

# Eco-development for Biodiversity Conservation

*15th March - 9th April 1999*



भारतीय वन्यजीव संस्थान  
Wildlife Institute of India

WORKSHOP REPORT

*Preface*

Session

Session I

Session I

Session I

Session V

Session V

Session V

Session V

Session E

Session X

Session X

Session X

Session X

Session X

Session X

Session X

Session X

Session X

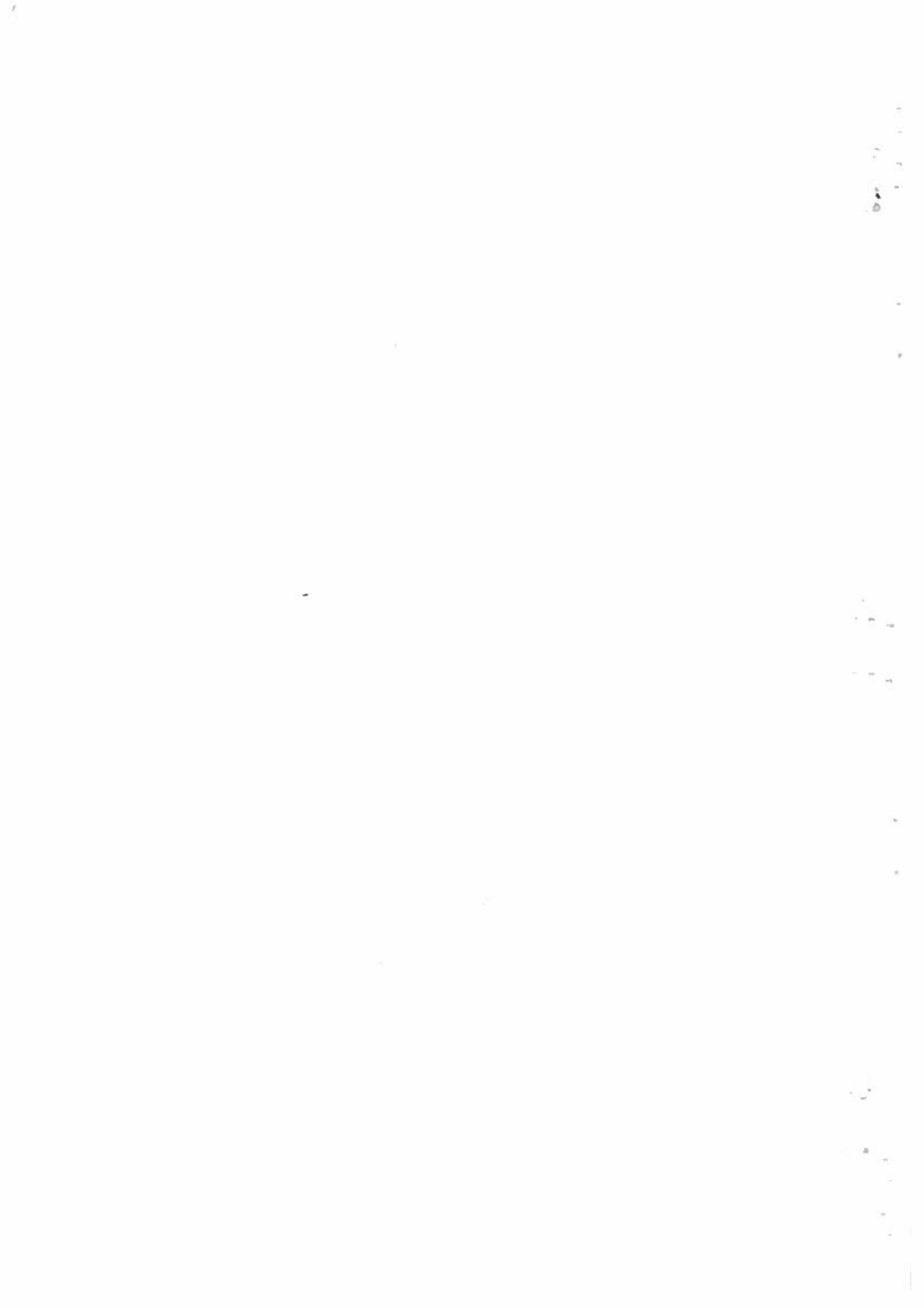
Session X

Session X

Session X

Session X

Annexure: XVIa Approaches to Conflict Management	37
Annexure: XVIb Steps in Conflict Management	38
Annexure XVIc Conditions for Negotiation/Mediation	39
Annexure: XVIIIa Advantages of Collaborative Management	42
Annexure: XVIIIb Steps for Collaborative Management	43
Annexure: XIX Analysis of Livelihood Strategies (Group Output)	45
Annexure: XXI Protected Area Mutual Impact Assessment (PAMIA)	50
Annexure: XXII Problem Tree (Group Output)	52
Annexure XXIIIa Objective Tree	54
Annexure XXIIIb Objective Tree with Assumptions	55
Annexure XXIIIc Logical Framework	56
Annexure: XXVa Effective Feedback	61
Annexure: XXVb Receiving the Feedback	62
Annexure: XXVII Factors Affecting Decision Making/Consensus Building	66
List Of Participants	68
List Of Resource Faculty	69
List Of Guest Faculty	69
Session Details	70
Workshop Evaluation	72
Others behind the Scene	73



## Preface

This report is the outcome of the three weeks workshop on Ecodevelopment for Biodiversity Conservation (March 22<sup>nd</sup> to April 9<sup>th</sup>, 1999). The workshop was conducted as a part of the nine months Diploma Course in Wildlife Management. Of the sixteen modules that form the nine month diploma course, this is the only module that is conducted as a stand alone workshop and provides space for lateral entrants. The lateral entrants are driven into the main module workshop through a one week bridge course that introduces them to the basic elements and issues of Biodiversity Conservation through Protected Area (PA) network.

The workshop was designed on the basis of training need assessment carried out for PA Managers and was designed as a competence based training programme. The workshop was conducted on the principles of Androgogy. This report summarizes the sessions conducted during this workshop alongwith selected group outputs. It was in fact a two way learning process wherein the trainee officers shared their experiences and perceptions with one another as well as with the facilitators, while the later tried to link learning experiences to the basic concepts of integrated conservation and development. We thank our trainee officers for sportingly bearing with the inconveniences faced during the workshop. Thanks are also due to the officer trainees of XVIII and XIX Diploma course and the lateral entrants for the Ecodevelopment modules held in March-April 1997 and 1998 respectively, the frontline staff of Rajaji National Park, Panna National Park and the staff and the VEC members at Great Himalayan National Park, who participated in the various Ecodevelopment training workshops held during the past two years. Working with these participants with varied experiences was an eye opener in many ways and some of the relevant group outputs from these workshops have also been included in this report.

We hope that this report will be useful to the participants in any further training programmes that they conduct themselves in their working place as well as in solving their practical problems for Ecodevelopment planning and implementation.

Ruchi Badola  
A.K. Bhardwaj  
B. K. Mishra  
B.M.S. Rathore



## Session I Introduction

**Objective :** To welcome and introduce the participants and the resource faculty with each other and open up the workshop.

All the participants (participants also includes the resource faculty) formed five groups based on their colour preference. Each group facilitator then introduced the group members and what characteristics their group (colour) stands for. Group characteristics as brought about by the teams are given in Annexure I.

In trying to highlight the characteristics of their groups the team members identified common interests of the group members through the points they had gathered regarding their group colour. Opening up a larger discussion regarding this session and the workshop, it was emphasized that as all the colours are important in life, for being a successful manager a proper mix of various human qualities is necessary. Each person/organisation/institution has strengths that can be used in a positive way to achieve the desired goal. The importance of adaptability, unbiased attitude, transparency, respect for other people's values and beliefs, intense passion to achieve objectives and initiative for bring about positive change were discussed. These are some of the qualities that a good manager needs to bring about positive change and elicit participation of various interest groups in PA conservation. Session was ended by a note that in next coming days we will be trying to explore such commanlities.



## Annexure - I Introduction through colours

### **Green Colour : (origin = Blue + Yellow)**

1. Green is sign of prosperity and productivity. For example, Green revolution is related to revolution for welfare.
2. It indicates love for nature.
3. Imparts Soothness and indicates Tranquillity.
4. Sign of happiness. (Green bangles in rainy season).
5. It indicates positive approach, high ambition and safety.
6. Sign of development.

### **Group Members :**

1. Shri M.G.C. Sooriyabandara
2. Shri U.K. Laxman Peiris
3. Shri D.K. Jain
4. Shri Abhimanyu Behera
5. Shri Kr. Manish Arvind
6. Shri Ramavtar Dubey
7. Shri A.P. Pathak
8. Shri A.K. Geete

### **Yellow Colour :**

1. It symbolises unity and equality - Sarwa Dharma & Sarwa Bhuma.
2. It means liveliness, cheerfulness and positive attitude.
3. This is the colour of Krishna indicating believe in Karma.
4. Sign of religious thinking and traditions.

### **Group Members**

1. Dr. Ruchi Badola
2. Dr. B.K. Mishra
3. Ms Chandini Wilson

### **Red Colour :**

1. Sign of revolution and change.
2. Strikingly different from others.
3. Symbol of firmness and courage.
4. Radical
5. Symbol of importance - Red carpet, red light in vehicles shows importance, colour for VIPs.
6. Intense and deep.
7. Pragmatic
8. Represents Life – The red colour of blood.
9. Sacrifice

### **Group members**

1. Shri Arvinder Singh
2. Shri Lila Puri
3. Shri Anurag Bhardwaj
4. Shri B.M.S. Rathore

## Annexure - I (Contd..)

### White Colour :

1. Sign of peace and tranquillity.
2. Indicates accommodativeness.
3. Plain hearted
4. It represent transparency
5. Open and broad minded
6. Removes darkness or ignorance
7. Clean and clear
8. Mixture of all colours

### Group Members

1. Shri C.L. Das
2. Shri Ashutosh Mishra
3. Shri Shashi Malik
4. Shri S.R.B. Dissanayake
5. Shri B. Srinivas

### Blue Colour :

1. Deep thinkers
2. Colour of inventiveness and discovery
3. Colour (sea, sky, ink) all pervasive.
4. Denotes cool and calm mind.
5. Spirit of nationalism (Champaran- Blue-indigo movement)
6. High acceptability.
7. Related to evolution of life.
8. Agent of purity (shining white comes from blue)
9. Divine colour – Colour of God Krishna.

### Group members

1. Shri A.D Baruah
2. Shri H.S.D.M. Amarathana
3. Shri VB Srivastava
4. Shri M.S.L.R.P. Marasinghe
5. Shri S.K. Gupta
6. Shri Ashish Kumar Verma
7. Shri R.K. Khairwa
8. Shri Anil Bhardwaj

## Session II Workshop Expectations

**Objective :** The objective of this session was to find out the expectations of the participants from this workshop.

The participants were asked to note down their expectations from this workshop. The following points summarize the expectations of the participants from this workshop.

### **Concept :**

- ❖ Clarify the concept with special reference to objectives of Ecodevelopment in PAs vis-a-vis mainstream forestry.
- ❖ Is JFM advisable in P.As?

### **Conservation Vs Development:**

- ❖ What is Ecodevelopment ? Conservation or Preservation.

### **Process :**

- ❖ Identification of stakeholders and processes through which this is done.
- ❖ How to accommodate stakes of different stakeholders so as to attain better understanding with them?
- ❖ How to elicit participation of local communities in conservation? How to reduce their dependency on PAs?
- ❖ How to motivate the frontline staff?
- ❖ What are the required institutional changes for ecodevelopment? How to bring about these?
- ❖ How to organise funds for ecodevelopment?
- ❖ How to address VIPs (Politicians etc.)?
- ❖ How to change the outlook of the forest department?

### **Planning :**

- ❖ Some models for planning/case studies, more details about preparing microplans, various steps involved in ecodevelopment.
- ❖ How to develop a plan which can satisfy all stakeholders and how to develop linkages?

### **Implementation :**

- ❖ What are the methods of implementation, practicability and feasibility of the concept?
- ❖ How can we apply Ecodevelopment in SriLankan situation?
- ❖ How to implement Ecodevelopment in limited financial resources?

### Session III Workshop objectives, methods and group norms

**Objective :** To introduce the participants to the objectives, methods and schedules of the workshop.

Discussing the workshop objectives it was mentioned that these revolved around the four basic issues related to Ecodevelopment i.e. what, why, where and whither. This will cover most of the concerns of the group given in their expectations. After knowing the group expectations care was taken to see that ecodevelopment implementation issues in the neighbouring countries, Sri Lanka and Nepal are also discussed. The following were the objectives of the workshop.

- ❖ To understand the concept of Ecodevelopment. (What, Why, Where).
- ❖ To understand the role of local communities in conservation.
- ❖ To identify the importance of conservation development linkages.
- ❖ To devise strategies of collaborative management.
- ❖ To understand the process of project planning.
- ❖ To develop intra-personel skills for effective ecodevelopment planning and implementation.

This would be a competency based workshop in which the trainees would be required to achieve certain standards of performance. These standards have been determined through training needs assessment done with PA managers and through a number of workshops carried out with different stakeholders groups. The unit is a specification of the standard while the objective describes what the trainees will be able to do within the training environment and duration. The performance criteria lays down the level and quality and performance expected, while the outcome statement sets a scope to the performance criteria.

The workshop will be carried out on the principal of Androgogy (Art and Science of adult learning). The trainers will act as facilitators who will ensure that the experience and insights of the trainees are combined with conceptual theories. The trainees will be able to build upon their knowledge and experiences through a number of methods like case studies, simulations, role plays and small group discussions.

It was told that during the workshop certain group norms would be observed. The following were the group norms agreed upon by the group :

- ❖ Punctuality during the workshop will be maintained.
- ❖ All members will be treated as equal.
- ❖ Participation of all members will be ensured.
- ❖ There will be small group facilitators.
- ❖ The group members will ensure self restraint to discuss irrelevant things.
- ❖ Due respect to each member.
- ❖ All the members will be given opportunity to express their views.

## Session IV Experiencing Change (Warm up)

Objective : To understand the difficulties arising during a change and ways to minimise these difficulties.

Working in pairs, the participants were asked to make three changes to their appearance, without their partner being able to see. Following this the partners were asked to discover the changes made by each other. The process was repeated and after the third round of change, large group discussion was initiated along the points mentioned in the Box.

The session was concluded by pointing out that in the process of ecocodevelopment we aim to bring about a change in people's lifestyles and thinking. But we should realise that sometimes change creates uncertainty and inconvenience. It is therefore important to work towards making the change acceptable to people. Also for making changes among the villagers it will be necessary to bring about changes in our own attitudes. The forthcoming sessions of the workshop would be useful to the participants in understanding the change brought about during the process of ecocodevelopment as well as the difficulties faced therein.

### BOX

#### Feelings While Experiencing Change

- ❖ For making any changes and then monitoring these keen observations are required.
- ❖ Superficiality of change/permanent change.
- ❖ Limited resources available for bringing about change.
- ❖ Initially social barriers for change and how to get rid of them.
- ❖ Frequent changes create problems and frustrations and hence there is a limit for change.
- ❖ Easy to begin but difficult to sustain.
- ❖ Time is always a constraint, but sufficient time is needed for any significant change.
- ❖ Process of change becomes easy once we know it.
- ❖ Uncertainty in the beginning - need of training/skills.
- ❖ Unfamiliar people can team up- may not always get a person of choice. Need to adjust and adapt.
- ❖ For effective change help of others may be necessary.

**Session V**  
**Ecodevelopment - Perceptions and Assumptions**

**Purpose :** To determine participant's perceptions and assumptions related to eco-development and to build a common understanding about what is eco-development?

Based on their experience the participants were asked to work in three small groups and come out with their understanding about eco-development. They were asked to discuss in the small groups and come out either with a definition or with some sketch or with some role play which can depict the meaning of eco-development as understood by them (see Box 1 which is the group output of the workshop held with officer trainees from Sri Lanka). The group worked for half an hour and came out with outputs synthesised in Annexure V.

**BOX 1**

**Group-I**

**ECODEVELOPMENT IS**

A collection of mutually linked strategies with the involvement of all the stakeholders to reduce dependencies on natural resources with the expectation to reduce stress on dependants due to the implementation of those strategies.

**Group-II**

**ECODEVELOPMENT**

PA (Animals)	IMPACTS	PEOPLE (Villagers)	CONSERVATION (Natural Resources)
	Participating with (Developments) Stakeholders		Use Protection Regulation Management
	Solutions		
Sustainable use (By controls)		Reducing the usages (By controls)	

**Group-III**

- Ecodevelopment is a process to facilitate the villagers who are living around the PAs to get their requirements with helping to protect the natural environment.
- Ecodevelopment is nothing but a rural development which help for better conservation by Providing better facilities to break their poverty through education controlling and by providing alternative income.

Picking up a debate from the group outputs, various definitions of ecodevelopment were discussed which are given in Box 2. It was explained that ecodevelopment is in fact the strategy in which we take care of the economic needs of the people around the protected area and the social concerns of these people, keeping in view the conservation values of the PA. It was also told that there can be many definitions which can be given for ecodevelopment. All these definitions talk about the important concerns of ecodevelopment i.e. conservation, needs of the people, sustainability, social issues, reducing pressures, providing alternatives, linking development and conservation etc.

## BOX 2

### DEFINING ECODEVELOPMENT:

" Site specific package of measures, developed through people's participation, with the objective of promoting sustainable use of land and other resources, as well as on farm and off farm income generation activities which are not deleterious to PA values" (Panwar 1992).

" Limited rural development designed with the participation of local people, for the purpose of reconciling genuine human needs with the specific aim of PA management" (Rodgers, 1992).

"Strategy for protecting ecologically valuable areas (PAs) from unsustainable or otherwise unacceptable pressures resulting from the needs and activities of the people living in and around such areas" (Shekhar, 1994).

"To improve productivity of lands and resources that is ecologically sustainable amongst rural communities, in that they are not dependent on declining levels of natural resources".

"To achieve PA conservation by promoting socio-economic development and providing local people with alternative income sources which do not threaten to deplete the plants and animals within the PA" (Brandon and Wells, 1992).

"Ecodevelopment aims to conserve biodiversity by addressing both the impact of local people on the protected areas and the protected area on the local people". (World Bank, 1996)

"The basic objective of the ecodevelopment programme is to reduce the biotic pressure on the core areas of the PAs". (Project Tiger, 1992)

"Ecodevelopment is a strategy to overcome unsustainable and incompatible resource use practices by the dependent communities for their livelihood in and around PAs through regulated (sustainable and compatible) use and alternatives through participation of various stakeholders". (as per findings of Ecodocumentation Workshop at WII, 1998)

**Annexure -V**  
**SUMMARY (Synthesis of group discussion)**

**What is Ecodevelopment?**

Ecologically sustainable economic development of the local people based on the optimal utilization of local renewable resources by adoption of site specific conservation and development packages of measures.

**Components of Ecodevelopment (Characteristics of Ecodevelopment)**

- ❖ Benefit to local people.
- ❖ Use of low impact appropriate technology.
- ❖ Rehabilitation and reclamation of the degraded areas.
- ❖ Priority for stabilization of subsistence agriculture.
- ❖ provision for lean period benefit.
- ❖ Peoples' participation.
- ❖ Bottom up planning.

**How Ecodevelopment will help PA Conservation?**

- ❖ Reduction of economic dependence
  - by providing income generating activities.
  - enhancing productivity of the PPRs.
- ❖ Reducing resource dependency.
  - by use of substitute.
  - by meeting resource need from the buffer zone and village commons (C)
  - by efficient use of the resources.

**Where Ecodevelopment?**

- ❖ Ideally outside villages, but inside PA there are villages.
- ❖ Whether or not Ecodevelopment inside PA – Ecodevelopment inputs compatible with the habitat management activities alone.

**Wildlife Protection Act 1972 (interpretation).**

- ❖ No settlement inside National Park . Therefore villages to go.
- ❖ Sanctuary can tolerate some human presence (Sec 24 III. 1991 Amendment) – some village to go and some to remain.

**Possibilities of village relocations.**

- ❖ Takes time
- ❖ Pose problem because of :
  - lack of alternative land.
  - socio political reasons.
  - logistic (money, man power etc.)

Session VI  
If – then (*Warm up*)

**Objective :** The objective of this warm-up was to understand the assumptions and externalities in a project.

In this exercise, the participants were divided into two groups. One person from group no.1 was asked to write any sentence starting with "If". Another member from the other group was supposed to write "Then" in response to the first member of group No.1 without knowing what has been written by the first member. In this way all the members from the two groups wrote sentences. The outcome of this exercise is as follows:

Group – I	Group - II
If the forests could be protected	then the forest would have been saved
If I was not a forest officer	then the PAs could not have been degraded.
If I was the inhabitant around the PAs	then you would have been the most powerful man on earth.
If I would have become a point	then nature will counter attach itself.
If the human development had been oriented towards ecological conservation	then we can have a luxuriant forest equilibrating with the needs of local people.
If I am a tree in a forest	then the process of conservation would come to an end.
If I was the pavilion-end	then the doom's day will come.
If I am in forest village	ther the PA area/forest area would have not degraded ecologically.
If he was alive	then we could win the match.
If there is no PA impact	then this situation has not been arisen.
If we allow people living inside PA	then policy would have easy to complement.
If I am allowed to be a dictator	then what will be happen to other personnel.

After this exercise, all the participants joined in a bigger group and discussed the outcomes of the exercise. It was explained that all the times the "If...." may not exactly fit with "Then....". In Ecodevelopment or Integrated Conservation and Development, same situation can be seen. All the time our assumptions may not come true as per our thinking. It is in this context that the next session is analysing the importance of understanding these "Ifs" and "Thens" in detail.

## Session VII Conservation Development Linkages

Objective : To understand the linkages between conservation and development activities in the ecodevelopment project and ways to strengthen these linkages.

One of the important expectation of the group was how to generate employment and incomes for the local communities with meagre available resources. Another expectation was how to establish the stakes of local communities in conservation. Picking up from these issues this session was conducted. It was explained that ecodevelopment basically is looking after two main issues, the conservation of natural resources and the development of people. The people will agree for any activity of conservation only if their (impoverished communities) socio economic conditions are improved. It was told that regarding the approach for the ecodevelopment there are two school of thought. One school of thought is of the opinion that if the development needs of the local communities can be met from alternate sources, this will lessen their impacts on (PA) resources. According to the other school of thought local communities will act to conserve (PA) resources if they are actively involved in the planning and management of resources (PA) and can share in the benefits.

After this the participants were divided into two groups and debate was organised on the two school of thought between these two groups. The results of the debate are given as Annexure-VIIa After the debate the participants concluded that in the real life situation either of the two approaches given above cannot be used in isolation. We will have to use activities which are a mixture of two approaches. On one hand we may have to given alternatives and on the other some the activities may provide some sharing of resources in a designated zone and in compatibility with the objectives of the park management

It was explained that in the ecodevelopment programme often the linkages between conservation and development are either very weak or non-existent. For any activity to be suitable for conservation these linkages need to be strong and if they are not strong they have to be strengthened. These linkages can be both to and fro in the form of preconditions (which may need supporting activities) and steps for taking care of assumptions. Explaining about linkages it was informed that the linkages between conservation and development can be direct or indirect as well as strong or weak. Any activity which has direct and strong linkages with conservation will be the one suitable for ecodevelopment. In order to understand this further, the group was asked to undertake a small exercise. The participants were divided into 3 small groups and each group was given 4 cards depicting 4 developmental activities frequently being adopted in ecodevelopment. They were supposed to discuss in the group and find out preconditions and supporting activities for each development activity. Simultaneously each group was supposed to find out the assumptions in carrying out these activities to yield the desired results.

Assumptions: Assumptions are the external conditions to a project or any activity which lying outside the project and are beyond the control of the project.
--

Following were the activities assigned to groups :

1. The project is making arrangements for establishing drinking water and school facilities for the villages around the PA.

2. The project is providing expertise and resources to local farmers for agriculture improvements around the PA.
3. The project is encouraging local communities to get involved in eco-tourism activities linked with the PA.
4. The project is supporting a local group to develop and market ropes made out of controlled harvest of Bhabhar grass from the PA.

The small groups worked for 45 minutes and presented their results (See Annexure-VIIb) After clarifying the doubts there was discussions in the larger group. Following points emerged from the discussion :

- ❖ While selecting the development activities for ecodevelopment we must ensure to and fro linkages of these activities so as to have better conservation of the PA.
- ❖ Those activities which have direct and strong linkages with the conservation are more suitable for ecodevelopment. The activities like eco-tourism can be consider under this category.
- ❖ If in a developmental activity there are lot of assumptions, the linkages will probably be not very strong. In such a case we will have to either carry out additional activities to see that the assumptions hold true or we will have to select some other activities. By doing additional activity against assumptions we are trying to strengthen the C&D linkages.
- ❖ It is not always necessary that the developmental activities will have direct linkages with conservation. Some times we may have to undertake activities in the beginning of the programme for generating trust. Activities like health programmes, school programmes, drinking water supply etc. which do not have direct linkages are often implemented as trust building activities and these are very crucial to start the programme in a new area.

At the end of the session the participants were able to understand the importance of C&D linkages and ways to strengthen these linkages.

**Annexure - VIIa**  
**Debate on Two Approaches of Ecodevelopment**

<b>First approach : Sharing of Resources</b>	<b>Second approach : Exclusive</b>
People will have to be allowed to share the resources as they have been in the system since time immemorial.	It eliminates fear in people, if people are allowed to be inside PAs.
Sharing of resources is not always destructive, rather it leads to habitat improvement as in case of Bharatpur, Rajaji.	Area for PA is only 4%. Why to share it?
People were part of ecosystem and hence they can not be excluded.	Habitat destruction will occur to PA if people are inside.
Past history shows exclusion of people from P.A. has not lead to positive effects.	It is against nature's processes.
Creation of fear does not work in present context.	Expectations of people will go on increasing and it can not be fulfilled indefinitely.
Sharing of resources will still continue even if people are sent out.	It will lead to loss of control in future.
People go to P.A. for needs but not for greeds.	To slow down process of extinction people must go out.
Exclusion of human being is against the conservation concept.	For indirect benefits-Oxygen reducing pollution etc. PAs have to be without any disturbance.
Biodiversity is not only flora and fauna but also the people living in and around of P.A.	Population is increasing and resource is limited. So only alternatives should be provided and not sharing.
Proper alternatives were not given to the people at the time of declaration of PA.	Diversity and animal populations may go down due to interference.
Needs of the people in and around the PA will have to be fulfilled.	It was concessions in past which became right now. So let us be aware of it.

**Annexure - VIIIb**  
**Conservation and Development linkages (Group Output)**

Developmental Activity	Preconditions /Assumptions	Supporting Activity
Control harvest of Bhabhar grass and its marketing.	<ul style="list-style-type: none"> <li>❖ It will not adversely affect the habitat.</li> <li>❖ Enough quality grass is available.</li> <li>❖ People need making ropes for their livelihood.</li> <li>❖ Department has necessary infrastructure to control the movement of people in the PA during harvest season.</li> <li>❖ People are aware of the necessity of control on harvest.</li> <li>❖ There is no market ensuring proper prices to local people.</li> <li>❖ There is market for the ropes.</li> <li>❖ The profits will raise the economy of the local people particularly women and others dependent on bhabbar grass.</li> </ul>	<ul style="list-style-type: none"> <li>❖ Should have scientific research base and regular monitoring.</li> <li>❖ Survey the area.</li> <li>❖ P.R.A. in the area.</li> <li>❖ Capacity building of staff and additional infrastructure for mobility of staff.</li> <li>❖ awareness campaigns.</li> <li>❖ Cooperative marketing system in place.</li> <li>❖ Market survey.</li> <li>❖ Necessary Govt. orders for not allowing the transport of Bhabhar grass outside local area and village institutions in place to ensure profits to the local people particularly those dependent on Bhabbar and women.</li> </ul>
Establishment of drinking water facilities for villagers around the PA	<ul style="list-style-type: none"> <li>❖ There is shortage of clean drinking water supply.</li> <li>❖ Villagers are going inside the PA for fetching water.</li> <li>❖ The water facilities created under the project will be maintained by the community.</li> <li>❖ Water facilities are compatible with local traditions and beliefs of villagers.</li> <li>❖ Villagers will stop going inside the PA after establishment of drinking water supply.</li> </ul>	<ul style="list-style-type: none"> <li>❖ Survey of the village and the area and interaction with villagers.</li> <li>❖ Agreements with the villagers for maintenance or linkages with water supply department.</li> <li>❖ Village survey and interaction with villagers to decide the type of facility to be created.</li> <li>❖ Mutual agreements with the villagers.</li> </ul>

<p>Provision of expertise and resources to the local farmers for intensive agriculture improvements around the PA</p>	<ul style="list-style-type: none"> <li>❖ Suitable and sufficient land is available for agriculture.</li> <li>❖ There are organizations available near the area for giving expertise.</li> <li>❖ There is market available for sale of agriculture produce.</li> <li>❖ Farmers are willing to adopt new package of agriculture.</li> <li>❖ The new package of agriculture is environment friendly with PA values.</li> <li>❖ Farmers will provide active help for protection of the PA.</li> </ul>	<ul style="list-style-type: none"> <li>❖ Land survey of the area.</li> <li>❖ Survey for organizations and tie up with them.</li> <li>❖ Market survey and proper linkages with market.</li> <li>❖ Awareness and capacity building of farmers.</li> <li>❖ Farmers don't use excessive chemical fertilizers, pesticides and insecticides. They use organic manure – an agreement with farmers.</li> <li>❖ Mutual agreements for PA protection.</li> </ul>
<p>Encouraging the local communities to get involved in eco-tourism activities linked with the PA.</p>	<ul style="list-style-type: none"> <li>❖ There is sufficient flow of tourists.</li> <li>❖ Local people are willing to participate for ecotourism.</li> <li>❖ The benefits will go to the local people.</li> <li>❖ The tourism activities remain regulated.</li> <li>❖ The park has enough tourism value spots inside.</li> <li>❖ There is appropriate policy of the Government for this activity.</li> <li>❖ People have the necessary skills to handle tourists.</li> </ul>	<ul style="list-style-type: none"> <li>❖ Tourists flow survey.</li> <li>❖ Proper awareness of locals and then necessary capacity building.</li> <li>❖ Necessary order that no outsiders will be eligible for this benefit.</li> <li>❖ There are necessary institutions and arrangement to regulate and check the tourism.</li> <li>❖ Survey of the park.</li> <li>❖ Necessary Govt. order in place for this activity.</li> <li>❖ Capacity building of villagers involved in ecotourism.</li> </ul>

## Session VIII Community Diversity

**Purpose :** To appreciate the importance of community diversity and defining communities in ecodevelopment planning

The session was initiated by defining the term community as referring to any group formed due to geographical proximity culture, religion, caste or any common interest, members of which influence each other. Its definition depend upon the objective of planning. It was further pointed out that the communities are not homogenous social entities. They are normally tied in a series of horizontal and vertical, patron-client and other social relationships. Various subgroups exist in a community that have different resource requirements and expectations from planning. For a successful planning process, it is crucial to recognize this diversity and ensure that the needs and aspiration of different sub groups are looked into. The various sub groups were able to bring out a number of community variables (as given in Annexure VIII) that have different implications for resource utilization and conservation.

It is important to know about the community diversity because of the following reasons :

- Some groups are invisible.
- To avoid ignoring interests of weaker sections.
- Social poverty, seasonality.
- Identification of most dependent groups.
- To tackle issues like, livelihood Vs rights, traditional use Vs rights, distance from the resource.

On the last point there was a discussion and it was pointed out that all projects have boundaries. hence the PA manager in consultation with other stakeholders needs to decide who are the communities, i.e. who are the people that are to be part of the project particularly with reference to the above factor. It was discussed with the help of examples that solutions to such issues have been site specific and have sustained where the PA management in consultation with the communities involved have worked these out. The smaller groups were asked to related their experiences with respect to these factors and how and also they overcame such situations. Group outputs have been given in Annexure VIII.

**Annexure -VIIIa**

**Community Variables, Identified by the various groups :**

- |         |   |
|---------|---|
| Group 1 | Living style, Food habits, Community Structure, Land holding, Income Level, Family size, Literacy, Location, Occupation, Age, Political Ideology, Gender, Caste, Religion.  |
| Group 2 | Extent of Dependency on natural resources, Traditions, Attitude, Beliefs, Sex, Education, Land holding <i>e.g.</i> -landless, middle and big landowners, Age, Skills, Economic condition, Religion, Caste, Occupation, Food habits, Native or migrants, Geographical Area (Location). |
| Group3  | Local Interest, Politics, Age, Social beliefs, Aggregation pattern, Caste, Occupation, Migration (Emigration/immigration), Gender, Educational Background, Cultural beliefs, Lifestyles, Types of dependency, Economics status.   |
| Group 4 | Dependency on natural resources, Occupational seasonality, Source of livelihood, Sex, Caste, Land ownership, Cattle, Age, Literacy, Family size, Culture and Traditions, Ethnicity, Religion, Food habits.  |

## Annexure -VIIIb Defining Communities

### Group 1 -Traditional use Vs. Rights

**Traditional Use :** Bhabhar grass harvesting in Rajaji National Park was traditional use. there was conflict with local communities when park was declared and the extraction of bhabhar grass was banned.

**Rights :** The state government and park management solved this problem by making this use legal since it has positive impact on habitat improvement.

This has ensured sustainable and discriminate use of the resource besides improving the relationship between the PA management and the local villagers.

### Group 2 -Livelihood Vs Rights

E.g. Tharu Village in Dudhwa National Park. Villagers are Tharus, the local people and the Nepali laborers who are immigrants. There is conflict over resource use by the later.

How are being tackled.

1. They are not in voter list. They are not being taken care of BDO and tribal development department.
2. But by they need fuel. Timber, fodder, employment, grasses for their livelihood.
3. Ecodevelopment is only answer for their needs.

### Group 3 - Distance from the Resource

1. Rajasthan graziers (Kota, Chittorgarh) migrate to M.P after rains with large number of sheep and camel. Many times there is conflict with local people over resource use.

Attempts by M.P. Govt.

-The graziers are given passes for two months only.

-Police party accompanies the cattle groups upto district boundary where, other district police takes over (to avoid conflict with locals)

By Rajasthan Govt.

-Problem not solved. Nomads are still armed and resort to firing to serve their purpose.

### Suggestions :

-As done in Rajasthan. shift pressure to their areas by forming village communities who took 'kulhadi band' (banning the axe) decision if the nomads are shifted.

-Inter-state collaboration

-Formation of local village communities everywhere for kulhadi band.

-Identification of PAs for complete protection.

-given alternative routes district wise and forest wise.

## Session IX The Box

**Purpose :** To illustrate how perceptions and decisions are affected by closeness to ( or information about ) any given situation.

The activity was opened by explaining that perceptions of needs and/or problems are influenced by how close we are to the situation as well as by how much information we have. A box containing few objects familiar to participants was assembled. The group was shown the closed box and explained that the box contained several items familiar to them. During the next 5 minutes the participants were asked to identify what was in the box. Participants were divided into groups A, B, and C. Members of group A were allowed to briefly shake the box. Members of group B were allowed to feel objects inside by holding the box behind their backs and allowing them to put their hands inside. Finally, members of group C were allowed to touch and look inside. All groups were then asked to briefly discuss what they think was inside and then write descriptions in notebooks.

The three groups were then asked to relate how they felt when they tried to describe objects inside? What type of information was each group able to get given this problem? Which group was at advantaged and disadvantaged and Why? Which group's description was most accurate and Why?

This activity suggests that those closest to a situation should play a major role in describing that situation. It is important to involve the beneficiaries in doing a need assessment and planning that relate to them. The three groups could also be compared to three levels in the forest department *viz* the senior policy makers, the middle level officials and the frontline staff represented by groups A, B and C, respectively. The exercise brought out the importance of involving all the three levels in planning for ecodevelopment. It was explained to the participants that perceptions of needs and/or problems are influenced by how close we are to the situation as well as by how much information we have. It was emphasized that although those closest to a situation should play a major role in describing the situation, an outside perspective is also useful as sometimes people from a distance can see certain things which are not obvious to those who are closer to the situation. Here the role of NGOs is important. The role of past experiences and knowledge in planning was also highlighted, specially for the first and second groups, who could not see the objects inside the box. The groups were able to list the contents of the box through mutual discussions, this shows the importance of team work in planning.

**Annexure - IX**  
**Group description of the contents of the box**

Group A said that they found the task very difficult and were not able to understand much except for the sound of familiar objects like metal. Group B said that they could make out shapes and feel of certain items but they did not feel very confident. Group C found the task very easy.

**Group A - (Permitted only to listen to the sound of the box being shaken)**

1. Metal pieces
2. Smaller + Bigger metal pieces.
3. Metal clips.
4. Non metal pieces are also
5. Chalk pieces
6. Marker pen
7. Nails
8. Plastic materials
9. coins
10. Paper ball
11. Long, Cylindrical metallic objects.

**Group B - (Only touching permitted)**

1. Pencil
2. Key (with ring or tag)
3. Spoon
4. Artificial Flower
5. Metallic ring (Bangle)
6. Cap of Bottle (Plastic)
7. Pencil Sharpener
8. Plastic No. 6 (Toy).
9. Bead/Seed
10. Piece of Chalk
11. Medal with cloth
12. Film Role case/cap

**Group C- (Could see the items inside the box)**

1. Petals (Marry-gold)
2. Marry-gold – natural
3. Rose – artificial
4. Leaves – Artificial
5. Key bunch – three Keys with ring
6. Plastic lid (10 ml)
7. Pencil with broken tip – H.B. Green colour
8. Hair clips – (Lat.)
9. Pencil Sharpener
10. Tea spoon
11. Pea seeds (3)
12. Pant Hook
13. Paper clip
14. White paper stuck with tape
15. Bangles – Blue (12)
16. Broken tip of crayon

## Session X Community Participation in Ecodevelopment

**Purpose :** Purpose of this activity was to understand the importance of community participation in Ecodevelopment and various levels of participation.

Picking up the debate from the box game, it was emphasized that the participation of local communities and the front line staff is very important for Ecodevelopment Planning and implementation. While talking about participation it was explained that often the definition of participation is differently understood by different people. Often question is raised when we should say that the participation is taking place or not. Explaining about this it was told that the participation can have various levels (Annexure-X). While on one hand the participation can be restricted to mere information giving, on the other hand the level of participation can be so high that all the major initiatives and decisions are in the hands of local communities. This is called the interactive participation or active participation.

After explaining about the various levels of participation, it was told that between any two levels of participation there is now clear line of demarcation. There can be situations when the levels of participation are somewhere in between the recognize levels. In fact, the different levels of participation can be seen in the form of a continuum as given in Annexure-X.

Any one particular level of participation cannot be recognized as most suitable or useful. Every protected area has its own situations and depending upon these situations the level of participation can be decided. In the end what level of participation is established will depend upon the local history, social and political system of the area.

We may begin from anywhere, the level of participation may change in both the directions. Infact within the same PA, different areas can have different levels of participation. Not only this, within an area the level of participation may change with time. Of course, a higher level of participation will definitely lead to better and sustained results in the area. Hence, depending upon the situation and to the extent possible we should try to achieve a higher level of participation while undertaking Ecodevelopment.

After this discussion the participants were divided into smaller groups and each group was asked to identify some ongoing projects in their area and try to see the level of participation in these projects with possible reasons. The groups worked for 45 minutes and discussed the results of their group work for understanding the level of participation and how these levels can be raised.

After this session the participants were able to understand various levels of participation and the ways to raise the level of participation in a particular area.

**Annexure - X**  
**A typology of participation**

Typology	Components of each type
Passive participation	* People participate by being told what is going to happen or what has already happened. It is unilateral announcement by an administration or by project management; people's responses are not taken into account. The information being shared belongs only to external professionals.
Participation in information giving	* People participate by answering questions posed by extractive researchers and project managers using questionnaire surveys or similar approaches. People do not have the opportunity to influence proceedings, as the findings of the research or project design are neither shared nor checked for accuracy.
Participation by consultation	* People participate by being consulted, and external agents listen to views. These external agents define both problems and solutions, and may modify these in the light of people's responses. Such a consultative process does not concede any share in decision-making and professionals are under no obligation to take on board people's views.
Participation for material incentives	* People participate by providing resources, for example labour, in return for food, cash or other material incentives. Much in situ research and bioprospecting falls in this category, as rural people provide the resources but are not involved in the experimentation or the process of learning. It is very common to see this called participation, yet people have no stake in prolonging activities when the incentives end.
Functional participation	* People participate by forming groups to meet predetermined objectives related to the project, which can involve the development or promotion of externally initiated social organization. Such involvement does not tend to be at early stages of project cycles or planning, but rather after major decisions have been made. These institutions tend to be dependent on external initiators and facilitators, but may become self-dependent.
Interactive participation	* People participate in joint analysis, which leads to action plans and the formation of new local groups or the strengthening of existing ones. It tends to involve interdisciplinary methodologies that seek multiple perspectives and make use of systematic and structured learning processes. These groups take control over local decisions, and so people have a stake in maintaining structures or practices.
Self-mobilization	* People participate by taking initiatives independent of external institutions to change systems. Such self-initiated mobilization and collective action may or may not challenge existing inequitable distributions of wealth and power.

## Session XI

### String-bag (*Warm up*)

**Purpose:** To understand the importance of community values, beliefs and traditions in conservation.

In this session each participant was given a time of 10 minutes and asked to come back with any object that depicted their personal or professional values. Each participant came back with various objects and explained what value it signified to him or her, some values and objects are listed in Annexure XI. Based upon the values shown by various participants following discussion took place in the larger group :

Every person or community has certain values which are very important to them. People work according to their values. If the activities or decisions confirm to these values, then they are encouraged to participate and make a success of such programmes. On the other hand, if certain things take place which do not confirm to these values, then most of the time, these activities fail. Therefore, while taking up a project with people, it is important to understand and recognise the social traditions and values of the people.

Whenever two or more groups are brought together to work for a common purpose, then most of the time they have to compromise on certain values to reach consensus. The same thing applies in the case of a successful Ecodevelopment project. Accepting positive change is an important quality for successful negotiations and ultimately for successful projects.

**Annexure - XI**  
**Values of the participants**

**Personal Values :**

Respect for age, least privileged  
Simplicity  
Beauty  
Love, affection  
Uprightness, straightforwardness  
Transparency  
Human values  
Knowledge  
Wisdom  
Traditional values  
Good health  
Religious values  
Books  
Keys (presently)  
Prosperity

**Values related with Nature :**

Wildlife  
Flower  
Right use of resources  
Roots  
Dry leaves for beauty and colour  
Tree as a symbol of selfless service  
Soil as a symbol of productivity and origin

## Session XII Role of local values and beliefs in conservation

**Purpose :** The purpose of this session was to understand the community values and beliefs and their impact on conservation.

On the basis of the discussion of string bag exercise, it was explained that in any community or a village, there are a number of traditions or beliefs which may have good or bad impact on conservation. While planning for Ecodevelopment, understanding of these traditions and beliefs is extremely important. After this, the participants were asked to work in small groups to bring out answers for following issues :

- A. Some traditions or beliefs which have positive impact on conservation.
- B. Some traditions or beliefs which might have negative impact on conservation.
- C. Some field example where the local traditions and beliefs were kept in mind while planning/undertaking a scheme and it has been successful.
- D. Such example where the local traditions and beliefs were ignored while planning/implementation of a scheme and there were failures.

The participants were asked to work in small groups to gather information on above questions. The output of the group work is synthesized as Annexure-XIIa. On the basis of these field examples the participants could understand that if the local traditions and beliefs are kept in mind while undertaking activities, the results can be positive. Those traditions or beliefs which have positive effect on conservation should be linked with our Ecodevelopment activities. In those cases where such beliefs have a negative impact on conservation, role of strong awareness programme is extremely important before planning and implementation.

It was informed that based upon these values and beliefs of the local communities, one can get a number of such local traditional institutions which are accepted by the villagers. These traditional institutions often have their own rules and regulations and they are not the outcome of govt. system. The values and beliefs of the local communities are in fact the foundation of such institutions. It is important to identify these institutions and where ever possible such institutions can be directly or after some modifications used as Ecodevelopment committees for our purpose. Even if we have to create new Ecodevelopment committees in an area, the strength of existing traditional institutions should be linked to these new EDCs.

In continuation with this discussion the importance of indigenous knowledge or local traditional knowledge which is based upon the experience of local communities, tested by the people over sanctuaries and adopted for local conditions was discussed. Sources of this indigenous knowledge and availability of this knowledge with different sectors of community was also discussed. Ways and means of use of indigenous knowledge for natural resources management were also discussed with the participants (for details please see Annexure XIIb).

## Annexure - XIIa

### Values and Beliefs (Group Outputs)

#### Sacred Animals and Plants :

- Peacock**      Considered vehicle of God Kataragama and hence people don't kill it.
- Pig**            Muslims worship and hence protect it.
- Black buck**    Being protected by Vishnoi community of Rajasthan and hence protected.
- Khejari**        Tree worshiped by Vishnois and hence protected.
- Ficus bengalensis**    |                      Sacred and protected through out India.  
& **Ficus religiosa**    |
- Cobra**          Helped Budha after enlightenment. Hence in Sri Lanka still worshiped. Worshiped even in India.

#### Areas being protected :

**Sacred groves of South India.** There are either around shrines or even houses. Considered to be dwellings of God or souls of fore fathers. Hence these are protected.

**Wetlands of Kokkare Bellur (A.P.)** being protected. The Pelicans, Storks, White Ibis and other water birds migrate to this area every year. These are protected by local farmers as they believe that due to coming of these birds, they get good crop yields.

#### Some incidences of beliefs due to which projects failed/succeeded :

1. The smokeless chullahs provided to Gonds in AP. The tribals did not accept these due to their belief that there are not clean as they can not use cow dung paste on them.
2. During relocation programmes concrete houses were constructed for tribals and given to them in Wayanad district of Kerala. They stopped using these after some time and constructed huts nearby. They believed that the roof can fall at any time. Some of them leave their old house after some death in their family and construct a new hut for them.
3. In Nepal the department provided pucca toilets to people which people did not use as they considered these unhygienic. They preferred outside as more clean and hygienic. In 1980s in Sri Lanka Poultry (Broiler) farming was introduced in Mahaweli system to solve the second generation problems. It failed due to religious beliefs. People don't like to kill animals. Later the department distributed Broiler chicks and after 30 days they purchased back the live animals from the beneficiaries. This experiment worked successfully.

## Annexure - XIIIb

### Indigenous knowledge for natural resource management

#### What is indigenous knowledge(IK)?

- ❖ Knowledge based on experience.
- ❖ Knowledge tested over centuries of use.
- ❖ Knowledge adapted to local conditions.
- ❖ Knowledge that is constantly evolving.

#### How is IK Manifested ?

- ❖ Information
- ❖ Practices and technologies
- ❖ Beliefs
- ❖ Tools
- ❖ Experimentation
- ❖ Human resources (skills & institutions)
- ❖ Domesticated crops and livestock

#### Who knows what?

- ❖ **Common knowledge** includes things that are known by most of the community.
- ❖ **Sectoral knowledge** includes things that certain groups in the community know.
- ❖ **Specialized knowledge** refers to knowledge that is held by only a few individuals in the community.

#### Why is local knowledge useful?

- ❖ It is familiar to the people.
- ❖ It draws on local resources.
- ❖ It is often less expensive than introduced.
- ❖ It is pre-tested.
- ❖ It is adapted to local conditions (socio-economic, cultural, political, environmental).

#### Why do local systems often fail?

- ❖ Rapid exogenous changes in local economy, environment and culture.
- ❖ Imposition of new property regimes (e.g., private, or state/public).
- ❖ Rapid changes in population.

#### How to use IK for Natural Resources Management ?

- ❖ Assess with community what has been done in the past and what is presently done.
- ❖ Evaluate past and present practices and identify potentially useful ones.
- ❖ Apply local knowledge either directly or with modifications, or by blending with outside knowledge.

**Session XIII**  
**Dependency of local people on Natural resources**

**Purpose:** To determine participant's perceptions and assumptions related to resource dependency and to build up a common understanding about how to assess resource dependency.

A brief introduction on what makes a community and why is it important to understand community diversity in context of ecodevelopment was provided. It is important to identify types of dependencies of different sections of the community on PA resources for designing viable alternatives to address these dependencies - after pointing out this briefly a definition and list of types of dependencies was generated in a discussion with the larger group. Dependency was defined as: **To the extent that material alternatives are not available or people lack the ability to purchase substitutes they are dependent.** Three factors determine purchase of any commodity by individuals.

- \* Availability of the commodity.
- \* Ability of people to buy it.
- \* Willingness of people to buy.

It was pointed out that dependency that resulted due to actual lack of alternatives was actual dependency. Other types brought out by the larger group were religious, traditional and habitual. Participants were divided into 4 groups and were asked to discuss ideas among their group members about the followings:

- (a) What is dependency?
- (b) To list the types of dependency in a given Protected Area with which they are familiar with
- (c) Criteria to measure dependency

The groups results were posted and a plenary session synthesising the group results followed. The participants were able to appreciate the need to identify the dependency type and to distinguish between pressure and dependency, while designing alternatives to natural resources. Group outputs and synthesis of the outputs is presented in Annexure-XIII.

**Annexure - XIII**  
**Resource dependency (Group output)**

What is Dependency ?

Fulfillment of needs from a place for which no alternatives are there, may varies place to place.  
Periods of dependency is variable.

Type of Dependency	Criteria to measure	Indicators
Food	Demography of site availability	Food habits
Fodder	Cattle population, availability fodder	Grazing and lopping
Fuel	No. and size of families	Stock Availability of privately owned trees. Agricultural residences.
Small timbers	No. and size of houses	Housing patterns
Income generation	Economic status of villagers	Availability of MFP and living standard locals. (Cloths of villagers).
Trade/Cultural	Artifact and tools	Cultural traditions.
Water	Population of human/cattle size land holding	No. and size of water sources in villages.
Recreational	Availability of time	Sites of aesthetic value vicinity.

In order to meet economical, daily and cultural or religious needs of the people.

**Summary of group outputs**

Type of Dependency

- ❖ Economic
- ❖ Basic Need
- ❖ Religion-Cultural
- ❖ Recreation
- ❖ Habitual/traditional
- ❖ Primary
- ❖ Secondary

**Definition of Dependency :** "Lack of alternatives to PA resources."

When people do not have access to forest other than PA forest, or do not have the ability to purchase the substitutes from the market, then they are actually dependent.

**Criteria to ascertain Dependency :**

- ❖ Access to forest other than PA forest.
- ❖ Relative poverty.
- ❖ Fertile land.
- ❖ Irrigation facility.
- ❖ Regular employment opportunity.

### Annexure – XIII (Contd..)

Type of Dependency	Criteria to measure	Indicators
<p>*Food :</p> <p>Yams, fruits, Green leaves, vegetables, Mushrooms</p> <p>Meat</p> <p>Fish</p>	<ul style="list-style-type: none"> <li>• Food Consumption</li> <li>• In surrounding villages.</li> <li>• Consumption and demand.</li> </ul> <ul style="list-style-type: none"> <li>• Demand</li> </ul>	<ul style="list-style-type: none"> <li>• Proportionate in the market</li> <li>• Availability in the market.</li> <li>• No. of court cases.</li> <li>• No. of Gun shots heard per day.</li> <li>• Reduced visibility of animals.</li> </ul> <p>No. of fishermen and boats.</p> <p>Harvested quantity (percatch/per month etc.)</p>
<ul style="list-style-type: none"> <li>• Drugs :</li> <li>-Medicinal Plants</li> <li>Aralu</li> <li>Bulu,</li> <li>Nelli,</li> <li>etc.</li> <li>-Animal Parts.</li> <li>Antlers,</li> <li>Hortns,</li> <li>Elephant</li> <li>Molar.</li> </ul>	<ul style="list-style-type: none"> <li>• Demand</li> <li>• Availability</li> </ul> <ul style="list-style-type: none"> <li>* Demand</li> </ul>	<ul style="list-style-type: none"> <li>• No. of permits.</li> <li>• No. of Trees affected.</li> <li>• Area affected</li> <li>• Soil Erosion.</li> </ul> <p>No. of Court cases.</p>
* Fuel wood	<ul style="list-style-type: none"> <li>• Consumption</li> </ul>	<ul style="list-style-type: none"> <li>• No. of head loads/tractor loads.</li> <li>• No. of chopped and cut trees.</li> <li>• No. of court cases.</li> </ul>
* Fodder	<ul style="list-style-type: none"> <li>• Demand</li> <li>• Grassland Availability.</li> </ul>	<ul style="list-style-type: none"> <li>• No. of cattle</li> <li>• Overgrazing.</li> </ul>
<ul style="list-style-type: none"> <li>• Building Material :</li> <li>-Timber</li> <li>-Sand</li> <li>-Stone</li> <li>-Cane</li> </ul>	<ul style="list-style-type: none"> <li>• Resources Availability outside the forests.</li> <li>• Demand</li> </ul>	<ul style="list-style-type: none"> <li>• No. of Tractor loads going out from the forest.</li> <li>• No. of head loads.</li> <li>• Soil Erosion &amp; Land Degradation.</li> <li>• No. of Court cases.</li> <li>• No. of new houses.</li> </ul>
<ul style="list-style-type: none"> <li>• Mining</li> <li>GEM</li> </ul>	<ul style="list-style-type: none"> <li>• Area affected.</li> <li>• Distribution of resources.</li> </ul>	<ul style="list-style-type: none"> <li>• No. of Pits.</li> <li>• No. of court cases.</li> </ul>
<ul style="list-style-type: none"> <li>• Land</li> </ul>	<ul style="list-style-type: none"> <li>• Area under illegal cultivation.</li> <li>• Encroachments.</li> </ul>	<ul style="list-style-type: none"> <li>• Area affected.</li> <li>• Area encroached.</li> </ul>

## Session XIV Stakeholders Analysis

**Purpose:** To identify and analyse the stakeholders in a given Protected Area.

This session was basically to understand the concept of interest groups or stakeholders. While defining the interest groups or stakeholder, it was explained that a stakeholder is any person or group or organisation i.e. involved or interested or impacted by "What is being done". Stakeholders are motivated to take action on the basis of their values.

The group was asked to work for half an hour on some Protected Area that they were familiar with and map the various stakeholders. They were also asked to depict the power and impact that each stakeholder had on the decisions regarding the PA. After the groups finished their tasks a group discussion was held along the following lines.

- ❖ It is important to know the stakeholders well because this exercise highlights those groups/individuals/organisations that have an impact on the project
- ❖ All stakeholders do not have the same impact on the project because of their different stakes and powers. Therefore such stakeholders who do not have much stake on power can be excluded from the project in the initial stages. Similarly, stakeholders who have a very high stake but less power (local villagers, frontline staff etc.) can be empowered so that effective partnerships for conservation can be developed.
- ❖ To achieve the objective of conservation and participation, it is important to bring together the strengths of the various stakeholders and to find ways and means to eliminate their weaknesses.
- ❖ During the course of any project, it is possible that new stakeholders may merge or old stakeholders may be eliminated. Such kind of analysis helps us to monitor this kind of changes over the life of a project.
- ❖ This mapping also helps in understanding the relationships between the various stakeholders. This facilitates decision-making regarding the joint effort of certain stakeholders.

**SWOT Analysis:** The session on SWOT started with the session facilitator asking the participants to think of their strengths to begin with and why do they consider it so. the discussion then gradually led to the participants to think of the weaknesses both at the individual level and at the organisational level. Definition of the terms was then shared with the participants as shown in the Box on the SWOT. While the strengths can help us to capitalise on the opportunities, the weaknesses can allow the opportunities to go a begging. Both the threats and the opportunity are the external conditions which needs to be dealt with by building on the strengths while overcoming the weaknesses so that the project goals or organisational objectives can be met.

### BOX

Strength :	Any internal asset (Knowledge, skills, motivation, etc.) which will help to capitalize on opportunities or fight off threats.
Weakness :	Any internal condition which hinders the organisation/project from reaching its desired aims.
Opportunity:	Any external circumstances which will help the organisation/project to reach its goals and to succeed.
Threats :	External challenges which, unless acted upon, could cause the disintegration of the organization/project, or other wise keep it away from meeting its aims, fulfilling its purpose.

SWOT helps organizations/projects to do the right thing (DSS) in the right way.  
 Is the organisation/project ....

**DOING THINGS RIGHT  
 (EFFICIENT)**

**DOING THE RIGHT THING  
 (EFFECTIVE)**

	NO	YES
NO	this organisation/project will die quickly(*)	this organisation/project may survive
YES	this organisation/project will die slowly	only this organisation/project will thrive and prosper

\* if nothing is done about efficiency and effectiveness

3.(DSS) Results of SWOT will help enable organisations/project to choose strategies to meet demands of the environment (O and T) while taking into account internal potential (S and W).

Because STRENGTHS and WEAKNESSES must be determined in relationship to the vision and the environment, it is best to first examine THREATS and OPPORTUNITIES. Thus S.W.O.T. becomes T.O.W.S.

**Strategies Worksheet**

	OPPORTUNITIES	THREATS
STRENGTHS	Maxi-maxi Strategy: Build on existing strengths to increase opportunities	Maxi-maxi Strategy: Build on existing strengths to fight off threats.
WEAKNESSES	Mini-maxi Strategy: Minimise weaknesses to make the most of opportunities	Mini-maxi Strategy: Minimise weakness to fight off threats.

Although group activity for SWOT analysis was not carried out, group outputs from an earlier workshop held with officers from Sri Lanka have been given in Annexure XIV. The trainees were asked to look at the strength weaknesses opportunity and threats that the management has as on today given the institutional mandate of wildlife conservation. Following the group work, the facilitator looked for the similarities and dissimilarities and discussed the possible combination of strategies by using the strategy worksheet (shown in the enclosed exercise on SWOT) and using examples from the participants. The SWOT exercise properly done for the projects will help us in doing the right thing in right way much against the often repeated mistake of either doing the wrong things right or the right thing wrong.

**Annexure - XIV**  
**SWOT Analysis (Group Output)**

**Yala National Park (for frontline staff)**

Strength	Weakness	Opportunities	Threats
1. Wildlife Act 2. Strength of staff 3. Vehicles 4. Information 5. Incomes 6. Staff experience	1. Lack of money 2. Inadequate staff 3. Poor knowledge 4. Poor connections with other departments 5. Low power of park staff 6. Poor education level 7. Administrative Problems	1. Aids 2. Training of staff 3. Research 4. Training of other stakeholders 5. Awareness of local people 6. Collaboration with other agencies	1. Poaching 2. Illicit felling 3. Gem mining 4. Fishing 5. Political interference

**Another National Park in Sri Lanka (PA Management)**

Strengths	Weaknesses	Opportunities	Threats
1. Wildlife Protection Act 2. Skill of persons 3. Educated staff 4. Infrastructure	1. Lack of staff 2. Unskilled staff 3. Less powers 4. Infighting 6. Lack of planning 7. Lacks of clarity boundaries 8. Lack of money	1. Help from villages/schools 2. Training centres 3. AGA/Police/Courts 4. Better organisation 5. University/training centre 7. Survey department 8. NGO/GEF	1. Poaching 2. Political interference 3. Mining 4. Overgrazing 5. Fires

## Session XV Chairs (Group output)

**Purpose :** To demonstrate how conflict can be managed through co-operation.

The participants were asked to stand in one single group. Each participants was provided with a slip containing a set of instruction (to put the chairs in the room at point A, B or C). They were told not to read their slips till they are told to do so. They were told that the instructions given in the slips will have to be implemented in five minutes without showing the slips to each other. After the instructions were clear to all, the group was asked to carry out the instructions in five minutes.

In the beginning there was lot of struggle for getting the chairs and this continued for five minutes. The participants were asked whether they are satisfied or they needed more time. As per their request some more time was given in which some of them started communicating with each other and assigned different responsibilities to members having common instructions. A brief discussions in the larger group brought out following learning for the participants.

1. The chairs (resources) were less in number and hence there was a conflict between individuals to arrange them as per the instructions. The resources are always a constraint which is major cause of conflict. This is exactly true for the protected area surrounded by poor rural communities.
2. It is possible to resolve the conflict provided there is proper communication. This happened in the game to when some people started talking to each other.
3. Only few people could initiate communication with others. In context, of protected areas on so there is very important role of mediators who can initiate proper communication with the local communities for resolving the conflict.
4. For arranging the chairs as per the instructions given all the groups had to make compromises or trade offs. This will be required even in Ecodevelopment where there will be conflicts over limited resources.
5. Often the conflicts are very minor but because of lack of communication these become very serious. Other these conflicts lead to resource destruction and degradation (some chairs were damaged in the struggle).

## Session XVI Understanding and Management of Conflicts

**Purpose :** The purpose of this session was to understand and map the conflict between different stakeholders of a protected area and find out various strategies of conflict management.

In the beginning based upon the understanding developed from previous game of chairs, it was explained that in most of the protected area due to limited resources and different objectives there are conflicts between different stakeholders. Ecodevelopment is basically trying to minimise these conflicts and devise strategies for improved protected area management. The level and causes of conflict may vary from area to area. The conflict between the stakeholder and their severity can be mapped. In order to do this the participants were asked to work in small groups. Each group was asked to recollect one real life situation around a protected area about which at least one participant of the group should be quite familiar. The group was suppose to identify the main stakeholders and the existing level of conflict between the stakeholders. They were also asked to map these conflicts on a flip chart. After the small group presentation a larger discussion brought out following points:

1. This activity of mapping is very helpful in understanding the initial picture of number and severity of conflicts between different stakeholders of a PA.
2. Many times the severe conflicts between same kind of stakeholders exist even in different areas and different countries.
3. The conflicts map can be very useful even for monitoring the level of conflicts over a time. One can clearly understand the increasing or decreasing level of conflicts and even the emergence of new conflicts in an area. If the conflicts are increasing even after implementation of the project, this needs a change in strategy of the project.
4. By seeing the conflict map one can understand and decide the possible alliances between different stakeholders to increase their effectiveness as they may have similar goals. This is also a strategy to reduce the negative strength of the other stakeholders in the direction of project objectives.

The participants were later explained various causes of conflicts in the conservation with examples and the concept of conflict. It was explained that conflict is an inevitable part of change and is a step towards solution of a problem. Conflict is a good thing but we must know how to manage it. Just like participation the conflict management and resolution approaches also exist in the form of a continuum. While the conflict Management strategy like negotiation have more of win-win situation, the authoritative third party decision making or extra legal coerced decision making have more chances of win loose outcome. Conditions for negotiation mediation have been given. Based on this, the three strategies of conflict management i.e. negotiations, mediations and arbitration were discussed with examples (see Annexure-XVIa). Steps for conflict management have been given in Annexure-XVIb.

The participants were later asked to work in small groups and demonstrate the use of three conflict management skills in their area. The participants demonstrated three skills through role plays (Annexure-XVIc).



## **Annexure -XVIa**

### **Approaches to Conflict Management**

#### **Negotiation**

Where the parties discuss their differences and attempt to reach a joint decision with or without the help of a facilitator. It is a voluntary process in which the parties meet to reach a mutually acceptable resolution. If a facilitator is involved, it is only for guiding the process in a non-partisan manner.

#### **Mediation**

Involves the assistance of a neutral third party in directing the process of clarifying positions, identifying interests and developing agreed solutions. This is also a voluntary process and a mediator has no powers to render a decision.

#### **Arbitration**

When each side is required to present its case to an independent person who has legal authority to impose a solution.

**Annexure - XVII**  
**Steps in Conflict Management**

1. Compile all important information related to the conflict from all stakeholders. Verify these facts where possible.
2. Select a time and a place for the meeting that is agreeable to all parties and organise the meeting.
3. Ask each party to explain their position clearly (what they want and why). They should be allowed to do this without interruptions (except for clarifying questions).
4. Identify where there are areas of agreement or similar interests.
5. Identify the areas of disagreement of conflicting interests.
6. Agree on a common overall goal for the negotiations.
7. Compile a list of possible options to meet this goal.
8. Evaluate each option against mutually agreed criteria (e.g. threat to resource, livelihood needs, etc.).
9. Facilitate an agreement on the options that maximise mutual satisfaction among the parties.
10. Determine a process, timeframes and responsibilities for actions required to implement the agreement.
11. Write up any decisions reached and get parties to sign this.

## Annexure - XVIc Conditions for Negotiation/Mediation

- \* All people or groups who have a stake in the negotiations should be willing to participate.
- \* Parties should be well prepared for the negotiations.
- Each party should have some means of influencing the attitudes and/or behaviours of the other parties.
- \* They should have some common issues and interests on which they are able to agree.
- \* They should be dependant on each other to some degree.
- \* They should have a willingness to resolve their conflicts.
- \* They should be willing to compromise to some degree.
- \* They should feel some pressure or urgency to reach a decision.
- \* The issues should be negotiable.
- The parties should have some authority to actually make a decision.
- Any agreement reached should be feasible and achievable.

**Session XVII**  
**On common grounds (*warm up*)**

**Objective :** To explore the issues in entering into co-management partnerships

The participants were asked to form pairs and try to find something unique that was common to both the partners. They were then suppose to find out another group with something unique and common to four of them. This exercise was continued till all the groups had come together as one group. Discussion along the following lines was initiated.

This exercise highlights the importance of interactions, discussions and communication in trying to find common grounds with others. It is important for the stakeholders to meet regularly and thrash out the issues on a common platform. There is need to convince others of one's own point of view and listen carefully to theirs, and if need be then one has to compromise on certain things. Flexibility is an important quality for this purpose. The role of leaders and negotiation skills in successful collaborations was brought out. Peer pressure also affects the negotiations as many people compromised because of this. As the group became larger, the shared fact also changed and became more general. This shows that when many stakeholders are involved then it is difficult to stick to specific issues. There is hence a need to see that weaker groups are not neglected and their specific needs and interests are taken care of. This exercise also showed that it is easier to find common grounds when the group is homogenous rather than with a diverse group. But while actually developing co-management partnerships the stakeholder groups are rarely homogenous in terms of their interests, expectations and capabilities. It thus requires sufficient time and commitment.

## Session XVIII

### Collaborative management:

**Objectives:** The objective of this session was to understand the advantages and the need of collaborative management and to identify various steps for developing comanagement.

The dual objective of ecodevelopment *i.e.* conservation for biodiversity and the development of the local communities needs lot of resources and manpower. Single organisation cannot have all these resources and strengths. Different organisations have different mandate for them. But they are working in the same area, of course, in isolation from each other. Many times, the objectives of various organisations working in the area are not compatible with each other with respect to conservation. Therefore, it is important that all the individuals and organisations work together for achieving agreed common goals so that the conservation objectives are achieved. To explain this, various examples of how the forest department and different developmental agencies are working against each other's objectives, were explained. Annexure-XVIIIa lists out some advantages of collaborative management.

After this initial understanding the participants worked in small groups to identify the reasons for collaborative management. It was also explained that the development of a collaborative management programme is easier said than done. The participants were given slips containing some important steps which can be taken for developing collaborative management. They were told to arrange these steps in a order how they feel it should be actually done. They were also asked to remember their own areas and incorporate additional steps if found necessary.

After working for one hour in small groups, the participants presented their results and later on the final discussion took place. The outcome of the final discussion is given in Annexure-XVIIIb . In the end, it was agreed that these steps are just an outline and minor adjustments can be possible according to the situation. Even additional steps can be incorporated if needed in the existing list of steps. Some of the activities are continuous like the training of the staff and communities, monitoring etc.

**Annexure - XVIIIa**  
**Advantages of collaborative management**

1. It gathers various experiences, expertise and knowledge.
2. Problem solving becomes easy.
3. On the spot decisions can be taken.
4. There is pooling of resources both manpower and finance which reduces the cost of the project.
5. Protection becomes easy.
6. There is no overlapping of inputs by various agencies.
7. The solutions evolved by joint management are best.
8. There is increase acceptability of the project by various collaborating agencies.
9. A better atmosphere of implementation is created.
10. The number of stakeholders increase which can make possible the finer details of management strategy quite easily.
11. The management problems can be seen from different angles.
12. The efficiency and effectiveness of the inputs increases.

**Annexure - XVIIIb**  
**Steps\* for collaborative management**

1. Initial dialogue between Governments and local communities.
2. Development of supportive policy framework to enable government institutions to work with local communities and NGOs in management of resources.
3. Reorientation and training of government employees.
4. Building mutual trust and confidence.
5. Determining membership of co-management communities or groups.
6. Discussion and development of management options.
7. Methods identified to control open access and unsustainable use of resources.
8. Discussion and agreement on mutual rights, responsibilities and procedures to maintain agreement.
9. Mechanisms established for resolving disputes (with communities, between communities and between community and governments).
10. Training for local community in resource monitoring, marketing, management, etc.
11. Requirements fulfilled, procedures implemented and regulations enforced.
12. Monitoring process and review of agreement as necessary.

\* These steps are common and there can be additions/deletions or minor changes as per the requirements of an area.

## Session XIX Livelihood Strategies

**Objective :** To analyze the livelihood strategies taken up under ecodevelopment project.

In this session, it was pointed out that alternative livelihood strategies undertaken under ecodevelopment projects often do not succeed in the long run due to various reasons. These reasons hamper the acceptance of these livelihood strategies by the local people or sometimes people undertake these activities, but give them up after some time. As a result there is wastage of resources and people lose interest in the activities of the project. It has also been found when such schemes fail, it is difficult to involve people in further activities of the project. The greatest loss due to this is that good schemes do not succeed sometimes due to very small reasons and the dependence of the people on the park areas does not reduce. From various examples, it was pointed out that if a proper analysis of livelihood strategies is not conducted, then these are also likely to go the way of the various rural development schemes undertaken by the government departments. These factors are often the social, cultural, economic or political characteristics of the area. An alternative may be acceptable by certain villagers in one village or all the people in one village but it might not be acceptable to other villagers in the same village or other neighboring villages. Sometimes, even if these strategies are socially, economically and culturally feasible they do not succeed because of political reasons.

After this, the participants were asked to work in small groups and bring out successful and unsuccessful examples from their own experience.

It was concluded that any livelihood strategy undertaken as part of ecodevelopment project should be properly analyzed. Such analysis should be site-specific and should take into consideration the social, economic, religious, cultural and political situations. This is only possible when all the stakeholders are brought together in the initial phases of the project itself.

**Annexure - XIX**  
**Analysis of livelihood strategies**

Alternate Livelihood	Causes of Success					
	Social	Traditional /Religious	Economic	Technical	Political	Conservation impact
Developing & propagating use of fuelwood saving devices	Improvement in lifestyle time saving	Not against the traditional and religious values	50% cost was borne by the project.	Nil	Politician very supportive of the scheme	Positive impact on conservation 1. Decrease in the quantity of fuelwood consumed. 2. Positive attitude of the people towards the forest department.
*Distribution of Handloom to the local people	Improvement in lifestyle	Already a part of the traditional lifestyle of the local people	Increase in income	Traditional knowledge already existing with the people.		Decrease in dependency on the forest.
Distribution Sewing Machine to the women		No Problem	People were interested an	Women knew how to use it	No Problem	Not much impact

Alternate Livelihood	Causes of failure					
	Social	Traditional/ Religious	Economic	Technical	Political	Conservation impact
High yielding variety of cattle		Not a part of the traditional lifestyle of the people	Because of failure and disease of cattle, people had to suffer loses.	People were not aware of the methods to maintain such cattle.		Negative
Ecodevelopment works at Srikot	Mutual disagreement	NIL	NIL	NIL	Political pressure from some unscrupulous parties whose illegal works were stopped due to such initiative.	NIL
*Distribution of Handloom to the local people	NIL	Unsuccessful because the "Devatas" (high class priests, spooks person of the god because of Devtas have banned the installation of handloom inside the room, while the models of handlooms supplied were smaller and could be installed only inside the house	NIL	People were aware of the ways to use these but when the "Devatas" disallowed these to be kept inside the house then the programme was unsuccessful.	NIL	NIL

\* The same alternative which was successful in some villages, was not successful in some other villages nearby. This reinforces the importance of careful site specific and participatory planning while developing livelihood alternatives.

The group outputs for this session have been taken from the workshop held for the park staff and members of the village Ecodevelopment committee at Largee, Great Himalayan National Park, Himachal Pradesh, June 21-25, 1998.

## Session XX

### Prioritization of Villages

Taking examples from various protected areas, it was explained that there may be many villages around a PA which may vary from each other in various parameters. It will not be possible to start ecocodevelopment activities in all the villages simultaneously. Therefore, there will be a need to prioritize these villages so that we can decide which villages are to be taken up first and which are to be picked up at the last. For deciding the criteria to prioritize the villages a discussion was held. Based upon the discussion, following criteria were listed for this prioritization.

#### Criteria For Prioritisation

1. **Size of village - small/Large** : Small villages will be easier to handle in the beginning, thus having more chances of success.
2. **Dependency on natural resources**: This dependency will be mostly from landless people and marginal farmers. More is the dependency on the natural resources, more priority should be given to such villages.
3. **Education** : A Village which is better educated should be given priority over the others as the implementation will be easy.
4. **Acceptability - Commitment** : The villages which have better understanding and acceptability of ecocodevelopment programme can be given priority over the others as we may require less time for making the people understand the programme.
5. **Prosperity** : Less prosperous a village, more will be the dependency on the P.A. resources. Therefore, the villages which are comparatively less prosperous than the others can be given priority.
6. **Hold of staff** : A good understanding between the villagers and the staff will have an added advantage while taking up a village for ecocodevelopment.
7. **Local political environment** : A good political atmosphere in a village will have more chances of success as often political rivalries lead to failure of such efforts.
8. **Grouping of villagers** : More homogenous a village with respect to different groups, easier it is to handle for ecocodevelopment.
9. **Homogenous/ Heterogenous village** : The homogenous populations of a village will have common interest which will help in easy implementation. Therefore, homogenous villages can be given priority over heterogenous villages.
10. **Location of a village**: Villages which are inside or very close to PA will have more of pressure and need to be taken up for ecocodevelopment on priority.
11. **Forest/Revenue villages** : Forest villages are usually located inside the PAs which can be given priority over revenue villages as these may have very significant and direct pressure on PA.
12. **Relocated villages** : Often the villages after relocation are left as such and are a source of added pressures and criticism for the department. Therefore, relocated villages can be taken up on a priority basis for ecocodevelopment.
13. **FPCs already working** : Such villages where already FPCs are working can be taken up on priority basis because the stage is already set for the ecocodevelopment initiatives and we may require very less time for making the people understand the programme.
14. **Offence rate** : The villages which have high offence rate need to be given priority.
15. **Working of NGOs** : Existing NGOs in a village will have added advantage for the ecocodevelopment initiatives and they can be given priority.
16. **Village institutions** : Villages with well established institution will have better chances of success and these can be given priority.

17. **Previous record of work :** A good previous record means better atmosphere for ecodevelopment.
18. **Accessibility - Nearness, Road/Telephone :** Villages which have better communication can be given a priority. This will help in easy implementation.
19. **Availability of forest (other than P.A.) :** Such villages which have sufficient extent of forests can be taken up little later as they are not an immediate pressure on PA.
20. **Influential people existence :** These people can be very helpful in taking a leading role for organizing the people of the village thereby ensuring better success.
21. **Actions/Expectations :** Villages who have more expectations from the department can be given a priority as they would respond better for such initiatives.
22. **Use of resources:** The use of resources can be for domestic purpose or for commercial purpose. Those villages where the use is on a commercial purpose will have more pressures and they need immediate attention for ecodevelopment.
23. **Number of livestock:** Grazing is one of the major factors for degradation of PA resources. Therefore, those villages which have more number of livestock have to be given priority for ecodevelopment.
24. **Availability of alternatives:** Those villages which have very less alternatives available need immediate attention as compared to the villages where such facilities are available.
25. **Traditional/religious dependency:** In many areas these dependencies are the cause of heavy pressure from the PA. A live example for this is the pilgrimage pressure of temples/shrines located in some of the PAs due to nearby villages. Such villages also need attention of ecodevelopment on a priority basis.

There can be a number of such factors which can be useful for prioritizing the villages for ecodevelopment. For a particular PA all the criteria may not be relevant. In such a situation, the best way to prioritize the villages for ecodevelopment is to give values (say 1-10) to different villages for different criteria of prioritization. After doing so for each village the total value can be used as an index to decide its priority for ecodevelopment. Those villages which have high prioritization index value can be taken first and those with less value can be taken up a little later.

**These criteria have been developed by the officer trainees of the XIX Diploma and the lateral entrants for the ecodevelopment module held in March-April, 1998.**

## Session XXI Toolshop

**Purpose:** To explain the participatory tools and methods for gathering data for planning Ecodevelopment.

PRA tools like social mapping; resource mapping; time lines and trends; seasonality; preference ranking; problem ranking; pie diagram; venn (Chapati) diagram; wealth ranking and flow diagram were discussed. Charts and diagrams explaining these along with outputs of some activities were posted. A film on PRA was shown to the participants.

The participants in two groups rotated through the toolshop. The facilitators for each corner explained in short about the different methods available for data gathering for planning ecodevelopment. For the PRA technique corner the participants discussed among themselves and evolved following do's and don'ts for PRA :

### DOs

- Have patience for active or at least passive listening.
- Have attitude of acknowledging the ideas of people.
- Select a proper time for arranging interviews with people when they are not otherwise busy.
- Appreciate the highlight the qualities of the villagers.
- Play a role of the catalyst among the people while doing PRA.
- Sit along with the people at the same platform during PRA.
- Always use a common place of the village or the settlement (like a junction of the village or school building or a community hall etc.) for the purpose of undertaking the PRA work and related exercises.
- Ensure excellent behaviour particularly with women folk during PRA.

### Don'ts

- Avoid using I or You statements. (rather use We)
- Avoid hopping from group to group.
- Avoid taking too many photographs/pushing people around the pursuit of good photographs.
- Avoid lecturing, ordering, threatening, criticising etc.
- Avoid giving advice, showering questions, making suggestions, evaluations etc.
- Do not waste own/others time by not knowing what is required.
- Do not start exploring several unrelated subjects simultaneously.
- Avoid whisper into each others ears in front of people.

In the end of the session it was explained that we can use the above tools depending upon our requirement for gathering information. It was also informed that for actual use of these tools the participants will be taken to Ganeshpur village at the southern periphery of Rajaji National Park. The participants will be able to use these exercises themselves in the field for microplanning.

## Annexure - XXI Protected area mutual impact assessment (PAMIA)

The first step in planning for Ecodevelopment is assessment of Protected Area Mutual Impact. There are two aspects to PAMIA. The first step with the impact of the village on the PA while the second identifies and assesses the impact of PA on the village.

I Impact of village on the PA : To assess this impact few rapid and easy methods can be used. Two step method: is a rapid method for the systematic sampling of ground cover along a straight line.

- A fine notch is made on the toe on one shoe.
- Hits are recorded on every alternate steps as the observer walks along the transect.
- A hit consists of the ground cover material covered by an imaginary point located at the tip of the observer's toe.
- The number of hits of different items (e.g. grass, bare ground, litter, rock, indicator ....) can be then be calculated as percentages.

Trail Density

- This is done along the boundary of the PA.
- Can be done on foot/by vehicle.
- Along the boundary of PA the density of trails per kilometre is assessed.
- At some points it should be checked to see whether the small trails coverage at one after going a small distance into the forest.
- Distance of trails from human habitation.

Settlement Impact Analysis

- This assessment is done going in from the settlement to the forest.
- Certain parameters that depict human pressure in that particular area are to be identified.
- These parameters have to be assessed in a transect or in sample plots (depending on the forest area) moving in a fixed direction inside the forest.
- This assessment should ideally be done upto a point where human pressures seem to be reducing.

Assessment of Human Pressure based on staff statement :

- Forest staff in field are interviewed and information in terms of biotic pressure parameters and their extent (e.g. grazing, lopping, cutting, illegal felling) in their respective compartments are recorded.
- Based on the statements given by the staff a matrix for each compartment is prepared.
- Other factor such as proximity of human habitation, human and livestock density and availability of resources in the compartment are also considered.
- Based on this matrix a compartment wise map of biotic pressure categories is prepared.
- This map then forms the baseline for further sampling and identifying for further sampling and identifying areas subject to varying degrees of human pressure.

II. Impact of P.A. on the Village :

This can be done by using PRA exercises : The most important exercises that can be adopted are transect map, resource map, seasonality, pie diagrams and unstructured interviews. The participants should be divided into small groups of convenient size for undertaking these exercises. Results should be discussed in a larger group and based on the results the impact zone can be identified on the map as well as the field.

**Session XXII**  
**Problem analysis : searching for root causes**

Objective : To understand the process of finding out the root cause of a problem in a simple way.

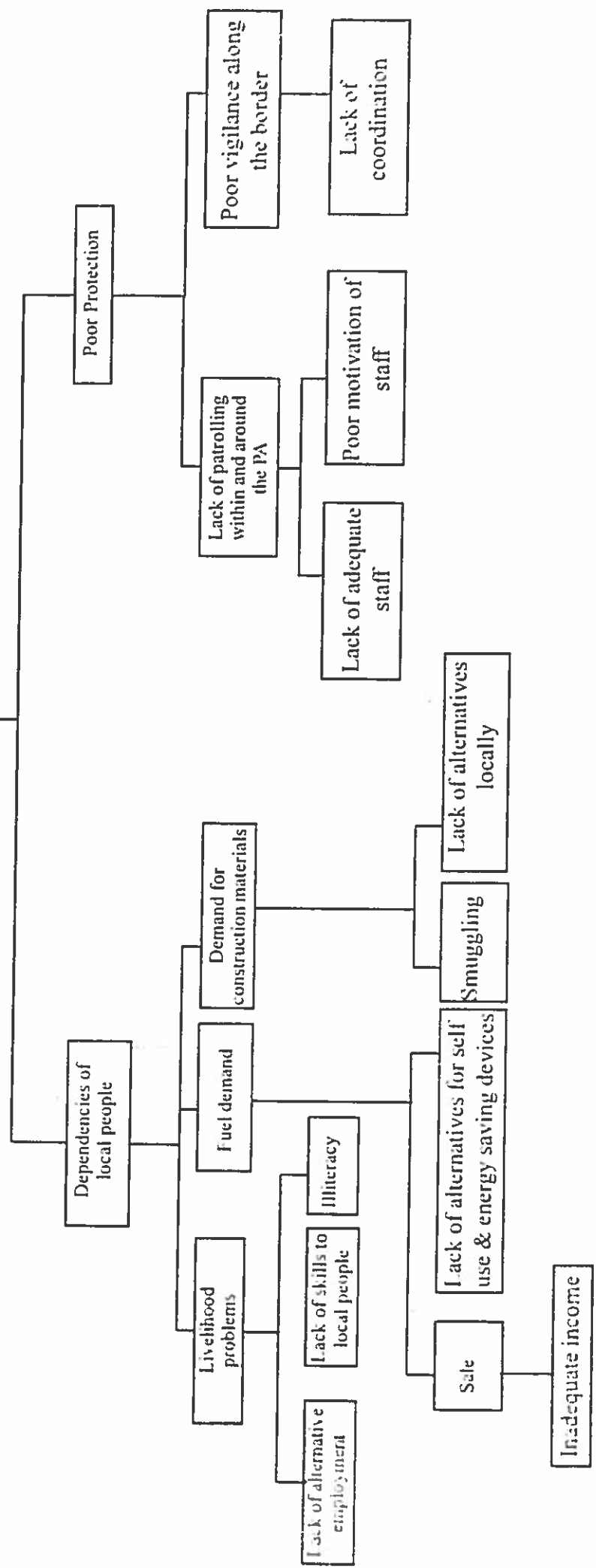
It was pointed out that each step of problem identification is very important in the planning process because a project built upon on the "wrong" problem is not going to be effective or sustainable. Often we end up with a very superficial analysis of problem without getting to the root cause. The participants were asked to think of such examples where they were addressing something else rather than the real problem and its root cause. The "Problem Tree" approach will help to break down a large, seemingly insurmountable problem into smaller pieces till they reach root cause and assist in identification of points of intervention. It also enables us to look at several, possibly unrelated, causes. The role of various stakeholders also becomes clear by such an approach.

Each group practised using the problem tree and the results of one of the groups have been given as Annexure-XXII..

This exercise showed the importance of breaking down a complex problem into simpler components. This allows for effective interventions to address these simpler problems. At the same time this exercise also prevents unnecessary efforts and resources being used for those problems that lay outside the scope of the PA manager or the forest department and enables us to identify the agency that would be most effective in addressing these problems.

Trishna Wildlife Sanctuary

Reduction in Illicit felling of trees



Handwritten text at the bottom of the page, likely bleed-through from the reverse side, containing various characters and symbols.

**Session XXIII**  
**Project planning**  
**Setting of Objectives, Monitoring and Logical Frame work**

**Objective:** The objective of this session was to understand the process of framing different levels of objectives and monitoring indicators and to understand the use of logical framework for project planning.

1. While explaining the process of objective framing it was told that the objectives of the project must flow from the problems and hence root cause analysis, as done in the last session, is the fundamental step of project planning (See Annexure-XXII) for Problem Analysis as given in the last session).

2. Participants were told that the problem tree can be converted into the objective tree by rewriting the negative statements of problem tree into positive statements. These statements will have to be verified by testing the cause and effect statements. Often while verifying the cause and effect relation, we may have to modify the problem tree itself. The participants while working in the small groups took up their identified projects for which they had carried out problem analysis in the last session. From this they could get the objective trees for their projects. Output for one of the small group is given as Annexure XXIIIa.

3. After the synthesis of objective trees it was told that in the next step, for each statement of objective tree, we will have to look minutely. At the lower level statements we will have to find out preconditions and at the higher level possible assumptions or externalities by applying if and then relation. The small groups tried to find out the pre-conditions and assumptions for their respective objective tree. Output of one of the groups is given as Annexure -XXIIIb.

4. After the creation of detailed objective trees, it was told that goals, objectives, outputs and activities will have to be framed from each objective tree. It was also explained that goals, objectives, outputs and activities are, in fact, all different types of objectives but they are the objectives at various levels and this is called the hierarchy of objectives. The hierarchy of objectives will have to be decided from the detailed objectives tree in the light of the resources and capabilities of the management. This hierarchy of objective along with the monitoring indicators and assumptions can be put in a log frame which can enable us to see the whole of the project in a summarized way. Log frame is a very handy tool in understanding the project and its linkages. The small groups were later asked to develop the hierarchy of objectives and put it in a log frame. The groups development log frames for their respective project and the output of one of the groups is given as Annexure-XXIIIc.

5. The participants were explained that the objectives of the project should be SMART objectives.

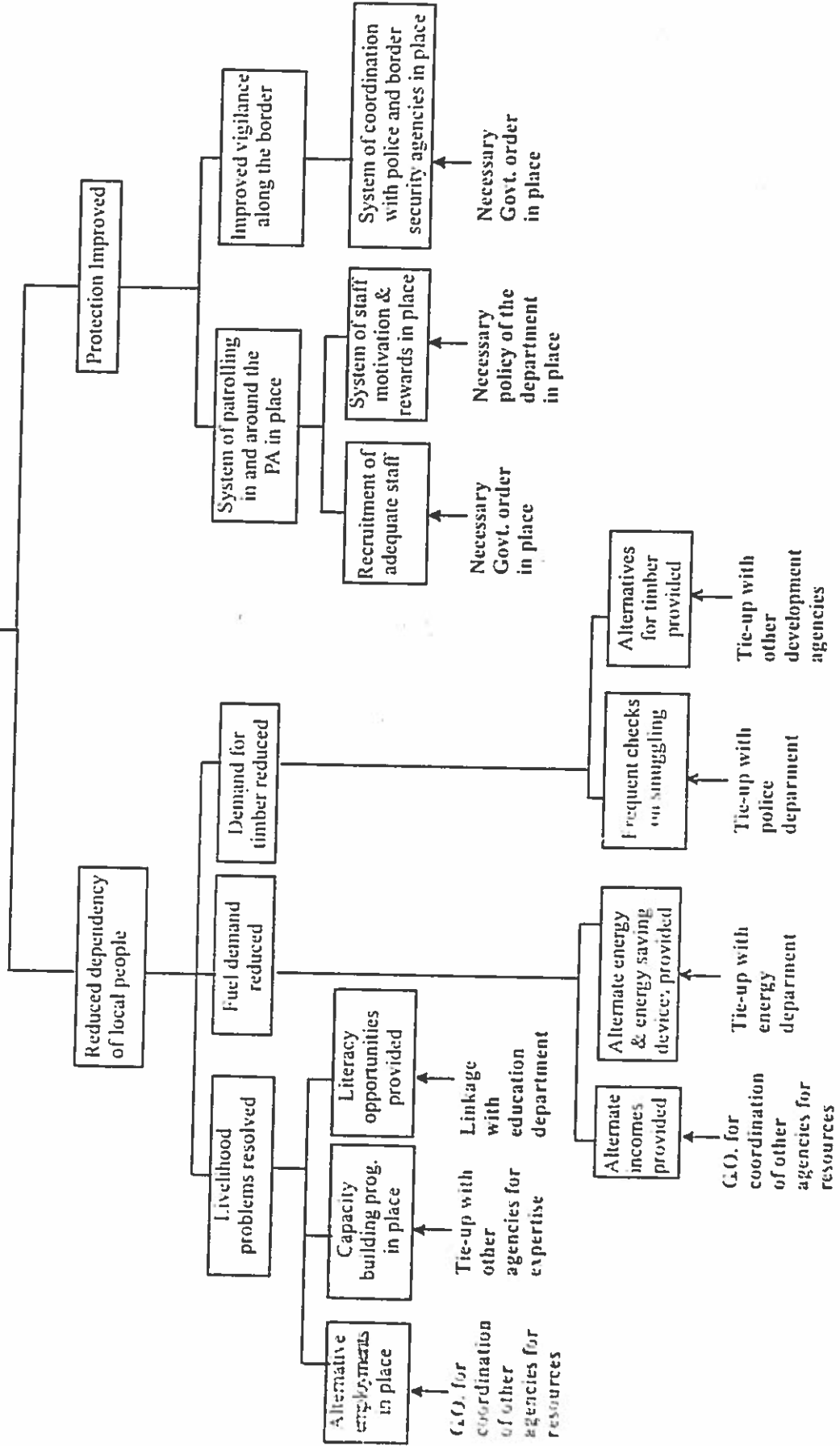
**What are SMART Objectives?**

S = Specific  
M = Measurable  
A = Achievable  
R = Realistic  
T = Time bound

In the end of the session the participants could understand the step by step method of framing objectives, monitoring indicator and logical frame work.

# Trishna Wildlife Sanctuary

Reduction in Illicit felling of trees





**Annexure: XIIIc  
Logical Framework**

		O.V.I.s	M.O.Vs	Assumption
Goal	To reduce the illicit fellings in PA.	1. No. of offence cases. 2. Regeneration status	Offence register. Regeneration survey.	
Objectives	1. To reduce the depending of local people. 2. To improve the protection network of the PA.	1.No. of head loads. 2. Time spent for women outside. 3. Offence cases.	Survey of area Interviews with women. Offence register.	Institutions for first patrolling are in place.  No new demands for resources come from outside.
Outputs	1.1 Alternate employments in place. 1.2 Capacity building programme for local communities in place. 1.3 Alternate sources of energy and energy saving devices in place. 2.1 System of patrolling in place in the PA. 2.2 System of coordination with other patrolling agencies in place.	Income from alternate employment. No. of persons trained.  No. of gouses. Using there devices.  Number of cases recorded.  No. of coordination machining.	Village survey. Office records.  Village survey. Offence register  Office records.	Mutual agreement between PA management and communities are in place.  There is a proper awareness programme.  There are proper training of communities.  Staff morale is maintained.
Activities	Inputs for activities	Physical achievements	Office records	There is necessary mechanism of coordination and tie-up with their agencies.

## Session XXIV Use of Training Aids

**Purpose:** To enable the learners in acquiring skills in effective use of flip chart and overhead projector.

In this session the advantages and disadvantages of using the various training aids were discussed with the participants along the lines below

### **Flip Chart:**

#### **Advantages**

- ❖ Transportable
- ❖ No Power needed
- ❖ Adaptable
- ❖ Any paper usable
- ❖ Easy to use
- ❖ Retained for reference
- ❖ Simple, cheap, needs little training
- ❖ Usable for immediate recording
- ❖ Portable anywhere

#### **Disadvantages**

- ❖ If badly prepared, can look unprofessional
- ❖ Usually only a temporary measure value
- ❖ Easily torn, dirtied dog-eared
- ❖ Special techniques difficult

#### **Golden Rules on making a Flipchart effective :**

1. It should be clear enough and the writing large enough to be read from any where in the training room (2 inches when the group is about 20 feet, increase half a inch for every additional 10 feet).
2. Do not talk to the flip chart as you are writing.
3. KISS - keep it short and simple.
4. Maximum 10 lines on a sheet with no more than 6 or 7 words on each line.
5. Use key words and phrases rather than full sentences - remember it is a visual aid to your presentation.
6. Use different colour for impact - avoid pale colours.
7. Use boxes for impact or separation of ideas - only in a control amount.
8. In addition to the words, can also use pictures, symbols, drawings and so on to supplement words.
9. When its use is completed, flip over to a blank sheet.

### **Overhead Projector:**

#### **Advantages**

- ❖ High visual impact
- ❖ Usable in light
- ❖ Large image
- ❖ OHPs widely available
- ❖ Used sitting or standing
- ❖ Professional production

- ❖ Slides easily portable

#### **Disadvantages**

- ❖ Power required
- ❖ Older versions noisy
- ❖ Condition variable
- ❖ Head post can obscure
- ❖ Crowded slide encouragement

#### **Making Effective Use of OHPs**

##### **A. Managing the Overhead Projector**

- \* Check before the session that :
  - the OHP works
  - there is a spare bulb
  - the head post does not obscure anyone's view
  - the transparencies are well focused and images are sharp
- \* you switch off when you are not using a slide
- \* you point to the slide on the OHP screen, not turning round to point to the projected screen

##### **B. Preparing OHP Slides (Transparencies)**

- \* Limit information on the transparency to 6 to 8 lines of 6 to 7 words per line.
- \* Limit information to the most important point.
- \* Use lower case letters in preference to capitals.
- \* Leave adequate space between letters, words and lines.
- \* Use graph paper to help achieve squareness and alignment.
- \* Use colours to the maximum impact - do not indulge in colours.
- \* Project images to awaken interest or reaction.
- \* Use the overlay and revelation technique.

## Session XXV Feed Back

**Objective :** To enable the participants in drawing up the guidelines for giving and receiving the feed backs.

The participant were drawn in discussing the purpose of the feed back along the following:

- ❖ To see ourselves as others see us
- ❖ Helps us to see/hear about the effect we have on each other
- ❖ Helps in getting awareness to develop
- ❖ Allows the views of others to emerge which can be incorporated for improvement
- ❖ Re-engages the participants in understanding what has been done during the day.
- ❖ Gives information which can be used in progressive development e.g. in next activity, session, etc.
- ❖ Helps to know our actions which might have upset the people and helps in designing
- ❖ more appropriate behaviours.

### **The Basis For Feedback - The Johari Window**

The basis for any form of feedback is the conveyance of information about a learners performance and other attributes, suggesting an open exchange of views. It is only by this 'opening' process that feedback can help the learner to develop. This development can be demonstrated by the Johari Window (Figure 1).

The window developed by Joe and Harry Ingham from whose names the name of the Window was developed, represents in four quadrants the main aspects of knowledge about an individual as seen by self and also others.

The Window's panes are shown on the accompanying Figure 1 but in practice they will vary in comparative size from one individual to another. The upper left quadrant represents what is known about yourself and also by others - the open, public domain. In feedback terms the individual knows what they are doing, and these actions are also obvious to others. The top right quadrant represents the aspects of an individual which although can be seen by others but are not evident to the individuals - their blind spots. On the other hand, there are aspects of the individual which although the individual knows about them, are kept hidden from others - a facade is built.

If feedback helps the individual to know more about themselves by receiving comments from others about what they see, the blind area will be reduced and the open area will be increased. This feedback may encourage the people to be more open and disclose other aspects about themselves, thus reducing the facade. The increased openness on both sides could help to understand and bring out aspects from the unknown areas.

### The Johari Window

	KNOWN TO SELF	NOT KNOWN BY SELF
KNOWN TO OTHERS	OPEN	BLIND
NOT KNOWN TO OTHERS	FACADE	UNKNOWN

Figure 1

The consequence of feedback to this extent, to the individual is a change in their Johari Window. This change reduces their 'Blind' area. It reduces, as far as they want, their 'Facade' area. It increases considerably the 'Open' area and can even reduce the 'Unknown' area with the emergence of previously unknown skills, attitudes and the behaviours.

The session was summarised by recapping the key points and emphasising that the workshop would provide ample opportunity to the participants and the resource persons to practice the guidelines developed in the session

## Annexure - XXVa Effective Feedback

### Effective actions

- ❖ Be clear about what you want to say.
- ❖ Give feedback as soon as possible after the events.
- ❖ Give praise feedback first.
- ❖ Give positive, not negative feedback.
- ❖ Be specific.
- ❖ Concentrate on behaviours that can be changed and seek/offer alternatives.
- ❖ Be descriptive rather than evaluative.
- ❖ Own the feedback - use 'I', 'In my opinion' 'As I saw it'.
- ❖ Understanding of the feedback should be checked.
- ❖ Action should be agreed.

### Ineffective actions

- ❖ Being too critical.
- ❖ Being too soft when directness/straight speaking is obviously needed.
- ❖ Too soon - let the learners return to the real world after the activity.
- ❖ Too late.
- ❖ Too rushed.
- ❖ Too many criticisms - no more than three or four.
- ❖ Inappropriate feedback.
- ❖ Contradictory (particularly from more than one trainer).
- ❖ Not actionable.
- ❖ Non-specific.
- ❖ Too theoretical.
- ❖ Too prescriptive.
- ❖ Too subjective - 'I felt'.
- ❖ Incomprehensible/jargon-ridden.

**Annexure - XXVb**  
**Receiving the feedback**

- ❖ Listen actively and carefully
- ❖ Try to avoid defensiveness
- ❖ Avoid rationalizing
- ❖ Be open-minded
- ❖ Remember feedback represents the perceptions of the giver only.
- ❖ Check your understanding of what has been said
- ❖ Ask questions for clarification
- ❖ Seek feedback from other 'observers'
- ❖ Carefully evaluate the accuracy and potential of what has been said
- ❖ Consider how the feedback can help you to improve.

## Session XXVI Leadership styles

**Purpose:** To enable the participants to –

- get a feed back on their leadership styles.
- improve their effectiveness.
- identify right strategies to deal with different kinds of problems.

The session began with a brief introduction along the following lines. Leadership is the most important aspect of team building. According to Harsey and Blanchard, leadership is defined as "the `Process of influencing group activities, towards the accomplishment of goals in a given situation".

Leadership is a relationship between two or more people in which influence and power are unevenly distributed and is a continuous process of influencing behaviour. According to Krech and Crutch Leader is primarily concerned with the problem of morale and it is his responsibility to increase and sustain group morale.

Earlier theories on leadership focused mainly on three styles, autocratic (ordering), democratic (involving followers in planning) and laissez-faire (indifferent). These theories were replaced by two contrasting styles task oriented style and people-oriented style. A milestone in leadership research was Fiedler's theory of contingency. It stated that task orientation and people orientation depended on situations Hersey and Blanchard combined the grid approach and contingency theory, and proposed a situational theory on leadership. By combining task orientation and people orientation they came out with four styles, style 1 (both low), Style 2 (task concern high, people concern low), Style 3 (task concern low, people concern high), Style 4 (both low). According to them all the four styles are functional, although their relevance to situation is important. According to them each style's effectiveness is inversely proportional to the maturity of follower as shown below:

Leadership Style And Follower Maturity

Leadership Style (Task & People Orientation)			
High-High	High-Low	Low-High	Low-Low
Style 1	Style 2	Style 3	Style 4
M 1	M 2	M 3	M 4
Low	Moderately Low	Moderately High	High

They also proposed the concept of flexibility of a style. A leader needs both, diagnostic competence to assess the situation (follower's maturity and the competence to use the appropriate style). If the group's maturity is low (i.e. they do not know their job or motivation is low), Style 1 would be most effective, where he defines the task, monitors and provides guidance. However, if the group has

matured, leader can move to the next style. If the group has high maturity (i.e. can work on its own and has relevant competency, leader need not worry about task or people. In this situation style 4 would be most appropriate (low on both) Leaders role may be mainly of visioning, boundary management, external linkages, and providing facilities needed by the group. Leader's role also becomes to help the group to mature. Maturity of group has three aspects; competence, motivation and team work.

Based on the above theory an instrument was given to the participants which enabled them to identify their 'dominant' and 'back up' styles. as well as the index of leadership effectiveness or adaptability.

## Session XXVII Decision making and team work

**Objective :** To understand the decision making process, team working in a given situation.

- ❖ The participants were given a survival game scenario and problem as attachment and the team
- ❖ members were asked to complete the answer sheet for survival individually without consulting
- ❖ the other team mates. The answer sheet were collected from individual team members and they
- ❖ were then asked to work in team and again complete the answer sheet for the group. The
- ❖ individual as well as team scores as plotted were shared with the participants. The session was
- ❖ summarised along the following lines:
- ❖ The individual score differ from the team score. due to various reasons like peer pressure and dominance by few.
- ❖ All the groups had different decision making processes depending upon the group dynamics. The decision making process affected the group outcome and the group strategy for survival.

**Annexure - XXVII**  
**Factors Affecting Decision Making/Consensus Building**

**Factors Hindering Decision Making/Consensus Building**

- a) **Domination by a Few :**  
Where few members have the tendency to dominate the group and influence the decision, consensus is difficult to reach.
- b) **Withdrawal :**  
Where the members do not see an opportunity to express themselves freely. It is also a result of dominance.
- c) **Tendency to Make Quick Decisions :**  
When the group members rush to make decisions leading to the decrease of consensus. Consensus requires patience and member's inclination to pay attention to the opinions of others.
- d) **Testing Strength :**  
In the process of decision making, when strengths like numerical strength or strength of argument, is used to take decisions instead of moving towards consensus, there is a tendency to move towards the division in the group, e.g. voting is one way of testing strength. But this always does not lead towards consensus. It only divides the group in majority and minority, and members in the minority usually fail to commit themselves to the decisions, which are taken by the majority.
- e) **Avoiding Confrontation :**  
When the members of a group avoid confronting differences in making the choice by continuous discussion, the possibility of consensus decreases. One way to avoid confrontation is to use third party intervention.
- f) **Trading or Compromising :**  
When the members in order to get their suggestion or point of view accepted, trade their point of view with some other's, so that they come to an agreement that the suggestion given by one member will be accepted in exchange for another suggestion given by another member. This reduces the possibility of consensus.

**Factors Facilitating Decision Making/Consensus Building**

- a) **Concern for Others :**  
The basis of consensus is the respect and concern people have for others. This also helps them to look for expertise and resources available with the various group members.
- b) **Listening :**  
A consequence of respect and concern for others leads people to listen carefully to what others say, rather than being obsessed with their own ideas about a problem.
- c) **Identifying and Using Resources :**  
In order to make a good decision, it is necessary that all resources within the group are utilised to overcome problems and to take a good decision.

d) **Discussions Underlying Assumptions and Logic :**

When members discuss not only their own suggestions and ideas, but also why they are proposing these and what the underlying rationale of these suggestions and ideas is, movement towards a common understanding becomes easier and the group is able to move towards consensus.

e) **Testing Consensus and Disagreements :**

Once the members of the group come to a consensus, after substantial discussion it will be reinforced further if the members of the group examine if there are still some disagreements; which then should be allowed to be discussed and expressed. If however, these disagreements are not discussed or voiced, it would be difficult to develop consensus.

f) **Process Orientation :**

When the group spends sometime on the process and is able to develop consensus faster. Instead of being concerned only with the task the group is also concerned about the way the people are feeling – withdrawn, remaining silent due to heated discussions, or not able to walk with the group etc. Such matters when discussed from time to time help to move towards consensus.

### List of Participants

Sl. No.	Officer Trainee	State/UT/Country
1	Mr. S.K. Gupta	Andhra Pradesh
2	Mr. B. Srinivas	Andhra Pradesh
3	Mr. Arvinder Singh	Bihar
4	Mr. Kumar Manish Arvind	Bihar
5	Mr. Shashi Malik	Madhya Pradesh
6	Mr. A.K. Geete	Madhya Pradesh
7	Mr. Ashish Kumar Verma	Madhya Pradesh
8	Mr. D.K. Jain	Madhya Pradesh
9	Mr. Abhimanyu Behera	Orissa
10	Mr. Anurag Bhardwaj	Rajasthan
11	Mr. Akash Deep Baruah	Tamil Nadu
12	Mr. C.L. Das	Tripura
13	Mr. A.P. Pathak	Uttar Pradesh
14	Ms. A.S.C. Wilson	Sri Lanka
15	Mr. M.G.C. Sooriyabandara	Sri Lanka
16	Mr. S.R.B. Dissanayake	Sri Lanka
17	Mr. U.K.L. Peiris	Sri Lanka
18	Mr. H.S.D.M. Amarathana	Sri Lanka
19	Mr. M.S. L.R.P. Marasinghe	Sri Lanka
20	Mr. Lila Puri	Nepal
21	Mr. Ramavtar Dubey	Madhya Pradesh
22	Mr. Ashutosh Mishra	Madhya Pradesh
23	Mr. R.K. Kherwa	Rajasthan
24	Mr. V.B. Srivastava	Uttar Pradesh

**List of resource persons :**

1. Dr. Ruchi Badola, Module Coordinator, Wildlife Institute of India, Dehra Dun
2. Dr. B.K. Mishra, Facilitator, Wildlife Institute of India, Dehra Dun
3. Shri A.K. Bhardwaj, Facilitator, Wildlife Institute of India, Dehra Dun
4. Shri B.M.S. Rathore, Facilitator, Wildlife Institute of India, Dehra Dun

**List of guest faculty :**

- 1) Dr. J.B. Lal, Ex-Director, Indian Institute of Forest Management, Bhopal.
- 2) Shri Vinayak Rao, Jawahar Lal Nehru University, New Delhi.
- 3) Dr. Amita Baviskar, Department of Sociology, Delhi University, Delhi.
- 4) Dr. Gopa Pandey, Indira Gandhi National Forest Academy, Dehradun
- 5) Ms. Geeta Gairola

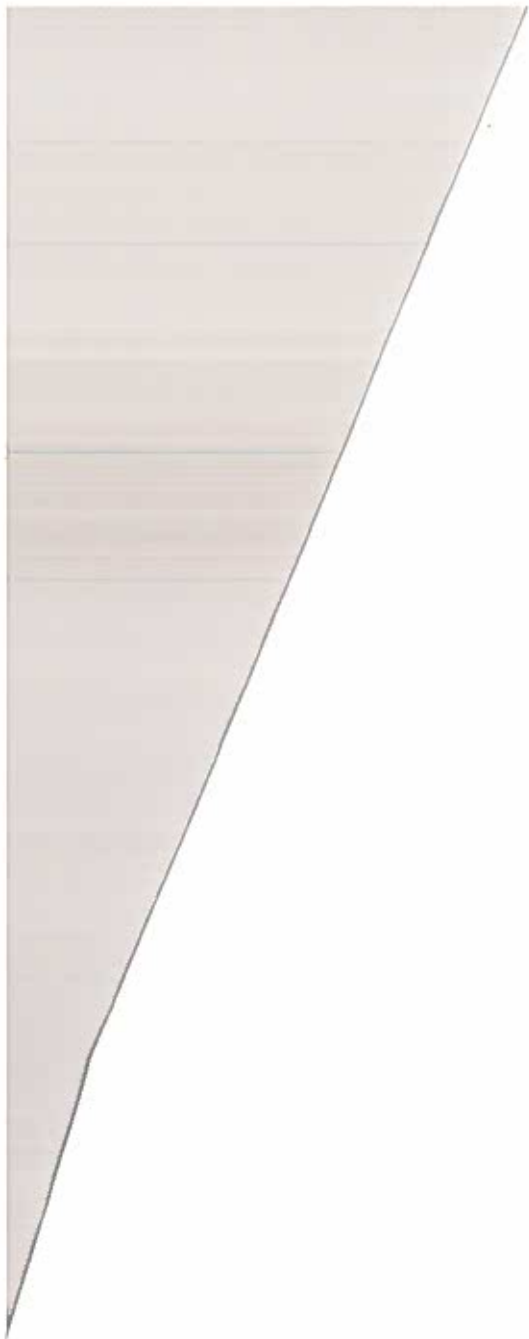
### Session Details

22.03.99	
Workshop introduction and expectations	
Workshop overview (competency frame work and learning methods assessment)	
	R.Badola
What, Why and Where of Ecodevelopment	
	B.K. Mishra
If----then ----	
Assumptions on Ecodevelopment, linkage between conservation and development	
	A.K.Bhardwaj
Feed-back on Feed-back	
Community Variables,	R.Badola
Introduction to participation – Box	B.K. Mishra
Community participation in Ecodevelopment including typology of participation	
	A.K. Bhardwaj
String bag	R.Badola
Community belief and value system in conservation ; Significance of local traditional knowledge	A.K. Bhardwaj
Intra-personal skills	B.M.S. Rathore
Feed-back	
24.03.99	
Feedback on Feedback	
Dependencies of local communities	B.K. Mishra
Stakeholders analysis (SWOT)	R.Badola
Stakeholders mapping	R. Badola
Chairs	R.Badola
Conflict management	A.K. Bhardwaj
Feedback	
25.03.99	
Feedback on Feedback	
Collaborative management and steps in developing partnerships	R. Badola
Institution/Organisation	B.M.S. Rathore
Analysis of livelihood strategies	R.Badola
Intra-personal skills	B.M.S. Rathore
Feed-back	
26.03.99	
Feedback on Feedback	
Prioritization of villages	B.K. Mishra/R.Badola
Social concerns in Eco-development (Guest Lecture)	Amita Baviskar
Introduction to project (process/blueprint, CDR/Non-CDR)	B.M.S. Rathore
Intra-personal skills	B.M.S. Rathore
Feed-back	
27.03.99	
Feedback on Feedback	
Gender issues (Guest Lecture)	Gopa Pandey
Gender issues (Guest Lecture)	Geeta Gairola
29.03.99	
Feedback on Feedback	

Tool shop	A.K. Bhardwaj/R. Badola/B.K. Mishra
Problem Analysis	R.Badola
Project Framework	A.K. Bhardwaj
Feed-back	
30.03.99-01.04.99	
Feedback on Feedback	
Negotiation skills (Guest Lecture)	Vinayak Rao
Protected Area Economics	J.B. Lal
Project frame work	A.K. Bhardwaj
02.04.99 – 03.04.99	
Field exercise in Rajaji National	A.K. Bhardwaj/R.Badola/B.K. Mishra

## Workshop Evaluation

Sl. No.	Session	Evaluation by the Participants		
		☺	☹	☹
1	Introduction	3	2	
2	Ecodevelopment (What, why.....)	16	2	
3	Community Diversity	14	1	
4	The Box	17		
5	Participation	9	8	
6	Dependencies	14	3	
7	String Bag	10	4	1
8	Values & Beliefs	12	3	3
9	C & D Linkages	8	5	3
10	Livelihood Strategies	8	4	4
11	Stakeholders	10	5	3
12	SWOT	7	5	4
13	Co-Management	7	5	5
14	On Common Grounds	9		
15	Institution/Organisation	8	8	1
16	Chairs	11	7	
17	Conflict Management	7	6	3
18	Village Prioritization	7	8	1
19	Management Clinic	5	5	7
20	Problem Analysis	9	9	1
21	Objective Setting	4	10	
22	Project Framework	3	9	2
23	Tool shop	4	8	3
24	Field Visit	1	4	13
25	Intra-Personnel Skills	13	2	1
26	Leadership Styles	10	3	1
27	Feedback	10	3	
28	Presentation Skills	12	1	1
29	Work Methodology	8	3	3
30	Gender issues (Guest lecture)	5	7	14
31	Social Issues (Guest lecture)	3	7	5
32	PA Economics (Guest Lecture)	3	7	6
33	Negotiation Skills (Guest Lecture)	9	4	3



**Report preparation assistance**

1. Shri Narendra Agarwal
2. Shri J.S. Negi
3. Shri A. Annathurai
4. Shri Virendra Sharma
5. Shri Mukesh Arora

**Photographs :**

1. Shri S. Wilson
2. Shri A.K. Bhardwaj
3. Shri Vinod Verma

**Office Assistance :**

1. Shri Kishan Kumar Ram
2. Shri Chandan Singh Aswal
3. Shri Ramesh Kanti