in project design .** Most governments and international development agencies have policies to promote gender equity. These emphasize how attention to gender issues can and should start from the earliest stages of identifying and planning and continue throughout all aspects of project design and implementation. While earlier Women in Development (WID) approaches tended to focus on separate sub projects for women, such as home gardens, more recent gender and development (GAD) approaches place a wider emphasis on mainstreaming women's involvement in all aspects of project implementation.

- The World Bank's GenderNet page links to a variety of information, including sectoral tools for project preparation:

<http://www.worldbank.org/gender/>

<http://www.worldbank.org/gender/resources/checklist.htm>

- The Asian Development Bank publishes Gender and Development Checklists, including one on key issues and strategies for irrigation subsector projects:

<http://www.adb.org/Gender>

[http://www.adb.org/Documents/Manuals/Gender\\_Checklists/Agriculture/agri0501.asp](http://www.adb.org/Documents/Manuals/Gender_Checklists/Agriculture/agri0501.asp)

**Roles and rights.** Gender analysis often highlights how the roles of women and men in irrigation are linked to broader social relationships concerning rights to land and water, local leadership, inheritance, and other sources of knowledge and power, as well as intrahousehold relationships. Women's access to and control over irrigated land is structured by whether they hold land rights on their own, jointly with husbands, or depend on husbands or male relatives for their access to land. The extent to which women are included in community meetings and decision making expands or diminishes women's opportunities. Such participation is affected by general

cultural norms and stereotypes, and by specific matters such as whether meetings are held at times and places convenient for women. The availability of credit and other financial services may be crucial in opening or blocking opportunities for women to profit from irrigated agriculture. Attention to gender in irrigation cannot be limited strictly to roles in water distribution, or infrastructure construction and maintenance, but needs to be examined within the broader context of local social systems.

**Gender and PIM.** Gender roles have an important influence on how irrigation is managed, and on who does or does not benefit from efforts to improve participation in irrigation management. Women are affected in multiple roles, growing crops, raising livestock, cooking, washing, bathing and other water uses. Women and men should be involved from the beginning and in all stages of activities to change irrigation management that affect their lives. Gender analysis methods can help identify the most important roles, problems and opportunities. These provide a foundation for ensuring that projects and programs include women and men and equitably address their concerns. Doing this effectively often means looking not just at water distribution and infrastructure improvement but also at how rights to land, participation in community decision-making and access to information, credit and other resources can help promote gender equitable development.

## 16.6 Participation in the Irrigation Sector

The irrigation sector provides a rich source of experiences and lessons in user participation. Participation by farmers in system design and management helps to ensure the sustainability of the system, reduce the public expenditure burden, and improve efficiency, equity, and standards of service. Mobilizing support at all levels and establishing the participatory process, however, involves costs; it also demands knowledge of the incentives facing each group of stakeholders and of the essential elements in building effective user organizations.

### 16.6.1 Benefits

Efforts to increase user participation have been spurred by poor performance in efficiency, equity, cost recovery, and accountability of many large irrigation systems managed by government agencies. Greater participation by farmers through water users associations has helped overcome many of these problems.

**System performance** The overriding reason for increasing participation in irrigation is to improve system performance. Clear gains in efficiency and standards of service are achieved when design and management of the irrigation system are transferred to farmers. System design benefits from local knowledge, and farmers have the means and incentives to minimize costs and improve services. For example, irrigation user associations can reduce labor costs by paying lower wages than government agencies; local farmers can provide closer supervision of staff than distant agency supervisors; and breakages are reduced when farmers feel a greater sense of ownership.

**Public Expenditure:** One of the most noted effects (although this has nothing to do with farmers' motives for participation) is the reduction in government staff and expenditure requirements caused by farmer management and contributions of cash, labor, and materials. Farmer associations have proved more effective collectors of user fees than government agencies. It is not unusual for farmers to be willing to pay more than the original user rates after transfer of the system to their control. Increased collection of fees, however, does not motivate farmer participation. Participation must also result in direct benefits to participants.

**Sustainability:** Building irrigation systems that are wanted, supported, and owned by users themselves provides the best assurance of sustainability. Physical and fiscal sustainability of the irrigation system beyond the project is enhanced when operation and maintenance costs are met from user fees rather than high levels of government subsidy.

**Equity:** More equitable organizational arrangements and water delivery have been noted when participatory approaches are followed. A contributing factor is the socioeconomic status of the leadership, which tends to be closer to that of the ordinary member, involving more tenants and small farmers than in non-participatory systems.

**Spillover Effects:** The transformation of water users from beneficiaries to partners in irrigation development can have a widespread impact as farmers become trained and organized. It can increase local ability to coordinate input supplies, for example, and to deal with other government agencies involved in rural development.

### 16.6.2 Costs and Risks

Establishing user participation involves costs in mobilizing field staff, training, and organizing farmers and carrying out socioeconomic research. These additional costs, however, are usually offset by subsequent savings in construction costs and higher loan repayment rates.

A bigger problem can be the additional time needed to establish a participatory approach and get the project off the ground, especially in the absence of existing local institutions for cooperation. Developing farmer organizations is often a slow process, since less is under the project's control than when constructing dams or delivery structures. Once the participatory approach has been established, however, it is not unusual for participation actually to reduce the implementation period. The kinds of problems that typically delay the implementation of non-participatory irrigation projects, such as difficulties in negotiating rights of way or obstruction by farmers or local politicians may be avoided or solved through effective participatory processes.

### 16.6.3 Conditions for Success

The success of participation efforts in the irrigation sectors depends on how well the project mobilizes support and builds effective farmers' organizations.

**Mobilizing Support:** User participation changes but does not eliminate the role of government agencies in irrigation development. Building support from policymakers and agency staff as well as farmers and other water users is essential for successful participatory projects and involves paying close attention to the incentives relevant to each group. The greatest receptivity to participation is often found in crisis situations.

In building the confidence of policymakers and senior agency staff, pilot projects have been used effectively to demonstrate the capacity for farmer management, the potential improvement in system performance, and potential saving in government expenditure and improvement in cost recovery rates. Building alliances with supportive individuals in government has been facilitated by participatory economic and sector work, by enabling Task Managers to spend several years working in a country, and by supporting them with good social analysis.

Project implementation rests ultimately with agency staff. Internalizing support for participation within irrigation agencies often involves structural changes to link agency budgets firmly to farmer contributions instead of government allocations and to promote a more service-oriented approach. Because agency staff typically come from engineering backgrounds and are not oriented toward dealing with farmers, incentives for them to support farmer participation need to be backed up by training programs. Study tours to farmer-managed irrigation districts can be particularly effective, not only for their demonstration effect but also in raising the prestige of participation, exposing staff to new possibilities, and creating a bond among participants.

The strongest opposition to farmer participation is often encountered at the field technical level, especially when civil service unions are strong. When field staff perceives the proposed changes as a threat to their jobs and livelihood, these vested interests can retard or even sabotage participatory projects. Clear directives are needed from policymakers, supported by performance measures linked to bonuses and promotions, to encourage greater accountability to the farmers. The new ethos can only develop gradually. Sudden cuts in the status quo should be avoided, and the composition of staff allowed to change gradually.

**Building Effective Farmers Organizations:** Teams of trained specialists acting as community organizers have proved to be the most successful catalysts in participatory irrigation projects. Wherever possible, existing organizational capacity should be built on, as in Nepal, for example. In cases of very hierarchical social structure and inequitable distribution of assets, it may be unrealistic to expect fully democratic local organizations. To control vested interests, the varying incentives of different categories of farmers should be identified and accounted for in project design (for example, in defining water rights), along with the resulting problems of achieving collective action.

Appropriate incentives are needed if farmers are actively to support the user associations that are essential channels for participation and to assume the additional costs in time, materials, and fees (as experience in Pakistan has demonstrated). The most important of these incentives are improved irrigation services and a voice in management decisions through a user



organization that is fully accountable to its members. The support of farmers is most likely to be sustained and organizational capacity developed when they are involved from the beginning in decisions on system design and their organization has full ownership and management control of the system. It is essential, for example, that specialized staff be selected by and accountable to the farmer organization, even if they have been trained by government agencies.

To be successful, farmer organizations must interact constructively with government agencies and technical experts. This relationship works best when consistent rules and procedures are established and supported by government regulation for the turnover of responsibility to farmers throughout the project or sector. Building the necessary organizational capacity for this turnover involves training farmers for a variety of new functions, including basic literacy, accounting, how to hold meetings, how to deal with agencies with legal regulations, possibly even computer applications, and water management and operation of equipment.

Fundamental to meeting all these conditions is a strong and transparent legal framework for the organization from the outset, providing farmers with rights and benefits as well as duties and responsibilities. This framework should also be flexible enough to allow farmers to evolve their own organizational structure and to permit the organization's responsibilities to grow in line with its capacity.

### ***Building participation in Irrigation***

#### ***Nepal Example;***

Nepal has a long tradition of direct farmer participation and cooperation in irrigation development. About 70,000 farmer-managed irrigation schemes, ranging in size from very small to thousands of hectares, account for 70.80 percent of the country's irrigation. In general these systems achieve high levels of performance over long periods of time without government cost or involvement. Such systems, however, are frequently damaged by landslides and floods beyond the capability of farmers to repair alone; most can be improved substantially with modern materials and construction techniques.

The Bank's irrigation line of credit was designed to assist these schemes by building on the farmers' traditional capability to organize and cooperate together. To participate under the irrigation line of credit, farmers had to form legal farmer irrigation associations, agree ahead of time to contribute to capital costs, pay full Operation and Maintenance costs, and maintain full control and responsibility for all decisions regarding their irrigation schemes. Such stringent requirements had never been attempted before under a Bank-supported project in Nepal. But in practice these requirements simply formalized the farmers' traditional mode of irrigation development and provided an avenue for Bank assistance that would strengthen rather than destroy the traditional farmer institutions. The irrigation line of credit approach proved highly successful, has become strongly demand driven, and is now being expanded to government-managed projects. (<http://www.worldbank.org/wbi/sourcebook.html>)



Fig 1: Stone-built irrigation channel



Fig 2: Irrigation canal in village

## 16.7 Water Management

### A case of Pakistan

The services performed by Water Management Wing of Agriculture Department, Lahore were:

1. Renovation/rehabilitation of watercourses
2. Precision/LASER Land Leveling of farmers' fields.
3. Establishment of On Farm Water Management Technology Transfer Centers
4. Construction of On-Farm Surface Drains
5. Development of Barani Areas
6. Human Resource Development (Training of Man-Power)

## **1 Watercourse Renovation**

Watercourse renovation comprises complete demolishing of community water channels and its rebuilding/reconstruction according to the engineering design. Parts of the watercourse are lined and necessary water control structures are installed. All the works on the watercourse are carried out through active participation of the beneficiary farmers, who contribute skilled and unskilled labour in addition to 30% of the material costs upfront. On Farm Water Management (OFWM) have its field offices at Tehsil level. The farmers seeking improvement of their watercourses contact the respective field offices. Formal Water Users Associations are organized and registered on each watercourse under the Punjab on Farm Water Management and Water Users Association Act 1981. This facility is provided to the farmers on first come first served basis and priority is assigned to the watercourse having more small number of farmers. Besides other benefits, renovation of a watercourse saves about 240 Million-Acre Feet (MAF) of water annually.

## **2 Precision Land Leveling**

Precision Land Leveling (PLL) consists of grading and planning of land to a smooth level or no slope to facilitate efficient water use. Previously this operation had been carried out with the help of ordinary bucket type scrapers, but from 1985 onward, this task is being accomplished through LASER equipment, which helps in achieving requisite degree of precision at lesser cost and effort. LASER land leveling services are provided by the OFWM Field Teams established at Tehsil level to the farmers after proper topographic survey and design of farmers' fields. The concerned Water User Association assigns the farm wise priority in case of greater number of farmers seeking Precision Land Leveling Services. LASER land leveling equipment is being provided to the farmers on subsidized rental charges i.e. Rs.150/hour. Laser leveling brings the field to a degree of precision up to (+,-) 1 cm which results in saving of water up to 30 percent and ultimately increased land and water productivity.

## **3 Promotion of improved irrigation management practices at farm level through resource conservation technologies**

In order to conserve land, water, energy, human resources etc; OFWM Wing of Agriculture Department is promoting resource conservation technologies. Such measures are becoming more and more important in the context of mounting pressure on limited land and available irrigation water. Water is the most crucial input as efficiency of all other inputs i.e. seed, fertilizers, pesticides/herbicides etc. largely depend on it. Accordingly, judicious use of water through adoption of modern irrigation methods (How to irrigate?) i.e. borders, furrow beds etc. is direly needed. Furthermore, use of Irrigation Scheduling Techniques (when to irrigate and how much to irrigate?) is a basic requirement for conservation of precious irrigation water. To

achieve the said objective, Zero Tillage technology is being introduced for sowing wheat after rice harvest without tilling the land. Use of Furrow Bed Shapers is being demonstrated in cotton growing areas to grow cotton on furrow beds for proper application of irrigation water.

#### 4 On Farm Surface Drains

Installation of On Farm Surface Drainage (OFSD) System connected with main drainage network facilitates discharge of excess irrigation water and thereby prevents damage to the crops. It saves excessive flooding of the crop and allows the fields to be dried periodically for land preparation, fertilizer application, weeding etc. and finally for harvesting. OFSD system is one of the most suitable measures to control emerging problems of water logging and salinity. The system is constructed by organizing farmers of the prospective catchments into Drainage Beneficiary Groups (DBGs). OFWM staff carries out requisite survey, design and construction under supervision of the DBGs.

#### 5 Development of Barani areas

In Barani areas of the Punjab, farmers depend upon scarcely available irrigation water available mainly through precipitation and in certain areas through natural nallahs, small and mini dams, and limited pockets of groundwater. For all types of such water resources, the only way of fetching irrigation water to the farms, having peculiar topography, is to install irrigation schemes which, inter alia, include:

- i) Lining of the irrigation water from the natural nallahs and low lying water ponds through multi-stage pumps.
- ii) Conveying the water through pipes to the fields situated at higher elevations
- iii) Supplying water to the fields of lower or equal elevation through open channels.
- iv) Connecting different fields having in between depressions through pipes

All the said activities are being implemented in the Barani Areas on cost sharing basis wherein, farmers are contributing physically and financially in the form of labour and material cost.

#### 6 Human Resource Development (Training of Man-Power)

On job and follow up training is essential for continuing professional development of project staff/end users. Water Management Training Institute established at Lahore is responsible for arranging courses for trainers (professional/sub-professional) and water users for their capacity building. In addition, seven Farmers' Training centers established one each at Faisalabad, Multan, D.G.Khan,

Bahawalnagar, Rawalpindi, Layyah and Bahawalpur are playing a pivotal role in training the water users/farmers of respective areas.

## 16.8 Wetland Resources

Wetland is a comprehensive term used for landforms such as swamps, marshes and bogs and saltwater marshes. Their common feature is that they are wet at least part of the year and as a result have a particular type of vegetation and soil. Standing water created a special soil environment with very little oxygen, so decay takes place very slowly and only plants with specialized roots can survive.

Wetlands may be defined as the areas that are inundated by water or where the land is saturated to a depth of few centimeters for at least a few days per year. Three major components used to determine the presence of wetlands are hydrology or wetness, type of vegetation, and type of soil. Of these hydrology is often the most difficult to define, because some fresh water wetlands may be wet only a few days a year. The duration of inundation or saturation must be sufficient for the development of wetland soils, which are characterized by poor drainage and lack of oxygen, and for growth of specially adapted vegetation.

Although wetlands occupy only a small portion of earth's land area, they are very important in the biosphere. In the oxygen less soils, bacteria survive that cannot live in high oxygen atmospheres. These bacteria carry out chemical reactions, such as the production of methane and hydrogen sulfide that have important effects in the biosphere. Over geologic time, wetlands environments produced the vegetation that today is coal. Saltwater marshes are important breeding areas for many oceanic animals and contain many invertebrates. The dominant animals include crabs and shellfish, such as clams. Saltwater marshes are therefore an important economic resource. Besides this wetlands perform a variety of natural services for other ecosystems and for people, including the following:

- Freshwater wetlands are natural sponge for water. During high river flow they store water, reducing down stream flooding. Following a flood they slowly release the stored water, nourishing low flows.
- Many freshwater wetlands are important as areas of groundwater recharge (water seeps into the ground from a prairie pothole, for instance) or discharge (water seeps out of the ground in a marsh that is fed by springs).
- Wetlands are one of the primary nursery ground for fish, shellfish, aquatic birds and other animals. It has been estimated that as many as 45% of endangered animals and 26% of endangered plants either live in wetlands or depend on them for their continued existence.
- Wetlands are natural filters that help purify water; plants in wetlands trap sediments and toxins.
- Wetlands are often highly productive and are a place where many nutrients and chemicals are naturally cycled.
- Coastal wetlands provide a buffer for inland areas from storms and high waves.

- Wetlands are an important storage site for organic carbon; storage is in living plants, animals and rich organic soils.
- Wetlands are aesthetically pleasing places for people (Holloway, 1991).

### 16.8.1 Reasons of Wetland Loss

Almost 70% of the world's population lives on seacoasts, and over much of the world river valleys and lakeshores have been settled since earliest. The communities established in these regions have often been attracted by the wetland system's easy access by land and/or water, level terrain, and high productivity. Exploitation of these features, even when leading the total conversion of wetland, has often brought social benefits, in both the short and long term.

Nevertheless, unacceptably high wetland loss had led to a net social cost. Many of these losses have been deliberate, but others are the result of decision taken in ignorance of the full value of the wetland in their natural state. Some are the result of inefficient management systems and others are unintentional byproducts of other actions.

- **Limited information:** some of the products and services of wetlands are sold; commercial fisheries, meat and skins from grazing herds, crops etc. but many wetland values do not have markets-water purification, storm surge protection for example. Because these values are free goods they tend to be ignored in the economic calculations that decide whether wetlands should be conserved or developed. The result is a systematic bias favoring development and hence the degradation of wetlands.
- **Distribution of Cost and benefits:** improving the quality and quantity of information on the distribution and values of wetlands is an important prerequisite for improving management. But even when sufficient information is available on the public benefits of conservation, wetlands are often lost because these benefits are not shared by the individual who owns the property. Private landowners frequently decide to drain their wetlands because they expect to earn more from growing crops than from leaving them in their natural condition.
- **Deficient Planning Concept:** point and nonpoint pollution are a frequent cause of wetland degradation. External factors such as runoff of agricultural chemicals and soil erosion, together with point source pollution from waste treatment plants, have resulted in the severe degradation of estuaries wetlands.
- **Policy Deficiencies:** despite increasing efforts to conserve wetlands, many are still lost because of competing government priorities. The most common example of this is where, despite an explicit government commitment to wetland conservation, national agricultural policy favors wetland drainage.
- **Institutional weakness:** most countries have institutional responsible for managing wetlands, though few pursue this mandate effectively. Among the many reasons for this, the ultimate cause is poor

understanding of the true economic importance of wetlands and misperceptions of the nature of management problems.

## 16.9 Integrated Wetland management

The 3<sup>rd</sup> Conference of Contracting Parties to the Ramsar Convention recommended in July 1987 that each country should develop a national policy for wise use of the country's wetland resources and provided following guidelines for the establishment of the national policies:

### Guidelines on the establishment of wetland policies

Wise use involves the promotion of wetland policies containing the following elements:

- a. A national inventory of wetlands;
- b. Identification of the benefits and values of these wetlands;
- c. Definition of the priorities for each site in accordance with the needs of, and socioeconomic conditions in, each country;
- d. Proper assessment of environmental impact before development projects are approved, continuing evaluation during the execution of projects, and full implementation of environmental conservation measures which take full account of the recommendations of this process of environmental assessment and evaluation;
- e. Use of development funds for projects which permit conservation and sustainable utilization of wetland resources;
- f. Regulated utilization of wild fauna and flora, such that these components of the wetland ecosystem are not over-exploited;

While detailed policies are being established, immediate action should be taken on:

- a. Interchange of experience and information between countries seeking to elaborate national wetland policies;
- b. Training of staff in the discipline which will assist in the elaboration of such policies;
- c. Pursuit of legislation and policies which will stimulate wetland conservation action, including the amendments as appropriate of existing legislation;
- d. Review of traditional techniques of sustainable wetland use, and elaboration of pilot projects, which demonstrate wise use of representative national and regional wetland types.

(Ramsar, 1988)

To manage the wetlands following steps should be taken:

**Improving information:** until people understand why they should conserve wetland ecosystem and species and are aware of the actions required to do so, the conservation would not take place. The quantity and quality of information on wetlands and their values must be increased and communicated more effectively to the critical audiences. A information programme to aware people will consist following four components:

- a. Assembling of national wetland inventory and classification

- b. Assessing wetland values
  - c. Assessing the management potential of wetland systems
  - d. Wetland research
- **Improving awareness:** understandings of wetlands values need to be built at all levels of Society. Three-audience merit particular attention: the general public; local communities dependent upon wetland resources and the government departments and development assistance community, which make decision on investment in wetland conservation and development.
  - **Change in agriculture policy:** include agricultural price support to reduce conversion of wetlands,
  - **Change in Water Policy:** including reducing impacts of water resources projects on wetlands.
  - **Tax Policy:** tax laws may provide partial incentive to wetland drainage. By changing these laws wetlands could be conserved.
  - **Wetland intervention/conservation policy:** the absence of specific national legislation limiting use of wetlands outside protected areas has been as obvious factor contributing to wetland loss. In recent years a number of countries have moved to correct this situation.
  - **Development Assistance Policy:** a great deal of wetland degradation and loss is supported by development assistance funds whether grants or soft loans. To reverse this pattern, development assistance institutions need to pay more attention to the importance of wetlands and pursue policies which promote a more environmentally sensitive approach to wetland management.
  - **Enhancing cross-sectional management:** the greatest obstacle to integrated management of wetlands in most countries is division of responsibility for wetland resource among several different agencies. The effectiveness of national wetland management efforts will be enhanced greatly by the establishment and effective operation of cross-sectoral structures. These may include specific ministries or department and interministerial committees and commissions. The success of such efforts will depend upon the capacity of the coordinating mechanism to bring together the widest possible range of institutions concerned with wetlands and to assist them in including wetlands concerns in their work, rather than by replacing their existing functions.
  - **Improving human capacity to manage wetland:** substantial investment in training is required if wetlands are to be management effectively.

Beside these regional and international cooperation is prerequisite for effective wetland management



## 16.10 Integrated Wetland and River Basin Management

### A Case Study of Loktak Lake

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#### Introduction

Loktak Lake is situated 38 km south of Imphal city, the capital of Manipur State. The lake covers an area of about 286 sq. km at the elevation of 768.5 m located between longitudes 93° 46' and 93° 55' E and latitudes 24° 25' and 24° 42' N. Water level is shallow, the depth of which during dry season ranges between 0.5 m to 1.5 m. The total water spread area of about 490 sq km was recorded in 1966. Main water body of the lake is surrounded by shallow water, which stagnates over a marsh/swamp land.

The characteristic feature of the Loktak Lake is the presence of floating islands known as Phumdis. These are heterogeneous mass of soil vegetation in organic matter, which occur in all sizes from a few centimeters to about 2.5 m. They occupy about two-third of the surface area of the lake. Free-floating plants, such as water hyacinth and partly decomposed roots and rhizomes contribute greatly to its development. The largest single mass of phumdis occupying an area of 40 sq km constitutes Keibul Lamjao National Park. The park is the only natural habitat of the most endangered mammal, the brow-antlered deer (*Cervus eldi eldi*).

Loktak Lake basin can be considered as a sub-basin of the Manipur River basin. It has direct catchment area of 980 sq km and indirect catchment of 7157 sq km. Out of the direct catchment area of 980 sq. km of the Loktak Lake, 430 sq km is under paddy cultivation, 150 sq. km of habitation/settlement area and 400 sq km of forest areas to the west and north/west of the lake. The direct catchment area in the hills covers 96 hill villages with a total population of 21,334 according to 1991 census. The elevation varies from 780 m at the foothills adjoining the Central Valley to about 2068 m above mean sea level at peak.

A number of streams originate from the hill ranges immediately to the west of the lake and these streams flow directly into Loktak Lake. Of these, streams, a few major streams, Nambul, Nambol, Thongjarok, Awang Khujairok, Awang Kharok, Ningthoukhong, Potsangbam, Oinam, Keinou and Irulok contribute maximum silt load to the lake. The indirect catchment area covers catchments of 5 important rivers i.e. Imphal, Iril, Thoubal, Sekmai and Khuga and is spread over an area of 7157 sq. kms.

Loktak Lake is the largest wetland in the North-Eastern region of India and has been referred as the lifeline of the people of Manipur due to its importance in the socioeconomic and cultural life. It plays an important role in the ecological and economic security of the region. The Lake has been the source of water for generation of hydroelectric power, irrigation and water supply. A large population living around the lake depends upon the lake

resources for their sustenance.

The staple food of Manipur is directly linked to Loktak Lake. The lake is rich in biodiversity and has been designated as a wetland of international importance under Ramsar Convention in 1990. The Keibul Lamjao National Park, in the southern part of the lake, is home to the endangered Manipur Brow Antlered Deer, locally called Sangai. The lake has been also the breeding ground of a number of riverine fishes and continues to be a vital fisheries resource. It supports a significant population of migratory and resident waterfowl.

### Manipur River Basin

The Manipur State has two river basins namely the Barak river basin and the Manipur river basin. The Barak River originates from the hills of the northern part of the state. It does not enter the Manipur valley. However it flows for some distance towards south and runs northwest and thereafter towards south through the hills of the Tamenglong district. The Manipur River arises in the north at Karong. It flows southwards of Imphal and is known as Imphal River. Along its course through the valley, downstream of Imphal, the riverbed of Manipur River slopes very gently.

The river has been regulated by two barrages for irrigation and hydropower. The Imphal Barrage downstream of Lilong regulates the flow for irrigation purposes while the second barrage at Ithai, diverts the river flow into the Loktak Lake for lift irrigation and hydropower project.

The important feature of the Manipur River from the hydrological point of view is the natural blockage of its flow in its lower reach. About 27 km. downstream of Ithai Barrage, after slopping down to 756.7 m the river bed suddenly rises by 8 m within a distance of 800 m and remains above 762.5 m for about 2.5 km. It reduces the capacity of Manipur River to discharge its flow.

The Manipur River system and its tributaries follow the NS trends. They have a high degree of base level erosion. The Irii is the largest river in Manipur River system. The Irii and Imphal confluence have many swamp areas, which have now dried up. Loktak Lake is located on the southern side of the river basin. This fresh water lake represents the lowest elevation of the valley. The major rivers did not fall in the Loktak Lake except few rivulets. This indicates the tectonic origin of the valley. All the rivers viz, Imphal, Thoubal, Irii etc. flow in a more or less N-S direction following nearly straight course. They also appeared to be tectonically controlled.

The drainage pattern is controlled by the structure and lithology of the area. Different types of drainage pattern were identified in the area. Sub-dendritic sub-parallel and sub radial drainage patterns were commonly observed in the hilly terrain area. Meandering of river course are usually observed in the valley area such as Imphal, Irii and Thoubal River. The straight river course were suddenly twisted in the hilly terrain which indicates structural control.

## Land use

The total catchment area of Manipur River basin is 6,97,124.5 ha. The many different land cover identified are dense forest, medium dense forest, degraded forest, agriculture, jhum areas, water bodies, swamps and settlements.

Degraded forest constitutes 31.1% of the total land area followed by dense forest (27.7%) and medium dense forest (14.8%). Agricultural land occupies 15.1% of the area.

## Water Resources and Hydrological Regimes

There are several lakes, ponds and reservoirs in the Manipur River basin, which provide water for irrigation, domestic supply, power generation etc. The total area under water bodies is estimated a 14,875 ha which comprises 2.1% of the entire Manipur River basin. At present, there are seven river valley projects out of which three (Singda Dam Project, Thoubal Dam Project and Khuga Dam Project) are multipurpose, one (Loktak Lift Irrigation Project) is major and the remaining three (Khoupam Dam Project, Imphal Barrage Project and Sekmai Barrage Project) are medium irrigation projects. Hydrological data on river basin, in general, has not been properly monitored. The Department of Earth Science, Manipur University, in their report on Geo environmental Studies of Manipur River Basin in 1996 has indicated the average runoff of Manipur River as 0.5192 million ha. m. against a total catchment area of 6,97,124.5 ha. Potential ground water is estimated around 44 million cu. m. per annum i.e. around 0.0044 million ha. m.

## Developmental Activities

In the basin, 50% of the domestic produce is generated from the agricultural sector. Water supply for irrigation is, therefore, of utmost importance in the basin. With the establishment of the Command Area Development Authority (CADA) in 1982-83, Command Area Development Programs has been carried out in the basin in the selected command areas of Loktak Lift Irrigation Project and Sekmai Barrage having cultivable command area of 24,000 ha and 5,000 ha respectively. The main objective of CADA program is to ensure irrigation water to every field in the selected command area for the benefit of the farmers and for increasing agricultural production.

The area under settlements has been estimated at 24,312.5 ha which represents 3.4% of the river basin. Out of this 5.3% is urbanized while the rest is rural.

## Demographic Features and Socioeconomic status

Manipur River basin has a total population of 13,94,398. The population is mostly confined to central Manipur valley. Here, the density of population is very high as compared to the hills, which is sparsely populated.

The main crop is paddy followed by maize. As per the 1991 census the basin produces 225,550 tonnes of rice (82% of the entire state) and 6,020 tonnes of maize (52.8% of the state). The State Government of Manipur has several programmes to promote production of commercial crops like cotton, tea, coffee, rubber sugarcane etc. Emphasis is also given on growing of crops such as pulse and oilseed using improved scientific methods.

## Issues

### Impact of Human Activities in the Manipur River Basin

Human activities often induce changes or accelerate the process of change. Developmental activities like construction of dams, barrage, etc., deforestation, shifting cultivation, uncontrolled use of fertilizers, etc. have degraded the river basin to a great extent.

The Loktak Multipurpose project has caused both gains and losses in different aspects of the Manipur River Basin. Some of the salient impacts of the project are as follows:

- The impoundment of water by the Ithai barrage has inundated 80,000 ha of agricultural land besides some settlements in the southern Manipur valley.
- The populations of resident and migratory waterfowl, several fishes and macrophytes have sharply declined.
- The siltation in the Loktak Lake as well as in the valley has increased as the outflow of the silt-laden water has been checked.
- The permanent water has caused thinning of the phumdi in the Keibul Lamjao area, the habitat of Sangai.

Siltation is another major problem the river basin is facing. The most important cause of soil loss from the catchment area is the shifting cultivation. The landslides and the construction of roads in the hilly catchment also contribute to the soil loss. It is estimated that 6,72,650 tonnes of soil is lost every year from the basin.

Deterioration in the ecological health of the river occurs subtly and steadily. Further complications have been added due to variations in the water level of the flow, human pressure on land for agriculture and settlement and increase in landscape modification. Though there is only negligible inflow of industrial effluents, the organ chlorine pesticides from the surrounding paddy fields are another source of pollution in the river. Besides these, additional nutrients enter the river with the domestic sewage from the settlements especially the urbanized area of Imphal city.

### Identification of Threats and their Impacts

Based on the analysis, the root-cause problems of the Loktak Lake is the loss of forest cover in the catchment area and the construction of Ithai Barrage. The degradation of the catchment area has led to the problems of siltation and increased flow of nutrients while the construction of Ithai Barrage have led to:

- changes in hydrological regimes thereby affecting ecological processes and functions of the wetland
- inundation of agricultural lands and displacement of people from flooded lands
- loss of fish population and diversity
- decrease in the thickness of phumdis in the Keibul Lamjao National Park thereby threatening the survival of Sangai deer

The above root-cause problems have led to the following:

**Siltation** - Jhum cultivation, extensive deforestation and unscientific land use practices in the catchment area are responsible for deposition of approximately 336,325 tons of silt annually in the Lake.

**Weed Infestation** - The proliferation of phumdis and aquatic weeds have led to the reduced water holding capacity, deterioration of water quality, interference in navigation, and overall aesthetic value of the Lake.

**Decrease in Power Generation** - The decrease in water holding capacity due to siltation, weed infestation and proliferation of phumdis has reduced power generation capacity of the Lake.

**Loss of Biodiversity** - The populations of migratory and resident waterfowl has declined during the last few decades due to poaching and changes in ecological character. The habitat of Sangai deer in Keibul Lamjao National Park (KLNP) is also threatened due to thinning of phumdis and poaching. 35 species (5 mammals, 3 birds, 9 reptiles, 3 amphibians, 12 fishes, 2 molluscs and 1 annelid) that were reported to be abundant in the past have declined and are now disappearing gradually.

**Decrease in Fisheries Production** - Over-exploitation, indiscriminate methods of fishing, extensive growth of phumdis and weeds are responsible for decrease in fisheries' production. Construction of Ithai Barrage across Manipur River has interfered with the migration of fishes from Chindwin-Irrawady River system of Myanmar and consequently brought changes in the species composition.

**Flooding** - The construction of Ithai Barrage and decrease in absorption capacity of the Lake has resulted in inundation of the peripheral, agricultural and settlement areas.

**Pollution** - Inflow of organo-chlorine pesticides and chemical fertilizers used in the agricultural practices around the Lake, municipal wastes brought by Nambul river that runs through Imphal, soil nutrients from the denuded catchment area and domestic sewage from settlements in and around the Lake are responsible for deterioration of water quality.

Several other issues of concern are:

- Lack of community involvement in the conservation and development programmes

- Encroachment pressures on lands created from dredged and excavated material; and fish pond encroachments into the Lake (related to decline in fisheries)
- Absence of policy and regulatory mechanisms at the government level for conservation of the Lake and its resources
- Emphasis on engineering measures rather than integrated approach involving social, economic and ecological aspects
- Inadequate technical and managerial skills and coordination among different agencies concerned with Loktak Lake management resulting in the emphasis on sectoral approaches leading to conflicting interests
- Lack of awareness about the importance of the wetland in the local, national and international context.
- Absence of baseline data on hydrology, siltation, ecology, socioeconomic aspects, catchment area, flora, fauna, etc. and their interrelationships
- Ineffectiveness of implementing agencies at different levels and lack of appropriate strategies and ineffective implementation of developmental programmes

### The Approach

Several measures have been taken by the Government of Manipur to check deterioration of the lake and to bring about improvement in the areas of power generation, fisheries, agriculture, tourism and siltation control. All these measures are focused at the site-specific level without understanding its linkages with the overall processes and development within the river basin which directly or indirectly has bearing on the lake ecosystem. Wetlands International-South Asia (WISA) in collaboration with the Loktak Development Authority (LDA), an agency of the Government of Manipur is implementing a project on Sustainable Development and Water Resources Management of Loktak Lake under India - Canada Environment Facility (ICEF).

### Organizational and Policy framework

Loktak Lake is managed by various agencies within the State Government i.e. Departments of Environment, Forests, Wildlife, Irrigation, Agriculture etc. The Loktak Lake Development Authority (LDA) though responsible for coordinated approach interacting with several departments is working within the limited area of Loktak Lake. As such, a single unified agency with multidisciplinary and multi-sectoral approach has to be established to ensure sustainable development of the entire river basin. Wetlands International South Asia (WISA) and LDA are currently undertaking a project to develop and apply technical know-how for conservation and wise use of Loktak Lake involving local communities, NGOs, Government agencies, research/academic institutions. The main aim is to promote integrated management approach and to build up technical and managerial capabilities in LDA and other concerned agencies to address the issues of water

management and sustainable development of Loktak Lake within Manipur River basin.

The specific objectives and strategies of the project is:

- Controlled soil erosion through afforestation, fuelwood and fodder plantation, regeneration of degraded forests, control/improve-shifting cultivation, engineering measures
- Optimise water level in the lake through hydrologic modeling and interventions to realise multiple values and functions of the wetland (power, wildlife, fisheries, flooding, water quality)
- Enhance water-holding capacity by hydrologic interventions at critical zones and improve flow and capacity
- Improve water quality through control of nutrient input/pollutants from point and non-point sources
- Sustainable fisheries development with emphasis on enhancing fish yield and diversity by developing mechanisms for fish migration and restocking
- Conserve the endangered Sangai deer through habitat improvement of Keibul Lamjao National Park
- Mitigate flood by rehabilitation of wetland processes and engineering measures
- Participation and development of local communities by their involvement in various components of the project and through alternative/additional income generation demonstration projects.

The strategies to be adopted highlight community involvement at all stages, addressing the problems at the river-basin level; shifting the focus of the present approach of LDA from curative to preventive measures; and integration of social, economic and ecological aspects.

This involves assessment of all stakeholder groups, current resource pattern, pressures and developing joint community-based demonstration projects to ensure participatory approach. All the tributaries directly or indirectly connected with River Imphal basin and contributing to quality and quantity of water in Loktak Lake will be thoroughly assessed for water management in the Lake.

The environmental impacts of the existing hydrological structures and the interventions if implemented under the project, will be thoroughly examined by carrying out environmental impact assessment studies. Based on the data collected and critical evaluation of various parameters, operation policies for water management will be evolved. The activities carried out by LDA will be critically evaluated and measures will be undertaken to combat the problems at the source level and also enhance the capacity of LDA to address issues relating to social, economic and ecological aspects.

The first component of the project is data collection and capacity building within which will involve the compilation of information through active participatory techniques and will lead to the establishment of accurate baseline data. A comprehensive information database is essential to support the other activities of the project and builds the capacity within LDA.

Currently the data that is available on Loktak Lake in relation to various parameters including water management, socioeconomic aspects and

resource utilization pattern is sparse. The project envisages collection of data under all components including water management, sustainable fisheries development, catchment area treatment and community development.

LDA staff will undergo training for various aspects i.e. catchment area treatment, water management and sustainable resource utilization. Human resources development activity especially within LDA, environmental agencies, NGOs and woman's organizations is important to ensure sustainable development and management of Loktak Lake in the future.

### Water Management

Water Management Plan endorsed by the stakeholders which addresses multiple values of Loktak Lake e.g. for power generation, agriculture, wildlife and fisheries will be prepared. The main objectives of the plan include optimizing water level of the lake and the holding capacity, improving water quality and flood mitigation and developing mechanisms for implementation of strategies based on specific studies. It will also include plan of activities for water resource use, water availability, water allocation, flood control and operational mechanisms for implementation.

### Specific Studies

The hydrology of Loktak Lake is complex and there are several issues, which need to be investigated thoroughly for formulating sound strategies for water management. While on one side phumdis are proliferating resulting in choking of the Lake, the decrease in thickness of phumdis in Keibul Lamjao National Park is threatening the survival of Sangai deer. Without adequate baseline data, the cause of degradation of the Lake ecosystem cannot be determined.

The role of phumdis in the hydrological functioning particularly, water holding capacity, water balance, maintaining the desired thickness in the park and their proliferation in the Lake has to be precisely determined. Scientific studies to address this issue will be undertaken by the project team in collaboration with the Manipur University, scientific institutions and other concerned agencies of the State Government in Manipur or outside.

### Water Use and Allocation

The water management plan will clearly indicate the quantity of water to be allocated after analysis of water use and water availability. The project will;

- estimate water available in the Lake based on water balance and water holding capacity
- identify stakeholder groups relating to water use by PRA exercises
- determine water use by different stakeholder groups in qualitative and quantitative terms
- identification of regulatory measures/legal obligations with respect to allocation of water
- estimate quantity of water for different uses like power generation, wildlife conservation, sustainable fisheries development and maintaining flora and fauna particularly endangered species



### **Flood Control**

Water levels in Loktak Lake are controlled by the Ithai Barrage during the dry season. Other barrages, such as the Imphal and Sekmai barrages, are used to control tributary water levels for irrigation. In general, flood protection is a downstream benefit with impoundment resulting in upstream flooding, as is the case for the Loktak lake area. The main activities within this component will be to identify every area, which are exposed to flooding, the operating regime for water control structures, flooding induced by the Ithai barrage and rehabilitation of wetland processes and engineering measures.

#### **Monitoring**

The plan will identify key factors, which should be monitored during and after the implementation of the plan. This is to ensure that the objectives of the water management plan are being achieved.

### **Catchment Area Treatment**

The hill areas of Manipur which constitute the catchment areas of important rivers, including Loktak Lake are under pressure mainly due to deforestation, prolonged practice of Jhum cultivation and overall exploitation of resources. These factors have mainly contributed to the rapid siltation of the Lake and consequently have reduced its carrying capacity. The success of the ICEF funding on water management and sustainable development can be realized if Government of Manipur takes simultaneous action for catchment area treatment. One of the main objectives is to ensure people's participation at all stages in catchment development programmes through various mechanisms intended to ensure equitable distribution of intermediate and final forest products.

A preliminary survey was undertaken to identify the critical areas, which contribute to soil erosion leading to sedimentation of the Lake. Based on this survey, 5 sub-catchments have been identified which constitute the catchments for the major river systems entering the Lake. Two broad landuse categories i.e. fallow land (upland with or without scrub having crown density less than 10%) and degraded forests (crown density 10-20%) have been delineated for soil and water conservation treatment purposes. Treatment for these areas has to be addressed separately with specific modifications at the different locations.

### **Biodiversity Conservation**

The Loktak Lake covers a variety of habitats with rich biological diversity. Aquatic macrophytes comprising 233 species of emergent, submergent, free-floating and floating leaf types have been reported in the lake.

Studies carried on the lake reveal occurrence of 32 species of phytoplankton and 55 species of zooplankton. The macrofauna include a number of vertebrate and invertebrate species, which inhabits the water body, Keibul Lamjao National Park, phumdis, islands and other habitats. A total of 425 species of animals (249 vertebrates and 176 invertebrates) have been

identified from the lake. The vertebrate fauna includes 6 species of amphibia, 106 species of birds and 32 species of mammals. The total fauna diversity is likely to be much higher as many species have not been properly identified.]

Of these, 34 species (5 mammals, 3 birds, 9 reptiles, 3 amphibians, 12 fishes, 2 molluscs and 1 annelid) which were reported to be abundant in the past, have declined and are now disappearing gradually. The fauna include some rare (e.g. the reptile *Python molurus*) and endangered species (e.g. *Muntiacus muntjak* and *Cervus eldi eldi*). At least one species of bird is reported to have completely disappeared. Brow-antlered deer (*Cervus eldi eldi*) is the most seriously endangered species, which inhabits the Keibul Lamjao National Park - its only natural habitat in the world.

Loktak Lake also provides refuge to thousands of birds, which belong to at least 116 species. Of these 21 species of waterfowl are migratory, most migrating from different parts of the northern hemisphere beyond the Himalayas. These migratory birds spend their winter (October to March) in and around the lake. In recent years it is believed that the waterfowl population, especially that of the migratory birds has gradually declined. Hume (1988) has recorded 57 species of birds in Loktak Lake alone during February. Singh (1971) also states that large number of waterfowl including several species of ducks and geese visit Loktak Lake, although a proper census was not undertaken.

The fish fauna of Loktak Lake comprises 64 species. Two of these species are restricted in their distribution to the Yunnan state of China, Myanmar and Manipur only. Loktak lake serves as the breeding ground for several species of migratory fishes such as *Labeo dero*, *L. angra*, *L. bata*, *Cirrhinus rebd* and *Osteobrama belangeri*. These riverine species migrate from the Chindwin-Irrawaddy river system in Burma to the upstream areas of Manipur River and breed in various shallow lakes in the valley (Tombi Singh, 1991 a and 1993). In the past they accounted for about 40% of the natural fishery resources of the Manipur State. However, these fishes have disappeared from the lake since the construction of Ithai Barrage, which has blocked their migratory route.

Keibul Lamjao National Park is the natural habitat of the most endangered mammal, the brow-antlered deer (*Cervus eldi eldi*) which is represented by about hundred individuals (WWF, 1994). Locally known as Sangai, this sub species of deer was reported to be completely extinct in 1951, but a survey conducted under the auspices of IUCN revealed that only a few animals are inhabiting the park. Sangai are specially adapted to this characteristic floating habitat, with their characteristic hooves unlike other deer species which help the animal walk conveniently over the floating islands.

### **Sustainable Fisheries Development**

The fishery in Loktak lake has traditionally been open water capture fishery which accounted for 60% of the total fish production of the state. Migratory fishes from the Chindwin - Irrawaddy system of Burma (Myanmar) used to contribute about 40% of the capture fishery of the lake. The commissioning of the Loktak hydroelectric project, however, brought about changes in the fish and fisheries of Loktak. Migratory fishes have, since then, disappeared

(Tombi Singh, 1993). While the State Fishery Department has been trying to compensate the loss by introducing millions of fingerlings of Indian and exotic major carps. Long before plans for the Loktak Hydroelectric Project were made in the 1970s, an area of 500 ha in the Takmu sub-basin was taken over by the State Government for intensive fish culture. At present, apart from the Takmu beel fishery, the lake is open to the public for natural capture fishery without the requirement of any lease or licence.

Aquaculture activities can be found in the peripheral areas of the lake, particularly along the inhabited islands such as Thangs and karang, where local fishing communities has constructed fishponds (20 -30m wide and 30 - 50 m long. Several fish species including the major Indian and exotic carps are cultured in these ponds. The fishermen are provided with loans and subsidies from agencies such as Council for Advancement of People's Action and Rural Technology (CAPART) and National Association of Fishermen.

Lack of policies and regulatory mechanisms fish production are the main causes of decline in fish production. More than 100,000 people on and around the lake depend for their livelihood to a great extent on the lake fishery, which is now a mixture of capture and culture systems.

ICEF has identified sustainable fisheries development as one major component of the project. The objectives will be to reduce impacts of different fishing methods and practices and develop mechanisms for fish migration, enhance fish yield and diversity and regulatory mechanisms to ensure sustainable development of fisheries in the lake..

### ***Community Participation and Development***

The communities living around the Loktak Lake can be broadly classified into three groups viz. (i) shore dwellers living in the periphery of the lake (ii) hutment dwellers living in the lake on phumdis and (iii) hillside dwellers living in the hills.

There are 55 rural and urban settlements around the Lake with a total population of about 100,000 people. The natural levees of Manipur river and its tributaries are densely inhabited. A large population of fishermen live on some 688 floating huts of which many have been converted into permanent dwellings. It has been estimated that about 4000 people live in these floating huts for fishing activities. Apart from the people living in the close vicinity of the Lake, it has been estimated that about 1,21,000 people live in 546 hill villages. These people are largely under the control of tribal chieftains and practice shifting cultivation. The implementation of the project would help socio-economic uplift of the people by enhancing the Lake resources and overall environmental quality of the Lake.

The participation of local communities is crucial in planning and management of Loktak Lake on long-term basis. Ensuring participation of all stakeholders requires understanding of their needs and sharing of authority and responsibility for resource management according to arrangements, which are understood and agreed by all parties. The process is lengthy and requires long-term commitment from all concerned stakeholder groups. In view of this, community participation and development has been identified

as an important component in ICEF project.

The ultimate objective of co-management is empowerment of impoverished majority, promoting equity in the access to and control of resources, greater involvement of women, sustainability and system orientation. A comprehensive community development programme has been evolved which is focused on survey and assessment, training and capacity building and demonstration projects.

### ***Survey and Assessment***

Participatory techniques were used to compile information on community structure, resources, demands, skills and indigenous potential, including seasonal changes and other relevant factors. Socioeconomic survey of the community living in and around the valley around the Lake was undertaken. In addition a baseline survey within Lake and its catchment area provide information on present resource utilization patterns and community development needs.

### ***Capacity Building, Training and Networking***

Capacity building of community based organizations and NGOs to develop skills for management of resources specifically related to the project was a one of the major component of the project. Mechanisms for institutional development and communication networking were developed and training of local communities in nursery raising, hatchery management, restocking techniques, data collection, hydrology and minimization of wastes will be undertaken. Awareness generating activities such as publication of newsletters and posters, organizing workshops and seminars is underway.

### ***Joint Community based Demonstration Projects***

Several joint community based demonstration projects have been planned under the ICEF project. They involve the establishment of hatchery, introduction of proper fish harvesting techniques, waste treatment and sanitary improvement, utilisation of Phumdis, cottage industry involving local handicrafts, integrated farm management and plant nurseries.

Pilot projects to encourage the local community to resort to alternate sources of employment such as working in rice and oil mills will also be explored. Such programmes would greatly help reduce pressure on the Lake.

### ***Lessons Learned***

In the past all development activities i.e. within the Manipur River Basin was focussed to contribute to major needs of the Manipur District community. However, this needs to change i.e. to also consider the ecological needs of the Manipur basin and the Loktak Lake

The major cause of ecological problems in Loktak Lake is due to improper planning and lack of integrated approach when developing projects. Efforts taken by the Government of Manipur to identify issues which leads to deterioration of Loktak Lake is a major step to increase the awareness on the

ecological deterioration of the lake.

Establishment of a Lake Development Authority as a single management body is a major step towards promoting holistic management of the lake.

The project highlighted the importance of involving community at all stages of development, which is an important aspect within integrated management of river basin.