BUILDING FARMERS' ORGANISATIONS FOR INTEGRATED WATERSHED MANAGEMENT IN INDIA

- A Trainers' Manual

by

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FOREWORD

The manual is an effort to fill the gap on the subject of farmers' institution building for watershed management in India. It is prepared for the trainers of participatory watershed management so that they can help train more facilitators of participatory processes in watershed management. Indian civilisation has evolved around sustainable management of their land, water and forest resources. However, recent few centuries have seen an onslaught of alien institutions to the native institutions and culture resulting into a slow erosion of these wonderful institutions. Thus the need to revive and build farmers' institutions around indigenous social institutions and the culture of the people. Even today, they participate together daily in innumerable social, cultural and natural resources management activities as well as in times of happiness and sorrow. It is around such institutions that we can once again facilitate the culture of living in harmony with nature so that the watershed resources are used sustainably.

The present manual is an exercise in helping revive these institution by making the exercise of farmers' institution building a dynamic one, not imposed but a multi-channel communication of all stakeholders and by turning the training for the same into fun! Thus the various participatory games suggested in this manual have an important role in making adult learning an exercise in fun. It is also hoped that this trainers manual will help change the attitudes of the trainers to use more participatory methods of training.

I thank the Society for Participatory Research in Asia (PRIA), New Delhi and its team to have taken this assignment with the spirit of service to the nation. In particular I thank all the contributors, specially Mr. Yogesh Kumar Bhatt and Dr. Rajesh Tandon of PRIA for their contributions.

I look forward to your comments on this edition of the manual.

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PREFACE

Strong farmers’ organisations are the foundation and central feature of successful watershed development programmes. In fact, most of the organised efforts in people’s participation in natural resources management, being tried in the Asian region today, consist of some forms of farmers’ group formations. One of the important underlying principles to initiate farmers’ organisation building for watershed management is through networking among the farmers’ groups in small watersheds.

A primary task lying ahead is building strong farmers’ groups, which will pursue not only watershed management programmes, but also income generating activities, ensuring women’s empowerment and development. It is important that farmers’ groups so facilitated, either by the development practitioners or agencies should as soon as possible, become independent, self-reliant. They may also form an important base for building farmers’ movements for watershed management. These small farmers’ groups are the building blocks of farmers’ organisations. Therefore, to make farmers’ organisations more effective, it is imperative that these small groups are properly reinforced. This calls for the need of trained manpower both at the regional and local level who are going to work with the farmers enabling them to develop strong groups, for which, as in most cases, they need initial motivation, advice and guidance, especially during the early stages of group development.

It is with this perspective that gaps were identified in the national participatory integrated watershed management training/education for the Himalayas and rainfed areas. One of the serious gaps identified in watershed management, has been a lack of trained manpower in participatory integrated watershed management at all levels. This is so because most of the training, education and extension institutions in agriculture and forestry for the Himalayas and other rainfed areas of Asia, are modelled based on top driven natural resource management programmes rather than people or farmer led programmes designed and developed by farmers’ organisations.

Another glaring gap found in the area of informal education and training on watershed management was related to inadequacy of-
I. awareness of participatory methods of watershed management;
II. curriculum and training modules for participatory watershed management;
III. lack of conceptual understanding on steps and processes for building strong farmers’ organisations for integrated watershed management for the Himalayas and rainfed areas; and
IV. lack of empowerment, networking and capacity building of farmers’ organisations for participatory watershed planning, implementation, monitoring and evaluation.

PURPOSE OF THE MANUAL

This manual is an effort to bridge some of these gaps by providing structured training to the graduate students, in-service professionals, leaders and activists on participatory integrated watershed management approaches, providing them conceptual understanding on the steps and processes for building strong farmers’ organisations and their capacity building for participatory planning, implementation, monitoring and evaluation of integrated watershed management programmes in the Indian Himalayas and rainfed areas.

The primary goal of this manual is to create a cadre of trained professionals who can reach the poorest of the poor and assist the farmers’ in organising themselves. The aim is to promote sufficiently autonomous groups of the rural farmers within wider formal farmers’ organisations. The groups are to be sufficiently strong, economically and socially, to secure adequate participation in these organisations.
The creation of homogenous groups of men and/or women should be promoted. The economic and social conditions of the group members, as well as their needs, aspirations and requirements should thus be similar. They are to be conceived firstly as starting-bases for self-help activities, secondly as instruments for participation in local decision making and thirdly as managers of natural resources in their watersheds.

WHO CAN USE THIS MANUAL?

This manual can be used for training of a target group of trainers on understanding of the participatory bottom-up approach, developing conceptual clarity on the steps and processes involved in building farmers’ organisations, dealing with group processes, enhancing group dynamics and encouraging willingness to listen and cooperate closely with others in partnership for integrated watershed management and their role.

HOW THIS MANUAL IS ORGANISED?

The training/workshop manual is organised in two sections. The first section, aims to provide the participants an overview of the initial activities essential in the process, where one tries to build confidence and establish rapport with the community, sensitise the participants on the power of cooperative group action followed by the information on various possible forms of farmers’ organisation, enabling the participants to form groups, understanding various dimensions of group functioning, and dealing with group processes in order to function more effectively. The second section deals with the effective functioning of these organisations, providing them with information on the concepts of integrated watershed management and importance of peoples’ participation in the process supported by some exposure activities, develop an understanding of the farmer community with whom they are going to work, build capacities in assessing the available resources and constraints, identifying needs, planning, implementation, monitoring and evaluation of integrated watershed management programmes.

The contents of the manual are in the form of modules with sessions that depict the flow of processes that can be followed while training on a particular module. These sessions are supplemented with session guides, handouts, etc. for the benefit of the trainers. However, it is expected that trainers adapt these to their situation and can develop different handouts or adapt the session guides as may be necessary to their situation.

BEYOND THIS MANUAL!

While this manual is being published, serious efforts are being made to document people’s movements for watershed management in India, which may have a different dynamics them presented here. However, community or group organisation may be a common link to building people’s movement for upland watershed management. We soon hope to learn how people’s participation can be taken to a higher level, when it can result into a movement for integrated watershed management in India.
ACKNOWLEDGEMENTS

This manual is an outcome of many minds and hands that have helped to give it the present shape. The authors would like to extend a warm thanks to all those people.

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Thanks are also due to the entire staff of PRIA, who have, in one way or the other, contributed towards the completion of this manual. Special thanks are extended to Mr. Chandan Dutta, Mr. Manoj Kumar Rai, Ms. Namrata Jaitli and Ms. Maya Pinto of the Centre for Participation & Governance for their inputs, comments & suggestions.

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Mr. Chandra Shekhar Joshi, Mr. Subhsah Verma, Ms. Lissy Jolly and Ms. Bindu Baby helped type set this manual. Their ability to take the corrected and heavily worked up copy and turn it into a neatly set type was remarkable. Their patience with a large number of authors' alternations is deeply appreciated.

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It is not possible to thank by name all those who developed and improved tools or provided information used or referred to in this manual. The ideas for many activities in this manual derive from a great variety of sources. It has not always been possible to trace an activity back to its origins, since good ideas and activities that work well are passed from trainer to trainer, changing each time in the process to fit the particular set of circumstances for which they are used. To those of you, whom we are not able to name- the results of your work have been extremely helpful to our own social and personal efforts, and the information included here was selected because we saw it could contribute to the efforts of others.

Finally, we salute the farmers of India, who by their increasing participation in the life of their communities, are contributing to their own and their countries' growth and development. To them we dedicate this manual.
INTRODUCTION

Though endowed with rich natural resources, India is a country having millions of people living in abject poverty. This has happened due to the negligence of our land resources, mainly in the mountainous and other rainfed areas. According to Maurice Williams (SID, 1992) over half of the world's poorest people now live on environmentally fragile lands which over time may not sustain the livelihood of such large and growing population. However, the past efforts in watershed management mainly concentrated on soil conservation with little emphasis on the welfare of the human population or land users.

Realising the gravity of the problem, UNCED, in June 1992, in its Agenda 21, approved a new kind of development- human, sustainable and shared. This gave a new dimension to the watershed management approach and consequently the focus shifted to poverty alleviation and food security, keeping in mind the complexities involved, inter-related factors and their interaction, through appropriate natural resources management with people becoming the first focus of natural resource management. The new definition of watershed management is more socially responsive and focuses mainly on the poor and marginal farmers with no gender discrimination. This is essential because most of the upland poor and marginal farmers are not men but women (Sharma & Kroschell, 1997) and in addition to this, women are responsible for activities such as collecting drinking water, fuelwood, minor forest produce, harvesting and processing of food grains. Most of the women in rural India spend 16-18 hours a day working in their homes and farms and yet their labour remains unremunerative and invisible. This situation is manifested in different ways, such as lack of opportunities for education, lack of access to technology, and lack of ownership of assets, etc. Women are often ignored in the matters of decision making relating to agriculture and allied activities, which often have the direct impact on their lives. Hence, it becomes imperative that they actively become an integral part in the management of resources for poverty alleviation and food security.

It was with this perspective in mind, India adopted an integrated approach for sustainable development through integrated watershed management. The approach took watershed as an identifiable and remarkable geo-hydrological unit for planning and development which comprised of a mix of both arable and non-arable lands and drainage lines.

Unfortunately, most of the benefits from this approach could not reach those sections of populations for whom they were meant. This was primarily because the planning and decision making processes did not involve the farmer community which was primarily being affected. Never before in the history of humankind was there such a massive experiment at inducing changes through infusion of external ideas, management, funds and technology, all controlled from places far distant from the site of development. As a result the few privileged rich grew richer and the majority of poor remained poor.

This led to the search for an alternative model of development, wherein even the poorest of the poor had a say in the entire process of planning and decision making, and this was only possible if their was reversal of control and accountability from the central authorities to the community organisations. This was supported by the fact that from time immemorial societies have organised themselves to take care of collective and individual needs and have proved to be highly effective in managing natural resources, providing basic infrastructure or ensuring primary social services.

Relevance of farmers' organisation in integrated watershed management

Strong farmers' groups are the foundation and central feature of successful watershed development programmes. Most of the organised efforts in people’s participation in natural resources management being tried in the Asian region today, consist of some forms of farmers' group formations. There have been adequate evidences that to ensure sustainability of the watershed programmes, where
majority of farmers involved are on the margin or below poverty line, there in no better way than to assist and support the emergence of strong independent farmers’ organisations. These organisations evolve their own rules, regulations and systems of management, which conform to the available resources, resources to be developed and maintained and accordingly impose sanctions which can be enforced in their respective watersheds. These organisations also have access to and control over adequate finances in order to meet contingencies related to both consumption and production, so that the vulnerable groups’ development doesn’t become a prey in the hands of rich & traditional money lenders. Such farmers’ organisations are capable of supporting sustained growth in terms of productivity and equity in watersheds.

The growth and institutionalisation of farmers’ groups or other socially viable affinity groups in a watershed gradually fosters the skills to solve their problems which obstruct their growth, gain confidence for managing their resources and resolving conflicts as and when they arise. What is important in context of sustainability of these groups is that they continue to function even after the withdrawal of the development agency, if any, and provide a strong, stable institutional base to meet the requirements of the farmers’ in the watershed.

It is worthwhile to mention here that most of the watersheds are composed of heterogeneous groups of small, marginal and big farmers. Apart from this there are also categories of farmers who have land within the watershed but are living outside; farmers who have lands outside the watershed but are living inside; and landless farmers who live in the watershed and harvest resources, to which they have access. In such cases often the efforts to form only one farmers’ group fails or results in ineffective associations on account of its heterogeneity. Experiences indicate that under these circumstances small homogenous groups, each operating like an independent self help group, proves to be highly successful. These small homogenous groups, in turn decide how to associate and network with other similar groups to form a larger organisation in order to manage the watershed. However the process through which a farmers’ organisation emerges will differ in each watershed.

**What is a farmers’ group?**

A farmers’ group is not just a collection of farmers’, but those who come together with a commitment and a sense of direction and plan for the future. A successful farmers’ group must have the following characteristics:

- They come together to work for an objective or goal, or a common and shared purpose.
- The farmers who come together have a common interest. No purposeful dialogue can take place until the members have a common interest.
- The members have a common understanding of their reasons for meeting.
- The members meet regularly and participate actively.
- There is a conscious membership- members know they are members, and others who are not members know that they are not. Membership criteria, responsibilities and rights, are known.
- They have decided on some rules and procedures for their being together and working together. These rules may be formally written down, or they may be only commonly understood.
- There is an identified leadership. The leader may be one or several, but the group recognises the leadership, and the leaders ‘lead’.
- The members take collective action, and carry out decided upon plans. A collection of farmers’ that doesn’t do anything is not a group.
- There is free and open communication and feedback among members.
- The size is big enough, yet small enough to allow members to interact and participate. In terms of what ‘feels like a group’ or what is a minimum size for effective collective working, it can be said that when ten to fifteen or more farmers get together regularly, meet and talk to each other, it is a group.
"Participation", "popular participation" and "community participation" are today very commonly used terms in the parlance of development. The adoption of a participatory orientation in contemporary mainstream development is a somewhat peculiar turn of events. Demands for 'participation' have their origin in radical politics. The democratization of development activities has been a long-standing objective of radicals in both industrialised countries and in the third world. The aim of this is to prevent adverse impacts of normal (bureaucratic, elite dominated) development on disempowered actors, and to generate receptiveness to the interest of 'the people'. In the second half of the twentieth century, both North America and Europe have experienced waves of social movements focusing on issues like civil rights, poverty, women and the environment. In the Third World, there has been 'widespread resistance to development project's that serve the interests of national elites and donor nations' foreign policy. This has precipitated grassroots movements demanding participation in policy planning and decision making.

Grassroots activism has been supported by intellectuals working in academic institutions and social movements. From the 'pedagogy of the oppressed' to 'participatory action research', a tradition of 'socially responsible' social science espousing a 'local-level perspective' has evolved among writers concerned with development, women, human rights, the environment, indigenous people, slum dwellers, etc. They have criticised the development process for failing and/or exploiting its supposed beneficiaries by imposing projects 'from above'. Their research strategies have sought to involve 'the people' in the process of knowledge production, and to combine research and community mobilisation as tools of social change.

These political and intellectual movements have originally been oppositional and conflict oriented, contesting both ideological discourses and material resources. The incorporation of radical discourses and strategies into the development mainstream has turned 'participation' into a tool of social engineering, a corollary to the engineering of the material world. Attempts at controlled management of social change are motivated by a number of significant reforms in the cultural development.

The widespread failure of the normal development models among the poor has attributed to their alienation from the development process. It is now argued that regard for peoples' (indigenous, local) knowledge is a crucial ingredient of a democratic development process. The Inter-American Foundation claims that 'no one is positioned to perceive and address local needs better than local actors'. Existing local knowledge and management systems are given prominence by development anthropologists, who problematise the 'inherent tension' between local level and supra-local interests. Chambers takes an optimistic view of poor people's interest in environmentally 'sustainable livelihoods', if they are permitted rights to resources and freedom from bureaucratic harassment. Participation is a pivotal issue, given that the development projects are not simply people's self development activities as they go about their lives, but initiatives of global to local organisational networks, providing sustainable livelihoods.

In the past, development interventions focused primarily on two types of actors. On one side were those who engaged in the task of identifying development needs, planning development activities, mobilising resources for development, implementation, monitoring the implementation process to ensure that designs, plans and disbursement of resources were taking place as planned, and evaluating the success or failure after the event, using monetary disbursements, physical achievements or impact that the activities had on the target group as yardsticks. On the other side were the beneficiaries for whom and for whose development all these tasks were undertaken. They were only marginally involved in the development process, but were called upon to operate and maintain structures such as minor irrigation reservoirs, wells and rural roads, and to share the cost of the development activities.

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

Therefore, bridging this gap between the two actors has been identified as the prime need for successful achievements of the development activities. The participatory turn of mainstream development implies that powerful organisations at local level are facilitated and sustained so that they can control the decisions that effect their own lives.

Oakely et al (1991) in their review of participatory cases have found out five major results yielded by participatory initiatives, viz. efficiency, effectiveness, self-reliance, coverage and sustainability. While participation implies a greater chance for efficient use of resources, it also ensure effectiveness. Participation helps to achieve self-reliance in the sense that it breaks the mentality of dependence which is inbuilt into the social system and further reinforced by the current development pattern to a great extent. The very action of participation promotes awareness and self-confidence. Participation creates capacity among the marginalised and 'rural excluded' to examine their problems and seek solution to them. Participation enables the project to expand its scope and also increases the chances of sustainability of the development initiative. Experiences show that externally motivated projects often fail to sustain themselves once the initial level of project support or inputs either diminishes or are withdrawn. Participation is seen as an antidote to this situation in that it can maintain the project's dynamism.

While looking at the concept of participation and the studies on participation, one has to keep in mind that participation is a complex concept and promoting participation is a further complex and difficult task. People's participation is certainly more than the participation of beneficiaries in projects, this is important but it is only one aspect of participation. Participation is not a one-off activity or input into development projects; it is a process which evolves over time and whose direction and outcome are not always predictable or manageable. Participation is a broad, multidimensional phenomenon with political, economic and social characteristics (Oakley, 1994)

Against the backdrops of the development dilemma and failures in the past there have been changes in the policy towards fostering people's involvement in watershed management. It has been realised that the major hurdles to people's involvement in watershed development programmes are not technical but are managerial and require skills in community mobilisation, conflict resolution and institution building. All these are the building blocks of sustained improvement and effective management of the watershed resources.

The interventions to build farmers' organisations for integrated watershed management is a step to ensure and sustain people's participation through these institutions, involve and empower people, not only to take over the functions of the existing delivery system but also to establish appropriate management system for their effective functioning.

Empowerment

Empowerment is a concept that goes beyond participation but has its roots deeply embedded in peoples' participation. Empowering farmers in the context of this manual, implies enabling the farmers to understand the reality of their environment, reflect on the factors shaping their environment and take steps to effect changes to improve the situation. Empowerment is a process that encompasses farmers deciding where they are now, where they want to go, and developing and implementing plan to reach their goals, based on self-reliance and sharing of power. Most importantly it helps to break the mentality of dependence. By empowering people, in essence, we mean that they acquire the ability to stand independently, think progressively, plan and implement changes systematically and accept the outcomes rationally.
The approach to people's empowerment in the manual focuses on ways to mobilise local resources, engage diverse social groups in decision making, identify patterns which eliminate poverty, and build consensus and accountability. It integrates social analysis and participatory methodologies, identifies issues for both the trainer/facilitator and the community, and offers tools which are formulated, operationalized and tested in rural settings. Such an approach can assist long-term capacity-building and empowerment of development agencies, local communities, and the individuals, households and institutions within those communities.

It is envisaged that, the capacities of the local farmers' organisation will be strengthened significantly by involving local people in the problem definition, data collection, decision-making and implementation processes. Such involvement encourages community awareness, understanding and commitment, facilitates decision-making, coalition formation, and consensus building, and promotes collaboration outside the community, a co-operation which can assist processes of empowerment and sustainable development.

Participation as a process of empowerment can help to amplify traditionally unacknowledged voices. It can strengthen the confidence of all members of a given farmers' group in the knowledge and capacity of each and may foster the ability to question and contribute to the existing systems of knowledge. This form of participation implies 'constant readjustment' and on-going information exchange, discussion, and conflict management or resolution under complex, changing and highly uncertain conditions. It involves consciousness raising and knitting together a 'shared understanding of problems and a vision for the future that leads to commitment and ownership by the community'.

Empowerment is linked to control over resources. This, in turn, is linked to ownership of the resources, of the participatory processes and of the watershed management programmes. Hence, land ownership is seen as an important aspect to facilitate peoples participation. The different types of land ownership (public, private and community lands, tenureship e.g. absentee landlords, etc.) will allow differently for empowerment. Therefore, they require different forms of empowerment and different approaches to management of these lands. Giving rights to people to use resources are seen as the important means to empowerment (Sharma et al. 1997).

A serious constraint to farmers' ownership of the participatory processes and of the watershed management programs is a lack of mission and vision in implementing agencies, their professionals, as well as in farmers. This requires a change in attitudes among all concerned so that the empowering process can help farmers to better handle the pressures from vested interests. Farmers' group formation and networking them into federations help them institutionalise the empowerment process better. This requires an integrated and co-ordinated approach at farmers' field and community levels by all the concerned implementing agencies.

It has been realised that lack of investment is not necessarily the problem. Improving farmers' receiving mechanism with proper checks and balances and avoiding abuse of funds are key issues in farmers' ownership of the investments. The resources from local banks/district programs and other local resources must be facilitated for integrated watershed management programs.

The strategy for farmers' ownership of the watershed management programme, therefore, consists of facilitation of the empowerment process (not imposition), guaranteed long-term ownership or user rights of land and other resources, change in attitude of government departments from target oriented to process oriented watershed development programmes so that it fits into farmers' (not government's) pace of life, farmers' capacity building, investments to farmers (public and private both) and technical support. It has been suggested that there should be a meeting place for the exchange of ideas between farmers and government officials.

This needs GO/NGO technical agents with persistence, commitment, innovation, dedication and better communication skills to assist in farmers' alternate institution building. This type of planning and implementation would be based on farmers' traditional processes and as far as possible on indigenous
technologies. Subsidies, if any, should be replaced by investments if the watershed management programmes are to sustain.

The following three very important aspects need serious consideration if the process of farmers' ownership of the watershed management programs is to be facilitated-

- the farmers' right to organise i.e. farmers' organisation
- right to use/own land and other resources i.e. land use titling, and
- equity among all sections of society specially as related to gender concerns and disadvantaged groups i.e. mainstreaming gender and other social concerns.

However, the underlying intention of this transformative approach is to move control over resources and institutions to the disadvantaged groups, which have so far been excluded from such control in the mainstream development.

Sustainability

Defining and refining the concept of sustainability has become a common exercise. Such an exercise, however, remains a necessary preface to an analysis which utilises this term, because of the plethora of meanings and emphasis, and therefore the diverse implication of this commonly used term. Over the years, many definitions of sustainability, in terms of watershed management programmes have been conned. In a simplified form, sustainable participatory watershed management can be defined as following-

"Utilisation and conservation of land, water, and forest resources at farm household and community or given watershed level for continuously improved livelihood and overall human development"

The term continuously improved livelihood signifies the long term process and overall human development includes strengthening of spiritual and cosmic relation of man with nature for long term sustainability of the watershed management programmes (Sharma, 1997).

As watershed management is a very wide and complex field, there are several criteria to judge the success of the participatory watershed management programs for their sustainability at the micro level as well as community/watershed level. These criteria's can be socio-cultural, political, economic, and/or environmental, keeping in mind the simplified definition of sustainable participatory watershed management stated above. These are essential to measure the impacts of the watershed management programs on improvements in livelihoods, on poverty alleviation, on environmental protection and empowerment of farmers (Sharma & Krosschell, 1996).

In a nutshell for sustainability of integrated watershed management, the following five key elements of participatory processes need to be identified and considered. First key element is to correctly define sustainable participatory integrated watershed management which aims at natural resources management in a watershed for over all human development including strengthening of spiritual or cosmic relation of man with nature. Secondly, the people's (farmers, land users, etc.) ownership of the natural resources, participatory processes, as well as the watershed management programs are to be ascertained. Thirdly, equitable land use rights is required to be ensured specially to the women and disadvantaged groups. Fourthly, gender concerns and disadvantaged group's concerns need to be mainstreamed and designed into the watershed management programs. Finally, the watershed management programs should result in to quick benefits to the people, if these programs are to succeed (Sharma, 1997).

Special training for group promoters is considered essential and should include clear understanding of the participatory bottom-up approach, ability to organise people, willingness to listen and cooperate closely with others in partnership. This implies suitably designed short term training courses on aspects related to building farmers' organisations.
SECTION 1

ORGANISING THE FARMERS
MODULE 1

Framework for participatory training
Creating a learning environment

Introduction

Participatory Training deals with adults, and as such, has its theoretical base in the principles of adult learning. According to these principles, adult learning takes place in a different way, and under different conditions, from those of children's formal school education. Ineffectiveness of programmes for adults may have partly to do with lack of understanding about the various principles and conditions of learning. Those who try to make adults learn in an environment similar to formal school and by the same methods sometimes end up believing it is impossible to bring about any change in adults. Another common misconception is that most learning takes place through childhood and stops after adolescence, and that it is impossible to alter this learning afterwards.

Contrary to such beliefs, people learn, grow and change even in adult life. Effective adult learning takes place when the essential characteristics of their learning mode are operationalised as principles guiding the process. We can distinguish five key principles.

1. **Adults come to the learning situation with a well-defined self-concept, and their learning can be facilitated by helping them to build up their self concept**

   If the self concept is low, the learner thinks that s/he is incapable, ignorant, inexperienced and powerless. This blocks new learning. This self-concept may have been conditioned by adverse circumstances, by marginalisation and exploitation. If the learner is helped to overcome this low self-concept, and recognise that s/he is capable, has something to contribute and has the potential to learn, s/he becomes more open to the learning process. Similarly, an unrealistically high self concept may block learning.

2. **Adult learning is an emotional experience, both in the sense that certain emotions are associated with learning, and that learning occurs through feeling as much as thinking or acting**

   All change entails risk, and learning is always a potentially painful process. Thus, the act of learning creates anxiety, stress, perhaps fear, frustration or helplessness. This needs to be understood and handled with sensitivity, especially when dealing with those who have never been to school and are very apprehensive about the learning situation. Moreover, feeling as such are an important mode of learning, a basis for learning, and a vehicle of learning. We avoid what angers us, or frightens us, or what we are contemptuous of. Conversely, we are eager to find out more, learn more, about the things for which we have positive feelings.

3. **Adults choose whether to learn or not**

   Adult learning is volitional and autonomous. Forced learning does not last. Adults need to be interested and ready before they learn something. If they have come non-voluntarily or as a result of external demands, they will need extra support, encouragement and guidance. Learning improves when self-directedness is encouraged when learners are involved in planning and monitoring the process. Interest can be heightened by feedback on progress in the desired direction of learning.
4. Adults learn what they think is relevant to their lives and their problems

Unlike children's learning which is for postponed application, adults want to learn today what they can apply tomorrow. Hypothetical problems, or content areas far removed from their reality appear a 'waste of time'. Learning is easier when it involves practical material related to current or perceived future concerns of the learner.

5. Adults learning is based on experience

Adults come to a learning situation with a rich storehouse of past experience, which can be both a potential learning resource or an unavoidable hindrance, for past experiences determine how a learner interprets new experience, and how s/he learns. Moreover, adults equate experiences with themselves, their understanding of the meaning of life. Devaluing or ignoring adults, experience is tantamount to a personal rejection. Sharing of experiences by learners and trainer, and giving value to past and present experiences, creates a readiness for new learning. According to Malcolm Knowles, adults learn 20% of what they hear, 40% of what they hear and see, and 80% of what they discover for themselves.

Learning Environment

Looking at the principles of adult learning, it becomes evident that a special learning environment is essential for adults to learn effectively. A learning environment is not given to the trainers, it has to be created, built, sustained and nurtured by the trainers.

In the context of our learners and the learning process, the challenge of building and sustaining an environment that would facilitate both individual and collective learning, that would facilitate a process of questioning, critiquing reflection becomes very crucial, and as trainers we have to create conditions for the principles of adult learning to become operationalized. Some of the key characteristics of the learning environment are:

1. Valuing learners and their experiences

A fundamental aspect of the learning environment is valuing the learner, valuing his/her uniqueness, experiences, contributions, knowledge, and capacity to learn, grow and change. Valuing and respecting the learner becomes the hallmark of creating a learning environment and this valuing has to be demonstrated by the actions of the trainer, by the conditions created in the training and not by empty words alone. This involves that the trainers, both during formal and informal sessions (outside the training) pay keen attention to the learners, try and understand what they are saying and sharing, provide support etc.

2. Sharing personal experiences

Since adults learn from their experience, conditions have to be created for an easy, open, systematic and effective sharing of their past experience. Sharing of experience doesn't mean endless, open-ended story-telling sessions. Sharing has to be focused in relation to specific learning objectives and therefore structured in a way that learners find the opportunity to share their experience in relation to those learning objectives with other learners and the trainers. This is why the task of facilitating small groups' sharing, expressing, opening up, articulating, listening to others, caring for others- becomes an important one. The purpose of sharing is also to promote critical analysis and be challenged to experiment with new ideas, feelings, behaviour and action. Mutual sharing process involves not merely learners sharing, but the trainers also sharing information about themselves and their experiences.

3. Openness

Another principle of the learning environment is openness. Openness to oneself, openness to others, openness to learn, openness to question, openness to examine, openness to observe. Conditions have to be created so that learners and trainers can be open with their thoughts and their feelings and they
can be open with their actions -open with themselves in the privacy of oneself and open with themselves in the presence of some others and open with others, on their face. This is important because learning occurs in relation to others, with the support of others, in the process of reflecting on oneself, on others and on the situation.

4. Challenging

The next characteristic of learning environment is that there should be a challenge to the learners. Learners should be provoked, stimulated, cajoled, challenged. It is not a passive environment; it is not do your own thing: it is the questioning, critiquing, asking stimulating, provoking. Creating conditions for people to be stimulated, to stretch themselves beyond their immediate capacity, to utilise their potential creativity, to utilise their capacity, to unfreeze themselves, to realise their critical faculties.

5. Safety

Another key characteristics of the learning environment is psychological safety and comfort. The learner should be challenged but not be dumped upon. The learner should be challenged and provoked but never undermined. The learner should be questioned, but not demolished. A sense of psychological safety- I can be myself, I can say to my self. I can look at myself, I can try myself, I can make mistakes myself and yet to be acceptable to and by others, is an essential aspect of the learning environment. Safety issues are also related to the security provided in and by the group. This facilitates opening up, taking risks, sharing about oneself etc.

6. Support

A related aspect, therefore, is support-emotional support, intellectual support, behavioural support, availability of support-individually available, available in small groups, creating conditions so the learners are supporting each other as much as the trainers and facilitators are supporting the learners and themselves: support in action and not as a verbal exercise. Support needs to be provided both during the sessions and outside the sessions. Support also needs to be solicited from the learners by trainers.

7. Feedback

Finally, the learning environment must have conditions built in for feedback-for information to come back to the person and to the group. Through mechanisms which are easy and relaxed, and not constrained and difficult; feedback from each other, from self, in unobtrusive ways, from the trainers and the learners, continuous feedback on one's thoughts, emotions, actions; on what one has learnt and what one has attempted.

In brief, these are some of the key characteristics of an effective learning environment. In order to build it and sustain it, there are several things a trainer needs to do:

1. The design of the training should be such that it all the time helps in building the environment, keeping learners involved and the pedagogy alive and relevant.
2. Shared responsibility for learning by the learners; involving the learner, soliciting their support, commitment, responsibility feedback towards building and maintaining the learning environment, supporting their roles as facilitators, counsellors, friends with their peer groups.
3. Physical aspects of the training, ensuring that all physical, administrative aspects (food, travel) of training are well co-ordinated and managed and do not cause stress and anxiety of any kind to the learners. Even small things like the cleanliness and organisation of training room, advance preparation/installation of technical aids, organising small rooms for group exercises, noise effects, too much movements in the room-people coming and going etc. become important issues for the trainers to ensure that the learners do not get disturbed or have to fend for themselves in the process.
4. Most importantly, the trainer's behaviour becomes a significant contributor to the learning environment. Knowledge of training design alone is not enough, their understanding about themselves is crucial-their perspectives, values, behaviour, action-how do they respond to learners, how do they care, what effort they put into the content areas, how do they enhance the self-esteem of
learners, etc. All these set the normative structures for the training. What do they do to set up the others, in the training. What do they do to set up the learning environment....all this has implications of what the learners would do, when they go back from their training centre.

The Conditions for Learning

- An environment of active people: People learn when they feel they are personally involved with others in a learning process.
- A climate of respect: When a high value is placed on individuals and a sense of caring prevails.
- A climate of acceptance: Accepting a person means that s/he can be himself/herself and express her/his beliefs without fear.
- An atmosphere of trust: When people have a feeling of trust in themselves and in others.
- A climate of self-discovery: When learners are helped to find out about themselves and to meet their own needs, rather than having their needs dictated to them.
- A non threatening climate: So that persons can confront each other and new ideas without fear.
- A climate of openness: When personal concern, feelings, ideas and beliefs can be expressed and examined openly.
- An emphasis on the uniquely personal nature of learning: When each individual knows that his/her values, beliefs, feelings and views are important and significant.
- A climate in which differences are thought to be good and desirable: When differences in people are as acceptable as differences in ideas.
- A climate which recognises the right of individuals to make mistakes: Learning is facilitated when error is accepted as a natural part of the learning process.
- An atmosphere that tolerates ambiguity: When alternative solutions can be explored without the pressures of having to find an immediate single answer.
- An emphasis on co-operative evaluation and self-evaluation: When people can see themselves as they really are, with the help of their peers.

During the training, your role as a trainer becomes very crucial in terms of making the participants realise the importance and relevance of working in groups. When the participants from different villages come together, it is very important to make everyone feel welcome and part of the group. Here, the trainer can take the lead and start with introductions. Introductions are important and should not be regarded lightly. It is critical to get everyone, especially the shy participants, involved and talking to one another by breaking the tensions and nervousness in the beginning. The introductions should encourage a greater sense of equality among them. This helps to create an open and trusting learning atmosphere, relaxes the participants and gains their commitment.

While meeting for the first time in a formal group gathering, there is often a certain degree of nervousness among the participants. They may be uncertain about what to do after they have greeted each other. Most of them might be asking themselves, Shall I start talking? Will others like me? Won't I make a fool of myself? The initial conversation is likely to be guarded and superficial. Any attempt to relax the group and break the ice must offer the group members the following:

- a safe, clear and acceptable structure
- conversation subjects which are both interesting and non-threatening
- enough scope for making and receiving distinct impressions of each other (but preventing competition)
- some actions, when possible, to relieve the tension
- the possibility for laughter, for the same reason

There are many games and exercises that can be used to enhance learning under these situations. The principle emphasis is on creating an environment in which individuals and groups feel free to experience, reflect and change. In particular, these games and exercises are invaluable for relaxing the participants; stimulating the flow of communication; bringing the personal expectations and group reality
closer; encouraging everyone to participate, learn and develop new skills; and exposing participants to new ways of judging their own actions in relation to group work.

The atmosphere that can be created by games and exercises acts as a basis for increased group cohesion and openness. Each game or exercise emphasises a particular message, which sometimes only comes out as the exercise ends. The basic idea is to make training and learning an informal and enjoyable experience. All these have been useful in a range of village situations and cultural contexts.

This module deals with the following sessions which help participants to know each other well, create some conditions required for a learning environment at the onset of a training programme.

1) Introduction - knowing each other
2) Relaxing the participants
3) Opening up the participants
4) Creating an informal atmosphere for training
5) Creating a sense of belonging and learning environment

However, few words of caution are necessary while attempting to use the games and exercises.

☞ First the games and exercises must be explained very carefully, because they may not know what to expect from or the purpose of a particular exercise. To offset nervousness, panic, or plain suspicion, remain relaxed, explain the objectives clearly, and, where required, draw attention to the relevance to their work. If necessary, start the exercise yourself by giving the first example or presentation. Some farmers may think that exercises are 'silly', 'foolish' or 'only for kids', until they realise the deeper learning points. Sometimes those who are reluctant to take part gain enthusiasm and confidence by watching others participating and enjoy themselves. However, these exercises should be balanced with sufficient time for discussion and reflection.

☞ Getting the balance right is important. The games and exercises outlined here are meant to provide a range of options from which you can choose during different situations. They may be used as described or modified to fit your particular situation. You can use your imagination, and experiment with variations and search actively for new ideas. Used selectively, these exercises can reinforce important concepts, behaviour and have a powerful effect on group processes.

Be sure to leave sufficient time for debriefing with the farmers after the exercise. This is the reflective stage and most of the important lessons are learnt during this stage. It is often very tempting to take over at this stage, but remember that the switch in style from a game to a authoritative teaching will limit learning. Give the farmers the chance to draw their own conclusions, rather than imposing your own. In fact you can ask- “How did you think it went? How do you compare this with the way you deal with such issues in real life?”

☞ As the farmers wind down after an exercise, it is important to make the transition into general discussion on the theme.

☞ Never feel disappointed if an exercise does not work according to the plan, or when farmers appear to make mistakes. As a trainer you can never know enough to predict the outcome of an exercise. As most exercises have multiple functions, all exercises will provide some useful lesson for someone and these should be highlighted by the trainer. Always treat outcomes of a exercise as alternatives and not as failures. Do not let the fear of failure stop you from trying something new.

☞ Finally, always thank those involved in the exercise, role play for their efforts. This is important because, as Jenny Rogers (1989) puts it- “many people will have taken part vigorously, but may privately wonder later if they have lost face by doing so. Forestall this reaction by making it clear that it is entirely thanks to their skill and commitment that such a valuable discussion was possible.”
Objectives
- To discover what participants want to get from the session, workshop or training course and learn a little about their personalities.
- To help participants know each other at the beginning of course.

Materials
Paper, pens

Time
45-60 minutes (depends on number of participants).

Method
Paired Interviewing

Procedure
Step 1. Divide the participants into pairs. Ask the participants to interview their partners by focusing on questions such as-
- What is your name? What is your background and experience?
- Do you have any past experience of participatory methods in the field?
- Name two good things that happened to you in the past year.

Step 2. After five minutes of interviewing each other, participants then report to plenary about their partner, summarising the main information in one minute.

Note to the trainer
The key to the exercise is that participants do not report on themselves - in this way they do not become nervous while waiting for their turn. In addition, the exercise is neutral to seniority. Neighbouring participants interview each other - you as the trainer may find only later that a junior officer is reporting on a director or vice versa. If expectations have been discussed, the trainer can write these down on flipchart paper, which can then be stuck to the wall during the workshop. Participants are then able to use the list to monitor whether their expectations have been met or have changed.

With a large group (over 20), the principal problem lies in limiting the length of each response. If each person takes 2 or 3 minutes to report back, many people will be bored and you are using precious time. If you explain this to participants, they will take more responsibility for sticking to time. You can also ask them to limit the reporting back to name, experience and two good things that happened last year. If you know or suspect that many participants have been told to attend the training, but do not know what it is about and therefore are unlikely to have clear expectations, then talking about expectations will be irrelevant and difficult. Instead focus on other questions such as the two good things that happened to them.

You may find that this exercise is also valuable for evaluations. To use it for that purpose, change the questions that the pairs ask of each other to:
- To what extent did the course meet my (your) expectations?
- What did you find most valuable? And What did you find least valuable?
- How would you like to see the course changed before it is run again?

Session 1.2

Relaxing the participants

Objective
- To allow participants to express, share, and reduce the misconceptions they may have brought with them to a training programme.
- To relax participants at the beginning of training programme.

Material
Flipcharts, note book, pens, pencil

Time
30 minutes

Method
Hopes and fears

Procedure

Note to the trainer
In some workshops, participants may come from a large geographical area, may know very little about the proposed programme, may not know each other, or may not know what is expected of them. In these cases, it may be appropriate to create a forum for exchanging and discussing some preconceptions.

Step 1. Divide participants into small groups of 4-6 people. Give flipchart/note book to each group.
Step 2. Have each group select someone to record the information. Ask them to respond quickly to the question, “What fears, concerns, or preconceived notions you had before coming here today?”
Step 3. After gathering responses quickly, ask the reporters to present their lists. This will present excellent opportunities for the trainer to empathise with trainee needs, as well as provide reassurance by using the items to indicate how the seminar does/doesn’t relate to the concerns.

Note to the trainer
Some of the fears, concerns or preconceived notions expressed by various group in the past include-
- Will I be the oldest (youngest) person?
- Will I be the only man (woman)?
- Will I act appropriately at my first professional seminar?
- I’m sure everyone will be more experienced than I am
- What kind of questions should I ask?
- What will the room/programme/trainers, etc. be like?

Source: John Newstorm and E. Scannell (1980)
Objectives
- To learn where the various participants have come from and to hear what is important to them.
- To allow the participants to shed inhibition and open up.

Materials
None

Time
Depends on the size of group

Method
Stepping stones

Procedure
Step 1. Ask the participants to work in pairs, interviewing each other. Each should choose 3-4 key events, or 'stepping stones' in their life's that are significant to bringing them to this point (and to the workshop). Stepping stones may be:
- Childhood experience
- Influence of parents, relatives, friends
- Formal training experience
- Key events, meetings, reading, realisations
- Changes in career, job experience

Step 2. Start them off by giving an example of your own stepping stones. By mentioning something funny or irrelevant you can show that this is not too serious.

Step 3. Participants can then feed back their chosen stepping stones to the group. This can be done in a number of ways - directly to the group, by paired introductions or visually displaying the stepping stones for group inspection.

Note to the trainer
This exercise can take some time, especially if the group is large (20 or more). You may have to remind people to keep to the main 'stepping stones' and limit other details.

Creating an informal atmosphere for training

Objectives
- To get participants talking to each other one-on-one basis.
- To create a relaxed but animated atmosphere and to establish an informal tone for the training.

Materials
Enough seeds/beans/pebbles/beads for each participant to have the same number as there are people (e.g. if there are 25 people, including the trainers, each person will require 25 seeds/beans/pebbles/beads). A few plastic bags or other cups or containers for any participants who do not have pockets.

Time
30-45 minutes, depending on the number of participants, and how much they talk to each other.

Method
The seed mixer

Procedure

Step 1. Give each person one bean for each person in the room (for example, if there are 25 people, including the trainer, who should also participate in this exercise, given each person 25 beans).

Step 2. Ask them to place the beans in one pocket and leave a second pocket empty. If anyone does not have pockets, they can use two small cups or containers instead.

Step 3. The participants are given a set amount of time (about 20 minutes) in which to introduce themselves to each of the other participants (this may include saying their name, the institution or project for whom they work, and a few things about themselves).

Step 4. During each introduction, they should give the other person a bean and accept one from them. They should place the other person’s bean in their empty pocket or cup.

Step 5. At the end each person should be left with one bean in their first pocket (representing themselves) and second pocket with beans for the total persons in the room minus one.

Note to the trainer
This is suitable for any number from 10 to 50 participants. There is no need for a debriefing after this exercise. It is a very effective way for each person to have an informal, face-to-face encounter with everyone in the training. It also creates an atmosphere of informality and conviviality.

Source: Robert Chambers, pers.comm.
Session 1.5

Creating a sense of belonging and learning environment

Objectives
- To get participants talking to each other in sub-groups.
- To get the sub-groups motivated by involving them immediately in a task.
- To create a sense of belonging.
- To show that you as a trainer want to learn from them also.

Material
Objects lying around in or near the room that can be used as symbols which do not need preparation.

Time
30-50 minutes, depending on the size of the group (3 minutes introduction amongst themselves, 10 minutes to decide on and find the object, 3 minutes plenary introduction and explanation per group).

Method
Symbolic introductions

Procedure
Step 1. Ask participants to form groups of three and to find an object, perhaps outside, that they feel symbolise their country, region, or organisation.

Step 2. Ask them to bring the object back in 10 minutes and put it on a table.

Step 3. Ask them to introduce themselves and to explain why they chose this object as their symbol.

Note to the trainer
This exercise is useful for encouraging participants to open up and share feelings early in the workshop. Introductions are made while searching for and agreeing on a symbol. These symbol groups can be used for later exercise which require sub-group work. If you are not familiar with the region or country, hearing about the symbols is a good introduction to the local value system. Examples of objects might include a pile of sand, cactus, a local pipe, a locally woven shawl, etc.

Source: Jane Vella (1989)
MODULE 2

Building co-operative group action

Introduction

We as individuals can gain much from working effectively with other people. Sometimes we need to turn to others for their help or advice. At other times we feel joy and comfort through being with others. Working together also has its advantages in sharing our experiences and learning from each other.

Collectivity offers us more control over our lives, helps us learn and respect others ideas and contributions and allows us to share tasks, rewards and mistakes. Its a joyous and trying process that gets improved and refined, the more we work collectively.

The results of collective working in the form of small farmers’ groups have been evident in the past, may it be income generating activities, or community development programmes. In fact, some of the watershed development programmes have been highly successful, because they revolved around organising the farmers for it.

Experiences have shown that strong farmers’ organisations are foundation and central features of successful watershed development programmes. It is true that most of the organised efforts in people’s participation in natural resource management, being tried in the Asian region today, consists of some forms of farmers’ group formations.

One of the primary tasks lying ahead is building strong farmers’ groups, which will pursue watershed management programmes and income generating activities, ensuring women’s empowerment and development. It is an important feature that the farmers’ groups so formed, either by the development practitioners or agencies should as soon as possible, become independent, self-reliant and form an important constituent of the movement for the development of farmers’, in order to tackle the complexities involved in this new development paradigm and improve the quality of life of those people who dwell within it. These small farmers’ groups are the building blocks of farmers’ organisations. Therefore, to make farmers’ organisations more effective, it is imperative that the base of these small groups needs to be properly reinforced. This calls for the need of trained manpower both at the regional and local level who are going to work with the farmers enabling them to develop strong groups, for which, as in most cases, they need initial motivation, advice and guidance, especially during the early stages of group development.

This module focuses on the various parameters involved in the process of organising farmers for co-operative group action, because farmers’ group don’t just happen, they have to be organised. This module deals with the following sessions-

1. Coming together
2. Setting common objectives
3. How to work together?
4. Organising
5. Mainstreaming gender concerns

Coming together

Co-operative working is very powerful. In many situations, individual actions do not yield results. This is particularly true for weaker sections of our populations as they lack, individually, resources, skills and strength to accomplish their own development. A group is much more effective than
an individual. In recent years various watershed development programmes for the farmers have been implemented, but adequate advantage is not taken by the farmers, particularly the poor farmers. It is important to realise that until the beneficiaries are well organised and well equipped to make use of the programmes, they will never be effective.

Hence it is imperative that the potentiality to get farmers organised must be realised. It is very important to recognise that farmers are capable of organised and collective action for improving their lot. This session deals with the advantages of working together and depicts the power of co-operation.

Setting common objectives

The first and basic step in organising farmers is the integration or becoming one with the farmers in their community. The organiser tries to immerse himself or herself in the farmer community to get to know the culture, history, and lifestyles of the community, trying to socially investigate the community. Social investigation is the process of systematically looking for issues to organise people around. The organiser, immersed in the community, looks for issues and problems, that the farmers feel strong about to the extent that they will act on them. Group formation is a dynamic process. Though there may be some natural settings in existence to form a group, some conscious efforts also have to be made for forming and developing a group. The creation of a group doesn’t occur in vacuum. The need to organise has to be felt by the farmers, which means that the farmers have a common objective around which they organise. The organiser should be receptive and be able to perceive the farmers urgent needs and motivate them as it significantly influences the stability, continuity and growth of a group. This session introduces how we can set common objectives for working together.

How to work together?

After experiencing the power of working together and having set a common objective for organising, it becomes very important that the farmers are introduced to joint working methods. At this stage it is very important to look at farmers’ organisation as an effective tool for watershed development programmes. Farmers’ organisation is a process by which the farmer community identifies its needs, develops the confidence and will to work at them, finds resources to deal with them, and in doing so, extends and develops co-operative and collaborative attitudes and practices in the farmer community for fulfilling the identified needs.

A farmers’ organisation has many benefits. It strengthens the farmer community and helps develop a harmony in the village. It forms the basis for improved resource management, in terms of better human resource management, better environmental protection and effective maintenance of assets, etc. The development services thus created are more cost effective and are easily approachable by the socially deprived sections of the society. It helps the community acquire new skills, providing better access to resources through credits, inputs, information, etc. It leads to self-sustaining savings, expands production and economic growth forming a basis for self reliance and sustainability. This session helps the participants to appreciate the concepts and importance of farmers organisation in facilitating peoples’ participation.

Organising

This session explores the various steps, elements and processes in organising farmers. It deals with their function, the problems they face and the solutions to these problems in various stages of group formation. It also illustrates the steps in organising self-help groups and user groups in a watershed.
Development of Groups

The developmental process of small groups can be viewed in several ways. Firstly, it is useful to know the persons who compose a particular small group. People bring their past experiences (in general as well as in particular of working in small groups); people come with their personalities (their perceptions, attitudes and values); people come to a small group also with a particular set of expectations of the group or the goals of the group they are about to join. Thus the a priori experiences and expectations of persons comprising a group can influence the manner in which the group develops over a period of time.

Still, there are some common developmental characteristics of all small groups. These characteristics take two forms. Firstly, all small groups face certain issues in their developmental process. Secondly, all small group go through certain stages in their developmental sequence. These issues and stages are visible in the case of almost all small groups, though to varying degrees and in varying manifestations. It is, therefore, useful to understand these issues and stages.

Issues

Three central issues are faced by all small groups in their developmental process. These are: inclusion, influence, intimacy.

Inclusion

Members in a small group begin to face the issue of inclusion as soon as they join the group. Questions uppermost in their minds are: Am I a part of this group? Am I accepted as a full member? How much am I included in the life of the group? These questions are largely relevant in the early stages of the life of a group, though they may reappear at a later stage also. When members enter a group, they leave behind their membership in other groups. Thus the tension of membership is the underlying reason for the issue of inclusion. The issue gets resolved at least temporarily, if all the members feel accepted and included. Full inclusion of all members of a small group may not occur, but even a partial acceptance creates the possibility of moving ahead.

Influence

The next issue members of a small group face is influence. Each member wants to have influence in the group, and so there is a fair degree of tussle around establishing superiority of influence and control in the group. Key questions facing the group are: Who has influence in the group? Do I have influence? How can I have more influence? The resolution of the issue of influence can take several forms. One or two members establish de facto superiority; a small clique controls the group; or, almost all members actively attempt to influence each other. This issue is a very difficult issue for a group to resolve and it keeps coming up again and again. However, ineffective resolution of the issue of influence can cause considerable obstacles to the goal accomplishment of the group, and can even lead to the splitting of the group.

Intimacy

One of the issues facing a small group is the degree of closeness that members feel for each other. Members meet their needs for affection and warmth by establishing intimate relationships. Key questions facing the members are: Do I feel close to others? How can I come closer? What can be done so that all feel close? How can we be an intimate group? In essence, members are concerned about an important aspect of group life which may remain hidden. In reality, however, differences may exist in the degree of intimacy faced by different persons in the group. Close relationships between some may become a source of jealousy and tension in others. Therefore, resolution of the intimacy issue can release energy in members for utilisation in task accomplishment.
It is important to recognise that these issues emerge in the proposed sequence: inclusion, influence, intimacy. But an issue once resolved can reappear in the life of a group. The manner in which these issues surface and get resolved will vary from group to group. But the important thing is to be aware of them and to be prepared to deal with them.

**Stages**

Viewing the group as a whole we observe definite patterns of behaviour occurring within the group. These can be conveniently grouped into stages and phases. One convenient way to describe these changing patterns of group behaviour is as follows-

**First Stage**

The initial stage in the life of a group is concerned with forming a group. This stage is characterised by members seeking safety and protection, tentativeness of response, seeking superficial contact with others, demonstrating dependency on existing authority figures (trainers or facilitators), complaining about physical and trivial matters, certain degree of show-off to the authority to gain his/her approval. Members at this stage either engage in 'busy' type of activity or show apathy.

**Second Stage**

The second stage in the group is marked by the formation of dyads and triads, members seek out familiar or similar individuals and begin a deeper sharing of self. Continued attention to the subgroup creates a differentiation in the group and tensions across dyads/triads may appear. The members feel comfort and support in their dyads/triads and feel strong enough to challenge the authority figure. Strong dyads attempt to show defiance against authority. Focus on task performance is beginning to emerge, but energy is mostly spent within a subgroup. Pairing is a common phenomenon.

**Third Stage**

The third developmental stage is marked by a more serious concern about task performance. The dyads/triads begin to open up and seek out other members in the group. Efforts are made to establish various norms for task performance. Members begin to take greater responsibility for their own group and relationship while the authority figure becomes relaxed. Dissimilar members in the group are accepted and interaction among dissimilar people takes place around the task.

**Fourth Stage**

This is the stage of a fully functioning group where members see themselves as a group and get involved in the task. Each person makes a contribution and the authority figure is also seen as part of the group. Group norms are followed and collective pressure is exerted to ensure the effectiveness of the group. The group redefines its goals in the light of information from the outside environment and shows an autonomous will to pursue those goals. The long term viability of the group is established and nurtured.

These stages too take place sequentially and the possibility exists for the group to slip back on the basis of certain events or experiences within the group. Tuckman (1965) has labelled these consecutive stages as forming, storming, norming and performing.

**Mainstreaming gender concerns**

In the past our development policy has not successfully met the need for gender responsive economic and social policies that gives appropriate emphasis on watershed management programmes. In almost all communities, there is a systematic gender bias in the allocation of resources, just as there is a bias in favour of development over environment. More recently, as key promoters of "sustainable
development”, watershed development policies aim to build upon the knowledge of local women and men, their needs and priorities, and to integrate various activities related to watershed development.

Gender is defined on the socially and culturally constructed difference between men and women. Gender division are learned behaviours and change over time, as circumstances force communities to adopt to situations by changing gender roles. Women’s participation in watershed management programmes in the past has primarily been neglected because of the following five myths-

1. Women do only domestic work.
2. Each member of the family shares the benefits equally.
3. Technology will automatically benefit both men & women.
4. Women’s voice will be heard through her male relatives equally.
5. Women are incompetent at certain activities.

On the contrary watershed management programmes can be highly successful if gender relations are properly considered in all aspects of watershed management. Gender analysis provides a valuable tool to help fill this gap. It can be used to practically examine the community diversity and its implications on watershed development. Gender analysis draws on the understanding that every development situation is unique. In fact gender analysis enhances watershed development programmes, because -

- gender desegregated information is useful for planning watershed development programmes.
- gender analysis contributes to positive social impacts of watershed development.
- gender analysis contributes to the success of watershed development programmes.
- gender analysis helps make efficient use of even the scarce resources.

The session on mainstreaming gender concerns deals with the framework for gender analysis and watershed development activities. It is a step-by-step tool for carrying out gender analysis and can be helpful to raise questions, analyse information, and develop strategies to increase women’s and men’s participation in and benefits from watershed development programmes. It also summarises the obstacles to mainstreaming gender concerns and possible ways to overcome these obstacles.
Session 2.1

Advantage of groups

Objective

- To help the participants understand the advantages of cooperative group action over individual action.
- To enable the participants think about the value of working as a group. A group can often accomplish a task more quickly and effectively than an individual can.

Materials

A bag containing about 20 local objects (articles such as clothing, utensils, thread, a stone, and so on), two posters (A village where farmers are organised and a village where farmers are not organised). Make your own posters.

Time

45-60 minutes

Method

Memory game

Procedure

Step 1. Begin by saying that you’d like everyone to play a ‘memory game’. Don’t tell participants the purpose of the game. Dump all the objects from the bag onto a table. Tell participants that everyone should try to remember all the objects as you put them back in the bag. Put these objects in the bag one at a time. When you put each object in the bag, say what it is. Give participants a chance to look at it. But, don’t go too slowly.

Step 2. When all the objects are in the bag, explain that one individual alone will try to remember the objects and the other group members together will try to remember the objects. Explain that this is not a competition. But it will be interesting to compare the results of individual effort and group effort. Ask for one volunteer who will try the exercise first.

Step 3. Meet with the volunteer and write down her/his list. Then, meet with the other group members and write down their list. The volunteer and the group should be far enough apart so they cannot hear each other. For literate groups, write the lists on newsprint so they can be compared.

Step 4. Bring the individual back to the group. Read her/his list first. For literate groups, post the newsprint. For pre-literate groups, take the objects from the bag as you read the list. Then, read the group list. Then, read the group list. Make sure to compliment the volunteer for her/his contribution. In almost all cases, groups will do better than individuals on this task. So s/he shouldn’t feel like s/he’s failed.

Step 5. Discuss the results of the “memory game”. The difference between the two lists should be clear, unless the volunteer had a very, very good memory. Encourage the participants to think about why the group list was longer. What does this tell them about the strengths of groups?

Note to the trainer

- Compare the two lists. Which is longer? (If the individual and group lists are almost the same, point out how unusual this is and how groups usually tend to remember more).
- Why was the group able to complete the task better than the individual? What strengths do groups have that individuals don’t have?
- Show the two posters. How would you compare the two pictures? Who do you think is more effective? Why?
- Think about your own life. What could you do better as a member of the group than as an individual?
Step 6. What ideas did the game give us about co-operative work activities?

Note to the trainer

Summarize some of the advantages and strengths of “working as a group” which the participants identified. Note that groups can have disadvantages, too. Sometimes groups are ineffective because members do not know how to work together. However, group activity is important in all our lives. We can use it to accomplish goals and to solve problems.

Source: Suzanne Kindervatter (1983)
Session 2.2

Setting objectives to work together

Objectives
- To enable the participants to understand the importance of having a common objective to achieve a set of goals.
- To help them understand how working together can help in achieving our objectives.

Time
2 hours

Materials
Flipcharts, Felt pens, black/white board, chalks

Methods
Brainstorming

Procedure
Step 1. Ask the participants to review the previous session on advantages & power of co-operative group action. Tell them that in this session we would try to understand that we have many goals set for integrated development of the area and how working together can help us achieve our objectives. With this brief, engage the participants in a short discussion.

Step 2. Ask them, what do we hope to accomplish by taking up development activities in the watershed? Brainstorm for ideas. List and discuss the 'goals' that they come up with.

Note to the trainer
- Development efforts should improve both the quality of life and standard of living by addressing people's basic needs.
- Possible responses could be
  - Increasing productivity
  - Ensuring equitable distribution
  - Improving services for the well being of all
  - Increasing choices and opportunities for the under privileged.

Step 4. Brainstorm the participants to take some of the listed goals and set objectives for accomplishing them. This can be done by dividing the participants into three groups. Allow sufficient time.

Step 5. Ask each group to present the outcome of their groups work. Meanwhile you can list the goals & objectives stated by them on the black/white board making a comprehensive list.

Step 6. Ask the participants now "Can any one of you achieve these objectives alone?" The obvious answer will be no. Then ask them what should be done to achieve these objective? Instruct them to go back to their original groups and present the group responses.

Note to the trainer
Some possible responses could be-
- Active involvement of everyone with village in development programmes
- Removing barriers to women's access to inputs and services
- Utilising the potential of the village youth and wisdom of elders
- Working together as formal or informal village organisations
Step 7. Now ask the participants “What you see in common, in order to achieve any objectives listed above”? Let the participants think and analyse it. Help them in synthesising their thoughts, till they conclude, ‘working together’. Inform them that this is their ‘common objective’.

Step 8. Inform them how crucial is their participation in development programmes and how they can participate effectively if they are an organised groups.

Step 9. Discuss more about people’s participation in development, emphasising on the power of working together in groups.

Step 10. Help them synthesise the learning from the session concluding that, to fulfil our development goals, our first and primary objective is to get everyone to work together in an organised manner for uplifting our living conditions.

Note to the Trainer

- Participation in the village development programmes aims at bringing about a change in the overall physical, social, economic & political environment.
- People’s participation is central to this process, to better provide for human needs in an environment, where people take control of their lives, and sustain on-going development through a dual process of economic & social objectives.
- Working together will help them in achieving a balanced approach to development, wherein people develop their creative potentials, assume self responsibilities and enjoy a spirit of independence and empowerment.

Step 11. Close the session highlighting the main learnings.
Session 2.3

How to work together?

Objective
- To enable the participants appreciate the importance of community organisation in facilitating peoples' participation.
- To help them understand the principles and elements of community organisation.

Materials
- Handout 2.3.1 - Definition of Community Organisation.
- Handout 2.3.2 - Principles of Community Organisation.

Time
4 hours

Method
- Brainstorming and case study

Procedure
Step 1. Narrate some socio-economic and production problems common to typical Indian villages.
Step 2. Draw participants attention to the importance of organising the community in participatory watershed management.
Step 3. Draw attention of the participants to formation of Watershed Association, Watershed Committee, Self Help Group and User Groups in a watershed and say that it is important to understand the concept, principles, benefits and the process of community organisation.
Step 4. Emphasizes the need for group action in problem solving.
Step 5. Ask, "What is community organisation?" and chart the responses. Further put up the chart on definition (Handout 2.3.1) and the highlight the key words.
Step 6. Ask, "What are the benefits of organising the community?" and chart the responses and relate these benefits to watershed projects.
Step 7. Mention that there are different groups and institution already working in the rural areas, ask the participants, "What are the various groups and institutions working in rural areas?" note down their response.
Step 8. Ask the participants to mention the groups or institutions to be organised as envisaged under watershed programme and chart the responses. Encourage discussions and suggestions.
Step 9. Give inputs on the principles of community organisation (Handout 2.3.2) and relate them to the findings listed in group reports.
Step 10. Close the session highlighting main learnings on importance of organising for facilitating development.
Community Organisation

Community Organisation is a process by which a community identifies its needs, develops the confidence and will to work at them, finds resources to deal with them, and in doing so, extends and develops cooperative and collaborative attitudes and practices in the community for fulfilling the identified needs.

Benefits of Community Organisation
- Strengthens the community
- Harmony in the village
- Better resource management - environmental protection, maintenance of assets etc.
- Development services are more cost effective
- Easy to approach socially deprived sections
- Better access to resources - credit, inputs, information.
- Acquires new skills.
- Self-sustaining savings - expansion - production - economic growth.
- Self-reliance and self-sustainability

Principles of Community Organisation

- The group should be small and preferably homogenous.
- The group should be formed around an income generating activity/common problem or interest.
- Group should be voluntary and democratic and involve actively in meeting their needs.
- Should deal with the problem which the community recognises as a problem.
- Develop sense of belongingness and encourage integration.
- Move at a pace that is comfortable to the community.
- Flexibility.
- Involve local leaders, both formal and informal.
Session 2.4

Organising

Objective
- To enable the participants to understand the steps and processes in organising groups.
- To enable participants to understand the steps in the formation of self-help groups/user groups/watershed associations.
- To understand the roles and responsibilities of various groups in a watershed.

Materials
Handout 2.4.1 - Steps in community organisation
Handout 2.4.2 - Stages in community organisations and associated common problems

Time
4 hours

Method
Brainstorming and group work.

Procedure
Step 1. Recapitulate the previous session (Session 3) and mention that having understood the 'Why' of community organisation, we shall now look into the 'How' part of it, i.e. forming groups, processes and issues thereof.

Step 2. Raise the question on the sequential steps that need to be followed in forming any village level organisation.

Step 3. Highlight the ideas given by the participants and give input on steps in community organisation (Handout 2.4.1). Chart the inputs and display them on the wall for the entire session so that group can keep referring to the steps in their subsequent work.

Step 4. Focus on problems in constituting a group.

Step 5. Mention that group formation involves different processes and issues which a facilitator has to be aware of. Initiate a discussion on this. The objectives of this discussion are to share the experiences of the participants in organising the community groups i.e. the problems or issues faced and the strategy needed to tackle these problems and issues for sustainable group work in the community.

Step 6. Select any one of the following options:

Option 1. Penal discussion on processes and issues in formation of groups. (Penalists can be drawn from the participants, NGOs and government departments who have experience in organising groups).

Option 2. Dialogue with an NGO representative, who has experience in forming groups like self-help groups/user groups etc.

Option 3. If time permits and the participants are interested, the participants can be taken to nearby village to study existing groups.

Step 7. Synthesise the steps and reinforce on the concepts of handling problems while organising the community. Supplement with Handout 2.4.2.

Step 8. Refer to the various groups envisaged under watershed programme and mention that now we shall apply the principles and practices of community organisation to these groups. Depending on the participants understanding, ask them to list out the purposes/objectives of different groups. Chart the responses and supplement them with your own information, if necessary.

Step 9. Ask the participants to divide into two groups and give the following task: Keeping in view the objectives/purposes of self-help groups/watershed association, list out the steps you would follow in organising them.
Step 10. Ask the groups to present their results and help them synthesise their ideas.
Step 11. Consolidate the learning from the session and close.

Source: Adapted with modifications from: Desai & Arora (undated).
Steps in community organisation

- Rapport Building
- Create awareness
- Identify affinity groups, common problems/interests
- Analyse the problem - discuss and share
- Form a group - name it and formalize it
  - List people’s interest in forming groups
  - Membership
  - Attend meetings regularly
  - Elect group leader
  - Regular contributions to the group savings
  - Repay the loans quickly
  - Help other members when in need
  - Set specific objectives
  - Record keeping.
- Build capacity
  - Pull resources
  - Training
    - Technical
    - Managerial
- Build linkages with other groups within and outside the village.

Handout 2.4.2

Stages in community organisation and associated common problems

Formation of farmers’ organisation

- Visit to the village with purpose of rapport building e.g. social mapping.
- Sharing of experiences with the village community e.g. telling success stories of other places.
- Identification of a suitable link man.
- Handing over the stick to the farmers.
- Making acquaintances with them.
- Making people aware of the programme e.g. its objectives, very clearly and specifically.
- Inducing or catalysing them to share a common platform and breaking of ice using various methods.
- Introducing other team members with them.
- Identify willing persons during course of discussion.
- Identification of specific area of operation.
- Ensuring participation of all concerned persons.
• Discussion should be directed towards problems with their cause and effect on the community as such.
• Identification of leader among the farmers.

**How the farmers' organisation function?**

• General guide/code of conduct/rules are framed with due flexibility.
• Size of group may be preferably of 20-25 members and a number of groups can be formed on the basis of activities to be undertaken in the watershed.
• The listing of people may be done activity wise.
• Norms regarding collection, mode of payment etc. are decided.
• Meeting are conducted to review problems, progress and monitoring of various activities.
• Members are made accountable to the community.
• Community gatherings are arranged in order to promote the feeling of working together.

**What are the problems often faced by the farmers' organisation?**

• Pressure groups/self interest groups prevailing over community try to create problems in the functioning.
• Inter or intra group complexes impede the functioning.
• Chances of conflict among group member in respect of sharing contributions/benefits.
• Problems of generation gap.
• Non-attendance of members.
• Problems connected with maintenance of records.
• Outside influences.
• Problems of women folks with reference to communication.

**How these problems are generally overcome by the farmers' organisation?**

• Making the farmers concious about the vested interest groups and their malafide intentions. Also by making people aware of their rights and duties.
• Inducing feelings of mutuality within and among different groups.
• Initiation of income generating activities.
• Propagation of feelings of equality and mutual respect.
• Equity in the distribution of benefits

**What can be an approach to sustainability of the farmers' organisation?**

• Clear cut guidelines be framed for management of the farmers’ organisation for a healthy working culture and cost-benefit sharing.
• Encouraging the growth of dedicated and sincere members.
• Proper attention to women folk and their problems in all spheres.
• Motivation of group members from time to time.
• Regular trainings to execute and maintain assets created.
• Periodic review of successes and failures.
• Mechanisms to resolve problems within the group.
• Framing realistic time-schedules.
• Appropriate follow up actions in post operational stage.
• Appreciation of services rendered on regular basis.
Session 2.5

Mainstreaming gender concerns

Objectives
- To sensitise the participants on gender concerns.
- To introduce the steps of the gender analysis framework.
- To establish that mainstreaming gender concerns will lead to increased effectiveness in watershed development activities.

Time
One day

Materials
- Flipcharts, pens, white board, marker-pens, notebook, pencils.
- Handout 2.5.1: What is gender analysis
- Handout 2.5.2: Patterns affecting development within an area
- Handout 2.5.3: Gender based activity profile
- Handout 2.5.4: Access to and control over resources
- Handout 2.5.5: Work Plan for success

Methods
- Gender Analysis Framework

Procedure

Step 1. Inform the participants that the development programmes seldom address the needs and priorities of both women and men, as we neglect them and tend to take for granted that the benefits reach both women and men equally. In fact, when talking about people-centred development, one needs to have precise information about who the ‘people’ are. They are not a homogenous group. The people include both women and men. Almost in every situation and within every socio-economic group, the lives of females and males are structured in fundamentally different ways. Irrespective of their class and ethnicity, women and men have different roles, responsibilities, resources, constraints and opportunities, because of gender. Therefore, it is very important to consider the information disaggregated by gender if we want our programmes leading to equity, effectiveness and sustainability. Tell them that in this session we will try to analyse gender concerns and establish that mainstreaming gender concerns will lead to increased effectiveness in watershed development activities.

Step 2. Ask the participants, ‘what do you mean by gender?’ and ‘what is gender analysis?’ Give them time to discuss and synthesise responses. Provide them Handout 2.5.1 for reading.

Note to the trainer

Gender: Gender refers to the different roles of women and men. For example, we talk of women’s work and men’s work. We say that work is gender specific, but it is not specific to sex, because what is regarded as men’s work in one place may be women’s work in another.

Gender Analysis: In gender analysis we want to understand the roles of women and men in relation to their work and available resources and a framework helps in understanding gender roles and their importance in development.

Step 3. Ask the participants to discuss, how gender roles change from one generation to the next & from one location to another, by drawing into a discussion based on their own experiences. Ask them, what can they remembers about the daily activities of their grand parents? How do these differ from their own activities, the activities of their children? Make a clear
distinctions between what the participants know from their own experiences and what they assume they know about activities of women and men outside their own families. Ask them to list their priorities and preferences in their note books to be used later in this session.

Step 4. Introduce the four steps of gender analysis framework-
Step 1- What patterns affect development in the area?
Step 2- What activities do women and men carry out?
Step 3- What resources do women and men have to work with?
Step 4- Based on the information collected in steps 1, 2 and 3 what can we do to better involve both women and men in watershed management?

Explain that the steps are tools to analyse a situation. The steps can be used to organise gender desegregated information and develop gender specific strategies for watershed development.

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<tr>
<th>Note to the trainer</th>
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<tbody>
<tr>
<td>• Avoid being too theoretical. Long discussions on definitions should be avoided. Try to focus more on the practical implications of gender based on your experiences.</td>
</tr>
<tr>
<td>• Avoid introducing new terminology. Focus on framework questions.</td>
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Step 5. Introduce the first step of the framework, "what patterns (that make life better or difficult) affect development in the area"? Ask them to visualise a watershed they know and then analyse this question under the four broad categories viz. physical, social, economic and political factors giving an example of each. Give them Handout 2.5.2 and ask to carefully go through it.

Step 6. Instruct them to divide into four groups. Ask them to work on the worksheet provided in Handout 2.5.2 and complete it based on their past experiences and knowledge.

Step 7. Ask each group to present their discussion to the entire group. During the discussion help them to establish links between the different patterns and gender issues.

Step 8. Synthesise their presentation to highlight-
  a) the four patterns;
  b) links between the patterns; and
  c) links between gender issues and the patterns.

List the outputs of the exercise on a flipchart and paste on the wall for the entire session.

Step 9. Now inform the participants that we will try to identify the major activities carried out by women and men, respectively, in a watershed and identify the location and time patterns in women’s and men’s activities. Distribute Handout 2.5.3. Ask them to read carefully and explain what we are trying to achieve by this.

Step 10. Divide the participants into three groups. Refer to the worksheet in Handout 2.5.3 and ask each group to take responsibility only for one set of activity only(e.g. women’s activities, men’s activities or common activities). If time is not limiting, you can ask them to take up each activity one by one and ask them to fill the worksheet.

<table>
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<tr>
<td>• Focus on who does what? When? Where?</td>
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<tr>
<td>• Identify activities which result directly in a product, such as income or food (productive activities) and activities related to human maintenance (reproductive activities) so that they are not ignored.</td>
</tr>
<tr>
<td>• Identify what productive &amp; reproductive activities are carried out by women and men in relation to watershed.</td>
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Step 11. Invite each group to present their discussion to the entire group, allowing discussion after each presentation. Record the final worksheet on a flipchart and paste it on the wall adjacent to the one developed in Step 8.

Step 12. Summarise the discussion highlighting-
   a) Activities that are carried out predominantly by women & men respectively;
   b) Relationships between division of labour and watershed related activities; &
   c) Time constraints that arise from division of labour.

Step 13. Next introduce the Step 3 of framework and tell them that now we would try to understand women’s and men’s access to and control over various resources. Use Handout 2.5.4 as an input and explain. Encourage discussion.

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**Note to the trainer**

Focus on-
- Identifying the resource base of both, women and men in the programme area, especially with respect to land, trees, credit, technology, training and so forth.
- Identifying benefits women & men derive from activities & use of resources.
- Defining what the resource and constraints are, especially in activities related to watershed.
- Sometimes neither women nor men control a resource. For example, forests are usually controlled by the governments even if they are vital to the livelihoods of rural women and men.

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Step 14. Divide the participants into four groups and ask them to brainstorm for ideas and list them on the worksheet provided in Handout 2.5.4. Allow sufficient time to fill the worksheet.

Step 15. Invite each group to present its findings to the entire group followed by comments, suggestions and discussions. Simultaneously, prepare a masterlist on a flip chart on presentations of the four groups and paste it on the wall adjacent to the other two.

Step 16. Summarise the discussion highlighting-
   a) What are the major resources and benefits?
   b) Which resources are controlled by men and women respectively and which one have a shared control, and to what degree?
   c) The resource needs and constraint of men and women.

Step 17. Now inform the participants that as a final leg of this session they would try to evaluate the needs for changes in the programme activities to incorporate women’s and men’s needs and priorities, based on the earlier part of the sessions, and relate these changes to increased effectiveness and programme success. Distribute Handout 2.5.5 and allow enough time for reading & discussion.

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**Note to the trainer**

Focus on the following-
- Using information recorded with the help of context, activity and resource worksheets, as a basis for preparing the work plan for success.
- Identifying changes in the programmes that need more participation by women and men.
- Assessing the importance of gender-specific information to achieve programme objectives.

Highlight that-
- The workplan for success must be pragmatic, similar to a real workplan. This Step outlines the changes trainees will be making in their own work.
- Avoid changes that cannot be made by the trainees, e.g. watershed policy or culture.
- Encourage the trainees to be as specific as possible.
Step 18. Divide the participants into two groups. Ask them to discuss and chart some of the activities related to watershed development, listing the appropriate involvement of men and women, in the worksheet provided in Handout 2.5.5 and plan for the action needed to mainstream appropriate gender concerns for programme effectiveness, quality and sustainability. Allow sufficient time for this activity.

Step 19. Invite each group to present their results followed by discussion, suggestions, criticisms and modification. Prepare a final list based on group consensus and put in on the wall adjacent to the other three flip charts.

Step 20. Summarise the discussion highlighting-
(a) Gender specific information facilitates planning and working with the farmer communities;
(b) We can influence our watershed development programmes by incorporating women’s and men’s concerns, needs and priorities; and
(c) Understanding women’s and men’s diverse roles is fundamental to a successful programme.

Step 21. Synthesis the learning from the session appreciating the participants on the commendable job done by them during the long session, and conclude.

Adapted with modifications from: Wilde, V.L & Arja, V.T (1993)
Handout 2.5.1

WHAT IS GENDER ANALYSIS?

Gender Analysis is about knowing "WHO DOES WHAT? WHO HAS WHAT? and WHAT ACTIVITIES TO DO?". Our knowledge is based on our own experiences. In our work we may think we know how rural people live. Sometimes we do not understand, the differences between our home areas and the area we work in. For example, it may be that in your home area women are responsible for basket weaving, while in the area where you work, men are responsible.

Gender Analysis is a way of avoiding failure based on "I think...." Gender Analysis provides more precise information about patterns in the lives of women and men, so that decisions can be based on facts.

To do Gender Analysis you can carry out the four steps introduced in this session. Together these steps are called the Gender Analysis Framework.

\* In many parts of the world men migrate into towns to earn cash income. This means that women have to start doing work which is called men's work. For example, in many parts of India house construction is seen as men's work. But today many men work in town and women have to build and maintain the buildings. The gender roles are changing.

\* We can think of examples of changing roles of women and men in our own families. What activities is your daughter/sister (son/brother) carrying out that your wife/mother (husband/father) never did?

What do we mean by....

**GENDER**

Gender refers to the different roles of women and men. For example, we talk of women's work and men's work. We say that work is gender specific. But it is not specific to sex because what is regarded as women's work in one place may be men's work in another.

**ANALYSIS**

When we want to understand what takes place in a village, we analyse village life. In gender analysis we want to understand the roles of women and men in relation to what they do and what resources they have.

**FRAMEWORK**

A framework is a set of questions to guide our analysis. The Gender Analysis Framework gives us key questions to answer that help us understand gender roles and the importance of these roles for development.

Why gender analysis?

Gender Analysis leads to **SUSTAINABILITY, EQUITY, EFFECTIVENESS**

What happens when we do not use gender analysis?

*For example, some watershed workers were planning to train people on how to improve erosion control. But they did not know that women were responsible for field maintenance in the village where the training took place. Most of the people who received training were men because they expressed an interest in erosion control methods. As a result, the wrong people were trained and erosion continued to be a problem. Unfortunately, the results were-

**NO SUSTAINABILITY** because men were trained to use improved methods for a job they never do.

**NO EQUITY** because women, who do the work, did not benefit from the training.

**NO EFFECTIVENESS** because erosion was not controlled.

CAN YOU GET RID OF THE "NO" WORDS IN THE ABOVE EXAMPLE
**PATTERNS AFFECTING DEVELOPMENT IN A WATERSHED**

**STEP 1 - What affects development in the area?**

Your work in a watershed is part of a development process in the area. *Step 1* identifies four kinds of patterns, PHYSICAL, SOCIAL, ECONOMIC AND POLITICAL. Here are some examples of these patterns. Can you think of more?

**SOCIAL:** education, health, numbers of people in an area

**PHYSICAL:** forest cover, number of tree species, agriculture, soil erosion in watershed areas

**POLITICAL:** power, leadership, distribution of benefits

**ECONOMIC:** income, technology, work opportunities

Here are some examples of questions to help you with the first worksheet -

**Physical patterns**
Are there environmental problems in the area? Are there environmental advantages in the area?

**Social patterns**
Are women/men moving in or out of the area? Do both boys and girls go to school equally?

**Economic patterns**
Are women/men getting richer or poorer? Do both women and men have access to new technologies?

**Political patterns**
Do both women and men have leadership roles? Is there a local political structure? Who decides who can use the resources?

**WORKSHEET 2.5.3**

<table>
<thead>
<tr>
<th>PATTERN</th>
<th>SUPPORTS</th>
<th>CONSTRAINTS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Physical</td>
<td></td>
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<tr>
<td>Social</td>
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<td>Economic</td>
<td></td>
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<tr>
<td>Political</td>
<td></td>
<td></td>
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</tbody>
</table>

**An example**

<table>
<thead>
<tr>
<th>PATTERN</th>
<th>SUPPORTS</th>
<th>CONSTRAINTS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Physical</td>
<td>Reforestation</td>
<td>Forest degradation, erosion, land slides, floods, etc.</td>
</tr>
<tr>
<td>Social</td>
<td>Land allocations for new villages</td>
<td>Over population, encroachments, etc.</td>
</tr>
<tr>
<td>Economic</td>
<td>A new co-operative bank being established</td>
<td>Creditors exploit villagers, no alternative sources of credit</td>
</tr>
<tr>
<td>Political</td>
<td>Development of infrastructure</td>
<td>Political strife</td>
</tr>
</tbody>
</table>
Handout 2.5.4

GENDER BASED ACTIVITY PROFILE

STEP 2- What activities do women and men carry out?

Step 2 in Gender Analysis identifies which activities are carried out mainly or only by men, or by women. A completed Step 2 will answer the questions, Who does what? Where? and when?

In addition to those activities which result in a product, such as food or income, we also need to pay attention to activities that do not result in production. These activities include child care, cooking and fuel collection for family use.

To know what women and men do, helps us plan better watershed development programmes. But it is not enough to know about watershed activities. When women and men are working on the farm and in the house they have less time for watershed related activities. We want to know when they have time. When we look at women’s/men’s activities, we need to know three things about each activity-

- GENDER: Who does the work (women, men, girls, boys)? Is it done by both women and men, or only by one of them?
- LOCATION: Where is the work carried out (home/forest/farm/city)?

WORKSHEET 2.5.4

<table>
<thead>
<tr>
<th>Gender</th>
<th>Activity</th>
<th>Time</th>
<th>Location</th>
</tr>
</thead>
<tbody>
<tr>
<td>Women</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Women + Men</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Men</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

An example

<table>
<thead>
<tr>
<th>Gender</th>
<th>Activity</th>
<th>Time</th>
<th>Location</th>
</tr>
</thead>
<tbody>
<tr>
<td>Women</td>
<td>Water collection, feed cattle, cook, child care, raise seedlings, transplant, select and store seeds</td>
<td>Daily, Seasonal</td>
<td>River, Homestead Forest, Field</td>
</tr>
<tr>
<td>Women + Men</td>
<td>Men do women’s domestic tasks after childbirth</td>
<td>Occasional</td>
<td>Homestead</td>
</tr>
<tr>
<td>Men</td>
<td>House construction, fencing for tree, planting, slaughtering, ploughing</td>
<td>Occasional, Seasonal</td>
<td>Homestead, Forest, Field</td>
</tr>
</tbody>
</table>
Handout 2.5.5

ACCESS TO AND CONTROL OVER RESOURCES

STEP 3- What resources do women and men have to work with?

Step 3 of Gender Analysis identifies which resources are available to women and to men to carry out any watershed related activities. It also identifies who has access to the resources and who controls them. For example, you are planning to plant agroforestry trees on marginal bunds. Sometimes water is very far from the fields or the village water is available from a well at cost. How far are the villagers willing to walk? How much are the villagers willing to pay? Who controls the money, women and men? Who will do the planting, women or men? Who collects water, women or men? Do they have the time?

Many different things can be a resource for watershed development, such as land, water, money or trees. Also training, technology, time or skills are resources. To know about resources, we can ask three questions about each of them.

WHO USES THE RESOURCES?
WHO BENEFITS FROM THE RESOURCE?
WHO CONTROLS THE RESOURCES?

WORKSHEET 2.5.5

<table>
<thead>
<tr>
<th>Resource</th>
<th>Benefit</th>
<th>Used By</th>
<th>Controlled by</th>
</tr>
</thead>
<tbody>
<tr>
<td>Forest</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Land</td>
<td></td>
<td></td>
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<tr>
<td>Bullocks</td>
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<tr>
<td>Seeds</td>
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<tr>
<td>Fertilizer</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Credit</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Extension Training</td>
<td></td>
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<td></td>
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</tbody>
</table>

An example

<table>
<thead>
<tr>
<th>Resource</th>
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</thead>
<tbody>
<tr>
<td>Forest</td>
<td>Food</td>
<td>F</td>
<td>Government</td>
</tr>
<tr>
<td></td>
<td>Fuel</td>
<td>F</td>
<td></td>
</tr>
<tr>
<td></td>
<td>fodder</td>
<td>F</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Timber</td>
<td>M</td>
<td></td>
</tr>
<tr>
<td>Land</td>
<td>Agricultural Production</td>
<td>M/F</td>
<td>M</td>
</tr>
<tr>
<td></td>
<td>For food and income</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bullocks</td>
<td></td>
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<tr>
<td>Fertilizer</td>
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<tr>
<td>Credit</td>
<td>Production and non</td>
<td>M</td>
<td>M</td>
</tr>
<tr>
<td></td>
<td>production purpose</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Extension Training</td>
<td>New Skills</td>
<td>M</td>
<td>Government/M</td>
</tr>
</tbody>
</table>
Handout 2.5.6

WORK PLAN FOR SUCCESS

STEP 4- What can we do to better involve both women and men in watershed development?

Step 4 of Gender Analysis links together information from Steps 1, 2 and 3. Now we know how to identify development patterns in the project area (Step 1). We also know how to analyse what both women and men do and what resources they have (Steps 2 and 3). A completed Step 4 is a WORK PLAN FOR SUCCESS because it helps us discover how we need to change our plans to better involve both women and men in watershed development programmes.

This worksheet is our new workplan based on Gender Analysis. In the WORK PLAN FOR SUCCESS we need to show-
- What are the activities required to be undertaken?
- On the basis of gender analysis who needs to participate in these activities—women? men? or both?
- What are the actions you need to take to achieve this involvement of women and men?

WORKSHEET 2.5.6

<table>
<thead>
<tr>
<th>List your own programme activities</th>
<th>Appropriate involvement of men and women</th>
<th>What actions are needed to achieve this involvement</th>
</tr>
</thead>
<tbody>
<tr>
<td>Training in home gardening</td>
<td></td>
<td></td>
</tr>
<tr>
<td>On Farm extension</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Provision of seeds and tools</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

An example- Work plan for Programme Success

<table>
<thead>
<tr>
<th>List your own programme activities</th>
<th>Appropriate involvement of men and women</th>
<th>What actions are needed to achieve this involvement</th>
</tr>
</thead>
<tbody>
<tr>
<td>Training in home gardening</td>
<td>Women are responsible for home gardens</td>
<td>High proportion of trainees should be women</td>
</tr>
<tr>
<td>On Farm extension</td>
<td>Most of the time men are only present as women are busy in other works</td>
<td>Extension programmes are so timed that men and women both participate</td>
</tr>
<tr>
<td>Provision of seeds and tools</td>
<td>Men buy seed and tools, but decisions about seed selections are made jointly between wife and husband</td>
<td>Provision for additional seeds of useful trees free of cost for poor women</td>
</tr>
</tbody>
</table>
MODULE 3

Dealing with group processes

Introduction

The dynamics involved in organising farmers for watershed management is similar to the dynamics of any group which meets and works together. There is a task at hand and there are the interactions, dynamics and 'process' of working together. If the group just concentrates on the tasks, interpersonal relationships within the groups often breaks down, because no time has been given to dealing with the personal and group needs. If the group concentrates too much on process, how it functions for support, decision making, and dealing with conflicts the task often doesn't get completed. To organise effectively, attention must be paid equally to the task and process of working together as a group. This can mean fun, tension, conflict, sharing, excitement or frustration. It is very important to give time to group processes or else the group can fall apart without even having dealt with community issues.

The culture of a group is determined by attitudes and customs established through practice by group members. Once united as members of the farmers group, the new culture shall be marked by-

- A strong feeling of unity
- Freedom of expressions of ideas and feelings
- Respect for others
- Democratic decision making
- Equality in the commonality of group membership
- Each person is taken seriously, in a way that the farmers can feel 'empowered', and work together to change their situation.

The culture of a strong group is built up over time by going through various group processes. It is very important for us to understand what is going on within the group both on the surface and imperceptibly, under the surface. These help us to determine the patterns emerging in groups and help us facilitate the groups more effectively to overcome their blocks in functioning smoothly.

A strong group in a result of the effectiveness of the group to deal with various group processes at various stages during the life cycle of groups. The focus of this module is to try and understand some of the main processes which are crucial for the life of a group and hence must be dealt with very carefully, if we aim for strong farmers' organisations.

Small group processes

When we observe a group, we usually take note of what the group is talking about, what are the ideas being exchanged, what is the goal the group is working towards. All this refers to the 'content' of the group task.

But there is another aspect which is just as important to observe, for it affects performance of the task. This refers to how the group is functioning, how it is handling communication, how members are trying to fulfil the task, how they are relating to each other. All this refers to the 'Process' going on within the group. Every group manifests these processes. As skillful observers, within or outside the group, we can identify the patterns in which the processess happen. We can then decide whether these patterns should be changed or improved.
Participation

Participation is a fundamental process within a group, because many of the other processes depend upon participation of the various members. Levels and degrees of participation vary. Some members are active participants- talkative, demanding, volatile; while others are more withdrawn, quiet, passive. In essence, participation means involvement, concern for the task, direct or indirect contribution to the group deal.

Participation by members is basic to the existence of a group. If members do not participate, the group ceases to exist. But this participation does not mean just physical presence or that everyone speaks. Silent members could be listening very carefully. What needs to be identified and tackled are the members who are "there but not there" those who are indifferent, uninvolved or could not care less. They can potentially damage the group. Factors which affect member's participation are-

- The content of task of the group - is it of interest, importance and relevance
- The physical atmosphere - is it comfortable physically, socially and psychologically
- The psychological atmosphere - is it accepting, non-threatening
- Members' personal preoccupations - are there any distracting thoughts on their mind?
- The level of interaction and discussions - is adequate information provided for everyone to understand? - is it at a level everyone understands?
- Familiarity between group members - do members know each other from before

Checklist for observing participation

- How much talking is done by the leader, how much is done by the others?
- To whom are questions usually addressed - the group as a whole or to particular members?
- Do members appear interested, bored, apathetic or self conscious?
- Are sub-groups forming and are they discussing issues other than those addressing the group task?
- Are quiet members being encouraged to speak?

Communication

Communication within a group deals with the spoken and the unspoken, the verbal and the non-verbal, the explicit and the implied messages that are conveyed and exchanged relating to information and ideas, values and feelings. To clearly understand the various exchanges, while they occur, one has to consider various aspects of communication, like direction, mode and reception.

One-way and two-way communication

One-way communication relates to a situation where one person conveys the message and the other passively receives it. Some dismiss it as not deserving to be called communication but merely the passing on of information and ideas. But then it takes place commonly and provides indicators to the relationship existing between the two parties. Two-way communication implies a situation where not only do the two parties talk to each other but that they are listening to each other as well. It indicates the degree of respect between the two parties. It helps in-

- clarification of doubts, confusions and misconceptions
- both parties understanding each other
- receiving and giving of ‘feedback’

Communication Networks

While one-way and two-way communication do provide clues to the hierarchy existing between the two individuals, in a group this alone is not enough. A clear idea of hierarchies is generated by observing the ‘who talks to whom’ communication networks.
Often communication is directed only at some specific group members, for example, towards a single authority. Some other times communication flows through all possible channels in every direction. It is interesting to note that groups exhibiting either one of these communication patterns would differ situationally from each other in the efficiency of task performance, time required for work, and satisfaction of members with their roles in the group.

**Communicating 'Upwards' or 'Downwards'**

Two individuals, or an individual and a group, may sometimes treat each other as inferiors or superiors. This could be on the basis of differences in sex, caste, religion, education, status and so on. Those who assume an inferior position tend to talk 'up' to the other person, demonstrating humility or submission. Those who assume a superior position tend to do the opposite. If however, there is a position of relative equality, as between good friends, communication can occur 'horizontally'.

**The mode of communication**

We are used to equating communication with conversation, or the exchange of words. But if we think for a minute, we realise that a great deal of what we express and a great deal of what we understand from others does not occur through words at all. There are a vast number of 'signals' that we send and receive consciously or unconsciously. These include gestures, expressions, change in voice and so on. Communication occurs through both modes: verbal and non-verbal. In fact, it has been estimated that of the entire message that gets transmitted, words constitute a tiny part, and the bulk comprises non-verbal expressions. While many of us translate these non-verbal signals unconsciously, we can make our communication more effective by becoming aware of this process. We can also become more conscious of the signals we are transmitting, and ensure that our non-verbal expressions match our verbal pronouncements.

**Communication in the non verbal mode**

We communicate non-verbally through a variety of ways to convey a range of meanings:

- **Using our bodies** - through gestures, posture, nodding, facial expressions, eye movements
- **Using our voices** - to laugh, yawn, groan, scream, whisper and so forth
- **Using our skin** - to touch, to pat, to push, to caress
- **Using distance** - sitting close, standing very far apart, sitting on a higher seat, standing behind a table and so on to indicate intimacy or distance
- **Using clothes, hairstyles, jewellery, accessories, etc.** to make a certain statement about ourselves
- **Using silence** - very effectively, sometimes to convey a range of emotions like shock, disapproval, hurt, great joy, togetherness and so on

**Reception in communication**

Drawing from the aspects of communication described above, it becomes clear that 'reception; involves both picking up non-verbal cues and listening to verbal messages. We need to sharpen skills in these for accurate understanding of what others are trying to express. Most of us are so busy thinking up and putting across our own ideas and points of view, that we seldom listen carefully to others, until of course we consider them experts or perceive some direct benefit from what is being said. Listening involves much more than passive hearing, and the mere fact that two people are taking to each other does not automatically mean that listening is also taking place. Listening is based on hearing and understanding what others say to us. It is only possible when we pay attention to what is being said. We must remember that listening is the true indicator of respect. When we are in a great hurry to react to what others say or make ourselves heard, we need to re-examine ourselves.

**Guidelines for Effective-Listening**

- **Concentrate on hearing** - we think about four times faster than the other person can speak, so our thoughts tend to stray.
• We must listen with an open mind— we often stop listening when we hear some key words, 'red flags', which touch our personal biases or preferences.
• Pay attention and try to understand what is being said— listen beyond the words, try to understand the feelings, the emotions, what is being implied. Be alert to the various non-verbal messages.
• Do not predict what the speaker is trying to say— do not jump to conclusions and stop listening, find out for sure whether what you think is true or not.
• Do not pretend to have understood when you have not— clarify your doubts, request the speaker to re-explain, ask relevant questions.
• Do not become defensive and do not argue or interrupt— when the speaker challenges some of our favourite ideas our immediate reaction is to either stop listening or to interrupt and argue.
• To ensure that we are listening attentively we should from time to time restate, repeat and summarise what we think is being said.

(Adapted from "Training for Transformation")

Some barriers to effective communication

Personal
• Our values, opinions, prejudices and attitudes
• The tendency to see one and only one way of doing things - our way
• The tendency to speak or react before thinking
• Stereotyping people— making quick generalisations
• Words and phrases have specific personalised meanings, we assume the same meanings when they are used by others
• Lack of trust

Situational
• Physical well-being and mood of the individual
• Differences in backgrounds and context between the parties.
• Differences in language

Checklist for observing communication

☞ Who talks? For how long? How often?
☞ How are silent people treated?
☞ Who talks to whom? To the group as a whole or to some people in the group?
☞ Who talks after whom? Is it for encouraging or for challenging?
☞ Who interrupts whom? Are some people interrupted all the time?
☞ Do the members listen to each other?
☞ What non-verbal messages are being transmitted?

Trust

Trust is the basis of human relationships, and supports the ethical norms of human behaviour. Trust is difficult to achieve and it grows slowly, because human beings are finite in nature and i.e. they are limited by space, time and energy, which impose limitation upon the building of trust.

However, as trust between people grows, behaviours change and interpersonal dynamics are transformed. Diverse skills and abilities become recognised and are appreciated as strengths. People begin to accept one another's attitudes and feelings. As trust grows, the barriers that prevent candour and openness lesson. People become more expressive, impulsive, frank and spontaneous. Their communication becomes efficient and clear. They risk conflict and confirmation, opening doors to deeper communication, involvement and commitment and are able to make decisions effectively. These principles are as true in organisations effective working as they are in other interpersonal relationships
Trust must be nurtured and maintained in a group if people are to enjoy their interpersonal relationships and attain their objectives. Effective group are those where members work well together, and the ability to work well together flourishes in warm atmosphere of trust. Group development through trust building thus becomes a major agenda and contributes to effectiveness of the farmers group.

Cohesiveness

One important characteristic of any group is to provide an environment that is facilitative to positive growth and/or change for its members, and cohesiveness is essential to a groups ability to carry out this function. "Cohesiveness" is the degree to which the members of a group like and support each other. Cohesiveness exists as a dynamics, when the following conditions are present -

- The members exhibit a high degree of solidarity
- The members defend the group from internal and external threats
- Volunteer attendance, participation and mutual help are high
- The defence of group norms is strong.

These conditions helps the members feel sufficient trust in the group to be able to share personal concerns comfortably, motivate them to work towards groups' objectives, achieve group goals and thereby facilitating the groups organisation.

Self disclosure, openness and honesty

Self disclosure, openness & honesty are some of the major growth process observed in the development of strong groups. It is their interaction that accounts for much of the immense potency of social intercourse for shaping the behaviour of individuals (Jones, 1982). The culture of a strong group depends upon the openness and honesty prevalent among the group members. Disclosing oneself to others in a group setting is an investment in membership. It signals a willingness to be looked at honestly and exposes trust in others. It also opens up the doors for possible interactions with other members. A group experience in which people only talk about themselves, however, is of limited usefulness. It is rightly said, "For me to know myself well, I must not only show myself to others, I must also find out about myself from others". In fact in situation where the group encourages self disclosure, openness & honesty, and has an atmosphere of trust we hold back much less then when these processes are absent. We must understand them and promote to develop strong groups.

Decision Making

Decision making in a group takes place in one or more of the following manners-

The plop: A decision is suggested by one individual to which there is no response, and the decision is adopted. Plopping occurs in a new group, in a group where a number of members have equal status, or when one member is overly aggressive.
Self authorised: A decision is made by the individual who assumes authority. The others find it easier/convenient to accept the decision than to reject it. The essential difference between this and the 'plop' is that the 'plop' is not tendered with authority but gets adopted by default, whereas in this case the decision is tendered with the assumption that it will be adopted.

Pairing: A decision is made by two individuals joining forces, one floats the idea, the other seconds it and the decision is made on behalf of the group.

Minority group: The decision is made by the clique and the rest accept it.

Vote: The decision depends upon the number of people adhering to it. Vote may be taken by a show of hands or even by ballot.

Consensus: This is essentially a minimum consent by all. It is important to differentiate between a true and a false consensus. When faced with the question 'Does anyone disagree?' many who do not agree show apparent support. True consensus, where everyone has contributed to the discussion, all angles have been considered and everyone is in full agreement, though desirable is not always possible. What can be aimed at is that everyone feels-

- they have had the opportunity to put forth their views and influence the decision;
- it was a good and open discussion; and
- they are prepared to act on the decision taken.

Checklist for observing decision making process

1. Does anyone make any contributions which do not receive any kind of response or recognition? What effect does this have on the member?
2. Does anyone make a decision and carry it out without checking with other group members? For example, he decides on the topic to be discussed and immediately begins to talk about it. What effect does this have on other group members?
3. Who supports other member's suggestions or decisions? Does this support result in the two members deciding the topic or activity for the group? How does this affect other group members?
4. Is there any evidence of a majority pushing a decision through over other members objections? Do they call for a vote?
5. Is there any attempt to get all members participating in a decision? What effect does this seem to have on the group?
6. Is the decision made by consensus? Are differences fully explored? Is there unanimity?

Leadership

Leadership involves focusing the efforts of the people towards a common goal and to enable them to work together as one. In general we designate one individual as the leader. This individual may be chosen from within or appointed from outside. In a small group the leadership function (unlike the leader) is not static, but is performed by different members at different times. Thus one member may provide leadership with respect to achieving the goal while a different individual may be providing leadership in maintaining the group as a group. There roles can also switch & change. It is interesting to note how leadership is assumed, challenged, and changed in the course of a small group's life. The reactions, behaviour and role of the designated leader is also noteworthy.

Questions of leadership have presented endless problems to people seeking social change. Leadership has become confused with authoritarianism and the wielding of undemocratic economic and political power in our society. As a result people often refuse to take on leadership responsibilities or do so by emulating the style of leadership they have observed. Neither has resulted in the emergence of viable political and social alternatives for our society.
Our experience has taught us that leadership can best be understood as a set of functions rather than as a personal trait. Dominating leadership is fulfilment by one person of many group functions and roles of leadership at the expense of, and with the co-operation of, other members. In group-centred leadership all members take on responsibilities that often would fall to one person. The result is a less centralised leadership, not vulnerable to the loss of one or two individuals. When all group members share leadership responsibilities the group's cohesion and durability tend to increase.

Leadership is a composite of learnable skills through which the efforts of individuals are co-ordinated to accomplish group goals. These skills are used as is appropriate in a given situation. To exercise group leadership means-

- to accept and clarify feelings of another without threat;
- to aid the group's insight into its feelings and attitudes;
- to relate emotions/feelings to the demands of the present situation;
- to state all sides of a controversy fairly and objectively;
- to summarise group discussion;
- to bring a group to a point for decision making without threat;
- to recognise and interpret forces operating in a group;
- to recognise and articulate themes noticed in discussion;
- to sense the development of tension;
- to co-ordinate the questions and steps a group needs to consider in order to reach a decision;
- to collect thinking and restate it for group acceptance and action;
- to encourage others to gain experience in and learn skills of leadership.

Leadership styles

One way of classifying leadership styles is based on the behaviour of leader, viz.-

1. **The autocratic leader**: who imposes with very little concern for the members' needs, opinions and preferences. Such a leader has great concern for accomplishing the task but little or no concern for the member.

2. **The Lassiez-faire leader**: who has little or no concern for the task at hand, but is concerned about the people, letting them act according to their own wishes.

3. **The democratic leader**: who is equally concerned with the task and the people. In the ultimate democratic tradition the leadership function is shared between members of the group.

The same individual in different circumstances and/or with different groups behaves differently. To understand this we can consider the following factors affecting leadership behaviour.

Factors affecting leadership behaviour

- **Within the leader**: Is the leader convinced about sharing authority? Does s/he have confidence and trust in the rest of the group? - a sense of security? What is her/his value system? This will affect the leadership style chosen.

- **Within the group**: Are members willing to take responsibility? - mature? interested? How cohesive is the group? Can they act together? What is the degree and level of involvement? Is there a sense of autonomy or of independence? These will influence the leadership pattern in the group.

- **Within the situation**: How much time pressure is there? Is there a crisis? What is the nature of problem the group is working on? What is the intrinsic nature of organisation within which the group exists? What is the overall environment? These factors decide the style of leadership.

Liberating Leadership

In almost all real life situations, groups have a designated leader. In a participatory model, the ideal is to reach a state of democratic leadership; but then to practice such a leadership style from the very beginning of group life can have negative results. Trust needs to be built, the members need to
become serious, mature, and committed. These conditions cannot be assumed. Thus, the leader must assume greater responsibility to be open, equal and accountable; humble, sensitive and committed. S/he must enable the group to identify and analyse issues of vital concern to the group, and as the group grows, share his/her leadership with other members. The leader has to help:

- raise the members awareness and motivation
- increase the readiness of members to accept responsibility
- develop group work and group morale
- convince the group that they can affect change
- further individual members' needs for growth and development

**Checklist for observing leadership process**

1. Which members are high in influence? That is, when they talk, do others listen?
2. Which members are low on influence?
3. Do you see any rivalry in the group? Is there a struggle for leadership?
4. Who are the members trying to assume leadership? Do they rely on coercion, expertise, formal authority, personal qualities?
5. How is the designated leader behaving? Is the style autocratic, democratic or laissez-faire?
6. How are people reacting to the leadership?

**Problem solving**

Most groups find themselves unable to solve problems because they address the problem at a superficial level. After that they find themselves blocked because they cannot figure out why the problem occurred and how they can tackle it. An effective problem solving procedure would be to:

1. Clearly define the problem- is it what appears on the surface or are there deeper hidden aspects.
2. Try to thoroughly explore and understand the causes behind the problem
3. Collect additional information, if necessary, and analyse it to understand the problem further.
4. Think of solutions or look for solutions- in this it is useful to stop thinking according to the usual logic and normal sequence, and deliberately think of 'wild ideas' which are apparently not relevant. Creativity and imagination are needed to spot new patterns within the same set of facts. The group should suspend criticism and judgement for a while and try to combine each other's ideas or add on improvements. The objective should be to generate as many ideas and suggestions as possible. This is called "brainstorming" in a group, when individuals try lateral thinking.
5. Choose the appropriate alternative. There will be some conflict to be resolved there. Collaborative and consensus based resolution is preferable to forcing a choice. Considerable discussion is needed to evaluate the various alternative solutions on the basis of constraints and available resources.
6. Implementing the solution through a plan, and evaluating how the problem is solved.

**The Problem Solving Process**

Frequently we talk about identifying, analysing, and solving problems. But there are also "opportunities for improvement" areas where there may not be obvious problems but where a process or procedure could be improved. Don’t overlook them. Problems and opportunities can be throughout- as the 'gap' between what is happening and what is desired. By correcting problems and making improvements you will close that gap.

**Step 1. Identify, select, and define the problem**

Identify, select and define the problem and clarify the desired results. Seek out potential problems or areas for improvement. Define criteria for selecting the most important problems; Define the selected problems operationally: how do we know it is a problem? Determine how we know when the
problem is solved by defining criteria for success. This is not the same thing as defining the solution. Choose a team to work on the problem.

Learn everything about the existing process- Determine where and when the problem is occurring. Understand the process in which the problem occurs.

Determine the basic causes of the problem or where the process is flawed- Determine the factors that contribute to the problem. Use tools to generate and test hypothesis about possible causes of the problem. Collect data to test hypotheses and determine which causes are the “critical few”.

Identify all possible solutions- Think creatively about how the critical causes might be addressed

Choose a solution to implement- Analyse the possible solutions against their ability to meet your criteria for success, the costs involved, the feasibility of implementation, or other criteria.

Pilot test the solution and evaluate its effectiveness- This is the Plan-Do-Check-Act cycle. It involves planning out the steps of implementation (including addressing resistance to change), doing it (implementing the solution), checking out whether it had the desired effect (monitoring the results) and acting on what you found (modifying the solution, extending implementation).

Selecting a problem

You cannot work on all problems at the same time. The list is usually long and needs to be narrowed to the most important areas. For initial problem-solving activities, it is best that the problem is a small one or on a well-focused issue, emotionally appealing, one that others can readily see the value of solving, and one where data are relatively easy to obtain.

Other criteria are needed to narrow down the list. The problem should be considered to be important to the people working on it. It should be feasible (size and complexity are manageable), the benefit of solving the problem should be worth the cost and effort required, and there should be support for changes and improvements in the current process.

Define the problem operationally

Many problem-solving efforts go astray because the group does not have a clear and common understanding of what it is supposed to solve. It is best to develop a statement of the problem in specific and observable terms. The answers to the following questions will assist in defining the problem:

- What do you think is the problem?
- How do you know it is a problem?
- What are the effects of this problem?
- How long has this been a problem? How frequently does it occur?
- How will you know the problem is solved?
- Where do you want to begin looking at the problem? And where do you want to end looking at?

The problem statement should answer these questions, be measurable, and be process oriented. It should never give or imply any preconceived indication of what the cause might be, state or imply a particular solution for the problem.

Choosing a team

Problems solving is most effective when those involved in the problem participate in analysing it and developing solutions. Once the problem statement is written, the next step is to answer the question, “who knows about the process, where this problem is found?” To answer this question you may need to do a flow chart that identifies the major steps in the process and helps you to focus on the key problem area. Once you know the key problem area(s), ask yourself the following questions:

- Who is experiencing difficulty because of this problem? These are the people who are experiencing the problem’s symptoms.
- Who do you think may contribute to the problem? It is important not to blame these individuals.
• Who might help solve this problem?
• Who can help you understand this problem?

These people will provide special knowledge, insights, and services during your problem solving journey. Some, you will work with closely, others you may just call on when you have a specific need.

Step 2: Learn everything about the existing problem

Start with what you know about the problem: clarify your understanding of what is presently happening. Analyse the data that you already have to see if you can answer the who, what, when, and where, of the problem.

Very often people do not have a clear picture of the process, especially the links between what they do as individuals and the work of others in the process. A flow chart is a useful tool to help you understand how the process operates. If you use a flow chart, be sure that it reflects the process as it actually functions also that everyone is working within the same context.

Step 3: Determine the basic causes of the problem

Effective problem solving involves identifying and understanding the root cause of the problem, so that an appropriate solution can be chosen. There are three steps to identifying root causes-

(1) identify all potential causes;
(2) develop theories of cause; and
(3) collect data to test theories of cause.

Identify possible causes

In order to identify the root cause, you should generate a list of many potential causes of the problem as possible. An excellent tool for helping to organise and sort your ideas and to begin creating theories is the cause-and-effect analysis. A cause-and-effect analysis helps you to look beyond the symptoms of the problem, which reflect the manifestation of the cause but do not necessarily indicate the specific cause. A cause-and-effect analysis pushes you to ask, “What causes that and what is behind it?” It is also designed to broaden your thinking about causes and explore other areas that might be contributing to the problem.

Develop hypothesis of cause

When you have finished identifying all possible causes and displayed them, you may find you have more causes than you could possibly investigate. You now need to narrow down and develop some hypothesis about what might be the root cause. This can be done by various decision making methods: expert opinion, voting etc. The point here is to produce a limited number of options from the vast array of possible causes you have identified. The narrowing process will produce your groups hypothesis of causes.

Collect data to test hypothesis of cause

It is important to remember that all the causes you have generated are only theories. Now it is time to collect data to prove or disprove these theories: specially, the goal of data collection is to test theories of cause. Data collection is the key component to making improvements. Your picture of what is going on must be based on facts, not opinions or assumptions. Data collection can also be used to reveal areas for process improvement, verify the existence of a problem, assess the effectiveness of a solution and prevent problems.
Step 4: Identify all possible solutions

Once the root causes of the problem have been identified, it is time for the group to think creatively about how they can be addressed. Selecting a good solution involves having a range of good options from which to choose. The following are suggestions concerning how to ensure that as many solutions as possible are considered:

- Review Steps 1-3 (defining the problem, learning about the existing process, determining the basic causes). Once again look at the precise problem, the unfulfilled need and the process involved.
- Brainstorm to get ideas. Be sure to consider conventional, minor and unconventional solutions. Don’t forget your past experiences!
- Clarify each suggested solution
- Involve people outside the group. Look for those who may be doing similar tasks, even if they are not in the same business. This is referred to as benchmarking. You can find out what others are doing through interviews or surveys.

The important thing to remember when you are developing solutions is “to think outside the box”, to get ideas from other sources, to avoid evaluation, and to ensure that everyone has a common understanding of the suggested solutions.

Step 5: Choose and implement a solution

Once you have identified as many solutions as possible, it is time to analyse them to determine which is the best one to implement. As in Step 1 (selecting the problem), you must determine the choice by examining criteria and constraints.

Criteria: Typical criteria for solutions include:

- Costs of the solution
- Technical difficulties of implementation
- Potential side effects
- Resistance to change
- Time required to implement the solution

It is also important to distinguish between which criteria are a “must” in order to be considered and which are only “wants”.

Constraints: Constraints are unchangeable facts that will limit the options you can realistically consider. It is important to note that these constraints should be challenged and tested prior to acceptance, for many times things that are considered “unchangeable” are, in fact, flexible.

Decision making: Once you have identified the criteria and constraints, discuss each potential solution in light of them. During this discussion phase, identify positive and negative consequences of the alternatives. Essential to effective decision making is the amount of time spent in active discussion as everyone must feel free to present his or her individual point of view. Once the team reaches a point where the members feel that they have sufficient information to make a decision, it can employ various tool for decision-making. These decisions can be made by an expert or by using rank ordering, cultivating, and or matrices.

Step 6: Implement quality improvement solutions

There are four steps to effective implementations of solutions:

- plan the implementation;
- do the implementation;
- check the results of implementation; and
- act on what you find, by either continuing implementation, modifying the solution, or returning to look for a better solution.
Plan: Before you start implementing the solution, you need to determine the objectives and criteria for success. You must also decide who, what, where, when and how the solution will be implemented. It is important to clarify your assumptions at this stage and to think about possible resistance you might encounter. Finally, you need to decide what data to collect to monitor implementation.

Do: Implementing the solution often involves providing training and always involves collecting information to monitor ongoing changes and ease of implementation. Observe how implementation is being carried out. Document anything that goes wrong. Every problem or error is an opportunity for improvement.

Check: Observe the effects of implementation and draw conclusions about “lessons learned”.

Act: Take action on what was learned: Adopt the solution, abandon it, or go through the cycle again to test modifications.

Conflict Resolution

Conflict is inevitable in the life of a group. When members with different experiences, attitudes and expectations come together in a group, differences are bound to arise. These differences are sometimes suppressed and not openly discussed. Sometimes, the emotions behind the differences in the two parties make the expression of conflict quite intense and visible. The important thing to remember is that conflicts exist in all small groups.

Why do conflicts arise? There are a series of reasons. We all face conflicts within ourselves - shall I do this or that (intra-personal conflicts). Conflicts between two persons (inter-personal conflicts) are visible in a group. Members bring different perceptions, values and knowledge. The greater the differences among members of a group, the greater will be the conflicts. For example, we can expect women and men in a group to differ on certain issues.

The differences arising out of information, facts and knowledge are easy to resolve. Confusions about roles, co-ordinator and responsibilities can also be sorted out in the group. The most difficult conflicts to resolve (they perhaps never get resolved) are those arising out of value-differences. Values are the core of ourselves - things we believe in. If you and I believe in different sets of things, it is rather difficult to resolve our differences.

The most important thing that can be done in these situations is to understand the real causes for differences.

Why is conflict seen as a process? Because conflicts do not go away; each conflict resolution also feeds into the next conflict in a group. It is therefore, useful to see conflicts as a series of differences in a group, each having some link to the next. How the group deals with conflicts affects the manner of its functioning.

Ideally speaking conflict is normal. Conflict is natural and healthy in a team. We all live with conflict in both our private and public lives. Conflicts can range from differences of opinion to major personality clashes, from minor to major friction with one colleague or family members to serious moral dilemmas. Conflict can be a potential opportunity. It can bring issues out in the open. It can help us to see problems more clearly and it can lead to more creative solutions. So, don't think that harmony is normal and that conflict is abnormal. On the other hand, conflict must be recognised. Conflict can turn out to be very dangerous if it is ignored or repressed. It can break working relationships and eventually destroy a team.

It is desirable that one should have the knowledge of the following aspects of conflict.

- How to pre-empt a conflict?
- How to recognise a conflict?
• How to bring a conflict out in the open?
• How to resolve conflicts between ourselves and others?
• How to mediate in conflicts between two individuals or groups?

Signs of conflict in a team

In most situations, conflict within a team becomes obvious very early on. If not, here are a few signs of hidden conflict.

• Some members withdraw from active involvement in the team.
• Team members may resist decisions and/or refuse to carry out tasks.
• Some may start arguing about every minor issue and refusing to accept the group's consensus.
• Others may simply avoid work and responsibility or "switch off" and avoid involvement.
• Another reaction is doing everything "by the book" and being formal.
• Gossiping becomes very common.
• Personal stress signs appear: sickness, short-temper, drinking, smoking, drug-taking, absenteeism, apathy, nervous breakdowns.
• Small "cliques" or "factions" appear. Antagonism between the factions increase. "Empire-building" becomes overt.

Pre-empt Conflict

Once the conflict has reached these levels, it is very threatening to the continued existence of the group and certainly prevents any effective work. The best ways of avoiding such damaging conflict can be found by effectively dealing with group processes as described earlier.

Personal behaviour

As an individual member of the group, there are many things that you can do to avoid conflict escalating into major problems:

• Don't let minor disagreements grow into massive problems. Raise the issue at an early stage.
• Learn how to disagree. Learn to put forward your point of view in an assertive way without getting too emotionally involved or attacking the other person.
• Be realistic. Don't assume that the working atmosphere will always be perfect. Learn to accept that conflict is a part of life.
• Accept the fact that you won't always be right; and even when you are, you won't always win.
• Learn to listen to other people.
• When things get heated, humour and/or a short break often helps.

Levels of conflict

Some experts argue that there are basically four levels of conflict:

1. Facts: Disagreement is over basic facts or data. Often the two parties simply have different information.
2. Method: The parties disagree over the best way to achieve a goal/solve a problem (i.e., how to organise the work, including structure, systems and procedures). How do you bring about community participation?
3. Purpose and goals: There is no agreement on teams main aims and goals. What is the overall purpose of the watershed development programme? Are we concentrating on the community organisations or local political structures?
4. Values: The parties disagree about the fundamental meaning of the situation and about things that they greatly value. They have different assumptions about such concepts as community participation, sustainable development, etc.
One can add to this list, conflicts over resources, behaviour (personality clashes), territory, and ethnic differences.

*It is vitally important that you identify the type and level of conflict before you start to resolve it.* The easiest conflicts to resolve are those over facts or methods. The most difficult are those conflicts over values, purposes and behaviour.

**Conflict styles**

There are five main approaches to the resolution of conflict.

1. **Accommodating:** Disagreements are smoothed over or ignored. People try to be nice to each other and the real issues are not addressed. The maintenance of "surface" harmony or peaceful coexistence is emphasised. Often one party will sacrifice his/her interests in order to satisfy the concerns of the other party.
2. **Avoidance:** The conflict is simply avoided in the hope that the problems will simply disappear. Neutrality is maintained at all costs.
3. **Competing:** The "in at all costs" attitude.
4. **Compromising:** Though bargaining and compromising, the two parties find an expedient and mutually acceptable solution that partially satisfies everyone. But the solutions are not usually the best or most creative ones.
5. **Collaborating/problem-solving:** The parties join together as a problem-solving team to find the most effective and most creative solution.

**Resolving Interpersonal conflict**

The best way of resolving interpersonal conflict (i.e. between individuals) is to use various negotiating techniques. This is particularly true in cross-cultural situations. If the situation is very tense, one can try using the following process:

1. Recognise that there is a conflict and that it has to be resolved.
2. Analyse the causes of the conflict
3. Assess your attitude to the conflict (are you responsible?)
4. Prepare your strategy and tactics
5. When you start the discussion, agree on a procedure (e.g. suggest that B begins and A listens. Then A speaks and B listens. There should be no interruptions).
6. When giving your viewpoint, state clearly and concretely how you feel, why and what the consequences are for you.
7. Use active listening techniques.
8. Focus on the interests/needs rather than the positions.
9. If an agreement is possible, clarify and specify the commitment of both parties.

**Resolving Inter-Group Conflict**

Serious conflict between two groups within the organisation or between two teams will need a more complex approach. The following process describes one way of approaching the problem.

1. **Facilitator:** Appoint a facilitator (somebody completely neutral, with a lot of experience).
2. **Preliminary meeting:** Hold a preliminary meeting to get commitment from participants to try to resolve the problems. Establish some working "norms".
3. **Group characteristics:** At the first session, separate the two groups and ask them to prepare a list of the characteristics of the other groups which they like, and they dislike (or which prevents them from carrying out their work effectively). Then bring the two groups together and get them to present their lists. Questions on fact and understanding the allowed (no debate).
4. **Problem identification:** Ask each individual to write down a list of the problems preventing the two groups from working together. Then organise separate meetings of the two groups. Each group has to prepare a consolidated list of the problems. Representatives of the two groups meet to make one list
of all the issues (not in order or priority). Then everyone meets and each individual has to select the five most pressing problems that affect him/her the most. Finally the top five issues are selected for immediate action.

5. **Problem-solving**: Five task forces are formed with equal numbers from each group. Each task force is assigned one problem to analyse the suggest solutions. Everybody meets and the task forces present their solutions for discussion. After a debate, the task forces meet to finalise their recommendations. This continues until agreement is found (or agreement is found to be impossible). If there is no success, mediation or arbitration would be necessary.

**Group strategies**

During the life cycle of a group, it may at many times be subjected to a variety of problems, complex in nature. A group must be efficient enough to handle such situations and develop group strategies to deal with them. If a group is capable enough to tackle such issues, then it is a healthy sign for a strong farmers group.

**The unconsciousness processes**

The various processes mentioned earlier describe what takes place when decisions are made or how communication takes place, but they do not provide information as to why things happen the way they do. In order to understand 'why' things happen the way they do, one needs to consider some unconscious processes that occur within groups, some emotional undercurrents that produce interfering or destructive behaviours.

**Response to authority**

From the moment we enter a group we unconsciously try to relate to the authority figure in the group. Depending upon our individual experiences and reactions to authority in the past the first response is either one of dependency, or of counterdependency.

- **Dependency**: Members look to the authority to tell them what to do. They are lost without the authority figure and seek security from it.
- **Counterdependency**: Members resent authority, their behaviour reflects hostility towards authority.

Emerging from these stages what has to be achieved is a state of interdependence where members can relate with each other reciprocally.

**Fight, flight and pairing**

Working cohesively in a group is not a natural function. The unconscious response to being in a group is either to fight, to flee, or to pair up. Various behaviours within the group provide clues to these unconscious processes.

- **Fight**: Disagreeing, asserting dominance, attacking whatever is believed to be responsible for stress, trying to get one's own way.
- **Flight**: Staying out of discussion, day-dreaming, changing the topic of discussion, making irrelevant remarks, cracking jokes continuously.
- **Pairing**: Forming pairs or subgroups which are not task oriented, in which members protect and support one another.

In order to function cohesively and work towards the goal these unconscious processes must be resolved. They have to be recognised, not ignored or denied. Once these processes are identified, the group needs to work with them so that emotional energies are channelled towards the group's effort.
Roles of Group Members

An infinite variety of behaviours may be seen in groups. Some group members may tend to be "all business"; they try to set task objectives, they process information necessary for the task and they push for completion of the group assignment. Behaviour of this type is often referred to as task-oriented role behaviour. Some behaviour is directed more toward maintaining group harmony and cohesiveness; encouragement is given, communications are fostered and conflicts are mediated. This is referred to as maintenance role behaviour. This behaviour is directed toward maintaining the vitality and functioning of the group, whereas task-orientation behaviour is focused on the solution of the problem or achievement of the task established for the group. Finally, another type of individual behaviour is observed which is not oriented toward any group function but rather is directed toward the resolution of a person's own needs. This is different from the others in that it is not relevant to the functioning of the group, while the others are relevant. We should not assume, however, that individual need for satisfaction is not important or that it does not affect the performance of the group.

The three roles just described - task, maintenance and individual- are seen in most groups. Furthermore, some members tend to emphasise, or specialise in one role, in other words, a person may concentrate on the task function to the exclusion of maintenance activity. Other members may assume a variety of roles. However, for the group to develop its maximum potential and to function effectively, both task maintenance roles must be performed and they must be performed at the appropriate time. Thus, there is a time when humour is important to the group, for example, as a means for reducing tension or conflict, and there is a time to call the members attention to the objective, such as when they begin to lose sight of their purpose. Finally, the emotional aspects of individual role behaviour cannot be wished away or ignored. They must be confronted and resolved if those members are to be effective contributors to the group.

Some of the group processes highlighted in this module, which need to be carefully observed and understood, are-

1. Communication
2. Trust
3. Cohesiveness
4. Self disclosure, openness and honesty
5. Decision making
6. Leadership skills and qualities
7. Problem solving
8. Conflict management
9. Group strategies
Session 3.1

Communication

Objective
- To help participants appreciate the importance of one-way & two-way communication.
- To appreciate the importance of listening carefully.

Time
30 minutes.

Materials
A simple line drawing, and two blank sheets of paper for each participant.

Method
Structured group exercise

Procedure
Step 1. Ask for one volunteer. Sit that person with her/his back to the rest of the group.
Step 2. Give to the volunteer the sheet with diagram & make sure no one else in the group can see it.
Step 3. The volunteer is then asked to explain verbally to the group what s/he sees, giving only verbal instructions on how to draw the figure. The rest of the group are asked to draw what they are told by the volunteer on the blank sheet of paper, titled Diagram 1. The volunteer is not allowed to make any gesture, turn around, etc.
Step 4. In the first phase of the game, the rest of the group are not allowed to ask questions; they must draw the diagram in silence. When the volunteer has finished the instructions hand the second sheet to him/her. It is the same picture but the others will not know this.
Step 5. The group is asked to start on this new sheet of paper titled Diagram 2 and repeat the exercise, but this time the group can ask questions and the volunteer is allowed to answer verbally, without any gestures. At the end, various diagrams are compared with the original.

Note to the trainer
- If time is short, this exercise can stop after the first phase as a demonstration of the difficulties of one-way communication. Debriefing should concentrate on discussion of the relative ease of one and two-way communication and the difficulties of both. The following questions can be discussed.
  - "At what point did the rest of the group get confused?"
  - "What assumptions was the volunteer making?"
  - "What would have made it easier for the group to understand (analogies like bricks, directions)?"
- This diagram is good because, if described clearly it can be drawn accurately. If other diagrams are used, they should be structured in a way that, it is possible for the volunteer to make analogies with the object.
- The second part of the activity with permission to ask questions, takes longer than first but feels less frustrating. More accurate pictures are drawn, helping them understand some essentials of good communication like- speaking clearly and precisely, listening carefully, giving and getting feedback, not assuming that people understand what is meant, being aware of non-verbal messages and asking questions when you don't understand.
Session 3.2

Trust

Objectives
- To offer the participants an opportunity to examine and enhance their relationships with one another.
- To demonstrate the importance of trust in the way people build relationships.
- To allow the participants to explore and enhance their nonverbal communication.

Time
One hour

Materials
A blindfold for each pair, A physical setting with a great deal of space and a multitude of objects to be explored (for example, a park with a playground, with stones, bushes, gates, etc).

Method
Non Verbal Trust Walk

Procedure
Step 1. The facilitator asks each participant to choose as a partner someone for whom he or she has neutral or negative feelings. The participants are to complete this procedure without talking.

Step 2. The facilitator distributes blindfolds and gives the following instructions to each pair: "Decide which of the two of you will be blindfolded first. You are going on a trust walk, and your partner will lead you."

Step 3. After one member of each pair is blindfolded, the facilitator gives these instructions: "Those of you who are not blindfolded have fifteen minutes to lead your partner around the area. Let your partner depend on you. Lead your partner over, through, under, and around things and places. Get your partner to explore, smell, touch, hear, and taste things. Return after fifteen minutes for further instructions."

Step 4. After participants have returned and the blindfolds have been removed, the facilitator gives these instructions: "Now choose a partner for whom you have positive and warm feelings. Do this without talking."

Step 5. Steps 2 and 3 are repeated.

Step 6. After all participants have returned and the blindfolds have been removed, ask the participants to share their feelings within the groups.

Step 7. Debrief the participants and lead them to a concluding discussion.

Note to the trainer

Focus the de-briefing on the following questions:
1. How did you feel during the walk (when blindfolded and when leading your partner)?
2. How did you feel about being totally dependent for your safety on your partner?
3. Were you confident about your partner? Did you mistrust him/her? Why?
4. How did you react at various difficult points during the walk?
5. How did you use other parts of your body?
6. Does this happen in real life?
7. Discuss elements of trust between people, organisations, dynamics of trust and non-trust positions.
8. If the session has been video-taped, review the exercise in light of shared experiences.

Objectives
- To encourage the development of cohesiveness within a group.
- To provide the participants with positive feedback in order to help build their feelings of self-esteem.
- To promote awareness and sensitivity to their own positive traits as well as those of others.

Time
Approximately 1 hour

Materials
A copy of the Instruction Sheet and Activity Work Sheet for each participant. Prior to conducting the activity, the facilitator writes the participants initials on the work sheet (one participant's initials in each box) and also prepares a copy of this worksheet on a large flip chart to be pasted on the wall for the participants to stick their responses, a pencil for each participant, several pairs of scissors, a flip chart and a felt-tipped marker.

Method
Structured group exercise
Procedure

Step 1. Inform the group members that now they are going to participate in an activity that involves no talking. Give a pencil, a copy of the instruction sheet, a copy of the activity work sheet, and a portable writing surface to each participant.

Step 2. Asks the participants to read the instruction sheet. Ensure that the directions are understood. Inform the amount of time allowed to complete the activity work sheet, and start the activity.

Step 3. At the end of the designated time, reconvene the group. Encourage the participants to discuss the processes they used to discover the initials of others and the mental processes by which they decided to make the positive comments.

Step 4. Now distribute scissors and asks the participants to cut apart the separate boxes on their activity work sheet and paste it against the individuals respective box on the Activity Work Sheet drawn on the flip chart.

Step 5. Ask each participant to choose the three sets of comments that he or she likes best and encourage him/her to talk with the group members about the positive feedback in these comments. After the sharing, invite the participants to take turns writing the chosen comments on newsprint for all members of the group to view.
Note to the trainer

Your own initials may be included on the Activity Work Sheet, so that you may participate in giving and receiving positive feedback.

Source: Barbara Kane (1996)

Instruction Sheet

During this activity do not talk to the other members of the group. Find out whose initials are written in each box on the Activity Work Sheet. Then list in each box the qualities you like about that particular person, excluding comments about appearance, clothing, and possessions. In the box that bears your own initials, list the qualities you like about yourself.

**Activity Work Sheet**

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Session 3.4

Self disclosure, openness and honesty

Objectives
- To help the participants achieve greater insight into how they perceive themselves and one another.
- To establish a deeper sense of openness and honesty in a group.
- To allow the participants to give and receive feedback.
- To encourage self-disclosure.

Time
Varies depending on the number of participants.

Materials
A room large enough so that the participants can form a circle around one group member. A written list of four negatively oriented questions that a group member might ask of himself or herself (Prepare this list prior to conducting the activity). The following are few examples:
- Am I hostile?
- Do I represent myself as being dishonest?
- Am I materialistic?

Method
Structured Group Exercise- Tell me what you see

Procedure
Step 1. Instruct the participants to form a circle and ask for a volunteer to stand in the middle of circle.
Step 2. Give the volunteer the written list of questions. Ask him/her to address these questions, one at a time, to the remaining group members. Each of the remaining group members reply to each question. Don’t allow any other discussion.
Step 3. Now ask the person in the center to answer the questions that he or she has been asking others.
Step 4. Ask for a new volunteer. Instruct the first volunteer to give list of questions to new volunteer.
Step 5. Repeat Step 2 through 4 until all group members have had their turn in the center of circle.
Step 6. Lead a discussion based on these questions-
1. Were you surprised at the answers you received to your questions? If so, in what way? How did you feel about the feedback you received? Do you perceive it as accurate?
2. How did you feel about being in the center of the circle? Did your feelings change as you asked more questions? If so, in what way?
3. What did you learn about yourself? What did you learn about other members of the group? Have your feelings changed toward anyone in the group? If so, in what way?
4. Were you hesitant in asking or answering any questions? If so, which questions and why?

Possible variation could be-
- You may have each participant write four negative questions. The volunteer chooses four questioners before being told their questions and then answers all of their questions. During the process, you address not only the questions in Step 6 but also question the volunteer's reasons for choosing the questioners.

Note to the trainer

Session 3.5

Decision making

Objectives
- To enable the participants to investigate the dynamics involved in decision making process.
- To encourage the participants to understand the decision making process in an organisational set up.

Time
4 Hours

Materials
Flip charts, writing paper, pens, role briefs written on separate papers
Handout 3.5.1- The case of a new diesel Jeep

Method
Structured group exercise

Procedure
Step 1. Inform the participants that each one of us makes decisions everyday in our lives. Often these decisions are made without thinking too much about them. But decision making processes in a group/organisation is influenced by many factors, because of the multiple actors involved in the process. Tell them that in this session we would try to understand the dynamics involved in the decision making process both in our daily lives and also in an organisational structure.

Step 2. Ask the participants for some examples of decisions they make every day. If they think they do not make decisions, remind them of simple day-today decisions they might be making. Now ask them to think of one decision, which they have recently made. Give them time to think.

Step 3. Now ask them to examine their decisions in relation to the various factors that would have influenced their decisions. Give them 20 minutes to do this. Encourage discussions.

Note to the trainer
You can discuss their decisions in light of the following questions-
- Was my decision made freely without external force? If not, why not? Why did I allow external pressures to influence me?
- Do I feel good about the decision I made or do I wish I had made a different decision? Why do I feel good or not so good about the decision?
- Did I carefully consider the advantages and disadvantages of my decisions and thoughtfully consider the consequences? How do I get the information I needed to help me make the best decision?
- Did I make my decision after examining all possible options? What were some of the other options?
- What personal values are reflected in my decision?
- Have I made my decision public? Whom have I told?
- Does my behaviour indicate that I repeatedly act on certain beliefs that make a pattern in my life? Which values and beliefs are most evident?

Step 4. After 20 minutes, when the participants have completed their discussions, share in a large group, the broad principles that guide the process of decision making and the links between values, roles and decisions.
Step 5. Next inform the participants that now we are going to analyse the decision making process in an organisational framework. Give them general instructions from Handout 3.5.1, about the exercise. Take about half an hour to brief the participants about the exercise.

Note to Trainer

- Do not distribute Handout 3.5.1 to the participants before Step 6.
- Explain only the general instruction to the participants at Step 6.
- Prepare the role briefs, before starting the session.
- Brief for each role should be on a separate paper.
- Every role brief is confidential and should be disclosed only to the concerned person playing that role. It is not supposed to be discussed with any one else in the group.

Step 6. Select six persons from the group depending on their various qualities. You can help them in doing so. Rest of the participants are required to play the role of observers.

Step 7. Distribute the role briefs to each of the six participants. You can fix badges on their shirts for everyone to identify the role being played by a particular person. You can now go personally to each of the six and help them to understand their roles. This will facilitate them to better perform their roles. Take about 20-30 minutes to do this. After all are ready and the stage is set, ask them to start the exercise with a scene inside a meeting hall. Instruct the observer team to very carefully observe the processes going on, the dynamics involved and take down notes.

Step 8. Help the participants perform the exercise with minimum necessary interference, that too only when they get stuck up. Avoid giving too many instructions. Let them perform for about 2 hours, with time the participants will feel more and more engrossed into the roles they are performing.

Step 9. After the team has come to a consensus on the decision made by them. Stop the exercise.

Step 10. Start debriefing, encouraging everyone to participate and asking them about their feelings on the various process they went through and the dynamics involved. Supplement the discussion with observations of the observer team.

Step 11. Close the session highlighting the dynamics of decision making process in real life situations.
THE CASE OF THE NEW DIESEL JEEP
An exercise in Organisational Decision Making

1. General Instruction

You are incharge of the various rural community centres run by a Rural Development Agency (RDA). You have several sub-centres to supervise, besides making visits to the RDA headquarters in Bhubaneshwar.

Each of you have been allocated a Jeep which, apart from you is also used for general community centre work, of course with your permission. Although the Jeep is allotted primarily for official use, in small places, such as those where you live, most of your work can be said to be official or quasi-official. The Jeep, and its general condition, also spells an element of personal prestige among the other officials and non-officials in your area of operation. It is, therefore, natural for you to have a possessive feeling about your Jeep. You like to have a new Jeep as and when available not only because it looks nicer, gives you, greater social status but also because it is trouble-free.

Here are some facts about the Jeeps that incharges of community centres reporting to Mr. Rehman, Chief Co-ordinator of RDA, have-

**Mr. Narsingh**
Senior-most among community centre incharges. He has a diesel jeep, two years old. *(Location- 50 Kms. from Bhubaneshwar).*

**Mr. Joshi**
Incharge for 6 years. Has a land-rover 5 years old. *(Location- 45 Kms. from Bhubaneswar).*

**Mr. Chatterjee**
Incharge for 5 years. Has a diesel jeep, 4 years old. *(Location- 70 Kms. from Bhubaneshwar).*

**Mr. Srinivasan**
Incharge for 3 years. Has a diesel jeep, 2 years old. *(Location- 75 Kms. from Bhubaneswar).*

**Mr. Mehta**
Incharge for 2 years. Has a petrol jeep 5 years old. *(Location- 55 Kms. from Bhubaneshwar).*

Mr. Narsingh and Mr. Joshi, cover somewhat larger areas than the rest. All of you have a standard budget to cover use of the vehicle.

Rehman has just received a attractively coloured new diesel Jeep for replacing one of the existing Jeeps. Mr. Rehman is in the process of taking a decision as to which community centre should be given this Jeep; and what other consequential reallocation of vehicle may be necessary, if at all.

2. *Mr. Rehman’s brief (CONFIDENTIAL)*

You have just received the new diesel Jeep. For the first time you have got this new Jeep to replace an old one. You have been in this organisation only for the last one and half years. You have the problem of deciding as to which of the Community Centres should get it. Often there are hard feelings because each community centre incharge seems to feel that he deserves a new Jeep; so, you have a tough time being fair. Your confidential data are:
<table>
<thead>
<tr>
<th>Name</th>
<th>Task-related competence</th>
<th>Condition of Jeep</th>
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<tbody>
<tr>
<td>Mr. Narasingh</td>
<td>Average Incharge, has a bossing tendency</td>
<td>Good Condition</td>
</tr>
<tr>
<td>Mr. Joshi</td>
<td>Average Incharge, but usually vocal on behalf of his tribe &amp; has contacts in influential circles</td>
<td>Below Average Condition</td>
</tr>
<tr>
<td>Mr. Chatterjee</td>
<td>Above average. His wife works at a location in the neighbouring district. Finds reason to visit that area quiet often on whatever pretext within rules</td>
<td>Average condition</td>
</tr>
<tr>
<td>Mr. Srinivasan</td>
<td>Below average Incharge</td>
<td>His Jeep had an accident for no fault of his or his staff, although in good condition, it rattles.</td>
</tr>
<tr>
<td>Mr. Mehta</td>
<td>Very competent Incharge</td>
<td>His Jeep is in bad shape. The engine is getting worn-out.</td>
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Plan how you are going to act in the matter.

3. Mr. Narasingh’s brief (CONFIDENTIAL)
You are the Senior most among Community Centre Incharges. You do expect a more responsible assignment within-RDA in about one year. Seniority to you, is a valid ground for deciding on the allocation of the new Jeep. Your Jeep which is in a good condition can be given to another Community Centre. Your Community Centre is also extensive compared to some others. Plan your strategy in the matter.

4. Mr. Joshi’s brief (CONFIDENTIAL)
Your Land-Rover is almost junk. You are the second senior most Community Centre Incharge in the RDA. You are also respected by other incharges who accept your leadership; and it is unlikely that anyone will grudge if the new jeep is given to you. You have connections in the right places, and the chief co-ordinator is aware of it. You do not see any reason why the Jeep cannot go to you. Plan your strategy in the matter.

5. Mr. Chatterjee’s brief (CONFIDENTIAL)
Quite a large amount of driving that you do is long distance; and you enjoy driving. Quite often you drive the Jeep yourself; and only if you are not travelling does the driver get to use the Jeep. Besides, you have proved to be effective as incharge of your community centre, and the various programmes are making good progress in your area. You will see allocation of the new Jeep to you as a recognition of your performance, Plan your strategy in the matter.

6. Mr. Srinivasan’s brief (CONFIDENTIAL)
Your Jeep was hit sometime ago by a way-ward truck while parked on the road outside the RDA office in Bhubaneswar, where you were attending a meeting. Since then, the body rattling continues. Your Community Centre is also farther from the RDA office compared to some others. You would like to get rid of the present ramshackle vehicle. Plan your strategy in the matter.

7. Mr. Mehta’s brief (CONFIDENTIAL)
Although the junior most among the Community Centre Incharge, you have proved to be the most successful of the lot. Figures speak for themselves. Yet, you have a petrol Jeep, that too in a bad shape. Diesel Jeep is the going thing being more economical. Jeep is a functional necessity and the element of seniority should not stand on the way to your claim on the new Jeep. Plan your strategy in the matter.
Session 3.6

Leadership skills & qualities

Objectives
- To enable the participants to identity some personal qualities needed for effective village leadership and watershed development.
- To help the participants identify skills for identifying leadership qualities

Time
3 hours

Materials
Flip chart, pens, white/black board, markers, chalks
Handout 3.6.1 - Some ideas about good leadership

Methods
Brainstorming

Procedure

Step 1. Inform the participants that, every community has some people who are natural leaders. Leadership cannot/should not be imposed. Tell them in this session we would aim to identify some of the personal qualities and skills required for identification of leadership qualities for effective village development.

Step 2. Ask the participants “What is a leader?”. Be sure to explain that “leaders” are not only people with official titles. Help them to understand that they can also be leaders in encouraging their communities to take actions for improvement. Brainstorm for ideas.

Note to Trainer
A leader is an individual-
- who exercises positive influence upon others.
- who exercises positive influence in goal setting and achievement.

Step 3. Next ask “How does a leader use his/her influence upon others?” Brainstorm for ideas and chart responses.

Note to Trainer
Possible responses could be-
- through the use of authority
- through the use of power, either through coercion or power derived from such inner resources as persuasiveness and understanding
- through communication process, transmitting messages or ideas without distortion.

Step 4. Divide the participants into four subgroups and ask them to discuss among themselves and chart responses on, “What is a good leader?” Explain them to focus the discussion on the qualities they would want to see in their leaders.
Step 5. Ask each of the subgroups to present its output to the entire group. Encourage discussions, comments and suggestions after each presentation. Distribute Handout 3.6.1 and summarise the list adding your own ideas. Emphasise that the most important measure of effective leadership is when people continue working together to achieve their goals, even if the leader is not present. A good leader should also train others to take his/her place.

Step 6. Now, ask the participants to recall their experiences in having organised some activities in their villages in the past. Ask them to describe what exactly they had done which they thought was quiet exciting.

**Note to trainer**

Activities can be (some examples)-
- Singing at village festivals leading a group
- Planning, rehearsing and conducting a village drama
- Conducting village meetings
- Arranging for a village festival/occasion
- Organising a representation to the PANCHAYAT for basic necessities
- Any other such occasion wherein they felt they had done some thing.

Step 7. Chart the responses on the board along with the names of participants. Lead the discussion further to realise that they have exhibited qualities of leadership.

Step 8. Continue the discussion and ask them, “was it because...”?
- you had clear practical knowledge of what was to be done?
- you had the talent or ability to take the lead?
- you had the courage to try out your capabilities in certain situations?
- you had an urge to do something good?

What was it in you that made you do, what you did? Ask them to describe.

Step 9. The answers could be one or a combination of several qualities. Continue by asking the participants to recall some activities when they enjoyed being just followers or observers. Take note of what they say and ask, “Are we not good leaders in certain things and good followers in certain others?” Ask them to discuss and identify leadership skills.

**Note to the trainer**

Help the discussion to gradually identify-
- It is true that some like to lead more and some like to follow more. One should not let others lead all the time and one should not try to lead all the time. Those who only follow will lose their initiative, which in turn limits their opportunities for development. Those who lead all the time prevent others who may be better at leading particular activities. We should ascertain who among ourselves is good at what activities and the right job should be delegated to the right person. Leadership can also be a group task, as we see quite often.

Step 10. Discuss the following skills for identifying leadership qualities-
1. In previous steps, what were the actions that helped success of the events?
2. Are the following skills of the leader important for each successful event-
   - Skill in making people understand the objective
   - Skill in planning the activity well
   - Skill in organising the human, physical and financial resources
   - Skill in communication
• Skill in taking appropriate decisions  
• Skill in involving people  
Help them synthesise learnings from this discussion.

**Step 11.** Inform the participants that the above process is effective in identifying leaders in their village communities who can be effective in watershed development-activities.  

**Step 12.** Close the session synthesising the important learnings from the session.

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**Handout 3.6.1**

**Some ideas about good leadership**

A good leader is-

• One who puts the group’s interest above his/her own  
• Broadminded, wise and analytical capable of making decisions  
• Flexible and understanding  
• Principled and courageous  
• One who knows how to listen  
• One who gets his/her members to work together
Session 3.7

Problem solving

Objectives
- To enable the participants to understand the importance and steps of problem solving process.
- To demonstrate that groups empowered to solve their own problems are much more successful than if instructed by outsiders.

Time
4 hours

Materials
Flip charts, felt pens, writing pads, pencils
Handout 3.7.1 Problem Solving
Handout 3.7.2 A list of sample situations faced in rural areas

Method
Brainstorming and ‘Knotty Problem’

Procedure
Step 1. Introduce the session by telling the importance of problem solving in our real life situations. Brainstorm for ideas on how one tries to solve problems as they arise. Encourage ideas and supplement participants views with Handout 3.7.1. Distribute the handout and allow sufficient time to read. Clarify doubts, if any.

Step 2. Divide the group into small groups of upto five people. Ideally these should be the groups that are going to work together in the field.

Step 3. Distribute the prepared sheets of sample situations (Handout 3.7.2) to the groups. Ask them to consider what they would do if they encountered these problems in the field.

Step 4. When each group has considered their strategy for dealing with each problem, ask them to report back to plenary. When all the problems have been discussed, including comments from other sub-groups ask each group to agree upon a team contract amongst themselves. This team contract is based on the discussions and is expected to serve as a code of conduct for the field.

Step 5. After the team contracts have been made, encourage everyone to write theirs in the back to their field notebook. You can also ask them to share it with the other groups.

Note to the trainer
- The sample situations list should contain a mix of problems relating to both group dynamics and difficulties related to using various participatory methods in the field. All of the 25 situations given as examples are problems that have arisen in real field work.
- The success of this exercise lies in anticipating problems related to field work and dealing with them before they occur. In this way teams will know better what to do when such situations arise. Discussions is usually most animated amongst participants who have field experience, as they will illustrate problems and strategies with stories from their past.
- Having the contract on their notebooks means that problematic team members can be encouraged simply to look at and stick to their contract, rather than be confronted directly with their behaviour. These rules helps to guide the teams thorough small crises.

Step 6. Tell them that now we are going to play a simple game in trying to solve a given problem.
Step 7. Select one, two or three participants to act as managers. They are asked to leave the room while you instruct the rest of the group.

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Step 8. Ask the remaining participants to hold hands in a circle and tie themselves into as entangled a knot as possible. They must not let go of each other’s hands at any cost.

Step 9. Tell the participants to follow the managers instructions literally and not make it easier for them by doing what they have not been told to do.

Step 10. Once the knot is complete, the managers are asked to return and to unravel the knot within three minutes, using verbal instructions only.

Step 11. Instruct the managers to hold their hands behind their back. They are not allowed to touch the group, only instruct them verbally.

Step 12. The first attempt is generally not successful and sometimes even produces a more complex knot. Now repeat the exercise with the managers participating in the knot. When the knot is ready, simply ask the participants to “get out of the knot yourselves”.

Step 13. Allow the participants to relax at their respective places after the activity. Start debriefing. Encourage their views on the experience in trying to untie the knot. Close the session highlighting the learnings from the session.

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**Note to the trainer**

The second untlying process is usually much quicker. Ask participants to comment on what relevance this has in our real life situations. You can raise various issues:

- What does the game tell us about the role of ‘outsiders/managers’ and ‘insiders’ (in the knot).
- What does the exercise tell us about the effectiveness of ‘outsiders’ and ‘managers’ in organising people?
- What does the game imply for facilitating participation in community development?

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Handout 3.7.1

Problem-Solving

Sometimes it seems that we spend our entire lives solving problems. As soon as one problem has disappeared, another one arrives. In practice problem-solving and decision-making go together. You cannot take a decision before you have analysed the problem and the possible solutions. In fact, by solving problems, you are automatically taking decisions. Normally a seven step process is adapted in solving any problem, however simple or complex the problem may be.

Seven steps to problem solving
1. Current Situation
2. Desired situation
3. Problem/obstacle
4. Causes of the problem
5. Identification of options
6. Analysis of options
7. Decision making

Current Situation—What is the current situation? What is going on?
Desired Situation—What is the desired situation? What do you want to happen? (This stage might seem to be a little pointless. But it is always worthwhile spending a few minutes to reflect on the situation and it is essential to decide what you want. How can you reach a place, if you don't know where you are going?)
Problem/Obstacle—What seems to be the problem i.e. the obstacle that is preventing you from going from the current situation to the desired situation? At this stage we often identify the symptoms of the problem.
Causes of the problem—What are the root causes of the problem? What are the real problems that we must solve if we are to get to the desired situation. Many people fail to identify the real problems. They choose a symptom and try to solve it. Unfortunately, in such situations the problem keeps reappearing.

For example—A lot of people are suffering from diarrhoea and they go to the village clinic. The current and desired situations are very clear. They are sick and want to be cured. If doctor decides that diarrhoea is the problem, he will give some medicine & send them away. For a few days they are better then diarrhoea returns.

The diarrhea is a symptom of the problem. The doctor normally would ask about the cause of the problem, which may be the river water. This water can be treated but it may be necessary either to stop the pollution at source or to find an alternative source.

In this example, the analysis of the causes of the problem will generate an immediate action (medicine), a short-term solution (water treatment) and a long-term solution (new sources of water).

Identification of Options—Once you have clearly defined the causes of the problem, you can move on to looking for solutions. It is very tempting to jump to the first and most obvious solution that comes into your head. Take some time to generate all possible solutions to the problem. Brainstorm and record all ideas, even wildest ones.

Analysis of Options—Once you have exhausted your creativity, take a short break and then structure the various ideas into groups. This will help you to analyse the strengths and weaknesses of each option.

Decision—Finally, you can decide which of the various options you are going to adopt. In most cases, you will probably decide on a package of activities. In the example cited above a package of activities could probably be—diarrhoea in the village requires medicine, a health education campaign, a well, a publicity campaign against the factory that is polluting the river, and so on.

Three main errors—There are three common errors made in problem-solving. Jumping to a solution before analysing the problem, failing to identify the real cause of the problem and taking the most obvious solution without trying to explore creative possibilities.
A list of some sample situations faced in rural areas

What would you do if.... ?

1. In a small group interview the informants are very silent, unresponsive and reluctant to answer your questions?
2. Part way through a small group interview, some farmers say they must have to attend to other matters?
3. A member of your team is late again in the morning and the other team members are irritated?
4. A team member is over-enthusiastic and keeps interrupting the farmers when they are speaking?
5. On the final day of the field work, important new information arises which contradicts an earlier key finding?
6. In the review meeting with farmers, the local leader tries to control the choice of research priorities?
7. You arrive in the community planning to begin with mapping and modelling, but the team is nervous and unsure how to start?
8. A farmer calls you over as you are walking back to the vehicle looking forward to having something to eat and drink?
9. In front of a group of farmers, one member of your team contradicts what one of the farmers has just said?
10. The majority of people in the village in which you have been working identify income generation, health and sanitation, and rural roads as more important than the work of your institution’s priority?
11. One member of the team is frequently giving negative criticism in team discussions?
12. You realise by the end of the second day that very few women have been interviewed, although they appear to be actively engaged in farming activities in the attachment?
13. One of your team members wishes to leave the day before you complete the fieldwork?
14. A very senior member of staff of your organisation wishes to attend the fieldwork to observe the participatory methods but, as s/he knows little of the attitudes required for good participation, you fear s/he will simply lecture the farmers?
15. After the initial briefing of your team, during which they appeared to have a good grasp of the concepts and objectives, they do not seem to know how to begin using the methods upon arrival in the village?
16. The information on fuelwood received from the women farmers largely contradicts that collected from men?
17. One of your team members accuses another of making an offensive remark and refuses to work with that person?
18. Towards the end of the day you meet a farmer who knows a great deal about experimenting on crops, but some of your team members are too tried to interview that person and would rather return home?
19. One team member is not participating at all in the team discussions at the end of the day, during which the day’s information is being analysed and the next day’s checklist is being developed?
20. An official, who has accompanied your team to the community, misrepresents the purpose of the participatory work to the community?
21. You asked a group of farmers to create a model of their village but they do not seem to know how to begin?
22. One team member is taking a condescending and patronising attitude towards the farmers and tends to lecture rather than listen?
23. You return from a transect walk and find that the village map has been produced entirely by the other members of your team without active farmer involvement?
24. During the matrix ranking and scoring, the more articulate and better dressed male farmers dominate the discussions about local farming priorities?
25. The information you collect during the participatory analysis seems to contradict your secondary data sources?

Note- These are some of the common situations one frequently encounters while in the field.
Session 3.8

Conflict management

Objectives
- To enable participants to understand decision making and conflict resolution processes in a group.
- To highlight the conflicts and tensions that take place within a group of people due to hierarchy, vested interests, differences in perception and perspectives, etc.

Time
3 hours

Materials
Flipchart, felt pens, notebooks, pencils

Method
Structured experience- Society for Organising & Upliftment of the Poor (SOUP)

Procedure
Step 1. Inform the participants that now they are going to perform an exercise on conflict resolution.
Step 2. Select a group of 8 members from the entire group of participants. Allocate a specific role (as per the exercise) to each member of the group. Tell the rest of the participants that they are going to act as observers and invitees from other organisations.

Note to the trainer
Who plays what roles should be decided by you, well in advance, based upon the abilities that the members of the team have in being able to realistically play the role and ensure that learning is kept uppermost in their minds. Other members of the remaining groups should be assigned special roles as observers/invitees etc.

Step 3. Explain the exercise to the participants. Ask for any clarifications and questions.
Step 4. Distribute each of the 8 members their role briefs to be read. Brief each individual about his/her role separately. Other members should not know about the individual briefs of each other. Brief the remaining participants on their roles as observers and invitees.

ROLE BRIEFS

1. Secretary

You are one of the persons who set up Society for Organising & Upliftment of the Poor (SOUP) and are its Secretary and the Chief Executive functionary since its inception. You have convened this emergency meeting of the Executive Board to consider three agenda items. You should introduce the agenda and ask the permission of the President to discuss them one by one and provide the necessary information.

On the first item, you feel that the project proposal of credit to the Sanghams is a good one and meets the needs of the people, but is clearly against the policies of SOUP, as Sanghams have not been consulted. A decision on this needs to be conveyed to the Government for release of funds within a week. You are in two minds, whether SOUP should accept it right away or delay it. The delay will of course, have implications. You are sympathetic to the need to raise workers salaries as you believe that they are presently underpaid. You feel that this increase can be budgeted in the next year in future programme and past savings of SOUP can be possibly used during this year.
The budget for the current year is Rs. 40 lakhs but funds available are only 35 lakhs. About Rs. 1 lakh worth of expenses on administration and overheads are not covered. While it is possible to reduce some costs of the programmes according to the available funds, it is rather difficult to reduce the administrative and overhead expenses. You feel that past savings could possibly be used to cover this deficit or SOUP may be forced to retrench about 30 staff members immediately.

The proposal to the Government would entail giving Rs. 10,000 for each credit union of Sanghams as seed money. You are entitled to 20% administrative and operating costs, which will contribute to your staff salaries in the field and office. You essentially raise costs only through such projects. The present salary bill of all SOUP staff has been increasing of late, and has reached 40% of the total budget of SOUP.

2. Treasurer (Age 50 years)

You work as an Honorary Treasurer of SOUP for the last 5 years and are associated with a number of voluntary organisations. You feel that the finances of SOUP are not managed tightly and various cost cutting measures are not implemented. You are particularly concerned about this year’s budgetary shortfall because of over commitment to staff and programmes and not enough funds. This year SOUP’s total budget is Rs. 50 lakhs out of which Rs. 20 lakhs is spent on salaried staff. The total available saving of SOUP in the Fixed Deposit with nationalised banks is Rs. 10 lakhs, bringing in an annual interest of Rs. 1 lakh.

You feel that these savings must be rationed and increased so that SOUP gradually becomes self-reliant. If savings are used in salaries or programmes, then SOUP may become financially vulnerable and non-viable. Should salaries be increased, you strongly feel that staff size should be reduced. There is some over staffing in the field. About 15% reduction in field staff strength is possible without effecting current quality of field work.

3. Project co-ordinator (Age 28 years)

You have been working in SOUP for the last 8 years. You joined as a field worker and have been promoted every two years because of your good performance. You feel that the project on credit should be accepted by SOUP, since it will benefit the Sangham members in any case. You generally support the Secretary, but feel that upward revision of the staff salary is desirable.

4. Field worker- 1 (Age 25 years)

You have been a field worker of SOUP for the last 4 years. You are very hardworking, capable and popular with the Sanghams and your colleagues.

However, you feel that the new strategy of SOUP must be implemented and no project should be accepted without the consultation of the Sangham at any cost. You feel that SOUP does not take care of its staff properly and its leaders are interested in saving money rather than paying good salaries.

You are also related to the local MLA.

5. Field worker - 2 (Age 30 years)

You have been working in SOUP for the last 10 years; first as a Sangham leader. You are very committed and serious, though your education is only upto class V.

You strongly feel that SOUP should not accept any project without the consultation of the Sanghams. You are also concerned about the increase in salary of field staff.

6. Social worker (Age 70 years)

You are a staunch Gandhian. You have worked during the freedom movement and also in many programmes of constructive work afterwards. You feel that the present generation of workers in voluntary organisations like SOUP show less commitment to selfless service and are bothered more about their salaries. However, you try to please everyone as part of your nature and generally avoid any conflicts.
7. **Women social worker (Age 40 years)**

You are actively involved in the women's movement. You feel that SOUP is not sensitive to women's issues and does not focus enough attention on it in the programmes. You feel that the members of the Executive Board pay only 'lip service' to women's issues. Therefore, you make it a point to raise the issue of women in every meeting and every agenda item.

8. **Administrative officer (Age 65 years)**

You are a retired government official working in SOUP for the last 5 years. You feel that it is a promising organisation but the salary structure is very poor. Unless something is done soon to increase the salary, many good workers may leave the organisation.

Your job is to assist the Secretary in performing his day to day functioning and in keeping minutes of the various meetings.

**Step 5.** Now introduce each of the 8 members in, the role they are playing (with a name tag of the role being played), to the remaining participants of the group.

**Step 6.** Once everyone has understood their role and task, start the exercise.

**Note to the trainer**

You should now carefully observe the entire process only and take notes about how the decision-making process is taking place and conflicts are being handled.

**Step 7.** End the exercise after 45-60 minutes and give them five minutes break to relax.

**Step 8.** Start the debriefing process. Encourage comments from the participants.

**Step 9.** Close the session highlighting main points.

**Note to the trainer**

During the debriefing process, some of the following questions can be asked:

1. What decision have you arrived at?
2. How do you feel about each of these decision and why? (Ask each member)
3. What process did you go through in arriving at a particular decision?
4. Can you draw parallels of this process to your real life situations?

This conflicts framework of the debriefing process is to highlight the process of decision making and conflict resolution, learn about what factors promote and/or hinder effective decision making and role of individuals in the same.
Session 3.9

Group strategies

Objectives
- To demonstrate that groups can evolve competitive or co-operative strategies, by exploring trust, effects of betrayal of trust, effects of competition and the process of developing co-operation.

Time
75 - 90 minutes

Materials
Two sets of two cards each, Red and Blue, pens and paper

Method
Structured experience - Prisoners Dilemma.

Procedure
Step 1. Explain to the participants that now we are going to experience a risk taking situation similar to that experienced by guilty prisoners, being interrogated by the police on suspicion of working together. The interrogator separates them and tells each one that the other has confessed and that, if they both confess, they will get off easier. The prisoners dilemma or risk is that they may confess when they should not or they may fail to confess when they should.

IMPORTANT
Carefully avoid discussing the objectives of the session

Step 2. Divide the participants into two equal teams. Name them Red and Blue team. Seat them apart. Instruct them not to communicate with the other team in any way, verbally or non-verbally, except when told to do so. Explain that each team has to maximise its own scores.

Step 3. Give both teams a red and blue card each. Tell them that they can discuss amongst themselves to choose between the red and blue strategy.

Step 4. Explain the game to the participants. Clarify doubts, if any.

Instructions
Ten rounds will be played, in which each team shall choose between red or blue strategy. There is a time limit of 3 minutes for each round to decide upon the groups strategy. They should not give their decision until the time is up. After three minutes both the teams have to display their chosen cards simultaneously for everyone to see the teams decision. The scores will then be entered in the tally chart. The score of each team in a round is determined by the choices of both teams, according to the scoring system given below.

Scoring system
Both choose red - both scores 2 points
Both choose blue - both scores 1 points
One choose blue and the other choose red - blue gets 3 points and red 0 points
# PRISONERS' DILEMMA TALLY CHART

<table>
<thead>
<tr>
<th>Round</th>
<th>Minutes</th>
<th>Choice</th>
<th>Cumulative points</th>
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<tbody>
<tr>
<td></td>
<td></td>
<td>Blue Team</td>
<td>Red Team</td>
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<tr>
<td>1</td>
<td>3</td>
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<td>9</td>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>10</td>
<td>3</td>
<td></td>
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</tr>
</tbody>
</table>

Total Points

**Step 5.** Begin the first round, let the team decide their strategies in the given time limit, and ask them to display their decisions. Note their scores on the tally chart.

**Step 6.** Conduct the round 'two' and 'three' in the similar way.

**Step 7.** Announce the round 'four' as a special round. Tell each teams that in this round both the teams are allowed to conduct each other for three minutes. After they have conferred for three minutes, they return back to their original places. Both the teams now have three minutes as before, in which to make their decision. At the end of time, ask them to display their choices as before and record the scores.

**Step 8.** Conduct the rounds ‘five’, ‘six’ and ‘seven’ in the same manner as the first three rounds.

**Step 9.** Again announce round ‘eight’ as a special round. Instruct the teams as in step seven and conduct the round.

**Step 10.** Conduct the round ‘nine’ and ‘ten’ in same manner as rounds one, two, three, five, six & seven.

**Step 11.** After the tenth round calculate the final score on the tally chart and announce. Start debriefing the participants.

**Step 12.** Encourage a discussion about the relative merits of collaboration and competition, effects of trust and betrayal of trust on inter personal relations in developing groups strategies. Allow time for discussion and synthesise the ideas to supplement debriefing.

**Step 13.** Close the session highlighting how these situations actually affects the decision taken by various groups in real life situation and influence our group strategies.

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**Note to the trainer**

To make the exercise more interesting, following possible variations can also be tried-

- In the special rounds 'four' and 'eight', the scores could be doubled.
- One group makes the first choice and then given it to the other group. It is then upto the other group to make its choice based on the choice of the first group. The second group then makes the next decision as well and the first group receives it. Then based on the second groups behaviour in round ‘one’ the first group makes its decision in round two which will decide the actual distribution. The game continues in this manner and creates even greater dependency between the two teams.
MODULE 4

Basic functional skills

Introduction

Any farmers' organisation can not be fully functional unless it is equipped with some basic functional skills to carry out its day to day functioning effectively. Some of the basic functional skills discussed in this module are-

- Participatory systematization skills
- Basic accounting and financial skills
- Facilitation skills
- Dimensions of group effectiveness

Participatory Systematization Skills

Monitoring and process documentation is an essential ingredient of the participatory management process. This is not being conceived in terms of bureaucratic requirement of technocratic flair for data and reports, but in terms of the need of the participants to assess what has been achieved, identify the problems and find solutions for further improvement. Without this "learning by doing" or "learning from experiences" can not take place. It is this key factor which converts programme implementation into participatory management. We are familiar with modes of implementation in which some dose of contribution and cooperation of the beneficiaries is negotiated through direct or indirect incentives for the local leaders. Control over decisions and choices, freedom to design initiatives and carry out interventions as they deem fit, and right to monitor, review and assess the performance, not only their own but of others also, in terms of their own criteria and expectations, are crucial to participatory management. It is participatory management which enables and empowers a community to make a programme truly sustainable and enhances commitment and capabilities of the community to protect, follow-up and expand upon the assets by themselves irrespective of external inputs and presence, whether of voluntary agency or of government agency.

Participatory management eventually requires capability to take carefully considered decisions backed by concrete information. Informal and oral communications are subject to ad-hoc, biased or even incorrect decisions and interpretations. This works against the principle of equity. It should be possible for everyone to challenge or supplement information. The village institutions should be able to judge
what information they need to know and for what purpose under the given contractual requirements and should resist the burden of unwanted informal load.

Systematization is a methodology which facilitates the on-going description, analysis, and documentation of the processes and results of a development project in a participatory way. New knowledge is generated through a systematic learning process, which is then fed back and used to make decisions about actions to be implemented to improve project performance. The lessons learned are shared with others.

*Why should we systematize the project?*

Although this may seem a simple question, it is important that participants understand the reasons for systematizing the project, so that the purpose is clear to all involved. Differences of opinion should be discussed and clarified before starting.

*Possible reasons to systematize*

- Improve project performance and avoid problems
- Learn about project dynamics
- Democratise project decision making
- Evaluate processes and impact

Every farmers organisation should have the skills for participatory systematization, since, systematization allows us to-

- Preserve the experience
- Monitor and analyse processes, activities, activities through the life of the project; and
- Use lesson learned to improve upon the project performance

**Basic Accounting and Financial Skills**

Accounting is a necessary part of economic man. This is true of today as it was in ancient times. While the sophistication of accounting will change in response to the complexity of the social and economic systems it serves, some level of accounting appears essential in every social order.

Accounting is the discipline which provides financial and other information essential to the efficient conduct and evaluation of the activities of any organisation. Accounting is the tool for a proper financial management. The importance of financial management cannot be over-emphasised. Sound financial management is essential in all organisations profit or non-profit-where funds are involved. It attempts to use the funds in the most productive manner.

Maintaining of accounts is a necessary aspect of creating, building and strengthening farmers organisations. Accounting is a financial manner of keeping track of how financial and monetary transactions occur inside the organisation. It is a system of recording, classifying and summarising financial information.

Accounts-keeping in farmers’ organisations is necessary for several reasons-

1) The first important reason for accounts-keeping is to generate information for effective financial planning and management in the organisation. This is intended to assist in ensuring that resources are available for working on the activities and programmes of an organisation, and for keeping an eye on effective, purposive and integral utilisation of those resources. This is the aspect of financial management, budgeting and monitoring.

2) The second reason for which accounts have to be maintained is to meet various statutory requirements under different laws effective in the country. A farmers organisation which has acquired a legal form either as a Society, under the Societies Registration Act, 1860, or as a Union,
or a Trust or as a Company, is called upon to maintain its annual accounts in a particular fashion. While the Societies Registration Act, 1860, is silent about the provisions regarding the method of maintaining of accounts, the amendments made by various states have introduced clear provisions for submission of final Statement of Accounts annually.

Similarly, organisations receiving foreign contributions have to maintain their accounts through cash books and ledger as required under FCRA, 1976. Under the provision of the Income Tax Act, 1961, as applicable to charitable and voluntary organisations, it is expected that they comply with the various provisions of this Act as they affect them. In particular, this becomes important for the purpose of getting annual accounts audited through a professional certified Chartered Accountant. Thus, legal requirements make it mandatory for these organisations to maintain proper Books of Accounts and prepare Financial Statements.

3) A third reason for maintaining proper accounts is for reporting to donors. All the donors who provide funds and financial support to various organisations, be they national or international, be they governmental or non-governmental, expect some sort of final accounts and report of utilisation of their funds. They may be interested in knowing the ways in which money has been utilised, in the manner in which it was proposed to be utilised. Different donors have different reporting requirements. Some ask for simple statements of expenditure on the various project heads as the project was approved. Some have prescribed formats for reporting. Some demand audited statement of accounts; and some even expect original/photocopies of the vouchers to be submitted to them. The periodicity for these reports also varies depending on the duration of the project, and donors' requirements.

Those organisations which cannot provide timely and accurate financial statement and reports get into difficulties with their donors and face problems in getting funds in future. If these reports are not properly prepared, a lot of time is wasted in providing explanations to the donors. Thus, maintaining proper accounts is imperative if regular and desired accounts reports have to be submitted to the donors.

More than the above, experiences of voluntary organisations show that money matters require careful attention and handling. The General Body of the organisation, its Executive Council, its members, its staff and its constituencies expect a particular level of financial integrity and competence from these organisations. It is also desired by law. This will ensure that doubts and questions about the use of resources are minimised and money does not become a source of discord in the organisation.

Facilitation Skills

A group cannot automatically function effectively, it needs to be facilitated. Facilitation can be described as a conscious process of assisting a group to successfully achieve its task while functioning as a group. Facilitation can be performed by members themselves, or with the help of an outsider. In order to facilitate, it is important to understand what is it that needs to be facilitated. We need to facilitate-

- the effective performance of task and maintenance functions
- the processes like participation, communication, decision making and leadership
- the effective resolution of issues like inclusion, influence and intimacy
- the smooth transition of the group from one stage to another
- the accomplishment of the task

To facilitate effectively the facilitator needs to-

1. understand what is happening within the group
2. be aware of his/her own personality and how s/he comes across
3. know how to facilitate

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Diagnosing a group

The process of finding out what is going on in a group may be called diagnosing. It is an essential skill of a facilitator. He can only proceed further to help remove the problem once s/he is able to diagnose what it is that is going wrong. Diagnosis involves understanding the causes after looking for clues within the group (e.g. communication pattern, unconscious acts) and outside the group (e.g. history of past relationship between members). Some examples follow to illustrate the point.

Problem: Everyone does not participate or show interest and a few remain silent.

Possible causes-
- The goal or task is not relevant for everyone
- Some members are insecure
- Some members are dominating on the basis of caste, class, education or sex.

Problem: Subgroups occur within the group and they get involved in their own conflicts

Possible causes-
- Members of the subgroup are loyal to some outside group of conflicting interests
- Existence of hidden agenda

Problem: People stick their conflicting points of view, stalling progress or decision-making

Possible causes-
- Existence of differing value systems, more important than the task of the group
- Existence of differences/conflicts between individuals which were there before the existence of the group.

Problem: Some members ignore or disregard contributions from other members

Possible causes-
- Members are insensitive to others, needs
- Members are too full of their own self importance

Problem: The group is not able to make a decision, or even if a decision is made members are not willing to implement it.

Possible causes-
- Group lacks adequate information, skills and know how to solve the problem
- Decision is threatening to members
- Fear of failure

The above list of possible causes is by no means complete and is given to provoke further thought.

An appropriate intervention

Having diagnosed the possible causes of the problem, the facilitator needs to decide upon how s/he will help the group go forward. This conscious act is called facilitating. Simple means of facilitating include-

- Encouraging
- Bringing the conversation to the point
- Mediating and peace keeping
- Maintaining order
- Requesting
But then in some cases, these alone are not enough. It is then that the facilitator needs to look deeper and understand clearly the unconscious processes and the levels of awareness within the members of the group, and the group as a whole. Depending upon the facilitator’s grasp of the situation, different styles of facilitation can be used.

**Some skills of a facilitator**

1. **Listening**: The ability to listen carefully and creatively; picking out both positive aspects and problems, difficulties and tensions
2. **Observation**: The ability to see what is happening; to understand non-verbal clues, to monitor the group's work objectively
3. **Sensitivity/empathy**: The ability to pick up implicit messages; to see problems through the eyes of the members; to understand their feelings, ideas and values, to focus on structures and roles rather than personalities or competence
4. **Diagnosing**: The ability to define the problem to synthesise diverse data and form a working hypothesis to choose intervention and action
5. **Supporting/encouraging**: Ability to provide verbal and nonverbal indicators of encouragement, affirmation, appreciation and caring - to assist in a joint search for solutions
6. **Challenging**: The ability to confront, to disagree, to stop a process without being rude
7. **Openness**: The ability to invite dialogue, to receive feedback, and to be prepared to examine one’s own attitudes values and ideas and to change them, if necessary
8. **Modelling**: The ability to include oneself as a model in the group, responding spontaneously, without being idealistic, or posing as an expert.

**Facilitation styles**

Groups vary in the nature of their tasks, their composition and in the problems that crop up. The facilitator chooses his/her style of facilitation depending upon his/her understanding of the situation, the objective of the change, i.e. in the action or the awareness; and focus of the change, i.e. the level of the group or the level of the individual. Four different styles of facilitation have been described taking into consideration these variables - task or awareness and individual or group.

**Interactive Mode**: Here the facilitator diagnoses the problem as being as the individual level and the facilitation is thus individual-centered. This mode focusses on action/behaviour. It is benign and educative, and change in behaviour of the individual is sought to be brought about by providing support and encouragement.

**Inclusive Mode**: This mode is used when the facilitator diagnoses the problem to be at the level of the group and focus is change in action. The facilitator deliberately includes him/herself as a member of the group and provides model behaviour that the group could adopt. The facilitator needs to be careful that she/he does not present an ideal infallible model but one which includes his/her feelings, values, needs, opinions and weaknesses as an ordinary human being.

**Interpretive Mode**: Having diagnosed that the problem is at the level of awareness of the group, the facilitator deliberately chooses to be an outsider. S/he analyses the problem objectively and presents his/her interpretation impersonally to the entire group.

**Intrusive Mode**: Here the facilitator diagnoses the problem to be with the individual and the focus of the change is at the level of awareness. With the assumption that the individual is interested in learning about becoming aware of his/her true self, the facilitator presents to the individual what he/she has observed and what that could possible indicate about that particular individual. This presentation is deliberate and impersonal and may be likened to an intrusion into the individuals life space.
A word of caution—Using these various styles of facilitation consciously requires practice, more so with the interpretive and intrusive styles. The facilitator must remember that the style depends upon the focus of change and s/he must be very conscious and avoid taking and authoritarian or moral stand during facilitation.

Dimensions of group effectiveness

In the process of building farmers’ organisation one very important aspect which should not be overlooked is its effectiveness. By effectiveness we mean here, how well the organisation is able to handle its routine functioning. Effectiveness at the group level is often termed as internal empowerment, as it relates to aspects of group functioning.

Although many internal empowerment parameters can be identified, four key aspects which are crucial for group functioning have been mentioned here viz. self management, problem solving, democratization and sustainability. These parameters need to be assessed regularly and the feed back utilised to improve the performance of these groups. This should be taken up as a continuous process at least for the initial few years in the life of any group, to improve its performance & functioning.

Some dimensions of group effectiveness

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Indicators</th>
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<tbody>
<tr>
<td>Self management</td>
<td>Membership growth trends</td>
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<tr>
<td></td>
<td>Quality/quantity</td>
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<td>Clear procedures/rules</td>
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<td>Recording of minutes</td>
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<td>Regularity of attendance at meetings</td>
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<td></td>
<td>Maintaining proper financial accounts</td>
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<tr>
<td>Problem-solving</td>
<td>Problem identification, analysis and arriving at solutions</td>
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<tr>
<td>Democratisation</td>
<td>Free and fair selection/election process</td>
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<td>Decision-making processes role of weaker members</td>
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<td>Information flows-transparency</td>
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<tr>
<td>Self-reliance and sustainability</td>
<td>Conflict resolution</td>
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<td>Actions initiated by the group itself</td>
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<td>Extent of dependence on animator</td>
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<td>Legal status</td>
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<td>Economic independence-capacity to mobilise resources</td>
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<td>Intra-group support system</td>
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Session 4.1

Participatory systematisation

Objectives
- To enable the participants to understand the meaning of participatory systematisation.
- To help them understand the objectives of systematisation and the activities that need to be conducted to achieve these objectives.
- To help them understand the necessity of sharing the lessons learnt.

Time
6 hours

Materials
Flip charts, felt pens, observation note books, pencils, black/white board, chalk.
Handout 4.1.1 - Objectives of systematisation and how to achieve them,
Handout 4.1.2 - How can information be shared?

Methods
Brainstorming and group discussions

Procedure

Step 1. Inform the participants that it is very important to document, analyse and share the knowledge gained from the functioning of a project, in a systematic way to improve the project through on going learning about its process and results. Systematisation satisfies these required needs. Inform that on this session we are going to learn about systematisation, its objectives, ways to fulfil these objectives and sharing of lessons learned.

Step 2. Question the participants “What do we mean by systematisation?” Brainstorm for ideas and instruct them to prepare a list and clarify doubts if any.

Note to the trainer

- Systematisation is a methodology which facilitates the process and results of a development project in a participatory way.
- New knowledge is generated through a systematic learning process, which is then fed back and utilised to make decision about actions to be implemented to improve project performance. The lessons learned are then shared.

<table>
<thead>
<tr>
<th>Systematisation is</th>
<th>Systematisation is not</th>
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<tbody>
<tr>
<td>A continuous process</td>
<td>A one time evaluation</td>
</tr>
<tr>
<td>A comprehensive process</td>
<td>An impact evaluation</td>
</tr>
<tr>
<td>A participatory process</td>
<td>A simple descriptive exercise</td>
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<tr>
<td>A planning tool</td>
<td>A mere documentation</td>
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<tr>
<td>A problem solving tool</td>
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</table>

Step 3. Brainstorm participants on “Why should we systematise?” Chart response and clarify doubts. Explain that there are broadly five main activities of systematisation process. Discuss and clarify doubts, if any.
Note to the trainer

- The systematisation process allows us to continuously analyse project activities, generate knowledge to improve its implementation and impact, and share lessons learned?
- It allows us to experience, monitor and analyse process, activities, results throughout the life of the project and use the lessons learned to improve the project performance.
- Five main activities of systematisation process are-
  1. Description of project
  2. Analysis of project activities
  3. Decision making and action to improve project performance
  4. Documentation
  5. Sharing lessons learned

All these activities must be documented in order to ensure that information is preserved for analysis, learning, and sharing with other organisations.

Step 4. Explain that there are six objectives of systematisation. Each objective, while important in itself, is also a step towards achieving the next objective. The six objectives are-
  1. Preserve information
  2. Improve project performance or results
  3. Promote empowerment, self-reliance and sustainable development
  4. Contribute to mutual understanding and co-operation
  5. Enhance organisational capacity
  6. Strengthen civil society

Step 5. Ask the participants to discuss the importance of each objective and come out with suggestions, comments and ways of how to achieve them. Allow sufficient time for discussions and help them synthesise their ideas. Distribute Handout 4.1.1 for supplementary reading.

Step 6. Explain why it is important to summarise the lessons learned to enable sharing with others. Encourage discussions.

Note to trainer

There are a number of reasons to share lessons learned. Some are-
- Present successful alternative models for planning and replication purposes, which have been analysed and documented and based on practical field experiences.
- Facilitate others in learning from your mistakes, thereby helping them to avoid making similar errors.
- Permit others to learn from the problems that were encountered in the project, and how were they solved.
- Increase the impact of your project, positively influencing the design and implementation of other projects, and the policies of other organisation
- Promote networking through the exchange of knowledge and information, thereby increasing co-operation among different organisations.

Step 7. Finally, ask them "How can we share the information gathered?" Ask them to discuss and chart out responses. Give Handout 4.1.2 to read and modify their responses and complete the list.

Step 8. Ask one person from the group to present the list. Encourage discussions, suggestions and modifications.

Step 9. Close the sessions highlighting the important learning from the session.
Handout 4.1.1

Objectives of Systematisation and how to achieve them

1. Preserve project information through documentation
   In recent years, development workers and project beneficiaries have expressed the need to describe, analyse and document their accumulated development experiences. In their daily work, these people often reflect on how development projects are planned and implemented, as well as on their impact and how they can be improved. Such informal lessons are rarely documented, so the experience and knowledge gained is lost over time. The systematisation process facilitates the documentation of these experiences so they can be used for analysis and learning in an organised and coherent manner. The information also serves as a basis for writing reports, articles, papers and training materials.

2. Continuously improve project performance and results
   Ongoing reflection and analysis enable organisations to learn from their successes and failures, as well as from the different factors that hinder or facilitate project performance. The lessons learned through this process are fed back into the project to improve its performance which, in turn, will contribute to achieving better results and impact.

3. Promote empowerment, self-reliance and sustainable development through active participation
   The process of systematisation requires a high degree of participation by all parties involved in the description, analysis and decision making of a project. If genuinely participatory, this process can promote the empowerment of the intended beneficiaries, encouraging them to actively participate in defining and fulfilling their needs. At the same time, this process can promote self-reliance and sustainable development, where changes and improvements are based on consensus.

4. Contribute to understanding & co-operation between communities and development organisations
   Because systematisation is a participatory process, it facilitates reaching a common understanding between community members and the development organisation staff, about the nature of community problems and the action to be taken to solve them. Ongoing dialogue and partnership in the process of reflection, planning, implementation and evaluation of development activities is essential.

5. Enhance organisational capacity through development of skills
   Systematisation helps participants to develop their ability to plan and implement activities, learn, and manage resources efficiently. It also facilitates common understanding of a project by its staff. This process also allows organisations to develop skills for networking with other organisations (NGOs, GROs, GOs, donors, etc.), thereby promoting co-operation and sharing of knowledge.

6. Strengthen civil society through the sharing of lessons learned
   Sharing lessons learned is important for organisations to play a meaningful role in civil society. Organisations are part of a global system that must be strengthened in order to have a wider impact on development policies that affect their interests locally, regionally, nationally and even internationally.

   Sharing knowledge and experiences with other organisations saves time and resources as it will make these organisations less likely to make similar mistakes. In this way, systematisation facilitates institutional learning, common problem-solving, capacity building and networking. Furthermore, if information is shared with donor agencies, it gives them a better idea of the needs of various
organisations and enables them to allocate resources more effectively. Sharing of lessons may be done through workshops, conferences, training courses, publications and formal or informal networks.

**Achieving objectives: activities of systematisation**

In order to achieve these objectives, there are specific activities which must be performed. The activities are summarised below-

<table>
<thead>
<tr>
<th>Objectives</th>
<th>Activities</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Preserve information</td>
<td>Document project activities</td>
</tr>
<tr>
<td>2. Improve project performance, results and impact</td>
<td>Analyse project design, implementation and results continuously and implement actions for change.</td>
</tr>
<tr>
<td>3. Promote empowerment, self-reliance and sustainable development</td>
<td>Ensure genuine participation by all parties involved</td>
</tr>
<tr>
<td>4. Contribute to mutual understanding and co-operation</td>
<td>Project participants and staff work together in planning, implementation and evaluation.</td>
</tr>
<tr>
<td>5. Enhance organisational capacity</td>
<td>Use lessons learned to: 1. Better design and manage planning, administrative and financial systems. 2. Collaborate with other organisations</td>
</tr>
<tr>
<td>6. Strengthen civil society</td>
<td>Network, collaborate with other organisations, exchange and share information and conduct advocacy.</td>
</tr>
</tbody>
</table>

**Handout 4.1.2**

**How can information be shared?**

The information you obtained and the lessons learned can be shared different ways:

- **Conference and seminars:** Incorporate/facilitate information in meetings organised by your or other organisations.
- **Training courses and workshops:** Provide specialised training based on the lessons and informations you have learned.
- **Exchange visits to projects:** Promote exchange visits among technical staff, extension agents, farmer promoters and participants from different projects. These activities have to be well organised and with the purpose of analysing specific topics.
- **Publications:** Consider publishing the results of your systematisation.
- **Formal and informal networks:** Share your experiences with networks for their libraries and other general purposes.
- **Learning materials:** Design materials which others can easily use in their own projects
- **Films, videos, and slide shows:** Produce an audio-visual about the project which can be shared with others.
- **Pamphlets:** Provide brief and clear explanations of your project, its methodologies and results
- **Posters:** Print large and easy-to-understand posters that explain key successful concepts and practices based on the projects experiences.
Session 4.2

Basic accounting and finance

Objectives
- To help them understand the importance of accounting a finance management in an organisation.
- To familiarise the participants with the books of accounts and basic accounting techniques.

Time
6 hours

Materials
Flip charts, felt pens, exercise books, pencils and black/white board.
Handout 4.2.1 - Necessary prerequisite of a simple accounting system
Handout 4.2.2 - Steps in maintaining accounts
Handout 4.2.3 - Example of a voucher
Handout 4.2.4 - Example of a cash book format and currency inventory form
Handout 4.2.5 - Sample ledger book
Handout 4.2.6 - Sample trial balance
Handout 4.2.7 - Important points in preparing trial balance

Method
Structured group exercise

Procedure
Step 1. Inform the participants that the proper management of a any organisation largely depends on the efficient organisation of its accounting system and finances. Tell them that accounting helps to record, clarify and summing up the organisations financial activities. Its purpose is to regularly provide information regarding the organisations financial position. Therefore, it is necessary to update the accounts possibly daily or at least weekly in small organisations.

Step 2. Brain storm the participants on the necessary pre-requisites of any accounting system and ask to list them. Distribute the Handout 4.2.1 and ask them to read and clarify doubts. Give them sufficient time as the objective is to appraise them with accounting procedures and documents.

Note to the trainer
Any accounting system must set out-
- What money has been received and from where?
- What money has been spent and on what?
- What money is left unspent?
- What money is still owed by the group on unpaid debts?
- What are the assets the group owns and what is their worth?

Step 3. After familiarising with the accounting documents, inform the participants that these accounts are maintained in accounts book which records all financial operations & should always be backed by supporting documents. Distribute Handout 4.2.2 on steps in maintaining accounts.

Note to the trainer
- Some financial operations are- Deposits, Payments, Credits, Transfers, Withdrawals, etc.
- Supporting accounting documents are- Bills, Petty cash vouchers, Statements, etc.
Step 5. Introduce *Step one* in maintaining accounts to the participants and inform them that collection of information and its clarification for each transaction is most important. For each transaction, a document (bill, cash, Memo etc.) is collected and classified in its debit and credit aspects for accounting. This clarification is done through filling the information in a format called 'voucher'. Each voucher should have a supporting document, such as bills, cash memos, invoices, etc. Since it is the prime evidence of any transaction having taken place. Distribute Handout 4.2.3 and explain the two types of vouchers.

**Note to the trainer**
- In case of any expenditure above Rs. 500 the recipient must sign the voucher on a revenue stamp of 1 rupee.
- No cash payment should be made for any amount exceeding Rs. 2000
- As far as possible every voucher should have a supporting document
- Every voucher should be approved by concerned authority.

Step 7. Introduce the participants to *Step two* in maintaining accounts. Inform them that each book is meant to record all transactions in which cash / bank receipts and payments are involved. It has two important columns of Debit (what cash comes in) and Credit (what cash goes out). This book is used to record only these transactions, where either cash comes in or goes out and the record of materials and services received and or offered. The balance at the end of the day can be seen by referring to this book. The cashier has only to reconcile this balance and the actual cash in hand by using the ‘currency inventory’ form to know the exact cash box balance. Supplement your explanation by providing Handout 4.2.4 to the participants. Ask them to go through it and perform an exercise on maintaining a cash book and ‘currency inventory’ form.

Step 8. Next introduce the participants to the *Step three* “Ledger” maintenance. Tell that a ledger is a record of final entry which contain accounts of all types. This is written from the books of prime entry i.e. cash books/journals. Since all the financial statements are extracted only through the general ledger balance, it is called the principle book. The ledger helps us to get all necessary data at one place. Since all types of entries are recorded in it. Unlike the cash book, ledger entries are recorded under their specific heads. In this book separate pages are maintained to record transactions of one type, like all expenses in wages will be on one page, similarly field work expenses on materials or equipments, travelling, etc. are all recorded on separate pages assigned for these transactions. Hence, if we want to know how much we have spent under certain heads like travelling during the entire month/year, we can get this information, which is not possible in a cash book.

Step 9. Distribute Handout 4.2.5 from a ledger book and ask to fill it giving them a sample exercise.

Step 10. Inform the participants that it is also very important to balance the accounts of the ledger. Balancing means finding the difference between the debit and credit sides of an account. Balancing is done to know about the current situation of the account, in terms of how much money has either come into that account or gone out of that account and what is the final balance.

Give the following example from Mr. XYZ’s account to explain this.

<table>
<thead>
<tr>
<th>Date &amp; Month</th>
<th>Particulars</th>
<th>Page No.</th>
<th>Debit Rs. Ps.</th>
<th>Credit Rs. Ps.</th>
<th>Balance Rs. Ps.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.1.88</td>
<td>Advance for field work</td>
<td></td>
<td>700.00</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5.1.88</td>
<td>Bills received</td>
<td></td>
<td></td>
<td>635.00</td>
<td></td>
</tr>
<tr>
<td>6.1.88</td>
<td>Advance for field work</td>
<td></td>
<td>800.00</td>
<td></td>
<td></td>
</tr>
<tr>
<td>9.1.88</td>
<td>Bills received</td>
<td></td>
<td></td>
<td>335.00</td>
<td>30.00</td>
</tr>
<tr>
<td></td>
<td>Cash received</td>
<td></td>
<td></td>
<td>500.00</td>
<td></td>
</tr>
</tbody>
</table>

This means Mr. XYZ has to pay back Rs. 30.00 to the farmers association.
Note to trainer

Inform them that after posting has been completed and accounts are balanced, if debit side is larger than credit side, the difference is called debit balance; similarly of the credit side is larger than the debit side, the difference is called the credit balance.

Step 11. Now introduce Step four. Explain to the participants that the fourth and final step in maintaining the basic accounts is preparation of trial balance. Under the double entry system, we have seen how a transaction is recorded - once by debiting an account and then (while posting) crediting a corresponding account. Since every transaction is recorded both as debit and credit, then if we prepare a list of all the accounts under the classification of debit and credit, and the total of both the sides match, it proves that the books are arithmetically correct. This list of debit and credit is known as Trial Balance. (See Handout 4.2.6)

Step 12. Tell them that trial balance helps to know whether books are arithmetically correct or not. If the total of debit balances is not matching the total of credit balances, then there is definitely some mistake in the books. That is why Trial Balance should be prepared every month to check that books are properly written. However, balancing of Trial Balance is not the final proof of accuracy. There are many mistakes which do not affect Trial Balance (Handout 4.2.7). This preparation of Trial Balance is a useful way of control and proper financial review. It should be prepared at least once a month.

Step 13. Wrap the session highlighting the main learnings from the session.
Handout 4.2.1

Necessary prerequisites of a simple accounting system

1. Every petty-cash operation is recorded methodologically
2. The treasurer/literate person maintains a box file to keep all accounting documents
3. Each accounting document is numbered corresponding to the cash/bank book
4. In absence of a supporting voucher for an expenditure, the same is prepared with details
5. All the accounting documents are kept in a secure place
6. If each such document is filed immediately so that it will not be lost, and if this procedure is strictly observed, it will enable any qualified accountant to write the annual accounts of a small farmers’ group in a few days.

A simple accounting system uses the following documents-
- **Cash**- Withdrawal vouchers/receipt, Deposit vouchers, Cash receipts which are prepared when there is supporting document, Currency verification forms, etc.
- **Bank**- Bearer cheques, Cheques not crossed, Crossed cheques, Withdrawal forms- debit/credit advice, Signature cards, Bank statements, etc.
- **Other accounting documents**- Invoices, Stock entry forms, Petty cash vouchers, etc.

Handout 4.2.2

Steps in maintaining accounts

There are four basic steps in maintaining accounts

**Step 1**: Collection of information and its classification e.g. voucher

**Step 2**: Posting of accounts to the books of prime entry e.g. journal or cash book.

**Step 3**: Posting of accounts from books of prime entry to the respective accounts maintained in the Ledger.

**Step 4**: Extraction of the balance of all accounts maintained in the Ledger for preparation of Trail Balance

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**Handout 4.2.3**

**Types of vouchers**

There are two types of vouchers:
1. Cash receipt voucher
2. Cash/bank payment voucher

*Example of cash receipt vouchers*

<table>
<thead>
<tr>
<th>Himalayan Farmers Association</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Receipt</strong></td>
</tr>
</tbody>
</table>

No. : **XXX**  

Date : **X/X/XX**  

Received with thanks from ___________________ through cash / cheque / bank draft, the sum of rupees ___________________ on account of ___________________ dated ___________________.  

Rs. : ___________________  

Signature

*Example of a cash/bank payment voucher*

<table>
<thead>
<tr>
<th>HIMALAYAN FARMERS' ASSOCIATION</th>
</tr>
</thead>
<tbody>
<tr>
<td>Voucher No.</td>
</tr>
<tr>
<td>--------------------</td>
</tr>
<tr>
<td><strong>DEBIT</strong></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td><strong>CREDIT</strong></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td><strong>GRAND TOTAL</strong></td>
</tr>
<tr>
<td></td>
</tr>
</tbody>
</table>

Accountant  

Director

<table>
<thead>
<tr>
<th><strong>Receipt</strong></th>
</tr>
</thead>
</table>

Received the sum of Rupees ___________________ on account of ___________________ by cash/cheque No. ___________________ dated ___________________.  

Rs. : ___________________  

Signature
Handout 4.2.4

Example of a cash book format and currency inventory form

CASH BOOK FORMAT

<table>
<thead>
<tr>
<th>Date</th>
<th>Document</th>
<th>Details of particulars</th>
<th>Debit (in)</th>
<th>Credit (out)</th>
<th>Balance (In Rs.)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

CURRENCY INVENTORY FORMAT

<table>
<thead>
<tr>
<th>Cash Control Form</th>
</tr>
</thead>
<tbody>
<tr>
<td>Date</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>No. of notes and coins</th>
<th>Value of notes/coins (Rs.)</th>
<th>Total amount (Rs.)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
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<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Total available in cash box _Rs._

Certified correct

Accountable Balance Rs. (Signature)
Handout 4.2.5

Sample Ledger Book

<table>
<thead>
<tr>
<th>Month and date</th>
<th>Particulars</th>
<th>Folio</th>
<th>Debit Rs.</th>
<th>Credit Rs.</th>
<th>DR/CR</th>
<th>Balance Rs.</th>
</tr>
</thead>
</table>

Handout 4.2.6

Trial Balance - an example

HIMALAYAN FARMERS ASSOCIATION  *(Trial Balance as on 11.05.1998)*

<table>
<thead>
<tr>
<th>Name of the account</th>
<th>Folio No.</th>
<th>Dr. Balance</th>
<th>Cr. Balance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Grant A/C</td>
<td></td>
<td></td>
<td>50,000.00</td>
</tr>
<tr>
<td>Rent Advance</td>
<td></td>
<td>1,200.00</td>
<td></td>
</tr>
<tr>
<td>Furniture</td>
<td></td>
<td>2,000.00</td>
<td></td>
</tr>
<tr>
<td>Printing &amp; Stationary</td>
<td></td>
<td>200.00</td>
<td></td>
</tr>
<tr>
<td>Sewing Machine</td>
<td></td>
<td>12,000.00</td>
<td></td>
</tr>
<tr>
<td>Travelling</td>
<td></td>
<td>1,000.00</td>
<td></td>
</tr>
<tr>
<td>Cloth Purchased</td>
<td></td>
<td>6,000.00</td>
<td></td>
</tr>
<tr>
<td>Materials purchased</td>
<td></td>
<td>300.00</td>
<td></td>
</tr>
<tr>
<td>Donation</td>
<td></td>
<td></td>
<td>1,000.00</td>
</tr>
<tr>
<td>Stipend</td>
<td></td>
<td>2,000.00</td>
<td></td>
</tr>
<tr>
<td>Sales</td>
<td></td>
<td></td>
<td>3,500.00</td>
</tr>
<tr>
<td>Scrap Sales</td>
<td></td>
<td></td>
<td>50.00</td>
</tr>
<tr>
<td>Salary</td>
<td></td>
<td>4,000.00</td>
<td></td>
</tr>
<tr>
<td>Water &amp; Electricity</td>
<td></td>
<td>50.00</td>
<td></td>
</tr>
<tr>
<td>Honorarium</td>
<td></td>
<td>700.00</td>
<td></td>
</tr>
<tr>
<td>Exhibition Expenses</td>
<td></td>
<td>500.00</td>
<td></td>
</tr>
<tr>
<td>Boarding &amp; Lodging</td>
<td></td>
<td>1,500.00</td>
<td></td>
</tr>
<tr>
<td>M/s Hari Lal Bhai</td>
<td></td>
<td></td>
<td>4,000.00</td>
</tr>
<tr>
<td>Cash in Hand</td>
<td></td>
<td>5,100.00</td>
<td></td>
</tr>
<tr>
<td>Cash in Bank</td>
<td></td>
<td>22,000.00</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>58,550.00</td>
<td>58,550.00</td>
</tr>
</tbody>
</table>
Important points in preparing trial balance

Errors which do not affect Trial Balance

1. If a transaction has taken place in reality but not entered in the books at all, the trial balance will not be affected. For example, Rs. 200/- was paid for local transport, but was not entered in the books. Here, only cash in hand will be short, but there will be no effect on Trial Balance, because it has not been entered in the book at all. So neither, debit side nor credit side of the book gets affected—so no effect on Trial Balance.

2. If a wrong entry is made in subsidiary books. Like instead of Rs. 200/- local transport, only Rs. 20/- is recorded in subsidiary books and the posting is also done with the same amount, it will not have any effect on Trial Balance.

3. If a posting from Cash Book to Ledger is done on the correct side but in wrong account. Like, in Cash Book Rs. 200/- is credited for local transport A/c but while posting it was debited under travelling A/c. Mistakes of this nature will not affect the Trial Balance.

4. If there is any error on principle like an asset is treated as expense or vice-versa, or a liability is treated as income, it will not be disclosed by the Trial Balance because entry still be on the correct side.

5. If a number of mistakes have been committed, and as a net result they compensate for each other, like posting of Rs. 200/- is missed for local transport but another posting for travelling account is done for Rs. 700/- instead of Rs. 500/- resulting in compensating the omission done for posting of local transport. Therefore, no effect will be shown on the Trial Balance.

The errors explained above will not effect the arithmetical accuracy of a Trial Balance, because none of them will upset the accounting equation, Debits = Credits. But some other mistakes which affect this equation show their effect on the Trial Balance.

Errors which affect the Trial Balance

1. Totalling mistakes
2. Mistakes in balancing the accounts
3. Posting mistakes - instead of Rs. 200/- to be posted from Cash Book only Rs. 20/- was posted, leading to the differences in total for Rs. 180/-
4. Making an entry on the wrong side. For example, instead of debiting local transport with Rs. 200/- in the Ledger, it was credited. Debit side of the Trial Balance will show a difference of Rs. 400/-. Posting on the wrong side doubles the differences
5. Mistakes in transferring the balance of an account to the Trial Balance or omitting to write the balance of an account in the Trial Balance.

Steps to locate Mistakes

When the Trail Balance is not matching, even with a small amount, one must check where the error is, because the small amount should never ignore the smallest difference in the Trail Balance.

1. First of all, check the debit and the credit side totals of the Trial balance
2. Check that the balance of all accounts from ledger have been written in the Trial Balance, including cash and bank balance.
3. Check the totalling of cash book and ledger accounts
4. Find out the exact difference in the Trail Balance and look for such accounts in the ledger which is of this amount (difference of trail) or half of this amount.

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5. Divide the difference by 9. If the difference is divisible by 9, the error may be due to transportation of figures. For example:
   If Rs. 321/- is written as Rs. 231/- the difference is Rs. 90/- and is divisible by 9.
6. Posting of all amounts corresponding to the difference or half the difference should be checked.
7. If the difference is a large one, then take out the previous Trial Balance and see if there is any extraordinary difference between any account. For example, if last time Grant A/c was Rs. 2,20,500.00 and this time is Rs. 10,50,500.00 then check about the accuracy of this massive growth.
8. And the last step is to check the posting of all accounts from subsidiary books. While checking, keep in mind:
   • Posting is not done at all.
   • Posting is done with the wrong amount
   • Posting is done in a wrong account with the wrong amount

**Bank Reconciliation**

Every bank periodically gives a statement of account to its customers. Usually it is in the form of a small account book showing money deposited and withdrawn from the account. It is called Pass Book. Since in this book a statement of deposits and withdrawals is given, then the final balance of the bank’s pass book should match with the bank account kept in the organisation’s cash book. However, quite often it does not match, and the difference arises because of the following reasons:
1. Cheques are received and deposited in the bank and therefore entered in the cash book, but for some reason not cleared (either cheques got delayed in clearance or were not cleared at all). Hence, the cash book will show more balance than what is in the bank’s pass book.
2. Cheques issued but not being presented for payments, by those who received them. Hence, the pass book amount will be more than what the cash book is showing.
3. Many a times, bank levies some charges for the services rendered to the customers. These are known as bank charges. The bank immediately makes entries of this in pass book, but in the cash book we enter it only when we receive the pass book. Hence, for the time being a difference arises between the cash book and pass book.
4. The Bank pays interest on the money deposited on our account. It credits to our account as soon as the interest is due, but we enter it in the cash book only when we receive information from the bank.
5. Direct transfers received by the bank are also entered in the pass book as soon as the bank receives the money. After receiving the money, the bank sends us information about these credits, which causes a difference between the pass book and our cash book.

These differences do not cause much problem, as sooner or later both bank and the client (we) will make entries. However, it is important to know the position clearly and to be sure that no mistakes have been committed. Therefore, we must prepare a statement to understand the reasons for a difference between the Pass Book and Cash Book. This is called Bank Reconciliation or balancing. It helps to know that the cheques issued have been claimed and cheques deposited have been credited in our account in time, and any undue delay could be traced and action could be taken. Preparation of the Bank Reconciliation statement is a very important control technique. It should be prepared at least once in a month, because then one can trace back the reasons of delay in cheques. If suddenly some cheque has come from some unexpected source, it can be properly utilised.
Session 4.3

Facilitation skills

Objectives

- To consolidate the understanding of the participants on the roles they have to play as facilitators of integrated watershed management programmes.
- To enable the participants to understand different styles of facilitation.

Time

3 Hours

Materials

Flip charts and marker pens
Handout 4.3.1 - Skills of a facilitator

Methods

Brainstorming, Group task

Procedure

Step 1. Highlight the roles of the participants in building farmers' organisations for integrated watershed management by explaining its importance.

Step 2. Brainstorms on the questions, "What are the various activities which need to be performed by you in a watershed?"

Step 3. Chart the responses and say that in order to perform all these activities you must possess some facilitatory skills.

Note to the trainer

Facilitating a Group

A group cannot automatically function effectively, it needs to be facilitated. Facilitation can be described as a conscious process of assisting a group to successfully achieve its task while functioning as a group. Facilitation can be performed by members themselves, or with the help of an outsider.

In order to facilitate, it is important to understand what is it that needs to be facilitated. We need to facilitate-
- the effective performance of task and maintenance functions
- the process like participation, communication, decision making and leadership
- the effective resolution of issues like inclusion, influence and intimacy
- the smooth transition of the group from one stage to another
- the accomplishment of the task

To facilitate effectively the facilitator needs to-
- understand what is happening with the group;
- be aware of his/her own personality; and
- know how to facilitate.
Step 4. Inform the participants, in order to understand the facilitatory skills, we shall under take a group task. Ask the participants to divide into two subgroups, and give them to ask: “Identify and list the facilitator skills required to effectively undertake the watershed development programmes”. Give them sufficient time to discuss and carry out the task.

Step 5. Ask each of the groups to present the results followed by clarification, discussions comments and suggestions.

Step 6. Explain the Handout 4.3.1 on skills of a facilitator and consolidate the understanding of the participants on facilitation skills

Step 7. Explain to the participants that group vary in the nature of their tasks, their composition in their problems, and the facilitator has to accordingly choose his/her style of facilitation. Therefore, it is necessary for the facilitator to know the different styles of facilitation.

Step 8. Give inputs to the participants on facilitation styles. Encourage discussions & comments. Synthesise the discussion explaining different facilitation styles.

Step 9. Close the session highlighting the main learnings.

Handout 4.3.1

Facilitation skills

Some common skills of a facilitator

- Listening and proposing
- Sensitivity/empathy
- Supportive
- Reviewing/analysing success and difficulties
- Using common methods
- Setting and clarifying aims
- Modelling
- Observation and feedback
- Time management
- Openness
- Diagnosing
- Process planning to foster co-operation
- Use of authority and personal initiative
Session 4.4

Group effectiveness

Objectives
- To help group members identify areas of group functioning that need improvement.

Time
1-3 hours, depending on the level of details the discussion involves in Step 4

Materials
A pencil for each participant, flip chart, felt tipped marker, any room where the group regularly meets.

Handout 4.4.1 - Group Effectiveness Scale (one copy for each participant)

Procedure
Step 1. Distribute the copy of Handout 4.4.1 on Group Effectiveness Scale and pencils to each participant and asks the participants to complete the form.

Step 2. Ask the participants to call out their ratings. The participants take turns calling out their ratings. Tally these ratings on the flipchart.

Step 3. Help the participants to identify various dimensions of groups effectiveness with low ratings as well as dimension about which the group members dis-agreed.

Step 4. Ask the group to discuss the results, attempting to determine why there were low and/or diverse ratings. During this discussion assist the group in devising plans for improving those dimensions that the members identify as needing improvement.

Step 5. Make arrangements for a follow-up meeting to review progress and close the session.

Handout 4.4.1

GROUP-EFFECTIVENESS SCALE

Instructions- Circle the number indicating the rating you think your group deserves at this time.

Task Dimensions

A. How clear are the goals for our group?
   1. Very confused
   2. Vague
   3. Average
   4. Fairly Clear
   5. Very clear

B. How involved are we in what the group is doing?
   1. No involvement
   2. Not much involvement
   3. Average involvement
   4. Some involvement
   5. Very involved

C. How accurate are we in group problem diagnosis?
   1. Disregard diagnosis
   2. Some diagnosis
   3. Average diagnosis
   4. Considerable diagnosis
   5. Very involved in diagnosis
D. Are our group norms and procedures consistent with our group goals?
   1. Not very consistent
   2. Somewhat consistent
   3. Average consistent
   4. Consistant
   5. Very consistent

E. How much attention do we give to contributions from other members?
   1. Disregard them
   2. Slight attention given
   3. Average
   4. Attention given
   5. Much attention given

F. What process do we use in decision making?
   1. Tsaristic
   2. Minority
   3. Majority
   4. Forced consensus
   5. True consensus

G. To what extent do group members contribute to reaching our goals?
   1. No one contributes
   2. A few contribute
   3. Average contribution
   4. Most contribute
   5. All contribute

   Maintenance Dimensions

H. To what extent do we find pleasure in working with one another?
   1. Hate it
   2. Discontented
   3. Some pleased, some displeased
   4. Most pleased
   5. All enjoy

I. How much do we show our appreciation, support, and encouragement to others?
   1. We do not
   2. Very few supported
   3. Average
   4. Often show support
   5. Every member given support

J. To what extent do we express feelings?
   1. We do not
   2. Positive feeling, no negative
   3. Low level positive and negative
   4. Negative feelings, no positive feelings
   5. Share all feelings at all levels

K. How do we handle conflicts?
   1. Avoid them
   2. Seldom explore them
   3. Change the subject
   4. Do explore them
   5. Explore them all and resolve them
SECTION 2

Building Capacity of Farmers’ Organisations for Watershed Management
Module 5

Integrated watershed management

Introduction

Among the major resources available to man is land; comprising soil, water and associated plants and animals; the use of these should not cause their degradation or destruction because man’s existence depends upon their higher productivity (FAO, 1982). It means that the community’s needs are to be met through optimal utilisation of these valuable resources using technological developments.

However, these resources are vulnerable to deterioration and degradation under improper use. The ever increasing human and animal population has been exerting powerful pressure on land resources to meet the requirement of food, fibre, fuel, timber and other industrial needs. In the process, over exploitation and improper use of these resources have resulted in the disappearance of the forests, the spread of the deserts, the erosion of the soil, the flooding of the rivers and growth of population on fragile ecological zones. According to Maurice Williams (SID, 1992) over half of world’s poorest people now live on environmentally fragile lands which over time cannot sustain the livelihood of such large and growing populations.

Realising the gravity of the problem, the United Nations Conference on Environment and Development (UNCED) held at Rio de Janeiro, Brazil in June 1992 approved a new kind of development—human, sustainable and shared. Agenda 21 adopted by UNCED addressed the pressing problems of today and also aims at preparing the world for the challenges of the next century. India being a signatory to this document owes the responsibility to implement it.

In this context, it is relevant to note that the use to which land is put is determined by the owners, farmers’ institutions, government, as the case may be, according to their perception and needs. Such decisions are influenced by a host of physical factors, such as soil and climate, technology and socio-economic aspirations of the community. Farmers are also influenced by other economic, political and social factors. Sustainable development is possible only if the useful life of a resource is prolonged so as to permit its exploitation not only by the present generation but also by the future generations. For sustainable use of land resources, watershed management, which is a holistic approach, is by now generally accepted as the best means and is gaining popularity in India.

Potential richness of natural resources in India

The potential of natural resources in the country is such that India could be one of the strongest economic powers of the world. With a geographical area of 329 million hectares, it is the seventh largest nation in the world. It is second only to China in terms of population which stands at 96 million today. With an average rainfall of 119 cm and surface flow of about 188 million hectare meters, India is endowed with vast water resources. India has the world’s largest livestock population of 400 million. It is estimated that over 75,000 species of fauna and 45,000 species of flora are found in India (MOEF 1992). All kinds of soils and forests are met within this country. The climate varies from pre-humid to arid and supports diverse type of vegetation. India is rich in mineral resources, also (Nair & Negi, 1993). No wonder, the country had a glorious past.
Present Scenario

Poverty

India is still considered as a poor country with about 230 million (1991) of its population living below the poverty line.

Vagaries of rainfall

Though the annual rainfall of the country is high, there are wide variations in its distribution over space and time. About 95% of the total rainfall occurs in a short period of 3-4 months, during summer. Half of the rainfall occurs in about 30 hours within rainy season. Rainfall intensity is also 2-3 times higher than that of middle latitude countries (Dewan, 1990). The arable area falling under various ranges of rainfall has been assessed as under:

1. Area receiving less than 750 mm (low rainfall region) : 33%
2. 750 mm to 1125 mm (medium rainfall region) : 35%
3. 1125-2000 mm (high rainfall region) : 24%
4. Above 2000 mm (very high rainfall region) : 8%

With such high variations in rainfall pattern, drought and floods are a recurring feature of Indian agriculture. Scarcity of water is felt in many parts of the country, especially during summer months.

Depletion of ground water

Due to indiscriminate withdrawal of groundwater through tube wells, the groundwater level has been falling sharply in several drought prone areas of the country.

Soil loss - a major cause for concern

It is estimated that in India about 5,334 million tonnes of soil (approximately 16.4 tonnes per hectare) is eroded annually, out of which 29% is permanently lost to the sea, 10% is deposited in the reservoirs, and 61% is transported from one place to another (Dhruvanarayana and Ram Babu, 1983). The annual average nutrient loss varies from 5.3 to 8.4 million tonnes.

Land degradation

Reliable data, based on systematic mapping on large scale, on land degradation are not available. As per estimates (NLCCB, 1988) about 174 MHa constituting more than 53% of the total area of the country is affected by water and wind erosion, salt affliction, water logging, shifting cultivation and other problems. During the past seven plan periods only about 34 MHa could be treated with soil conservation measures at a cost of Rs. 2190 crores (Nair & Negi, 1993). A recent study (Rao et al., 1994) shows about 107 MHa of land still needs immediate attention.

Dwindling forest cover

In spite of the massive afforestation programme taken up in the country, reports (FSI, 1991) indicate that out of 64 MHa land having forest cover, only 38.5 MHa land constituting 11.7% of the total area is having dense forest cover (PC, 1991). This has resulted in acute shortage of fuel, fodder, timber and other forest products.

Land use as per capability

Land has to be put to use as per its capability and suitability. An action point of National Land Use Policy Outline (NLPO) has emphasised this need (NLCCB, 1988). At least all ongoing watershed development programmes should be planned considering the land capability. However, for want of adequate data at field level this aspect generally gets neglected.
Pressure due to high livestock population

Productivity of India’s cattle is one of the lowest in the world. Pasture land constitutes only 3.9% of the total area of the country and as a result it is highly degraded (MOEF, 1992).

Gloomy picture

The overall present status of land resources is far from encouraging. Significantly high percentage of land is degraded and is having low productivity. Water is scarce and available water is getting polluted. Forest resources are under constant threat from human and animal population. Land use as per capability is yet to be practised. Thus the efforts for land care are far short of requirements.

Declining land-man ratio

Another dimension to the problem is that the per capita availability of land in India is declining fast, namely from 0.89 hectare in 1950 to 0.33 hectare by 2000 AD. This includes decline in per capita availability of cultivable land from 0.48 hectare in 1950 to 0.15 hectare by 2000 AD. To sustain a projected population of 1000 million people by 2000 AD, the requirement of food grains would be to the order of 240 million tonnes and the production of fuel and fodder would have to be increased substantially (NLCB 1988). Thus the situation demands adoption of strategies for wise use of land & water and other resources for sustainable biomass production.

Uneven growth in Agriculture

After Independence, India made tremendous strides in agricultural production. The food grain production rose from 50 million tonnes in 1950 to 186 million tonnes by 1994-95, resulting in self sufficiency. However, it is not worthy that the gains in agricultural growth have been confined to irrigated areas. In fact about 44 irrigated districts got maximum benefit from the Green Revolution (WARSA, 1992). This uneven growth has created several socio-economic problems.

Significance of Rainfed/Dryland areas

The rainfed areas presently constitute about 100 MHa and contribute about 40% of the total food grains and substantial quantities of oil seeds, cotton and other crops, so the development of these areas holds the key for stepping up agricultural production.

Dry land farming

While the term rainfed farming is used for all areas depending upon annual rainfall irrespective of its quantum, the term dry land farming is generally applied to the low and medium rainfall conditions (i.e. less than 750 mm and 750-1125 mm annual rainfall, respectively).

Factors affecting agricultural production in rainfed areas

In rainfed areas the availability of water is dependent on erratic amount, intensity and distribution of rainfall and hence an element of risk pervades the production systems. Subsistence farming is widely practised on the fragile and denuded ecosystem.

Problems of dryland farming area

- Due to uncertain and erratic rainfall and poor land resource base, there is great risk involved in agricultural production. Therefore, farmers tend to take up established traditional varieties of crops in these areas with least investment for any loss and with no regard to the suitability of vegetation for prevention of degradation of the ecosystem. Frequent droughts affect agricultural growth.
- Farmers are generally unaware of the already available improved crop production technology.
• The infrastructure facilities available for supply of inputs are weak affecting crop production.
• Farmers are generally small and marginal land holders and lack resources for investment
• Extension system is not equipped to promote multi-disciplinary land use systems.

**Special characteristics of desert areas**

These areas are characterised by extreme temperatures, poor rainfall of generally less than 400 mm per year, low humidity, high velocity winds, frequent dust storms and recurring drought.

**Integrated watershed management approach**

The problems of rainfed areas including those of drought prone, high mountain and desert areas are so complex that they require an integrated and multi-disciplinary approach for sustainable development. It is now well recognised that this can be achieved through watershed management. In fact, watershed management is a holistic approach for the development of an area with the ultimate objective of improving the quality of life of the people who dwell within it.

This module explores the concept of a watershed with an aim to understand the principles of participatory watershed management, which will form the basis for the activities of the farmers’ organisations. The sessions are arranged in the following order:

1. Concept of a watershed
2. Delineation of a watershed
3. Understanding aims of participatory watershed development
4. Participatory watershed management
5. Visit to a developed watershed.

The idea is to get the participants first acquainted with the concepts, aims and principles of participatory watershed management and then exposing them to a developed watershed in order to enhance their understanding of the same.
Session 5.1

Concept of a watershed

Objective
• To enable the participants to understand the basic concept of a watershed.

Time
150 minutes

Materials
Handout 5.1.1 - Concept of a watershed
Handout 5.1.2 - Features of a watershed
Handout 5.1.3 - Important basic information necessary on a watershed

Method
Group discussion, group task.

Procedure
Step 1. Start a discussion on the necessity to have a common understanding of the watershed concepts.
Step 2. Ask question, "what is a watershed?" and seek response from the participants. Note them in a flip chart.
Step 3. Elaborate on the responses, add more ideas and synthesise the basic concept of a watershed as indicated in Handout 5.1.1.
Step 4. Ask the participants to form groups of 5 to 6 each, and give them the following task. Allow sufficient time to discuss and complete the task.
"Based on your experience, prepare an illustration of a watershed, highlighting its important features".
Step 5. Ask the groups to present the outcomes of the task followed by clarifications and discussion.
Step 6. Help the participants to synthesise the understanding of the features of the watershed by using the Handout 5.1.2, and clarify any details.
Step 7. Ask the participants "what are the important basic information one needs to have on a watershed?"
Step 8. Initiate a discussion, seek responses from the participants and chart them.
Step 9. Elaborate on the responses. Add further ideas and help the participants synthesise the information using inputs from Handout 5.1.3.
Step 10. Clarify any queries and doubts remaining in the participants on the concept of watershed.
Handout 5.1.1

The Concept of a watershed

What is a watershed?

Watershed is all the land and water area which contributes run-off to a common point. The watershed above any point on a defined drainage channel is therefore all the land and water areas which drain through that point. It is marked by an elevated line that forms a division between two areas drained by separated streams, systems or bodies of water.

It refers to an entire upstream topography around a defined drainage channel which feeds water to the lands below. It may vary from a few hectares to several thousands of hectares. Catchment area, drainage basin, river basin and watershed are synonymous.

Watershed Concept

Watershed is a geo-hydrological unit of area, which drains the entire run-off to a single outlet.
Features of a watershed

**Location**
Geographical location
Longitude
Latitude

**Size**
Total geographical area in hectares or square kilometers

**Shape**
Geometric form, shape index, compactness, co-efficient

**Slope**
\[ S = \frac{(D \times L \times 100)}{A} \]

Where,
- \( S \): average slope
- \( D \): stream grade
- \( L \): average length of the contour
- \( A \): area of the watershed

**Geology**
Type of rocks, stratigraphy

**Soils**
Types, capability, fertility status

**Climate**
Precipitation, temperature, humidity, wind velocity

**Drainage**
Drainage pattern, drainage density, main stream length

**Land use**
Arable, non-arable

**Time of concentration**
Time required for water (run off) to reach outlet

**Ground water**
Depth of ground water, quality of water

**Demographic characteristics**
Population, socio-economic conditions
Important basic information necessary on a watershed

1. Socio-economic data
   • Human, cattle population
   • Occupation pattern (artisans, etc)

2. Preparation of map
   • Contour map
   • Land area available
   • Location of water bodies

3. Soil Study
   • Soil texture- sand:silt:clay
   • Organic matter and nitrogen content
   • Soil depth

4. Land ownership distribution
   • Ownership data
   • Land encroachment

5. Water resources
   • Location of water bodies
   • Water availability, seasonality, etc.
   • Extent of irrigation
   • Number of open wells, bore wells, etc.

6. Vegetation
   • Location of trees, dominant tree species
   • Area under plantations, grass and shrub coverage of lands
   • Tree species use for different purpose

7. Biomass
   • Existing consumption levels- fuel, fodder, timber, etc.
   • Source of biomass
   • Contributions - trees, crops, shrubs
   • Biomass requirements- subsistence, commercial, extent of export

8. Perceptions
   • Uses of watershed
   • Species choice
   • Management of resources

9. Agriculture and animal husbandry practices
   • Cropping pattern
   • Labour use- seasonal
   • Biomass use- manure, fodder
   • Crop residue- quantity, end use
   • Livestock- grazing practices, dung availability

10. Traditional knowledge
    • Tree species choice/selection for different locations, end uses
    • Land capability, Soil and water conservation
    • Harvest and sharing of resources

11. Local institutions
    • Existing membership, structure
    • Functions of institution
    • Mechanisms of settling disputes

Source: Development Support Centre, Ahmedabad
Session 5.2

Delineation of a watershed

Objective
- To enable the participants to understand and develop skills in identification and delineation of a watershed.

Time
120 minutes

Materials
Some sample toposheets or sketches of watersheds, pencil, erasers, scales.
Handout 5.2.1 - Classification of watersheds
Handout 5.2.2 - Watershed and its delineation

Method
Group discussion, task, reading. A resource person with subject knowledge can be invited for this session to give extra inputs.

Procedure
Step 1. Make the participants realise that identification/delineation of a watershed is the first step towards watershed development.
Step 2. Introduce the participants to various shapes and sizes of watershed and their classification based on size, using inputs from Handout 5.2.1 and clarify doubts arising from the participants.
Step 3. Familiarise the participants with toposheets, remote sensing, use of dumpy levels, apart from the local transact of the area with the farmers/villagers.
Step 4. Give introduction to different ways of delineating the watersheds. Use inputs from Handout 5.2.2.
Step 5. Explain to the participants the steps to be undertaken for the delineation of watersheds, and ask for any clarification, if needed.
Step 6. Engage the participants in group work by providing them with sample toposheets/maps, for exercise on identification of watersheds.
Step 7. Interact with the various groups of participants and provide necessary guidance for making them understand the sequential steps in delineating a watershed.
Step 8. Ask the participants to share their experiences of delineation of watershed and clarify the doubts emerging from discussion.
Step 9. If required, give additional inputs on other techniques of watershed delineation and close the session.

Adapted with modifications from: Desai and Arora
**Handout 5.2.1**

**Classification of watersheds**

Basically all the terms like watershed, catchment, river-basin, drainage basin, region and river valley are synonymous. It may be few hectares to hundreds and thousands of hectares or square kilometers. The following system of classification, depending on the size of the entity, is adopted in general.

<table>
<thead>
<tr>
<th>Sl. No</th>
<th>Category of Hydrologic unit</th>
<th>Size</th>
<th>Scale of base map</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>(In Lakh Hectares)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>01.</td>
<td>Region</td>
<td>300 and above</td>
<td>1:10 million</td>
</tr>
<tr>
<td>02.</td>
<td>Basins</td>
<td>50-300</td>
<td>1:4 to 6 million</td>
</tr>
<tr>
<td>03.</td>
<td>Catchments</td>
<td>10-50</td>
<td>1:1 million</td>
</tr>
<tr>
<td>04.</td>
<td>Sub-catchment</td>
<td>2-10</td>
<td>1:1 million and upto 2,50,000</td>
</tr>
<tr>
<td>05.</td>
<td>Watersheds</td>
<td>0.5-2</td>
<td>1:2,50,000 and upto 50,000</td>
</tr>
</tbody>
</table>

|        | (In Hectares)               |             |                           |
| 06.    | Sub-watershed               | 10,000-50,000 | 1:50,000                  |
| 07.    | Macro-watershed             | 1,000-10,000 | 1:15,000                  |
| 08.    | Micro-watersheds            | 100-1,000   | 1:5,000                   |
| 09.    | Mini-watershed              | 10-100      | 1:4,000                   |

Serial No. 7, 8 & 9 are the operational sizes for agricultural purposes and identifying these watersheds from sub to mini is known as micro level delineation of watersheds.

In the broad sense and considering the geography of India, the sub-continent is delineated into 6 water resource regions.

1. Indus basin
2. Ganges basin
3. Brahmaputra basin
4. Basins of the rivers, flowing into Bay of Bengal, except those of 2&3
5. Basins of the rivers flowing into the Arabian sea, except those of 1
6. Basins of rivers of Rajasthan that do not reach sea
Watershed and its delineation

Watershed is a geo-hydrological unit of area which drains the run off to a predetermined single outlet. It constitutes as big an area as a region and as small as a micro or mini watershed comprising only few hectares.

Flowing water forms the main nerve line of the economy of the nation and watershed management envisages a systematic and scientific approach towards conservation, harvesting, proper utilisation and safe disposal of flowing water from the moment it strikes the land surface in the form of a tiny rain drop till it joins the ocean.

Whenever and wherever the protection, development and sustained maintenance of natural resources like land, water and vegetation is to be taken up or the developmental activities/programmes are based on the development of natural resources, watershed is taken as an unit of development programmes instead of revenue or administrative unit.

Delineation of a watershed

Delineation of watershed/sub-watershed is the process of demarcating a hydrologic and physiographical entity encircled by a distinct ridge line and surrounded by many such entities from a major unit for the sake of administrative and technical feasibility, considering homogeneity of basic resources and problems.

Before delineating a watershed, the size of proposed entity should be decided. The size of the watershed varies according to the size of the stream of river for which it forms a catchment. From the practical point of view of a proper utilisation of land and water resources a workable size of watershed should be decided in accordance with the aims and objectives of the development programme in a particular area and period.

Procedure

1. With the help of toposheets

In the first step toposheet prepared by Survey of India should be made use of. These toposheet contain the water courses and contours at 20 meters interval and other important natural and created physical features. The water courses tanks and lakes serve as a very good guideline for demarcating watershed unit. In the process of delineation of watershed boundary, the ridge line is traced starting from a point which is the outlet for run off from that particular area of land, keeping in view the water courses (streams and nallas) which contribute water to that selected point. A line is traced from this point along with the ridge line (dividing line) till it joins the same point. While tracing this line, the loops of contour should be considered for properly locating the boundary line. This line encircles the area of the watershed and delineates it from the adjacent watersheds.

2. By topographical survey

The identified micro watershed can also be delineated by tracing out contours with smaller interval on the cadastral or revenue map of the area by conducting the topographical survey. The loops formed by the contours, water courses and the physical features (natural and created) help in delineating the micro watersheds of required size with reference to the predetermined point on the drainage course.

3. By cadastral or revenue maps

The micro watershed can also be delineated and demarcated on the cadastral or revenue map of the identified area directly by reconnaissance survey with reference to survey numbers and physical features, starting from the particular point on the drainage course and joining it back, walking along the dividing line (ridge line) of the micro watershed.

4. With the use of aerial photographs

The scaled enlarged prints of aerial photographs can be used for the delineating of micro watersheds with more accuracy. The aerial photographs of different scales are taken with forward overlap of 60% i.e. photo to photo overlap in a strip and lateral i.e., strip to strip overlap of 20%. The aerial photographs of 1:6000, 1:10,000 scale will be more useful as the 4 to 5 times enlargement of these photographs provides the prints sufficiently enlarged for the proper delineation and planning different watershed development programmes.

With the use of two photographs of a strip and stereo scope which gives the three dimensional view, the delineation of micro watersheds can be done by tracing the ridge line directly on the photographs.
Session 5.3

Aims of watershed development

Objectives

- To enable the participants to understand the aims and objectives of watershed development, its end results and success criteria.
- To enable the participants to understand the various issues in watershed development.

Time

2 hours

Materials

Handout 5.3.1 - Aims of a development programme & its components
Handout 5.3.2 - Aim of sustainable participatory watershed management
Handout 5.3.3 - Major issues in watershed development

Method

Group discussion, group tasks, lectures.

Procedure

Step 1. Highlight the importance of understanding the aims of a development programme for its successful implementation.

Step 2. Explain them the three main components of aim i.e. objectives, end results, and success criteria.

Step 3. Familiarise them with the terminology (Handout 5.3.1) and help them understand the same using a worked out example.

Step 4. Ask the participants to form groups and engage them in a group discussion to define the aim of sustainable participatory watershed management.

Step 5. Ask the participants to present the outcomes of the group discussion followed by clarifications and discussions.

Step 6. Help the participants to synthesise their understanding on the aim of sustainable participatory watershed management.

Step 7. Further ask, "what are the major issues in watershed development?"

Step 8. Seek responses from the participants and chart them on flip chart. Distribute Handout 5.3.3. Give them time to read and discuss.

Step 9. Elaborate upon the issues raised during the discussion and help participants understand the various issues related to watershed development.
Aims of a development programme and its components

**Aims - What does it mean?**

Aims relate the direction we wish to take or the future we want. Three aspects of aims are -
- Objectives
- End results
- Success criteria/standards

**Objective**

It gives clarity about -
- Why is the task being done?
- Whom is it meant for?
- What benefits it will produce?
- What use it will be?

**End result**

It refers to the visualisation of the results which we would like to produce at the end of the task. This needs to be decided during the planning stage.

**Success criteria/standards**

These refer to the indicators which help us judge whether we have achieved progress at the end of the project. Success criteria need to be set after visualising the end result in planning stage.

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**Handout 5.3.2**

**AIM OF SUSTAINABLE PARTICIPATORY WATERSHED MANAGEMENT**

Sustainable participatory watershed management can be defined as "UTILISATION AND CONSERVATION OF LAND, WATER AND FOREST RESOURCES AT FARM HOUSEHOLD AND COMMUNITY OR GIVEN WATERSHED LEVEL FOR CONTINUOUSLY IMPROVED LIVELIHOOD AND OVERALL HUMAN DEVELOPMENT".
Major issues in watershed development

There are three major issues in watershed development:

1. **Social issues**
   - Who are owning land and water resources and there distribution?
   - Who are dependent on these resources, directly or indirectly?
   - Why people are not able to develop and use resources properly?
   - Who are going to benefit from a watershed development plan?
   - Who are going to be affected by the watershed development plan?
   - Whether plan would focus on individual development or community development?
   - Whether plan would aim for social change?

2. **Technical issues**
   - Whether technological package (TP) is suitable according to agro-climatic situations?
   - Whether TP is proven technology in other similar areas?
   - Is it easily understandable by local people and less dependent on outsiders?
   - Is it easy to maintain and manage?

3. **Legal issues**
   - Land
     - Sanction for development of the lands and co-operation or coordination among different controlling agencies, which are controlled and managed by different departments or through various central and state acts and provisions.
     - Already leased for mining or other proposes
     - Encroachments
     - Cases under courts
     - Land record not updated.
   - Water
     - Watershed treatment is basically going to affect the flow of water from watershed and there are certain legal issues involved in usage of created resources.

   **A. Surface water**
     - Permission to construct any permanent structure from proper authority is needed for public lands.
     - Surface water cannot be utilised without the permission of irrigation authorities.
     - Restriction on construction of structure for surface water storage in catchment areas of big areas of big resources.
     - Forests lands cannot be diverted for other purposes except forestry even if good water storage sites are available.

   **B. Groundwater**
     - Individual has rights to dugwell/tubewells to exploit the groundwater in his own lands to any extent of depth, which hampers the equitable utilisation and distribution of created water resource.
     - It also restricts the benefit to certain elite people of the society who have a better financial resources for tapping ground water.

Several field applications which have been followed to agricultural watersheds are:

1. Terraces and diversions.
2. Grass covered waterways.
3. Farm and ranch ponds.
4. Structures for temporary flood water storage, channel works and drainage practices.

The conservation measures for land and water are contour bund check dams, terraces, gully plugging, vegetable cover afforestation, land management, stream bank protection etc. These measures are necessary to retard the velocity of runoff, to control soil erosion and to absorb more water in the soil.

People’s participation in the catchment management programme or watershed management programme is all the more important. People’s participation can be enhanced if management programme are made clear to the members of the watershed in order to mobilise public support.

Management of a small watershed to conserve soil, and water requires that the land be used within its capabilities and treated according to its needs.

Source: Development Support Center, Ahmedabad
Session 5.4

Participatory watershed management

Objectives

• To enable the participants to understand the importance of people’s participation in development programmes.
• To give an overview of the participatory watershed management.

Time
150 minutes

Materials
Flip charts, pens.

Handout 5.4.1 - Success stories in participatory watershed management
Handout 5.4.2 - Features of top down & bottom up approach
Handout 5.4.3 - Activities/Steps in planning & implementation of watershed development programmes.

Method
Group discussion, lecture, group task.

Procedure

Step 1. Ask the participants to recall the earlier sessions on the different components of a watershed and its basic knowledge. Tell them that now they are moving to the more intricate details on the ‘how’ of watershed management.

Step 2. Give the participants an overview of participatory watershed management and highlight the various steps with specific focus on involvement of people at different levels.

Step 3. Now ask the question “why has there been greater emphasis on peoples’ participation?” and let the participants hink and discuss. Inform the participants on the role of various actors in watershed development programmes.

Step 4. Highlight the role of various facilitating agencies and emphasise on the fact that the major responsibility for watershed development in terms of planning, implementation and maintenance is with the people, since, it is their resource which is being developed for their own use.

Step 5. Ask the participants “what are the benefits of peoples’ participation in watershed development programmes?” Let them analyse for themselves.

Step 6. Chart the responses. Refer to success stories in different parts of the country to help the participants appreciate the importance of people’s participation in watershed development programmes. Distribute Handout 5.4.1. Refer to the 73rd amendment of Government of India on local self governance through Panchayti Raj bodies to strengthen people’s participation.

Step 7. Explain to the participants the features of top down and bottom up approach (Handout 5.4.2) and contextualise it in terms of watershed development programmes.

Step 8. Follow it up with the inputs on steps to be followed in planning and implementation of watershed development programmes (Handout 5.4.3).

Step 9. Engage the participants in an open discussion on the various inputs received during the session and help them synthesis their ideas and understanding, clarifying doubts, if any.

Step 10. Close the session highlighting the main points.

Adapted with modifications from: Desai and Arora
Some success stories in participatory watershed management

Ralegan Siddhi

Ralegan Siddhi is perhaps India's first model of micro watershed development initiated and fostered by local people under the guidance of Padma Sri Anna Hazare in 1975. This village is located in drought prone area of Ahmedanagar district of Maharashtra receiving a scanty rainfall of 250-300 mm annually. Hence, the highest priority in the project has been given to harvesting and conservation of rainwater.

The project covers four watershed and a geographical area of about 962 hectares. Out of which 651 ha is cultivable, 137 ha forest land, 123 ha revenue wasteland and 51 ha village pasture land. The total cost incurred on the project from 1975-76 to 1985-86 was about Rs 11.42 million of which Rs 1.34 million contribution was from the local people mainly through Shramdan.

A series of 31 checkdams and nalabunds constructed under the project have created about 282,000 cubic metre water storage capacity which has resulted in increased availability of ground water. This has facilitated recharging of community wells. Water from these wells is supplied at a moderate rate and it has enabled the farmers to grow two or three crops every year including fruits and vegetables which are now exported. As a result of increased availability of water for irrigation, the total cropped area in the watershed increased from 619 ha in the pre-project period to 859 ha in 1985-86. The project has had a significant positive impact on crop, milk yield, fodder production, employment and incomes.

The villagers have participated whole heartedly in the project and have contributed through both Shramdan and cash. All the soil and water conservation structures were built through community action. The villagers have completely stopped grazing their animals on common property lands and have switched to stall-feeding which has become possible as a result of increased grass production from the common property land after stoppage of grazing. They have stopped illicit lopping and felling of common property trees and planted more than two lakh trees mostly in the common property lands including hill slopes. This has prevented soil erosion besides providing a variety of products such as fuel wood, fodder, fruits etc.

To enlist people's participation in the village development work including the project activities, Anna Hazare has organised the villagers into different associations which are engaged in development and management of natural resources of land, water and forests. Equitable distribution of water among the eligible farmers is ensured through various water supply associations. The forum of gram sabha has been used to introduce new ideas and seek people's involvement in refining and implementing them. It has been ensured that the final decisions taken in such meetings are considered by the majority of the villagers as their own.

The Ralegan Siddhi experience shows that people under the guidance and good leadership can develop and manage their natural resources and distributes the benefits equitably.
Sukhomajri

Sukhomajri is a small village of about 538 people in the lower ranges of the Shivaliks in Haryana. Roughly half of the total land in the village is owned privately by individual farmers and the other half is owned by forest department. The major portion of the catchment is owned by the forest department.

The Sukhomajri project was launched in 1979 with its focus on harvesting and recycling of rain water. Sukhomajri now has three rainfed reservoirs. All the rain water that falls on one side of the village is collected and stored in these reservoirs and is used for both irrigation and drinking purpose. In Sukhomajri, a total area of 4,085 ha was treated at the total cost of Rs 78.32 lakhs, and about 61.1% of it was accounted for by skilled and unskilled labour.

A water user's society was set up in 1982 to manage the reservoirs and ensure equal distribution of irrigation water and forest produce among the villagers and thereby to enlist their participation in the project. With the help of a management consultant a system of distribution of reservoir water was established in which every member was to be given equal share regardless of the land owned. The landless also had a right to the water and could sell their share to others. The right to membership of the society and to the water was contingent on the observance of stall feeding. All these factors led to greater participation of villagers in the project.

The project resulted in a significant increase in crop and milk yield rates and production, reduction in the number of cows and goats, increase in the number of buffaloes, increased availability of water and higher incomes. This achievement has motivated the villagers to invest in soil and water conservation measures and to invest in soil and water conservation measures and to participate in the programme whole-heartedly. It was also observed that land, water and forest resources were better managed and income are sustained at a high level when people are also involved in decision making about the strategy of rural development.

Source: Katar Singh (1992)
**Handout 5.4.2**

Features of top down and bottom up approach

<table>
<thead>
<tr>
<th>Item</th>
<th>Top Down (Blue Print based)</th>
<th>Bottom Up (Process based)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Point of departure</strong></td>
<td>Things</td>
<td>People</td>
</tr>
<tr>
<td><strong>Goals</strong></td>
<td>Predetermined (closed)</td>
<td>Adaptive (open)</td>
</tr>
<tr>
<td></td>
<td>Short term</td>
<td>Long term</td>
</tr>
<tr>
<td><strong>Key word</strong></td>
<td>Planning</td>
<td>Participation</td>
</tr>
<tr>
<td><strong>Focus of Decision making</strong></td>
<td>Centralised</td>
<td>De-centralised</td>
</tr>
<tr>
<td><strong>Methods/Rules</strong></td>
<td>Standardised/universal</td>
<td>Diverse/local</td>
</tr>
<tr>
<td><strong>Technology</strong></td>
<td>Fixed 'package'</td>
<td>Varied 'basket', local, indigenous</td>
</tr>
<tr>
<td><strong>Relationship with local people</strong></td>
<td>Controlling, Inducing Motivating</td>
<td>Enabling, Supporting Empowering</td>
</tr>
<tr>
<td></td>
<td>Clients, Beneficiaries, Recipients</td>
<td>Actors, Analysts Partners</td>
</tr>
<tr>
<td><strong>Outputs</strong></td>
<td>Uniform Infrastructure</td>
<td>Diverse Capacity &amp; competence</td>
</tr>
</tbody>
</table>

*Source: Robert Chambers (1992)*

**Handout 5.4.3**

Activities/steps in planning & implementation of watershed development plan

**Why plan?**

Deforestation, in-appropriate farming techniques, overgrazing, faulty land use serve to amplify the deleterious impact of heavy rains, prolonged drought or high winds leading to soil erosion, floods, vegetative deterioration and water scarcity, leading to eco-stress.

A resource management strategy must be evolved which involves not only ecological regeneration but also management of demand and claims on the environment by the human community within the particular eco-space; so as to bring about equilibrium between ecology (land, water, and vegetation), on the one side and demands made by man and grazing animals, on the other side. The presently scattered programmes of soil conservation, afforestation, minor irrigation, animal husbandry, sheep development, fisheries and other rural development activities, which are undertaken on an ad-hoc basis should be well-knit into the watershed projects following a study of climate, land, water and plant resources on one hand and man and animal resources on the other so as to bring about sustained natural resources development based on principles of ecology, economics, employment generation and energy conservation for human welfare.
Human and cattle population living in a particular watershed are directly or indirectly affected by what happens in a watershed as they depend for their basic necessities of food, shelter, fodder and drinking water on a watershed.

**Major steps in planning and implementation**

1. Define the goals and specific objectives of the programme.
2. Survey and inventory of natural resources land, water, vegetation, livestock
3. Investigation of status and dynamics of resource use.
4. Documentation of folk knowledge and traditional practices of resource use and management and the perceptions of community.
5. Assessment of problems of resource degradation, causes, nature of degradation and possible impacts and needs of the community.
6. Involvement of the village community, local institutions and experts.
7. Development of strategies, alternatives, programs and technology packages.
8. Demonstration and folk knowledge of technologies/options.
9. Selection of options by the community.
10. Develop institutional framework for implementation and monitoring, protection, sharing-decision making.
11. Implementation of the programmes with the help of people.
12. Monitoring and evaluation of the programs by the people.
13. Review and modify the programme if necessary.

The choice of management practices should be based on information of hydrologic cycle of the watershed. A co-ordinated effort of engineers, agronomists, foresters, silviculturists, farmers, geologists, hydrologists and economists would be very much desirable in an integrated management ventures of small watersheds.

Planning is for the people, and planners must give adequate emphasis to the social and environmental consequences stemming form water development projects. Technical and economic feasibility studies are needed, but equally necessary are social and environmental feasibility studies. Without such analysis, public understanding and acceptance of the programme, an important parameter to judge the success of water development programmes, may not be complete.

The planning process should become more sensitive to social and environmental problems, since long term sustainable development can only take place within the framework of appropriate environmental guidelines. Otherwise, the overall strategy of development will be self defeating.

**IT SHOULD BE PRACTICALLY IMPLEMENTABLE AND SHOULD TAKE CARE OF LOCAL PEOPLES’ NEEDS AND THEIR PRIORITIES FOR DEVELOPMENT.**

*Source: Development Support Centre, Ahmedabad*
Session 5.5

Visit to a developed watershed

Objective
- To expose the participants to a watershed, its components and technologies.
- To help the participants develop conceptual clarity of a watershed.

Time
One day

Materials
Toposheet, watershed maps, pencils, etc.

Method
Field visit, observation

Procedure
Step 1. Ask the participants to recall the earlier sessions of this module and clarify any concepts, they haven’t understood.

Step 2. Brief the participants about the field visit and give the basic information about the watershed they are going to visit. This can be done in a general session or outside the vehicle.

Step 3. Field visit

Step 4. Participants and course-team visit the watershed and observe its various components.

Step 5. Stress on giving the participants an opportunity to discuss with the officials & farmers about peoples’ participation in planning, implementation & management of the watershed.

Step 6. Expose the participants to observe different technologies including various structures being adopted in the watershed.

Step 7. At the end of the visit ask the participants to recall the observations made and do a self analysis of observations & conclusions.

Step 8. Back at the training center hold a review session on the outcomes of the visit, preferably the same day evening otherwise the next day morning.

Step 9. During the review help the participants develop the conceptual clarity on the watershed, relating it to their field visit.

Note to the trainer
- Pre-arrange the visit and if possible the officials concerned with watershed may be present with the group. Also, conduct a village meeting while arranging for the visit, in order to take their consent about bringing in so many people to the village. This will help the interaction of the participants with the villagers.
- If possible arrange for a village meeting of the farmers with the participants for information sharing.
Module 6

Understanding resources and need assessment

Introduction

Participation is a process by which the farmers becomes involved during all the stages in their own development, studying their own situations, making decisions and there by controlling situations that affect their own lives.

Participatory methods have been specially found useful in watershed development programmes, where self-help grassroots initiatives can solve problems on a long term, sustainable basis. This approach mobilises the watershed resources and strengthens the farmers’ group capabilities, so that greater self-reliance and independence is achieved.

Participatory research serves a dual process of data collection and learning. It is an ongoing action oriented approach which forms an integral part of watershed development and provides more accurate and authentic reflection of the reality of village life, and helps in suggesting viable solutions at the community level.

For a farmers’ organisation to take up integrated watershed management programmes, there are three important aspects which need to be thoroughly understood, before setting the goals and objectives of the programme. These are-

1. Understanding the watershed community
2. Understanding the resource and problems of the watershed, and
3. Identification and prioritising of needs of the farmer community in the watersheds.

Understanding the Watershed Community

The first step in the process is when the farmers’ organisation is able to systematically analyse its own watershed community. This systematic understanding of the community provides a base for all the development activities to be carried out in that watershed. This process is often referred to as ‘situational analysis’, and enables to gain useful insights regarding the prevailing circumstances and provides necessary insights as to how changes could be made to achieve certain goals.

The situational analysis at the initial stages is highly relevant for the following reasons-

- It sets stage for watershed development process.
- It helps to understand the dynamics of the farmer community, in terms of its existing socio-economic, socio-cultural socio-political conditions.
- It enables the farmer groups to identify the resources and constraints in the watershed and understand the need to effect the desired changes, and provides a platform for involving the people in the watershed in defining their problems and issues to determine objectives and priorities.
- It provides a reference for project monitoring and evaluation by the people themselves.

Understanding the resources and problems in a watershed

We often think of resources only in terms of material and money. But the resources in a watershed project range widely from natural resources, such as water, soil, climate, etc. to human resource, such as skills, experiences, interests and aspirations of farmers in the watershed. Everyone
who has skills, ideas, information or access to those who have them, can be a valuable resource. We must remember that more are the people involved, the bigger the pool of resources we have. It is therefore very important to identify all the necessary resources available in the watershed i.e. skilled persons available locally, outside specialists, material resources, both renewable and non-renewable. An assessment of resources provides a clear idea of the strength the farmer community possesses in achieving the desired objectives. It also provides a base to determine the amount of community resources that could be mobilised internally and what needs to be harnessed from outside.

In a farmer community what appears to be a problem is often only a symptom of a problem. It is important to realise that problems that hamper the progress of a project are very complex. It takes a collective, participatory effort and careful analysis to identify the various causes of any problem, and to isolate and define the core or underlying issues.

Generally people accept their situation without questioning. Involvement of farmers in research, which starts with identifying and looking into a problem to find its causes, is a learning process which raises awareness and understanding of the situation, leading to problem identification. The participatory approach uses the effective wisdom of a varied group. It requires knowledge of the culture, values, norms and practices of village groups, together with scientific and technical understanding because life experiences often provide realistic targets for actions to solve the identified problems.

Identification and prioritising needs of the farmer community in watersheds

The best people to assess the needs and identify the problems of a farmer community are the members of that community themselves. Often many of the resources to solve community problems lie within the community itself. Too often field workers or other change agents assume that they know the problems of a particular community and therefore the needs of that community. This probably is one of the reasons why so many projects or programmes for the rural poor fail, since they are built on the assumptions of the field workers or change agents rather than in response to the expressed needs of the community members. This is the primary reason why need assessment becomes one of the most critical stages in project development.

Watershed development projects require accurate, reliable and useful information that reflects the needs of a specific watershed community. The planning and implementation of projects should not be left entirely to guesses, view of experts or opinion leaders, guided by the consideration, “this is the right thing to do”. Needs should emerge directly from the ideas articulated by the respective farmer groups of the target population and other stakeholders in the watershed, and project ideas and objectives should be based on these needs.

A need assessment done by the farmer groups with the target population of the watershed community-

• strengthens community commitment and enthusiasm for the project;
• generates project ideas and indicators for evaluation;
• helps to create ownership in the project; and
• serves as an effective system of enquiry that provides information to help the decisions of the farmers’ organisation.

In principle, need assessment should answer the basic question- “Who needs What as defined by Whom?” Here, ‘who’ means the farmers who have needs, or the ‘needers’, ‘what’ means the kind of needs the needers have and ‘whom’ means categories of people who are qualified or have the knowledge or the responsibilities to define the needers needs i.e. the population of the watershed.

There are many ways to collect relevant information for identifying needs, however, the selection of a technique or a combination of technique has to be guided by contextual factors in a particular watershed.
After having identified the needs, it becomes very important that the farmer community is able to prioritise its needs. Prioritisation is important since, a community may have many needs which require solution. But all cannot be taken up at any one instance. Hence a farmer community needs to prioritise its needs or problems based upon their commonality, seriousness and importance, to be taken up under the development programme.

In this module a systematic effort has been made to orient the participants to explore the different ways to understand these basic initial processes and carry them out in the watershed under consideration.

The sessions are arranged in the following sequences-

1. Developing a community profile
2. Understanding resources in a watershed
3. Analysing production problems in a watershed
4. Field visit for understanding resources and problems of a watershed
5. Identifying needs
6. Prioritising needs
7. Field visit for identifying and prioritising needs in a watershed
Session 6.1

Developing community profile

Objectives
- To enable the participants to identify the characteristics of a community.
- To enable them to decide upon what information is needed to understand a specific characteristic of a community.
- To enable them identify the sources of information and data for understanding the community.
- To enable them to develop a profile of a community by synthesising the information.
- To make them understand the importance of using socio-economic information in a community planning exercise.

Time
5-6 hours

Materials
Flip charts, black/white board, pens, chalks, writing paper.
Handout 6.1.1 - Situational Analysis- Technique Development Worksheet
Handout 6.1.2 - Information required & sources
Handout 6.1.3 - An example of a community profile

Methods
Brainstorming, creative reflections, profile mapping exercise.

Procedure
Step 1. Instruct the participants to reflect on the community they are working with and individually note down on paper what each one should know about a particular farmer community as a development worker/practitioner (e.g. number of families, leadership in the community, etc.). Ask them to make the list as much comprehensive as possible.

Step 2. Ask them to form groups of four to five each and develop a common group list based on their group discussion.

Step 3. Invite each of the groups to present the outcomes to other participants.

Step 4. After each presentation encourage additions, comments, and questions from participants. Allow enough time for discussion.

Step 5. When all presentation are complete, display the list in front of the participants and prepare a common list by deleting, modifying, or adding items. Try to reach group consensus in the process.

Step 6. Pose a question to the group "what information is needed to understand these characteristics of the community?" Select a single characteristic from the above list (e.g. natural resources). Brainstorm for ideas and chart the responses as they come.

Step 7. Once all ideas are exhausted, review the responses with the group and reach a consensus on the major items.

Step 8. Highlight the main points to the group and ask them to identify all possible sources of information for each item on the final list.

Step 9. Chart the responses on the black/white board or flip chart. Encourage different view points and allow sufficient time to exchange ideas and clarify issues.

Step 10. Discuss and complete the list.

Step 11. Ask the question "How can we get the information from the above sources? "What are the methods & techniques we could use?" Brain storm and write down the responses/ideas on black/white board or flip chart.

Step 12. Discuss and complete the list. Distribute the Handout 6.1.1 on Situational Analysis- Technique development worksheet with an example, and ask them to fill it up based upon the outputs of the discussion, just completed.
Step 13. Help the participants synthesis their ideas giving examples from Handout 6.1.2. Also distribute the handout.

Step 14. Inform the participants that how they are going to develop a profile of the community using the available information and synthesised data.

Step 15. Instruct them to go through the information first individually, and then as a group, and write down the information in an organised manner under relevant heading.

Step 16. Distribute Handout 6.1.3 and draw their attention to the format used for categorising the data. Explain them that this is only an example.

Step 17. Ask each group to decide upon a format of their own to organise//tabulate/ classify the data and information available with them.

Step 18. Ask them to put the outcomes on flip charts and present it to the entire group of participants. After each presentation allow enough time for comments & discussion. Refine the data lists if needed, based on discussions.

Step 19. Develop a community profile by combining the reports presented by the three groups.

Step 20. Comment on the outcome of the session and synthesise major findings.
Handout 6.1.1

Situational Analysis - Technique Development worksheet

<table>
<thead>
<tr>
<th>1 Characteristics of community</th>
<th>2 Information needed</th>
<th>3 Source</th>
<th>4 Techniques/Methods</th>
<th>5 Instrument</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

An example-

<table>
<thead>
<tr>
<th>Characteristics of community</th>
<th>Information needed</th>
<th>Source</th>
<th>Techniques/Methods</th>
<th>Instrument</th>
</tr>
</thead>
<tbody>
<tr>
<td>Health, sanitation, and nutrition</td>
<td>Types of diseases, Morbidity, Maternal and infant mortality rates, Malnutrition</td>
<td>Records in hospitals and health centers, School records, Public health officer, Selected community members, Selected households</td>
<td>Review of records, Interviews, Discussions, Questionnaires, Observation</td>
<td>Review checklist, Interview guide, Discussion format, Questionnaire, Observation checklist</td>
</tr>
</tbody>
</table>

Source: Gajanayake & Gajayanayake (1993)

Handout 6.1.2

Information required and sources of information

Table 1

<table>
<thead>
<tr>
<th>Details of data</th>
<th>Method</th>
</tr>
</thead>
<tbody>
<tr>
<td>Basic data</td>
<td>Secondary sources</td>
</tr>
<tr>
<td>• NRSA maps, revenue maps</td>
<td>• BDO, Revenue office</td>
</tr>
<tr>
<td>• Socio-economic &amp; ecological data</td>
<td>• School</td>
</tr>
<tr>
<td>• Occupations, artisans, etc</td>
<td></td>
</tr>
<tr>
<td>• Institutions present</td>
<td></td>
</tr>
<tr>
<td>Map Preparation</td>
<td>Field visit and observation</td>
</tr>
<tr>
<td>• Rapid map preparation-hand sketch</td>
<td></td>
</tr>
<tr>
<td>• Marketing of land available on map</td>
<td></td>
</tr>
<tr>
<td>Land characteristics</td>
<td>Field visit and observation</td>
</tr>
<tr>
<td>• Visible extent of erosion</td>
<td></td>
</tr>
<tr>
<td>• Vegetation features on the land</td>
<td></td>
</tr>
<tr>
<td>• Soil colour, topography</td>
<td></td>
</tr>
<tr>
<td>Water situation</td>
<td>Field visit</td>
</tr>
<tr>
<td>• Location of water sources</td>
<td>Group discussion</td>
</tr>
<tr>
<td>• Seasonal availability of water</td>
<td></td>
</tr>
<tr>
<td>People's perceptions</td>
<td></td>
</tr>
<tr>
<td>• Land use pattern, land availability and wastelands</td>
<td>Group discussion in the village</td>
</tr>
<tr>
<td>• Environmental problems, soil erosion, runoff, etc.</td>
<td>• Discussion with key informants</td>
</tr>
<tr>
<td>• Status of watershed</td>
<td>• Use 1 or 2 page schedule</td>
</tr>
<tr>
<td>• Biomass-availability, requirement &amp; options</td>
<td>• Avoid quantification</td>
</tr>
<tr>
<td>• Labour availability-seasonality</td>
<td></td>
</tr>
<tr>
<td>• Grazing land and pressure</td>
<td></td>
</tr>
</tbody>
</table>

122
<table>
<thead>
<tr>
<th>Category</th>
<th>Data</th>
<th>Tools or technique</th>
</tr>
</thead>
<tbody>
<tr>
<td>Socio-economic data</td>
<td>• Human, cattle population</td>
<td>• PRA methodology</td>
</tr>
<tr>
<td></td>
<td>• Occupation pattern (artisans, etc.)</td>
<td></td>
</tr>
<tr>
<td>Preparation of map</td>
<td>• Contour map</td>
<td>• Contour survey, sketch, map, model</td>
</tr>
<tr>
<td></td>
<td>• Land area available</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Location of water bodies</td>
<td></td>
</tr>
<tr>
<td>Soil study</td>
<td>• Soil texture- sand : silt : clay</td>
<td>• Laboratory analysis past records</td>
</tr>
<tr>
<td></td>
<td>• Organic matter and nitrogen content</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Soil depth</td>
<td></td>
</tr>
<tr>
<td>Land ownership distribution</td>
<td>• Ownership data</td>
<td>• Revenue department and key informants</td>
</tr>
<tr>
<td></td>
<td>• Land encroachment</td>
<td></td>
</tr>
<tr>
<td>Water resources</td>
<td>• Location of water bodies</td>
<td>• Field survey</td>
</tr>
<tr>
<td></td>
<td>• Water availability, Seasonality</td>
<td>• Government department</td>
</tr>
<tr>
<td></td>
<td>• Extent of irrigation</td>
<td>• Group discussion</td>
</tr>
<tr>
<td></td>
<td>• Number of open wells, bore wells, etc.</td>
<td></td>
</tr>
<tr>
<td>Vegetation</td>
<td>• Location of trees, dominant tree species</td>
<td>• Field survey</td>
</tr>
<tr>
<td></td>
<td>• Area under plantations</td>
<td>• Survey of key informants</td>
</tr>
<tr>
<td></td>
<td>• Grass and shrub coverage of lands</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Tree species used for different purpose</td>
<td></td>
</tr>
<tr>
<td>Biomass</td>
<td>• Existing consumption levels: fuel, fodder, timber, manure, thatch etc.</td>
<td>• Key informants</td>
</tr>
<tr>
<td></td>
<td>• Source of biomass, biomass requirements</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Contributions-trees, crops, shrubs</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Extent of export</td>
<td></td>
</tr>
<tr>
<td>Perceptions</td>
<td>• Uses of watershed</td>
<td>• Discussions</td>
</tr>
<tr>
<td></td>
<td>• Species choice</td>
<td>• Individual</td>
</tr>
<tr>
<td></td>
<td>• Management of resources</td>
<td>• Group</td>
</tr>
<tr>
<td>Agriculture and animal</td>
<td>• Cropping pattern</td>
<td>• PRA</td>
</tr>
<tr>
<td>husbandry practices</td>
<td>• Labour use-seasonal</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Biomass use-manure, fodder</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Crop residue - quantity, end use</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Livestock grazing practices, dung availability</td>
<td></td>
</tr>
<tr>
<td>Traditional knowledge</td>
<td>• Trees species choice/selection for different locations, end uses</td>
<td>• Group discussion and PRA</td>
</tr>
<tr>
<td></td>
<td>• Land capability</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Harvest and sharing of resources</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Soil and water conservation</td>
<td></td>
</tr>
<tr>
<td>Local institutions</td>
<td>• Existing memberships, structure functions</td>
<td>• Group discussion</td>
</tr>
<tr>
<td></td>
<td>• Mechanisms of setting disputes</td>
<td></td>
</tr>
</tbody>
</table>

Source: Development Support Centre, Ahmedabad
Handout 6.1.3

An example of a community profile

General features
Total area of the community - 7 square kilometers
Total population of the community - 105 men and 99 women
Number of households in the community - 43

Classification of population according to age

<table>
<thead>
<tr>
<th>Age</th>
<th>Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>00-05</td>
<td>26</td>
</tr>
<tr>
<td>06-13</td>
<td>41</td>
</tr>
<tr>
<td>14-29</td>
<td>44</td>
</tr>
<tr>
<td>30-49</td>
<td>46</td>
</tr>
<tr>
<td>50 and over</td>
<td>47</td>
</tr>
<tr>
<td>Total</td>
<td>204</td>
</tr>
</tbody>
</table>

Classification of occupations of the heads of households

<table>
<thead>
<tr>
<th>Nature of employment</th>
<th>Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Casual labourers</td>
<td>12</td>
</tr>
<tr>
<td>Carpenters, masons</td>
<td>10</td>
</tr>
<tr>
<td>Businessmen</td>
<td>04</td>
</tr>
<tr>
<td>Clerical workers, teachers, servicemen</td>
<td>06</td>
</tr>
<tr>
<td>Unemployed</td>
<td>11</td>
</tr>
<tr>
<td>Total</td>
<td>43</td>
</tr>
</tbody>
</table>

Level of education of the heads of households

<table>
<thead>
<tr>
<th>Level of education</th>
<th>Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>No schooling</td>
<td>04</td>
</tr>
<tr>
<td>Grades 0-5</td>
<td>24</td>
</tr>
<tr>
<td>Grades 9-6</td>
<td>12</td>
</tr>
<tr>
<td>Above grade 9</td>
<td>03</td>
</tr>
<tr>
<td>Total</td>
<td>43</td>
</tr>
</tbody>
</table>

Income level of the families

<table>
<thead>
<tr>
<th>Average income per month</th>
<th>Number of families</th>
</tr>
</thead>
<tbody>
<tr>
<td>Less than rupees 500</td>
<td>03</td>
</tr>
<tr>
<td>Rupees 500 - Rupees 1000</td>
<td>07</td>
</tr>
<tr>
<td>Rupees 1000 - Rupees 2000</td>
<td>27</td>
</tr>
<tr>
<td>More than Rupees 2000</td>
<td>06</td>
</tr>
</tbody>
</table>

NOTE: Similarly we can extend the list and prepare community profile to suit our requirements.
Session 6.2

Understanding resources in a watershed

Objectives
- To enable the participants to understand the resources available in a watershed.

Time
Two-three days

Materials
Flip charts, marker pens, cloured chalk power
Handout 6.2.1 - Watershed resource inventory
Handout 6.2.2- Some useful PRA techniques

Method
Brainstorming. Group tasks and PRA techniques.

Procedure

Step 1. Introduce the topic to the participants, stating that this session focuses on understanding of resources in a watershed for improved efficiency of utilisation.

Step 2. Initiate the discussion highlighting the need to understand available resources before any development activity is to be undertaken. Pose the question "what do we mean by resources?" and chart the responses given by the participants.

Step 3. Synthesise the meaning of resources both by picking up from the list of ideas raised and also your own contributions.

Step 4. Clarify to them that resources mean agro-ecological, socio-economic and socio-psychological, apart from only technological.

Step 5. Engage the participants in a group task -
"Based on your experience prepare a resource inventory of possible agro-ecological, socio-economic, soci-psychological and technological resources in a watershed."

Step 6. Ask the groups to present the outcomes of their group task and allow sufficient time for discussion after each presentation.

Step 7. After all the presentation have been made sum up the discussion with a final list of resources in a watershed and supplement your inputs with Handout 6.2.1.

Step 8. Refer back to the type of information necessary to understand the watershed resources. Raise a question "How do you collect such information from the watershed area?" and seek responses from the participants.

Step 9. The possible source of collecting information could be the village leader, Block Development Officer, panchayat office or other officials. At this stage highlight that, keeping in view watershed development, it is necessary to adapt participatory methods from the very first stage of information collection. Accordingly introduce the concept, background and principles of participatory rural appraisal, with inputs from Handout 6.2.2

Step 10. Elaborate on some of the PRA methods i.e. participatory mapping and transact.

Step 11. Ask the participants to break up in two/three sub-groups for practising the task to have an experience of using the two techniques.

Step 12. Give them a task-
"Prepare a participatory map to find different resources (human & physical) existing in the campus and verify the information through transact walk."
(Note - This can be done with the help of local people on the campus, where training is taking place).

Or
"Take a transit walk of the training campus and using the information collected prepare a participatory map focusing on resources (human & physical)."

(Note- This task is done if there are no people on the training campus to assist).

Step 13. Reconvene the groups and ask them to present the outcomes of their exercise. After all the sub-groups have finished-their presentations, synthesise the commonalities and differences of the results of the given task on a larger map drawn by you on the flip chart.

Step 14. Emphasise the use of these techniques in watershed development.

Step 15. Next give them inputs on 'time line' and 'seasonality', highlighting their importance in resource analysis of a watershed.

Step 16. Dispense the participants into their regular sub-groups, formed earlier, for doing the task-

"Using the seasonality technique find out the pattern of availability of vegetables & fruits during the last season or year."

and/or

"Use time line technique to enquire into the history of this training institute and draw your conclusion about development of this institute."

Step 17. Reconvene the groups and ask them to present their findings with all participants followed by discussions, clarifications after each presentations.

Step 18. Synthesise the learnings and explain the application of these techniques in watershed.

Step 19. Also, explain them the way of doing it in the village situation.

Step 20. Further introduce the participants to the techniques of 'Wealth Ranking' and 'Venn Diagram' and relate their importance and use in a watershed.

Step 21. Explain the participant that emphasis should be laid on the group processes as well as the result of PRA techniques.

Step 22. Inform the participants that after the next session they shall be going for a field visit in order to understand and collect information pertaining to local resources and problems/constraints of a watershed by using PRA techniques.

Step 23. Wrap up the session highlighting the learning elements and conclusions.

**Note to the trainer**

- The tasks mentioned in Steps 12 and 16 are situated based on the assumptions that the Training center is located inside a campus or Institute.
- You can break the session into 2/3 days depending on the progress of the session.
### Watershed resource inventory

#### Agro-ecological information

| 1. Location          | • Latitude/ Longitude  
<table>
<thead>
<tr>
<th></th>
<th>• Village/Block/District/State</th>
</tr>
</thead>
</table>
| 2. Area              | • Geographical            
|                      | • Non arable/Arable      
|                      | • Drainage lines          |
| 3. Land use          | • Crops/Vegetation       
|                      | • Agriculture practices   
|                      | • Inputs (Biological & Chemical)/Technology used |
|                      | • Irrigation facilities   
|                      | • Average production/hectare |
| 4. Soils             | • Texture/Structure/Depth 
|                      | • Organic matter/Fertility status |
|                      | • Infiltration rate/Irrigability classifications |
| 5. Meteorological    | • Rainfall/Humidity       
|                      | • Daily Maximum/ Minimum Temperatures |
|                      | • Wind velocity & direction |
|                      | • Daily sun shine hours |
| 6. Hydrologic        | • Size of watershed/Length & width of watershed |
|                      | • Shape of watershed (shape index)/Slope of watershed |
|                      | • Soil erodability (erosion status) |
|                      | • Time of concentration/Run off intensity, Ground water status |
|                      | • Water resources/Stream grade/Drainage density |

#### Socio-economic information

| 1. Demographic       | • Human population (men,women,children) |
|                      | • Religion & caste wise strengths     |
|                      | • Literacy level (men and women)      |
|                      | • Landless labour, Resourceless poor   |
|                      | • Skilled, semi-skilled, unskilled labour. |
|                      | • Families headed by women            |
|                      | • Average family size                 |
|                      | • Livestock population, Poultry       |
| 2. Economic          | • Average size land holding           |
|                      | • Farm power                          |
|                      | • Number of employed members in a family |
|                      | • Availability of food, fodder, fuel  |
| 3. Infrastructure    | • Agro based industries               |
|                      | • Market                              |
|                      | • Input supply agencies               |
|                      | • Banks                               |
|                      | • Transport                           |
|                      | • Schools, Hospital                   |
|                      | • Communication facilities (telephones, post offices etc.) |
Handout 6.2.2

Some useful PRA Techniques

Participatory Rural Appraisal (PRA) is an approach, which combines a number of participation enhancing methods in order to initiate and support a process of self-analysis and planning. The techniques are an aid for capturing and analysing information of relevance to action in a participatory process.

PRA is both an attitude and a methodology. It is one of the tools of surveying that helps outsiders to understand the village systems, dynamics, politics by using various techniques as well as by methods of direct observation and discussion. These methods or techniques often help produce interesting and authentic information of the village. Useful insights are also gained. The process of understanding the agro-eco-system and the social organisation can only be successful with the total involvement of the village people and the officials concerned.

The need for PRA

1. Sustained change and the need for accurate and timely information.
2. It advocates that the people themselves are "Solution Agents" for their problems.
3. It cuts down the "Normal Professional Bias" and anti-poverty bias towards people.
4. Reduces down the normal time consuming long methods of survey which consumes the much needed resources and that gives results after a long time. The method is considered effective, accurate and timely.

The purpose of PRA

1. To use farmers criteria, choices and understand the local environment with clear local priorities.
2. To learn farmers indigenous technologies.
3. To use different methods and involve various people to check and re-check the findings.
4. To develop self-critical analysis and direct contact with local needs and communities.

Before discussing in detail, the techniques used in watershed, it would be appropriate to know some of the general guidelines when we conduct PRA in watersheds.

Operational Instructions on village interactions

The following suggestions would be helpful to ensure a conducive environment for participatory learning. The suggestions contain actions required before, during and after the semi-structured interviews.

Before
- Meet the villagers with an open and frank mind. Tell them who you are and why you have come here.
- Build up personal rapport with villagers.
- Identify villagers who are willing to share their experience.
- Show full interest and enthusiasm.
- Always begin the interview by relaxing the tension of the interviewee by asking general questions and setting the climate for discussion.
- Select a suitable place for the interview. Sit down with the villagers on the same floor.

During
- Listen carefully
- Show empathy
- Be patient
- Intense and careful observation is most important
- Try to understand village's way of reasoning.
- Do not interrupt, suggest or prescribe.
• Be polite, gentle and accommodative
• Try to adjust with villagers' convenience.
• Do not lecture.
• Respect villagers.
• Head nodding during interview either in approval or in disapproval should be avoided as much as possible.
• Try to follow existing social customs of the village, e.g. remove shoes at the doorstep before entering the house, avoid smoking in front of the elders, wish the elderly persons with Namaskar (Folded Hands). Do not insist too much upon the women members of the family who are reluctant to talk directly or sit in middle of a gathering. A female member of the PRA team can have separate meetings with the women.
• Participate whole heartedly.
• Accept villagers offer of hospitality e.g. tea, snacks.
• There is no point in getting impatient or becoming too much inquisitive when the villagers discuss amongst themselves. In their own local language which we may not understand easily. Other villagers who know our language would love to translate it for us.
• Lead towards sensitive and important issues using open ended questions.
• Asking too many questions at a time should be avoided.
• Allow time for reflecting on an issue.
• Take detailed note of the answers and the process of discussion and information generation.
• Individuals trying to dominate the discussion should be prevented carefully. Intervene politely, comeback to the original discussion and provide opportunities to everyone.
• Do not prolong the group interview unnecessarily.
• Revolve the discussions around the main issue without blocking spontaneity.
• Change of topic should be smooth.
• The intervening group should not generally have more than 4 to 5 people. The number of interviewers should not generally exceed the number of interviewees.
• Use Killings seven servants- what, when, where, which, who, why, how to rephrase questions.
• Try to find out different villagers for different interviews.
• During the course of interview the interviewer should not move out without intimating the group formally.

After
• At the end of the interview all the interviewees must be thanked individually by the members of intervening group for giving time and sharing their experiences.
• Sit down with all the members, record all the information collected and the process of information generations.

Some techniques which are useful in watershed projects

Seek good rapport with the people. Start by what people know. Learn to unlearn. Encourage local people to elicit and use their own criteria and categories for analysis and planning. Learn from others. Try not to impose your values/categories/common sense onto settings you do not have enough knowledge of. The best PRA instrument is to hand over the stick to the local people.

• Secondary data review
• Semi-structured interviews
• Direct observation
• Participatory mapping/modelling
• Transact walk
• Indigenous technical knowledge
• Time Line
• Preference Ranking
• Matrix Ranking
• Seasonality
• Venn Diagram

PRA can be used as an intensive and systematic way of learning from, and with, community members to investigate, analyse and evaluate constraints and opportunities, and make informed and timely decisions regarding development projects. It is one of the methods by which we can quickly and systematically collect information for-
• The general analysis of a specific topic, question or problem.
• Needs assessment.
• Feasibility studies.
• Identifying and establishing priorities for development projects.
• Implementing developmental activities.
• Project or programme evaluation.
• Identifying conflicting interests between groups.

Its purpose is to gain an understanding of the complexities of a topic than to gather highly accurate statistics on a list of variables.

Outcomes of using these techniques
1. First hand information.
3. Baseline information and list of priorities.
4. Involvement of different groups of the village in the process.
5. Identification of matrix.
7. Understanding potential conflicts between various groups within the villages in implementing the prioritised plans and proposals for identifying these priorities.
8. A common frame of reference for implementation, management, monitoring and evaluation of the programme.

There are many more techniques of PRA that have evolved and are being evolved. The above mentioned techniques are most widely used in planning and development of agricultural developmental projects and hence find a mention here. The process of using the techniques must go beyond data collection by the community to giving responsibility to use the result of the study for planning themselves the desired improvements in their environment.

 Adapted with modifications from: Desai and Arora
Session 6.3

Analysis of production problems

Objectives
- To enable the participants to understand the existing levels of productivity and analyse the problems and their causes.

Time
3 hours

Materials
Flip chart papers, marker pens

Method
Brainstorming, Group task.

Procedure

Step 1. Refer back to the earlier session on understanding the resources and indicate that the next logical step would be to identify the problems and their causes and situations in order to find out suitable options to solve the problems.

Step 2. Explain production in relation to crops, animals, etc.

Step 3. Elicit the common constraints in increasing production/yield in general and specific to the State and district where the watershed is located.

Step 4. Brainstorm the participants on the various problems that can be encountered in a watershed.

Step 5. Divide the participants into three groups and engage them in a group task.

In rainfed areas due to dryspells and moisture stress it is observed that crops/cattle/ horticulture crops (one item for each group) yield far less than their potential. Find out the problems and make root cause analysis for any one major problem.

Step 6. Ask the groups to present the outcome of the task to all the participants, allowing discussions.

Step 7. Synthesise the results by focusing on the importance of prioritising the problems based on farmers perceptions.

Step 8. Pose a question to the participants “Under which situation does this problem exist”? Further picking up one problem from the task/results, relate it to an agricultural situation by seeking views from the participant.

Step 9. Give inputs on a common crop/animal highlighting various possible situations applicable to an area. Explain that since problems are situation specific the solutions also have to be specifically identified.

Step 10. Further elaborate the concept using a worked out example and close the session.
Session 6.4

Field visit for understanding resources and problems

Objectives
- To enable the participants understand and identify the resources and problems of a watershed in a field situation.
- To provide practical experience to the participants in using various techniques.

Time
2 days (1/4 day-preparation for field visit, 1 day- Actual field work and 1/2 to 3/4 day-preparation and presentation of field work exercise).

Materials
Flip chart papers, marker pens, coloured chalk powders, etc.

Method
PRA technique

Procedure
Step 1. Introduce the session to the participants state that now they are going to actually implement the learning's on understanding resources and problems in a watershed in a real life village situation.

Step 2. Brief participants on the task -
"Using the techniques learnt, collect information on various resources of the watershed being visited".
Inform the participants that this information will form basis for developing action plans in subsequent sessions.

Step 3. Further explain that the groups need to prepare for undertaking the field task, which means that groups have to collect information on resource inventory and production problems.

Step 4. Also inform that the groups need to decide who will do what i.e., work distribution among members, sequence in using various techniques, materials they need to carry for field visit, time frame for each technique.

Step 5. Ask the participants to reassemble into groups and prepare for field visit. After which they disperse.

Step 6. Ensure that groups prepare thoroughly for field visit which will facilitate them to get the best results in the field.

Step 7. Ensure early departure to village in order to meet farmers before they leave to fields.

Step 8. After reaching the village, as decided on the previous day, ask the groups to proceed with their work as planned earlier.

Step 9. Make sure that the concerned facilitator of the group is present with the group while they are collecting the information.

Step 10. As a trainer, ensure that at least two techniques are practised by each groups.

Step 11. After returning to the venue in the evening inform the participants to prepare reports, so that all the details get enlisted since, they are fresh in their minds. Inform them that these reports are to be presented the next day.

Step 12. After briefing the day's programme inform the participants about the results and reports expected to be presented. Those are-
1. Report on the information collected through various techniques; and
2. Report on the process of the techniques, that were adopted.

Step 13. Ask the participants to get into groups and start working on the reports.
Note to the trainer

In groups, guide the participants in preparing the above mentioned results and reports i.e., 1 and 2 (from Step 12) and ensure that the groups give equal importance and stress to the results and process of various techniques.

Step 14. Ask groups to the present their results and reports to all the participants. Before starting the presentation inform the participants to first present the results i.e., show the maps and charts, present the information gathered first and present the process part of the techniques later. Same order has to be followed by all the groups.

Step 15. During presentation highlight the important finding, interesting features and issues encountered during the exercise.

Step 16. At the end consolidate the understanding on the various techniques by discussing with participants the code of conduct of these techniques, eg. do’s and don’ts, utility of different techniques in watershed planning and gaining people’s participation.

Step 17. Wrap up the session by distributing a set of ideas/learning charted out during the session for participants to go through later.
Session 6.5

Identifying needs

Objectives
• To enable the participants to understand what a need is and the importance of needs identification in project development.
• To enable them to identify community needs using pictorial illustrations.

Time
2 hours

Materials
Black/white board, two large-size pictures of Village Misery and Village Ideal drawn on flip chart (Trainer should draw these pictures before starting the session), felt pens, chalk

Handout 6.5.1- Techniques for identifying needs.

Method
Pictorial Interpretation

Procedures

Step 1. Display a picture (pictorial representation) of a community steeped in poverty sharing improper utilisation of the village resources. Name it Village Misery. Ask the participants what they see in the picture. Write down every response on the black/white board. Continue this process until all the ideas are exhausted.

Step 2. Display another picture of a prosperous community. Name it Village Ideal. Ask participants to identify the major characteristics of the community and write them down as they are presented.

Step 3. Display the two pictures (Village Misery & Village Ideal). Below each picture display the characteristics of that particular community. Pose the questions, “What should be done to improve Village Misery to come up to the level of Village Ideal?” Ask the participants to write down individually as many suggestions as possible.

Step 4. Instruct the participants to get into groups of five, share the individuals lists, and prepare a group list that includes important items in the individual lists. Repetitions could be deleted and ideas could be modified to reach a consensus. Get the groups to put the list on flip chart and select a spokesperson to present the list to the large group.

Step 5. Get the spokesperson from each group to present its list. Allow time for discussion. When all the lists have been presented, combine them and prepare a master list. When completed, have it typed and copied for distribution to the participants.

Step 6. Discuss the activity focusing on what they did and why they did it.

Note to the trainer

Stress the following points:
• What we did was a need identification exercise.
• The responses that we listed as answer to the question, “What should be done to improve Village Misery to come up to the level of Village Ideal?” are the needs of Village Misery.
• Needs are the discrepancies between the current situation and the desired situation.
• There are many techniques that could be used in identifying development needs in a community.
• A development worker should be able to decide which technique is relevant or which combination of techniques is most appropriate to the situation. Handout No. 6.5.1 gives some of the techniques that could be used by a community development worker in identifying development needs.
Step 7. Sum up the session emphasising that we have identified a long list of needs for that particular community. No development worker can attend to all these needs at once, but can address only a few at a time. Therefore, it is necessary to decide which needs are the most important to the community. This is called prioritisation. Inform them that in the next session we will do prioritisation of the identified needs.

Adapted with modifications from: Gajanayake & Gajayanake (1993)

Handout 6.5.1

Techniques for identifying needs

1. Surveys
2. Observations
3. Questionnaires
4. Listening to people
5. Participating in meetings of community organisations and listening to the discussions
6. Community seminars with the participation of community members, formal and informal leaders
7. Obtaining views from organisations
8. Conducting inquiries from government officers
9. Interviews-structured and unstructured
10. Requests from the community, petitions, etc.
11. Displaying of posters and initiating discussions on community needs
12. Getting the community to listen to a talk by a development specialist and initiating a discussion on needs
13. Identifying needs after a documentary field shown as a discussion starter
14. Brainstorming sessions on problem situation
15. Records, reports, and studies on issues in the community.
Session 6.6

Prioritising needs

Objectives
- To enable the participants to understand the necessity to prioritise needs.
- To enable them to prioritise needs using a modified version of Coffing Hutchinson Needs Analysis Methodology.

Time
2 hours

Materials
Flip charts, felt pens, Needs Prioritisation Scoring Sheet (Worksheet), same worksheet drawn on a flip chart, master list of identified needs from previous session

Handout 6.6.1 - Assessing relative importance of problems/needs

Method
Coffing-hutchinson needs analysis methodology

Procedure

Step 1. Remind the participants that they developed a master lists of needs for a particular community in the last session. The next step is to prioritise them and determine the most pivotal needs.

Step 2. Distribute copies of the master list of needs prepared in the last session.

Step 3. Ask each participant to go through the master list carefully and place a mark (+) against each need that she/he considers important for the Village Misery.

Step 4. Ask the participants to go over checked items again in the list and circle (O) the five most important ones (circle the item numbers).

Step 5. Explain to the participants that an item with mark (+) is equal to 1 point and a circled item (O) is equal to 10 points. Instruct them to write down his/her score against each item in needs list.

Step 6. Ask each participants to read his/her score for each need statement and record the scores on the Needs Prioritisation Scoring Sheet drawn on the newsprint (See Worksheet) as they read them out. After recording all scores, compute the total to get the group score for each need statement. The items with the highest scores are the needs receiving highest priority.

Step 7. Explain to the participants that, what they just completed is a needs prioritisation exercise based on a modified version of the Coffing Hutchinson Needs Analysis Methodology. The most important feature of the methodology is that it allows full participation of target group in the total process. Decisions regarding needs & priorities are made by individuals concerned.

Step 8. Sum up the session by highlighting its important points. Explain that there are many other methods of needs prioritisation. Handout 6.6.1 presents another method of assessing the relative importance of community needs.

Source: Gajnayake & Gajanayake (1993)
**Worksheet**

**NEEDS PRIORITISATION SCORING SHEET**
Tabulation of scores

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<thead>
<tr>
<th>Need</th>
<th>A</th>
<th>B</th>
<th>C</th>
<th>D</th>
<th>E</th>
<th>F</th>
<th>G</th>
<th>H</th>
<th>I</th>
<th>J</th>
<th>K</th>
<th>L</th>
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</tbody>
</table>

*Adapted from: Coffing, R.T. and Hutchinson, T.E. (1974)*

**An Example**

<table>
<thead>
<tr>
<th>Need</th>
<th>A</th>
<th>B</th>
<th>C</th>
<th>D</th>
<th>E</th>
<th>F</th>
<th>G</th>
<th>H</th>
<th>I</th>
<th>J</th>
<th>K</th>
<th>L</th>
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</tbody>
</table>

**Handout 6.6.1**

**Assessing the relative importance of problems/needs**

<table>
<thead>
<tr>
<th>1</th>
<th>Need or Problem Statement</th>
<th>2</th>
<th>How Common</th>
<th>3</th>
<th>How Serious</th>
<th>4</th>
<th>How Important</th>
<th>5</th>
<th>Relative Priority</th>
</tr>
</thead>
</table>

**Legend:**
- X Not very common/serious/important
- XX Common/serious/important
- XXX Extremely common/serious/important

*Source: David, W. & B. Bower (1984)*

**An Example**

<table>
<thead>
<tr>
<th>Need or Problem Statement</th>
<th>How Common</th>
<th>How Serious</th>
<th>How Important</th>
<th>Relative Priority</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lack of sanitary latrines</td>
<td>XXX</td>
<td>X</td>
<td>XX</td>
<td>6</td>
</tr>
</tbody>
</table>

137
Session 6.7

Field visit for identifying and prioritising needs

Objective
- To enable the participants to conduct a needs identification activity in a village/watershed community.
- Identify and prioritise the needs with the participation of the members in the watershed/village community.

Time
3 hours

Materials
Flip charts felt pens, Needs Identification Worksheet drawn on flip chart, and two boards to display the worksheets.

Method
A community survey

Procedure

Step 1. Assemble the farmers who have been invited to join in the needs identification activity in a community centre, church, temple, or other similar venue of common use. Select one of the trainees from each group to facilitate the needs identification process; the others could be observers. Have a large Needs Identification Worksheet drawn on flip chart and display it.

Step 2. Explain to the farmers in each group the objective of the activity. Ask them to focus their attention on the farmer community and to identify its current major problems. Brainstorm for responses and note them as presented, on the first column (present situation) of the worksheet.

Step 3. Ask them to imagine an ideal situation and describe it briefly. Write down the description of the ideal situation on the board. Next ask the question, “What needs to be done to move from the present situation to the desired situation?” Make sure that everyone participates. At this stage, ask them not to comment or discuss but to express their ideas. Note down the responses on the large worksheet displayed as they are presented. Continue the process until all the responses have been exhausted. If there are persons among the participants who cannot read, ask the observers (trainees) to help.

Step 4. With the participation of the farmers, review and discuss the responses presented focusing on each need to see if they are realistic, relevant, and achievable. Combine, delete or modify the responses and prepare a final list. The final list has to be written on the Needs Identification Worksheet under, “What needs to be done to bridge the gap” Number the items.

Step 5. Ask each participant to go through the list and select five items that they think should be given the highest priority in their community and note the number in the worksheet. Instruct the observers to help if there are people who cannot read.

Step 6. Instruct them to discuss in groups, select and agree on the five items. Next, ask them to rank the items ranging from 1 to 5 and submit their selection along with the ranking.

Step 7. Reassemble the whole group and ask each group to present its list of needs in order of priority.

Step 8. Display the final lists. Review, discuss, and integrate the lists into one single list of five needs.

Step 9. Sum up the session by pointing out that what they just completed was a needs identification and a needs prioritisation process done with the participation of the farmer community.

Adapted with modifications from: Gajnayake & Gajanayake (1993)
**Worksheet**

Needs identification worksheet

<table>
<thead>
<tr>
<th>Present situation</th>
<th>Desired situation</th>
<th>What needs to be done to bridge the gap</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
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<td></td>
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<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*An Example-*

<table>
<thead>
<tr>
<th>Present situation</th>
<th>Desired situation</th>
<th>What needs to be done to bridge the gap</th>
</tr>
</thead>
<tbody>
<tr>
<td>Village wells are dry and water has to be transported</td>
<td>Water is available in village wells all round the year</td>
<td>Proper soil and water harvesting structures (like check dams, percolation ponds, etc.)</td>
</tr>
<tr>
<td>from far off places</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Module 7

Setting of goals and objectives

Introduction

Tackling specific problem at first requires a plan of action. Determining goals and objectives based on the prioritised needs is critical in planning a watershed development project. A fundamental step in good planning depends on how well the goals and objectives have been formulated. This forms the basis for all the activities that follow and the criteria against which progress, success and failures of a project are compared.

The words goals, objectives, aims, etc., are interpreted and applied differently by different people. However, they have a marked relationship with each other. Goals specify the hopes of a farmer organisation in terms of the particular situation to be reached within a specified time period.

They are usefully general statements of intent, expressed in long range, achievable destinations, such as, 'raising the standard of living' or 'improving economic conditions'. A goal is made up of several objectives. The achievement of each individual objective alternately leads to the achievement of goal.

Objectives are more specific statements of accomplishments the groups is determined to achieve through the project activity. For a project to have clear direction and purpose, objectives should be formulated in a systematic manner. For an objective to be systematic, it should address the questions what, where, when, why and for whom, etc. In more specific terms, an objective statement should spell out the following-

1. What is the activity to be accomplished by the project?
2. When is the activity taking place?
3. Where is the activity taking place?
4. Why is the activity taking place?
5. Who is doing the activity?
6. Whom is the activity intended for?

It is important for an objective statement to arise out of the identified needs and be specific and clear. It is critical that objectives are measurable, appropriate and achievable.

An objective statement should be need based, specific, clear, measurable, appropriate and achievable.

This module on goals and objectives aims to focus on-

1. Clarifying goals and objectives.
2. Formulating goals and objectives.
Session 7.1

Clarifying goals and objectives

Objectives
- To enable the participants to understand what is a goal and what is an objective, and distinguish one from the other.
- Explain the characteristics/attributes of a goal and an objective.

Time
2 hours

Materials
- Flip charts, black/white board, chalk, felt pens
- Handout 7.1.1 - Example of goal and objective statements.

Method
- A Consensus seeking task

Procedure
Step 1. Explain to the group that the purpose of the module is to develop a goal statement and objective statements for a project that addresses the needs identified in the previous needs assessment activity. In order to do that it is necessary to clearly understand what is meant by a goal and an objective. Lead a brief discussion asking the participants to share their perceptions or previous experience about goals and objectives.

Step 2. Ask each participant to write in their own words what they mean by a 'goal' statement.

Step 3. Instruct them to write what they mean by an 'objective' statement. Ask them to reflect on the difference between the goals and objectives highlighting the characteristics of each.

Step 4. Distribute Handout No.7.1.1. Ask them to review the goal statements in the Handout and examine how well the characteristics they developed fits the statements. Lead a discussion based on the responses.

Step 5. Explain to the participants that objective statements are quite different from the goal statements. Ask them to share the characteristics of objective statements they have developed.

Note to the trainer
- Emphasise that an objective statement should be- specific, clear, measurable or quantifiable, feasible or achievable, based on identified needs and time-bound

Step 6. Instruct the participants that objectives should address the following questions-
- **WHO:** Target group (e.g., children under 5 years of age in community A)
- **WHAT:** Action (e.g., install hand pumps)
- **HOW MUCH:** Extent or number (e.g., four hand pumps)
WHEN: Time frame (e.g. January to March)
WHERE: Place (e.g. junior school in community A)

Step 7. Ask the participants to form four small groups, and go through the objective statements in the Handout to see whether they conform to the characteristics discussed above. Make the groups work on the characteristics they think necessary, in the objective statements in the Handout.

Step 8. Reassemble the participants and ask the spokesperson of the group to present their statements. After the presentations, allow time for comments, observations, and clarifications.

Step 9. Wrap up the session by highlighting the major characteristics of a goal and an objective statement.

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Note to the trainer

Emphasise the following points-

1. A goal is a general statement that describes the final outcome of a project (e.g. raising the standard of living) whereas an objective is a more specific statement that indicates the direction to the final outcome. A goal is an umbrella statement that encompasses the objectives.

2. A goal is a brief, but comprehensive statement that emerges from need/s or problem/s to be addressed and objectives are more operationalised statements that specify directions to meet the need/s or solve the problem/s.

3. A goal is like a light at the end of the tunnel which signals the final destination and objectives are en route milestones that direct one to the final destination.

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Adapted with modifications from: Gajanayake & Gajayemake (1993)

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Handout 7.1.1

Examples of goal statements and objective statements

Goal statements-

1. To improve the economic conditions of the watershed X.
2. To raise the literacy levels of the residents of the watershed X.
3. To improve the irrigation facilities in watershed X.
4. To establish a safe living environment in watershed X.

Objective statements-

1. To organise a literacy class in ABC village scouts society, from January to March 1993 in order to provide basic skills in reading and writing to 58 illiterate adults.
2. To expand the community playground in village ABC in order to provide recreational facilities for the 143 local resident families during the period, May to June 1993.
3. To start a crime alert task force in the XYZ housing complex during the month of January 1993 in order to provide vigilance patrols throughout the day for the 48 resident families in the housing complex.
Objectives

- To enable the participants to formulate goals and objectives for a watershed community.
- Experiment with a method of reaching consensus on determining goals and objectives.

Time
2 hours

Materials
Flip charts, black/white board, chalk, felt pens

Method
Inverted pyramid

Procedure

Step 1. Display the flip chart containing the identified needs from Session 6.6, Module 6. Instruct the participants to individually develop a goal statement for the need receiving the highest priority. Tell them that it is important to take into consideration the characteristics discussed in the previous session. Give time for everyone to complete the task. After completing a goal statement, instruct them to develop five objective statements for the project. Explain that a project can have any relevant number of objectives. However, the number should not be too many or too few. Generally, five is considered a reasonable number.

Step 2. Have the participants form dyads (pairs). Instruct them to share and discuss their goal and objective statements and reach a consensus on the goal and five objectives.

Step 3. Instruct the dyads to get together with the dyad closest to them, and form groups of four. Ask them to repeat what they did in the earlier step. Discuss and agree on a common goal and five objectives.

Step 4. Repeat the process in groups of eight. Ask each group to write down on flip chart the goal and objectives developed by the group and select a spokesperson to present them.

Step 5. Reconvene the participants and ask each group (of eight) to present the goal and objectives they developed. Allow time for discussion.

Step 6. Once the presentations are completed, review the goals and objectives presented by each subgroup with the entire group. Then:

1. Discuss and develop one goal agreeable to all the participants, incorporating the important elements in the sub-group goal statements.
2. Follow the same process to develop five objective statements. The process could involve deleting, combining, modifying, synthesising, refining, and rewriting objectives developed by the sub-groups.

Step 7. Sum up the session, highlighting the important points. Make arrangements to type, copy, and distribute the goal statement and objective statements developed by the entire group.

Adapted with modifications from: Gajanayake & Gajayananke (1993)
Module 8

Planning for participatory watershed management

Introduction

Planning is deciding on the best way to reach a goal. Participatory planning is a process of collective decision making by farmers in, for example, a watershed development project, about how to use resources and plan activities to reach a specific objective.

The key purpose of planning is 'goal oriented change', i.e. to change on existing situation, goods, or services, so that a problem experienced, can be solved. A field worker can very well assist in participatory planning, with the right kind of leadership, to integrate the use of indigenous knowledge and wisdom with modern scientific and technological solutions. Group decision are then made on the basis of a more comprehensive, realistic and balanced economic and social strategy applying both indigenous and modern solutions to complex problems. Careful planning helps minimise the risks and ensures the best possible outcome.

It primarily involves the following major steps-

1. Identification of activities
2. Sequencing of activities
3. Setting a time frame for activities
4. Division of responsibilities to carryout activities
5. Assessment of the facilities, equipment and services required.
6. Planning the budget.

Identification of activities

A problem at first seems simple, caused by obvious factors, which only need to be changed to solve the problem. A more detailed look at it often reveals a series of related underlying problems, which have to be examined before a suitable plan can be made to solve the problem.

In a watershed development plan we set out to tackle these underlying problem. The project may have its own limitations in resources, and hence it can often deal only with some aspects of the core problem. There is a need to prioritise the problems and decide, within the existing resources, which are the most suitable to tackle first and what related activities should be undertaken. Thus, identification of project activities in the most important step in project planning phase.

Time and effort invested in this specific step guarantees an increased potential for success. Identification of project activities has to be carried out with the involvement of all the stakeholders in a participatory way. The activities identified should be based on the objectives of the project, taking into consideration the resources and constraints. Systematic implementation of the project becomes possible only if the activities are spelled out in a detailed and through manner at the initial stage of project preparation. In certain instances, there is a time gap between the planning and implementation of a project. When a project is launched, there is sometimes the possibility that those who were involved in the initial planning might not be around. In such a situation, systematic implementation of the project becomes possible only if the project planners have recorded the activities in detail. Therefore, it is essential to identify and list the major activities and sub-components of each activity.
The ability to determine the appropriate series of activities and the sub-components of each activity (that will ultimately lead to the achievement of the objectives) is an important skill that project planners should possess.

**Sequencing of Activities**

Once the activities have been identified, it is essential to determine the right sequence of activities early on in the planning stage. Careful attention given to sorting out the right sequence prevents waste of time and resources. There are some activities that have to be completed before others. Also, there are some activities that have to be conducted concurrently with others. Hence, sequencing them is imperative. Often, implementation of a community development project is carried out by a team of individuals. Therefore, from the moment the project is launched, it is necessary to monitor and coordinate the different activities that need to be completed, and also to follow the most appropriate sequence. In order to do this systematically, it is necessary to put the activities in the proper sequence at the initial stage of project preparation. (Gajanayake & Gajayanake, 1993).

**Time frame**

After identifying and sequencing the activities of a project, the next task is to determine when to do these activities. Therefore, project planners should develop a time frame for the major and minor activities. This helps to determine the earliest date that each activity will be started and completed within the framework of available resources and expected constraints. It also facilitates monitoring the project activities as they are implemented, and checking whether work is proceeding according to schedule, and if not, to take necessary corrective actions.

GANTT Chart and the Program Evaluation and Review Technique (PERT) are two major tools for developing a time frame of a project. (Gajanayake & Gajayanake, 1993).

**Assigning Responsibilities**

Planning project activities will not be complete without assigning responsibilities for different activities to specific individuals. This has to be done in a systematic manner in order to secure the involvement of the community. One of the most important ingredients for project success is the motivation of the people who carry out activities. Motivation is generated if individuals are assigned responsibilities that they are willing to undertake and accomplish. Therefore, it is important to gather information about the skills and interests of the community members who will be actively involved in the project, and to take steps to match tasks with skills and interests of individuals. (Gajanayake & Gajayanake, 1993).

**Facilities, Equipment, Materials, and Services**

Carrying out activities of a project requires various kinds of facilities, equipment, materials and services. Community members have to collectively determine these (facilities, equipment, materials, and services needed) for each activity in the project. For example, most projects will require facilities to conduct meetings, and vehicles to transport needed materials. If the project involves construction work, arrangements have to be made to purchase, loan, or hire equipment. These arrangements have to be made prior to the implementation of the project. The same applies to services. A project might require the services of a health care worker or a carpenter. Planning has to be done to arrange for such services. (Gajanayake & Gajayanake, 1993).
Preparation of the Budget

Preparation of budget is critical in project planning. A budget is generally a statement of income and expenditure. In community development projects budgets can take many different forms. In certain projects, priority is given to preparing an estimate of expenditures for project activities, because the money will be provided by a funding agency or a development organisation. If a project has no prior pledge for funding, an estimate has to be made of the money required and how the money is to be raised, before the commencement of the project. Funds needed for community development projects can be raised in many ways. Some of the possibilities are to request funds from members, philanthropists, donor agencies, local, state or central governments. A well prepared budget facilitates coordination of activities and increases the motivation of people involved in the project.

Preparing a plan of action

Planning for watershed development can be fun, when all the members of the farmers organisation interact with enthusiasm about things that matter to them, and about actions they can take. The process strengthens their ability and confidence to move ahead.

To sum up, the following guidelines help develop a good plan of action -

- State clearly what the organisation wants to achieve
- Decide and select the activities and materials needed
- Share job/ tasks, responsibilities
- Give a time frame to each activity
- Develop a work plan including all the points mentioned above.

This modules will help the participants to orient themselves or the various steps of planning for effective watershed development activities. The sessions are arranged in the following sequence-

1. Developing participatory action plans
2. Developing time frame for activity plan
3. Determining tasks, responsibilities and services
4. Preparing a budget.
Session 8.1

Developing participatory action plans

Objectives

- To enable the participants to understand the concepts & methodology to formulate an action plan.
- To orient the participants to the skills required for action plan preparation.
- To provide them an opportunity for skill development in action plan preparation.

Time

5-6 hours

Materials

Flip charts, white/black board, felt pens, chalk
Handout 8.1.1 - Steps in participatory planning
Handout 8.1.2 - Concept and components of an action plan
Handout 8.1.3 - Example of an action plan
Handout 8.1.4 - Planning for constructing a stream plug

Method

Brainstorming, simulation.

Procedure

Step 1. Introduce the activity, explaining that this is the most important and crucial phase in the total process of watershed development. Explain them that the five steps- identifying needs/stating goals, listing tasks, identifying resources, setting priorities and sequencing are essential for planning any activity.

Step 2. Remind the participants that in the earlier Sessions of Modules 6 and 7 they have acquired an understanding of the former community, assessed their needs, developed goals and objectives based on priority of needs, apart from assessing the resources and problems of a watershed. Inform the participants that now they are all ready to prepare an action plan for the watershed, as all above are the essential components/steps in preparation of action plan. Introduce Handout 8.1.1 to the participants for reading and discussion.

Step 3. Raise a question `what are the features of good planning?' Chart the responses and highlight the aspects relating to feasibility, implementability and practicality of the responses. Sum up by emphasising on the fact that- a good plan is one, the implementation of which is practically feasible.

Step 4. Explain to participants the concepts and components of an action plan using Handout 8.1.2 and ask them to analyse it.

Step 5. Introduce the details of an action plan by sharing a worked out example (Handout 8.1.3) and ask them to brainstorm.

Step 6. Present the following by hypothetical situation to the whole group of participants as a preparatory exercise for sharpening their skills-

"Imagine you want to organise a meeting of the farmer community in the watershed for launching a community development programme. Identify the sequence of activities that would be required to hold the meeting?" Brainstorm for ideas and chart them on a flipchart as they appear form the participants, till all the ideas are exhausted.
Note for trainer

- The initial hypothetical exercise should be very simple and related to the type of work they are frequently engaged in.
- Do not allow questions while charting ideas from participants, as it will only obstruct free flow of responses.
- Some examples of possible responses are:
  - Decide on the likely number of farmers who shall be attending the meeting.
  - Decide on the chief guest (e.g. sarpanch/pradhan/etc.)
  - Designing the agenda for the meeting.
  - Decide & organise refreshments
  - Finalisation of data & venue.
  - Inviting the chief guest
  - Making invitation letter for those invited from outside the watershed.
  - Sending invitations and informing/requesting all the farmers, to attend the meeting.
  - Making comfortable seating arrangements in the selected venue.
  - Arranging for publicity through media/posters, if required.

Step 7. After brainstorming, review each item with the participants, followed with discussions and clarifications on, 'why is a particular activity necessary for accomplishment of the objective?' and 'should the activity be broken down into further sub activities?' Add items/points, if you feel some aspects are left out relating to the information.

Step 8. Based on above discussion, synthesise the list of activities and arrange them in a sequential order. Emphasise that in the list there are many activities that can be handled simultaneously and there are also some activities that must be completed before proceeding on to the next activity. Now with the help of the group give a proper sequence to the entire set of activities.

Step 9. Inform the participants that in the same systematic manner, now they will identify and sequence activities for "Construction of a stream plug in a stream flowing through the watershed." Ask the participants to visualise the activities that would be involved in the process and note them down in their note pads.

Step 10. Ask the participants to distribute themselves in two groups. Ask them to select a group leader to act as a facilitator. Instruct them to brainstorm for ideas and prepare a list of activities that shall help completion of the project. Ask them to follow the logical sequence as they went through above in Step 6 to 8.

Step 11. Reconvene the groups and ask each group leader to present the outcomes. Develop a master list on the flip chart incorporating all the important items from both the lists. Synthesis the final list by deleting, combining, modifying and adding new items, with the participants.

Step 12. Sequence the activities with the help of participants and give a sequence number to each of them. Distribute the Handout 8.1.4 to the participants for reading.

Step 13. Close the session highlighting the main learning elements in the process of planning and comment on the action plan developed by the them.
Handout 8.1.1

Steps in participatory planning

- Building rapport
- Understanding the resources
- Analysing problems
- Identification of technological options—e.g., conflicts, negotiation, mediation, etc.
- Decide the activities to be carried out
- Formation of groups
- Preparation of action plans—e.g., management of common property resources, water resource management, etc.

Handout 8.1.2

Concept and component of a participatory action plan

For the implementation of any programme/activity a cost and time plan is a must. A plan may be perspective or a master plan with annual phasing. The perspective plan gives the details of different components of plan with assumed estimates of total physical programme with financial outlay to have a general idea about the physical and financial requirements which will be tentative.

A master plan gives the actual requirements of different developmental programmes with actual financial outlay based on the prevailing cost, norms and rates. The master plan is then phased into annual plans based on the project period, flow of funds, infrastructure available and preparedness of the implementing agency. For the successful and timely implementation of the annual programme an action plan has to be prepared with implementation details of where, when, how and by whom in respect of every component of proposed or approved annual programme.

For example as per the approved master plan of a watershed the following developmental programmes are to be implemented in a phased manner in four years. For the implementation of contour bunding programme over an area of 20 hectares during 1st year of project period, the implementation agency has to finalise a programme and attend to it as detailed below by identifying the person/persons responsible for implementation.

1. Identification of proposed area of 20 hectares and the beneficiaries/participants by 15th April.
2. Survey and preparation of plans and estimates by 30th April.
3. Obtaining the sanction by 5th May.
4. Commencement of execution duly fixing the labourers at the approved rate as per sanction by 10th May.
5. Completion of proposed work by 20th May.

Similarly for each component of programme proposed for the 1st year, action plan is to be prepared for each step for implementation.

After the formation of Watershed Committee, it shall open two accounts in the nearest branch of scheduled or co-operative bank. The first account is known as project account. It is a joint account, which is to be opened in the names of watershed development team leader, chairman watershed committee and the secretary watershed committee. It will be in operation during project period and for 6 months and also if need after the project period but only for works component. Funds released by the Zilla Parishad/District Rural development Agency will be deposited to this account. The second account is watershed development fund account. It will be an interest bearing fixed account for the project period meant only for receipts, contributions and donations during the project period. It will be operated only after the project period. It is also a joint account in the names of president watershed association and chairman watershed committee.
Handout 8.1.3

Example of an action plan

<table>
<thead>
<tr>
<th>Sl No.</th>
<th>Type of Work/activity</th>
<th>Programme for the project period</th>
<th>Phasing of programme (in 4 years)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Physical (No)</td>
<td>Financial (Rs in lakh)</td>
</tr>
<tr>
<td>A.</td>
<td>Development of wastelands</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1.</td>
<td>Contour bunding</td>
<td>215 ha.</td>
<td>2.15</td>
</tr>
</tbody>
</table>

Handout 8.1.4

Planning for constructing a stream plug - An example
An activity plan for construction of stream plug in a watershed.

1. Contact the formal & informal leaders of the farmer community.
2. Organise a meeting of farmers' to explain the importance of a stream plug and formulate a plan of action.
3. Organise a meeting of the farmers' with those officials concerned, both from government and non-government organisations to discuss the plan & make arrangements for obtaining required clearance.
4. Form sub committees for major activities.
5. Organise a village meeting to obtain full financial/other support for various related activities.
6. Contact organisations within the watershed community and outside agencies to raise funds.
7. Get an agricultural engineer/soil & water conservation specialist to prepare the plan and estimate for the stream plug and his technical supervision in site selection, designing the structure.
8. Organise volunteer labour donation camp for clearing the site of construction.
9. Make regular arrangements for services of masons/labour, so that work is not interrupted midway.
10. Make arrangements for required construction material. Almost all the material is locally available.
11. After completing the necessary resource arrangements (human, physical and financial) start of with the construction process. As the first step in this, mark a central line of the stream plug across the stream.
12. Decide height of stream plug based on catchment area, rainfall, flood level & desirable storage capacity.
13. Mark base width of stream plug based on calculation of upstream and downstream slopes and plug height.
14. Dig out the foundation of the structure.
15. Dig out the core/cut off wall. It has to be deeper than the foundation of the remaining body of the plug.
16. Lay earth layers and ram them with suitable equipment, after sprinkling water, in a controlled manner. These earth layers should not be more than 30 centimeter thick.
17. Control side slopes of the plug by carefully measuring distance from central line, for each layer of earth.
18. Do not do the stone pitching immediately after the earth work, as there will be shrinkage in the size of the stream plug after some time. Usually give a gap of 1 rainy season between stone pitching and earth work.
19. Locate the overflow structure, suitably on the plug, either centrally or one side of the plug.
20. For more economy, look for the availability of natural overflow arrangements like boulders, stones, etc. on the banks of stream, other wise, construct some masonry structure, with proper overflow arrangements.

Note to trainer- For the activities at Steps 7 to 20, the services/supervision of an agricultural engineer/soil & water conservation specialist are very important for the desired sustainability of the structure.
Session 8.2

Developing time frame for activity plans

Objectives
- To enable the participants to time plan the activities in a watershed.
- To develop understanding and operational skills in use of some time management tools in watershed projects.

Time
4 hours

Materials
Flip chart, white board, felt pens, rulers, enlarged copy of GANTT chart drawn on a flip chart
Handout 8.2.1- A GANTT Chart
Handout 8.2.2- Programme Evaluation and Review Technique (PERT)
Handout 8.2.3- Activity and event scheduling

Methods
GANTT and PERT charts

Procedure

Step 1. Start the session with a review of the activity taken up during the previous session on planning. Stress upon the importance to manage the activities to make it successful, and in relation the need to understand and use simple tools to effectively manage the watershed projects.

Step 2. Brief them on various available tools and their applicability under different situations. Introduce GANTT chart, a comparatively simple and popular technique often used in small projects by planners. Introduce the PERT chart as an example of yet another technique, generally suitable for more complex projects. Clarify doubts, if any. At this point you can also introduce activity & event scheduling as a tool often used to report progress against time line.

Step 3. Inform the participants that in this session we will be developing a time frame for project activities using the GANTT chart.

Step 4. Display the enlarged copy of the GANTT chart on the wall or black/white board. Demonstrate how an activity could be marked on the GANTT chart to indicate the time schedule for each activity. Distribute each participant a copy of the GANTT chart (Handout 8.2.1)

Step 5. Ask the group to practice the techniques by giving them the following hypothetical situation-

"Imagine you are supposed to develop an Apple Orchard in a 10 acre plot of land. Broadly define the major activities, sequence them and time frame the activities for implementation using the GANTT chart."

Step 6. Brainstorm the participants to think over the assignment and determine the sequence of activities to be followed.

Step 7. Ask them to chart their responses in a flip chart as they appear.

Step 8. Next tell them to properly sequence the activities. You can help them in case of any confusion. You can also ask them to recall the previous session on planning activities for doing so. Ask them to note it.

Step 9. Ask them to determine a realistic estimate of time for the completion of each activity. To maintain uniformity in the unit of time instruct them to record time in months. However, tell them that it can be done in terms of weeks or days as well.
Note to the trainer

- The activities planned in previous session can also be used as an exercise here.
- The only idea to introduce a new hypothetical situation here is to get the participants practice their learning's of
  the last session and clarify doubts, if any.
- Some examples of possible responses on the sequence of activities, are-
  1. Location of area
  2. Preparation of the land.
  3. Digging of pits.
  4. Treatment of the pits.
  5. Leaving the pit open.
  6. Consulting a horticulturist
  7. Filling the pits with manure & soil
  8. Transporting the saplings from the nursery.
  9. Planting the saplings.
  10. Watering the saplings
  11. Undertaking weeding operations
  12. Undertaking plant protection operations, and so on...

Step 10. Ask the participants to chart the sequence of activities in the copy of GANTT chart provided to
them. Instruct them that now they have to record the time estimates for each activity as demonstrated to them in the displayed GANTT chart during the earlier part of the session.

Step 11. Allow the participants enough time for discussion, changes, modifications, questions and
comments. Refine the chart taking the observations presented by the groups into consideration. You can also draw a fresh, GANTT chart on the flip chart/black/white board in case there are many modifications, in order to present a neat & clear picture.

Step 12. Conclude the first phase of activity, emphasising that the GANTT chart, just completed is the
most popular tool used for developing time frames of project activities. Inform them that this can also be used for monitoring & evaluating project activities.

Step 13. Introduce the Handout 8.2.2 on the PERT chart inform the participants that this is another
 technique, which can be used to develop time frame of activities. Allow them sufficient time to
read and review the Handout.

Step 14. Brief them about the main features of PERT chart and explain that in the PERT chart the
circles indicate the events or completed activities, the numbers or alphabets inside the circles
showing the sequence of these activities and the arrows indicating the flow of planned
activities.

Note to the trainer

- PERT is a very popular technique among business managers and program planners. It is quite useful for more
complex projects with a large number of activities.
- When developing a PERT chart-
  1. Sort out the activities planned for the project in the appropriate sequence.
  2. Group the activities by type. This helps to decide categories to reach the final event in shortest possible time.
  3. Mark two circles on the news print or on the black/white board. One towards extreme left and the other towards
     extreme right. The left circle represents the beginning event and one to the right the final event.
  4. Begin marking the activities starting with the first activity to determine the time frame and then work
     backwards to adjust to any deadline.
- Connect activities with arrows. When completed, the chart should look like a grid with different tracks.
**Step 15.** Distribute the Handout 8.2.3 on activity & event scheduling. Informing the participants that this is yet another technique used by project managers to report the progress of the project against the time lines and in places which are geographically remote.

**Step 16.** Explain that activity & event schedules also help to identify the pace and progress of work and helps you to smooth and the project peaks & troughs. They can also help you to keep a check on the lagtime and delay in the project activities and plan to overcome or deal with any delays that may happen unforseeingly. Also, explain that this can additionally be used to report the overall progress of the work and ensures that the project team knows what corrective actions should be taken when delay occurs. Allows enough time for discussion & clarifications.

**Step 17.** Close the session emphasising the salient features of the various techniques learnt during the session, their advantages, relevance, applicability, etc. Consolidate the learnings from the session.

**Handout 8.2.1**

**GANTT Chart**

<table>
<thead>
<tr>
<th>Activities</th>
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<td>January</td>
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<td>10</td>
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</table>
Program Evaluation and Review Technique (PERT)

PERT is a management device used to define and co-ordinate what has to be done in order to achieve program objectives within a fixed time. It is a planning, scheduling and monitoring tool for the implementation of a program/project.

For a given program objective, a basic PERT chart consists of a graphic network showing the sequence of activities and events that have to occur during the allocated time span.

PERT is a graphical way of indicating the activities of a project. It is a control technique as well as a planning tool. It is suitable for deciding on an alternative course of action based on constraints of time, costs, resources, or unforeseen environmental calamities that occur after the launching of a project. This technique is also referred to as the critical path method or critical path analysis.

This graphical illustration uses arrow to indicate the activities. The tail of the arrow denotes the start or the beginning of the activity and the head of the arrow shows the end. The length of the arrow is the duration but the length is not exactly proportional to the duration of the activity.

Tail \( \rightarrow \) Head

(Duration of Activity)

At the beginning and end of every arrow (activity) is an event shown by a circle inside which the sequential number or letter of the event is written. (An event is the beginning or end of a task, and an activity is the execution of the task. e.g. "drafting a report" is an activity "report completed" is an event; presenting report," is an activity). An event, unlike an activity, consumes neither time nor resources.

Handout 8.2.3

Activity and event scheduling

This tool is often used when the project manager wants the project team to report progress against timelines and when the places are geographically remote. Activities and events schedules help to identify progress in the project and helps to smooth out project peaks and troughs. They can also help you to keep a close eye on lagtime and delay in the project and to plan to overcome or deal with any delays that this may cause.

<table>
<thead>
<tr>
<th>Activity/Event</th>
<th>Respondent</th>
<th>Scheduled Start/end</th>
<th>Actual Start/end</th>
</tr>
</thead>
<tbody>
<tr>
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</tbody>
</table>

One needs to add further lines to this schedule, but the principle is very straightforward. It can additionally be used to report the overall progress to the client and ensure that the project team knows what corrective action may need to be taken when delays occur.
Determining tasks, responsibilities and services

Objectives

- To enable the participants to identify individuals or groups in the farmer community who would be responsible for completing a specific activity or a group of activities.
- To enable them to determine facilities, equipment's, materials and services required to carry out the identified activities.

Time

2 hours

Materials

Flip chart, felt pens, activity list developed in earlier session on developing an apple orchard, or construction of a stream plug, paper & pen

Handout 8.3.1- Determining responsibilities, facilities, equipment, materials & services

Method

Structured group exercise

Procedure

Step 1. Review the process in developing the plan of activities & setting time frames for its implementation as done in the last two sessions. Explain that in this session we shall try to identify the individuals or groups in the farmer community who would be responsible for completing the activities and also determine the facilities, equipment's, materials and services required to carry out the identified set of activities.

Step 2. Inform the participants that before determining the responsibilities, one must help the participants to assess themselves, their skills, strengths and weaknesses, as these have a great impact on the roles they play in the community, and helps in fixing of responsibilities in the areas where their strength lies.

Step 3. Ask each participant to list on a piece of paper-

1. Things I can do well
2. Things I cannot do well
3. Things I can do reasonably well and can do better with someone who is good at them.

Step 4. Ask each person to find a partner and talk about their own abilities, strengths, weaknesses and how these help or hinder their work both in the family and community.

Step 5. Ask each pair to join several other pairs to form two large groups. Let each group list on flip charts its skills and strengths with names of individuals possessing it. Encourage discussion.

Step 6. Let each group present its list to the larger group and allow discussion on it. Add any other skills which the whole group can think of, to arrive at the total number of skills existing within the group and the persons having them.

Step 7. Group the lists of skills into appropriate categories to show the wide range within each category and who possess them.

Note to the trainer

Some of the possible responses to different categories of skills, could be-

- Socio-economic
- Technical
- Interpersonal
- Cultural
Step 8.  Tell them that now they are ready to identify individuals and/or groups in the community, who shall be responsible for a particular set of activities.

Step 9.  Distribute the list of activities developed in earlier sessions, and ask them to mark the activities under, broad categories like socio-economic, technical, interpersonal, cultural, etc. Give them enough time to discuss & categorise the activities.

Step 10. Instruct them to try matching these categories with the list of skills developed in Step 7 of this session.

Step 11. Brainstorm them for identifying the names/designations of individuals/groups who will be best suited for taking the responsibility and completing each activity.

Step 12. Emphasise that they must in the process consider the persons willingness, commitment, and competencies for each particular activity. Let them discuss and reach a group consensus on this for every activity mentioned in the list. Ask them to keep noting in a note book.

Step 13. Display the Handout 8.3.1 drawn on a flip chart, with the activities marked on it. Instruct one/two members from the group to indicate the names and/or designations across each activity in the responsibility column. Allow enough time until all the activities have been marked.

Step 14. Once the responsibility column is completed, ask the participants to proceed to the next three columns namely facilities, equipment, materials and services.

Step 15. Instruct he groups to go through the list of activities, taking one activity at a time. Brainstorm for ideas, reach group consensus and identify the facilities, equipment, materials and services, that will be required to complete each activity.

Step 16. Ask them to keep recording the outcomes in a flip chart(Handout 8.3.1) displayed on the wall, till all the activities are completed.

Step 17. Allow time for comments, suggestions, additions & modifications. Finalise the list:

Step 18. Close the session with a summary of the lessons learned from the session and a xerox copy of the final list developed by the participants.

Handout 8.3.1

Determining responsibilities, facilities, equipment, materials, and services

<table>
<thead>
<tr>
<th>1 Activities</th>
<th>2 Responsibilities</th>
<th>3 Facilities</th>
<th>4 Equipment and materials</th>
<th>5 Services</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
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</tbody>
</table>

An Example

<table>
<thead>
<tr>
<th>Activities</th>
<th>Responsibilities</th>
<th>Facilities</th>
<th>Equipment and materials</th>
<th>Services</th>
</tr>
</thead>
<tbody>
<tr>
<td>Levelling the ground for the foundation</td>
<td>President and working committee</td>
<td>Temporary shed to store equipment</td>
<td>5 hoes, 5 pickaxes, 2 truck loads of earth</td>
<td>5 labourers, 5 volunteers, 1 mason</td>
</tr>
</tbody>
</table>

Source: Gajanayake & Gajayanake (1993)
Planning a budget

Objectives
- To orient the participants to various aspects of budgeting.
- To develop their skills in using a budget as a planning tool.

Time
3 hours

Materials
Flip charts, felt pens, writing pad, pens, Handout 8.3.1 developed in Session 8.3 on facilities, equipment, materials and services drawn on a flip chart
Handout 8.4.1- Budget preparation information form.

Method
Lecture and Structured group exercise

Procedure
Step 1. Inform the participants that budget preparation is the final step in planning a programme or activity. It is one of the most essential activity and holds a very special position in the project activity plan. Explain to them the use and importance of budget as a planning tool.

<table>
<thead>
<tr>
<th>Focus on-</th>
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<tbody>
<tr>
<td>A budget is a comprehensive financial plan depicting the details of achieving the desired objectives.</td>
</tr>
<tr>
<td>Budgets are presented in many different forms, most common being the statement of income and expenditure.</td>
</tr>
<tr>
<td>While preparing a budget one should very carefully take into account even the smallest details that has any financial implications. Some examples are- local contributions, operational costs (direct and indirect), personal and labour inputs, equipment, facilities, services, maintenance, supplies, human resource development and administration costs. Often the human resource utilisation costs are omitted in a budget, so one should recognise all the contributions both in cash &amp; kind while budgeting. While preparing a budget, we have to estimate a monetary value for each component associated.</td>
</tr>
<tr>
<td>Budgets are important for all the project activities before they are operationalised or submitted for consideration for possible funding to any agency.</td>
</tr>
<tr>
<td>A well prepared budget facilitates coordination of activities, increases the motivation of people involved in the project and increases its effectiveness.</td>
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<tr>
<td>Budget is a tool for implementing a project plan, communicating plan of operation, while controlling the costs.</td>
</tr>
<tr>
<td>A budget helps to face eventualities, if any and provides a rational yardstick for evaluating a projects success.</td>
</tr>
</tbody>
</table>

Step 2. Ask the participants to divide into four groups. Instruct each group to note down one activity from the list developed in earlier session and note the responsibilities, facilities, equipment, materials and services below that on a flip chart. (All four groups take a different activity).

Step 3. Ask them now to review each item very carefully and estimate a monitory value for each, based on prevailing market rates. Tell them to make use of the information they already have and estimating the exact cost at this stage is not very necessary, as this is an exercise for them to understand and practice only. If necessary the budget can later be refined with the consultancy of market experts. Ask them to mark these values against the respective items, on the flip chart. Give them sufficient time to complete the assigned work.

Step 4. Next distribute Handout 8.4.1 on budget preparation information form, and ask them to complete the first three columns, based on the information developed in the previous step.
Step 5. Now ask them to review the available resources (community fund, village fund, watershed fund, etc.). Ask them to mark this estimated value on one separate flip chart. Inform them that completion of task has a list of many activities involved, so they need to proportionately break up the total available resources to all the activities listed. Now ask them to mark the available resources for activity 1, 2, 3 & 4 on their respective Handouts at column 4.

Step 6. Next ask them to determine from their knowledge & experiences, how much funds can be raised from various sources within the community. Discuss & mark it against column 5.

Note to the trainer

Emphasis the following-
There is a need to estimate the expenses for services, facilities, equipment, and materials that could be obtained as contributions from the community in monetary terms for three major reasons-
1. The community can have a clear idea of the value of its contribution to the project.
2. When projects are funded by donor agencies, most agencies insist that the receiving organisation should provide matching funds to share expenses of the project (matching fund requirement varies and may go up to 25% of the project expenses). Voluntary contributions from the community in terms of labour, materials, etc. make up for matching funds.
3. It helps to reinforce the sense of ownership of the project in the community.

Step 7. Now ask the participants to analyse the estimated cost from column 3 and available resources column 4 & 5 and find the gap for which funds must be raised. Mark this value in column 6.

Step 8. Explain to the participants that column 6 represents the amount of funds the farmers’ organisation has to seek from other sources to go ahead with the activity.

Step 9. Brainstorm the participants for various possible actions that one can take to bridge this gap. Examples could be: obtaining funds from donors, government agencies, development agencies, district authorities, etc. Ask them to list the possible sources which can leverage funds for that activities and accordingly complete column 7 & 8.

Step 10. Reconvene the groups to present the activities of their group work focusing on the estimated amount of community contributions and services required to bridge the gap.

Step 11. Based on the sequence of activities now help the participants prepare a master list in the given budget preparation information form on a flip chart. Calculate the total value of estimates, contribution, voluntary services, amount of deficit, and suggested ways of filling the gap. Allow time for modification until consensus on the estimates is reached.

Step 12. Finalise the budget preparation information form based on discussion and modifications.

Step 13. Synthesis major information and summarise the session highlighting major learning points.
Budget preparation information form

<table>
<thead>
<tr>
<th>1 Activity</th>
<th>2 Required facilities</th>
<th>3 Estimated cost</th>
<th>4 Available resources</th>
<th>5 Funds from the community</th>
<th>6 Gap/Deficit</th>
<th>7 Funded by</th>
<th>8 Amount</th>
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An Example

<table>
<thead>
<tr>
<th>Activity</th>
<th>Required Facilities</th>
<th>Estimated Cost</th>
<th>Available Resources</th>
<th>Funds from the community</th>
<th>Gap/Deficit</th>
<th>Funded by</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Building walls</td>
<td>10 bags of cement</td>
<td>Rs.3000</td>
<td>Rs.1000</td>
<td>Rs.1500</td>
<td>Rs.500</td>
<td>Village council</td>
<td>Rs.500</td>
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Module 9

Participatory management and implementation

Introduction

The purpose of management is to enable people (in groups, communities and as individuals) to become self-reliant, creative and self-motivating. This implies enabling people to-

1. Reach their goal.
2. Change their existing situation.
3. Take control of situations that affect their lives.

In this sense, management has to take into account the needs, the dignity and the voice of the people. The underlying beliefs are-

- People must participate in decision making
- People have the motivation, ability and readiness to take responsibility to work towards change.
- People are not by nature passive or resistant to their own needs and goals. They can become so as a result of previous experience.

The various steps in management and implementation are-

1. Study the plan and commit to action
2. Carry out the actions
3. Monitor and review
4. Solve problems as they arise.

Study the plan and commit to action

In order for the planned objectives to be realised, it is essential that those involved understand that various activities have to be implemented by each of them. This means-

- taking time to discuss the work plan prepared
- understanding the sequence of activities, the time frame within which the activities need to be carried out and each person’s responsibility in carrying out the various tasks.

Carry out the actions

To carry out actions effectively, the structure of the project should be flexible, with small units taking responsibility of specific tasks. The basic principle is team work, with people accountable to each other in their own areas of work. Some basic principles that need to be observed while carrying out actions are: open communication among all concerned, facilitation and process of decision making.

A. Open Communication through a dialogue among all concerned

1. Everyone is well informed about the decisions made, the responsibility given and the time frame.
2. The work team chooses the area of work on the basis of their own strengths and weaknesses.
3. Everyone feels that her or his voice is worth hearing, and is heard.
4. The work team decides its own procedures guided by planned goals and objectives.
5. No one issues orders. Work is seen as a learning process for the village groups & field workers.
6. Regular participation by all persons at group meetings provides an opportunity to share concerns, information and contributions.
7. There should be flexible working hours in relation to other teams, and for the project as a whole.
8. When an individual chooses to work, family responsibilities are taken into account.
B. Facilitation

As a facilitator and coordinator, the field worker plays an important role in enabling people to participate in their own development. The process of facilitation is shown as-

Facilitation....

1. Keeps communication channels open to allow full participation
2. Promotes “Enabling Leadership” to encourage village groups to make their own decisions.
3. Supports and builds teams and groups which become self-starting, self-directing and self-managing
4. Strengthens relationships and harmony among people, rather than allowing conflict and confrontation.
5. Take care of many of the training needs
6. Encourages and enables group decisions
7. Puts people in touch with new ideas and technologies
8. Simplifies administrative procedure.

C. Decision Making

The way in which decisions are made in a group affects the commitment of the members to their work. If one shares in the process of decision making, one is more likely to carryout the agreed actions. The group gets frustrated when decisions cannot be made, or are constantly deferred.

To achieve its goal, every group is constantly involved in taking decisions. It could be big, small, easy, difficult, right, wrong etc. The decision-making process shows the pattern of relationships among the group members. The way each member feels about another e.g. admiration, appreciation, hostility, envy, etc.,influences the pattern and the ultimate decision. Making decisions by consensus means-

- Matters requiring decisions are known and understood by all those involved.
- Many possibilities and choices are considered.
- The pros and cons of each option are analysed thoroughly.
- Choice of solution from among alternatives is clear.
- Deciding who will do what, when, where, and how is agreed by all.

Management is a series of decision making. There are both tactical and strategic decisions to be made, to achieve the objectives in a project. Participatory management allows for and encourages each member of a group to contribute in the process of management decision making.

- Examine the facts
- Consider the background
- Learn about people’s feelings
- Check with the specialists
- Look at all the choices
- Select the best alternative

Choices and decisions are not quite the same. Choices are made by selecting between two or more alternatives, where as decisions are made on the basis of both facts and feelings. It is a matter of deciding positively or negatively, to accept or reject a situation or action. Decisions are made in many cases, almost without thinking, since they are influenced by, and in turn influence other decisions. Decisions and choices are therefore part of a pattern of decision-making.
Monitor and Review

Monitoring is watching how a project is going. It is concerned with the efficiency of the project. It is necessary to see the progress at several points in a project, in terms of:

- timely delivery of the supplies and funds
- the actual expenditures against estimated costs
- the efficiency and effectiveness on the part of all those in the project
- group cooperation and mutual trust

This kind of review provides feedback so that the work plan can be revised if necessary. It is useful to have simple records kept by the village people. The field worker should keep in touch with them and get to know the information about what is happening.

Solve problems as they arise

Good planning minimises the number and complexity of problems which inevitably arise while carrying out a project. In a participatory management strategy, each member of the group becomes a supervisor. Overall coordination is achieved by participatory supervision and leadership. Supervision has a place here. It is done through regular monitoring and evaluation meetings through a process of self and mutual criticisms.

Accountability

People tend to take credit for work accomplished successfully, and to blame others for failures. Taking responsibility for the consequences of decisions and project activities is central to promoting self-evaluation and building esteem. Examining failures carefully, with a willingness to accept responsibility and learn from mistakes is constructive. Building up such a culture within the project will help in the recognition of problems, enlisting mutual support and the mobilisation of the whole group towards their ultimate goals.

This module on management and implementation of watershed development plans, focuses on-

1. Analysing community participation in implementation
2. Programme coordination
3. Participatory monitoring of activities
4. Managing contingencies

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Session 9.1

Analysing community participation in implementation

Objectives

- To enable the participants to identify the forces that promote and hinder community participation in implementations of a project.
- To enable them to devise strategies to overcome the 'hindering force' and strengthen 'promoting forces', to enhance community participation

Time
2 hours

Materials
Flip charts, Black/White board, chalks, felt pens, diagram of Force Field Analysis drawn on a flip chart,
Handout 9.1.1- Worksheet on Force Field Analysis

Method
Brainstorming on force field analysis

Procedure

Step 1. Give a brief presentation emphasising on the importance of community participation in the successful implementation of a watershed project. Add that in every situation there are several factors which either promote or hinder a communities participation. Give them some examples. Tell them that, if we want the maximum level of participation from the community, we must first identify those factors and accordingly develop strategies to overcome the 'hindering forces' and further strengthen the 'promoting forces'.

Step 2. Explain to the participants that several techniques exist to identify such forces. However, we would be using a simple and popular technique known as 'Force Field Analysis' in this session to try and analyse such forces. Distribute a copy of Handout 9.1.1. to the participants and display the same drawn on a flip chart, on the wall.

Step 3. Explain the techniques to the participants. Tell them that the first step in the process is to define the future 'To be situation', based on the goals of the project. Tell them that our aim is to elicit full participation of farmers' for successful implementation and sustainability.

Step 4. Draw a circle on the extreme right corner of the board/flip chart and name it 'To be situation', the situation expected as an outcome of the project.

Step 5. As the next step, inform the participants to brainstorm the present situation and come to a consensus on it. Define it as 'current situation'.

Note to the trainer

- The position of the 'current situation' can be decided by the participants depending on their visualisation of the same in terms of peoples participation in this continuum.
- If the participation is high the position of this circle will be closer to the 'To be situation', and if the participation is low, it will be further to the left. Refer to the Handout 9.1.1 and help them reach a consensus on its location.

Step 7. Explain to the participants that there are several factors operating in any given community that determiner the location of the 'Current Situation'. Give them examples of same of these factors like- political, social, economic, psychological, etc.

Step 8. Inform them that position, 'Current Situation' vis-a-vis the 'To be Situation' on the board/flip chart is an outcome of the various forces which have helped in promoting peoples participation. In the same way the distance between the two circles is a result of the forces that
hinder peoples participation and prevent the project reaching the 'To be Situation'. The present status is a result of the equilibrium created by the 'Push & Pull' of these forces.

**Step 9.** Emphasise on the importance of the fact to identify both these categories of forces, and determine the strategies to be adopted to further strengthen these 'promoting forces' and weaken the 'hindering forces', and if possible, completely eliminate the hindering forces.

**Step 10.** Brainstorm for ideas on the helping or promoting forces and list them on a flip chart. Exhaust them for ideas to make the list as complete as possible.

**Step 11.** Next, brainstorm for ideas on hindering forces and list them on the flip chart. Again try to make the list as complete as possible.

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**Note to the Trainer**

If you feel the participants are missing out on certain key factors, you can guide them to a discussion on the same and record the outcomes under the relevant sections of the flip chart.

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**Step 12.** Now let the group the participants review the listed hindering forces and differentiate them according to the following criteria-
- Easy to overcome
- Can be overcome, but with difficulty
- Beyond the control of group

**Step 13.** Divide the participants into two groups. Ask them to refer to the list of hindering forces, taking one item (force) at a time. Brainstorm for ideas and come up with appropriate resources/strategies to weaken or eliminate the impact of that particular force. Ask them to complete the list in similar fashion and prepare for presentation.

**Step 14.** Ask each groups to present their suggestions or strategies to overcome the hindering forces. Discuss, modify, add, delete and prepare a final list, agreeable to all.

**Step 15.** Review in a similar manner the promoting forces identified by the two groups.

**Step 16.** Instruct them to go back to their respective groups. Brainstorm for ideas and come up with suggestions that could further strengthen these forces. Ask them to list down their suggestions for each item (force), till list is completed.

**Step 17.** Ask each group to present its outcomes followed by discussions after each presentation, giving scope for adding, deleting and modifying the listed suggestions. Finalise the list.

**Step 18.** Neatly record the outcomes in the displayed flip chart on the wall, for the participants to review, what they did in this session.

**Step 19.** Sum up the session reviewing the process & emphasise upon salient learnings from the session.
Handout 9.1.1

FORCE FIELD ANALYSIS

Helping Forces

1. 
2. 
3. 
4. 
5. 

Hindering forces

1. 
2. 
3. 
4. 
5. 

Now Situation

1. Commitment enthusiasm and interest of community leaders
2. Support given by the youth group

TO BE SITUATION

1. Political difference in the community
2. Apathy and lethargy among community members

Source: Gajanayake & Gajamake (1993)
Session 9.2

Programme co-ordination

Objectives
- To enable the participants to identify actors whose efforts need to be co-ordinated for successful implementation of the programme.
- To understand the importance of co-ordination.
- To identify the obstacles to co-ordination and develop strategies to overcome them.

Time
2 hours

Materials
Flip charts, black/white board, felt pens, chalks
Handout 9.2.1- Case study
Handout 9.2.2- Co-ordination

Methods
Case study and brainstorming

Procedure

Step 1. Inform the participants that in this session we will try to understand the importance of coordination among various players involved in development projects, identify obstacles to coordination and device strategies to overcome them.

Step 2. Distribute copies of case study (Handout 9.2.1)

Step 3. Instruct the participants to read it carefully and individually write down answers to the three questions given in the end. Allow them enough time.

Step 4. Divide the participants into two groups. Ask them to review and discuss the answers written by each person. Instruct them to share their individual answers and come to a consensus on the answers to the three questions, to be presented to the entire group.

Step 5. Reconvene the entire group & ask two sub groups to present allowing time for discussion. Encourage comments, suggestions and carefully deal with criticisms in the process.

Step 6. Instruct every participants to define coordination in his/her own words and write it on a paper.

Step 7. Ask them to reassemble back into two groups and develop a group definition of coordination, reviewing their individual definitions. Allow sufficient time for discussions.

Step 8. Instruct them to write the definition arrived at in a flip chart and display it on the wall.

Step 9. Distribute Handout 9.2.2 on co-ordination and give them time to read and analyse it. Ask them to compare it with their group definition on coordination. Discuss the salient points.

Step 10. Instruct them to think of the project “Construction of stream plug in a watershed”. Ask them to discuss the following questions in context of this project and prepare group reports for presentation to the entire group-
- Who are major actors in this project?
- Whose coordination is necessary in this project for its successful completion.
- What problems you see may arise in trying to co-ordinate activities?
- What strategies/mechanisms need to be adopted to prevent such problem and promote coordination.

Step 11. Reassemble entire group and ask each group to present its report. Encourage discussions, comments and suggestions after each presentation and write modified answers on a flipchart.

Step 12. Close the session highlighting the main features of coordination and its importance.

Adapted with modifications from: Gajanayake & Gajayánake (1993)
Case Study

In a remote district X, a land settlement scheme was launched by the state, scheduled to be completed in January 1989. The purpose was to settle 50 families from a densely populated area and to develop agriculture in the newly settled area. Several government ministries and departments were involved in the project. The Department of Land Settlement cleared the jungle and prepared land for cultivation. The department of Housing constructed the houses. These two departments completed their assignments in due time. The Department of Irrigation was to construct the irrigation canals and provide water for agricultural activities. The department started work in February 1988, but could not complete the work in time. The Department of Land Settlement blamed the Department of Irrigation for the delay caused, but the latter responded that it had other priorities.

In May 1990, families were settled in the newly constructed scheme. There were about 10 families without houses, and temporary tents had to be constructed to provide shelter for them. Later it was found that ten occupants were unauthorised settlers. It took two months to figure out the legitimate claimants and evacuate the unauthorised. Each settled family received a sum of Rupees 5000 for its subsistence, for a period of six months, with possible extension for a few more months. The Department of Social Services was normally responsible for the distribution of subsistence funds. In this case, authority was given to the Department of Land settlement to distribute the money. Some families were able to obtain subsistence assistance from the Department of Social Service as well. It was only about a month later that the Department of Social Services realised that the authority to distribute subsistence money had been given to the Department of Land Settlement. The new settlers very soon realised that there were no places for their children in the schools. Some of the parents met the Director of Education in the area to enquire about the problem. He explained to them that this was the task of Director of Settlement to provide funds for the needed facilities. Once it is done, he could admit children.

1. What are the problems/issues in the above incident?
2. What are the reasons/causes for the problems?
3. What could be done to prevent occurrence of such problems?

Note: This is a hypothetical case to understand the importance of co-ordination.

Handout 9.2.2

CO-ORDINATION

**Definition:** Co-ordination is the process whereby two or more individuals/organisations work together to deal collectively with a task. The responsibility for coordination may lie on an individual or a group of individuals.

**Rationale for Co-ordination**
1. To achieve the objectives of a project with a minimum amount of constraints.
2. To take immediate corrective actions for problems encountered in implementing the project.
3. To promote better relationships among organisations/institutions/individuals to harmonise resources & activities.
4. To establish cordial relationship between the target population of a project and all other concerned.

**Obstacles to Co-ordination**
1. Turf Consciousness or desire of an organisation to protect its individual identity & prevent others on its turf.
2. Need to acquire as many resources as possible for one organisation at the expense of other organisations.
3. Lack of smooth communication systems.
4. Existing power relations, social relations, philosophies, ideologies, and communication systems.
5. Differences in rules, regulations, structures, and norms of the organisation.
6. Political indifference, lack of participation and personal rivalries.
Session 9.3

Participatory monitoring of activities

Objectives

- To enable the participants to understand the concept and process of monitoring different activities of a project systematically.
- To enable them to think over the mechanism of monitoring and plan a systematic monitoring system for the watershed activities.

Time

3 hours

Materials

Flip charts, felt pens

Handout 9.3.1- Concept & process of monitoring

Handout 9.3.2- Project monitoring format

Method

Brainstorming and rolling group method

Procedure

Step 1. Inform the participants about the importance and need for monitoring of activities during implementation in any project. The moment a project is launched, it is necessary to monitor the different activities and ensure that appropriate strategies and sequence of actions are being followed. The implementation of a project is a complex task and without a systematic monitoring system, the implementors may not be aware about the progress of the activities.

Step 2. Pose a question to the participants, ‘What is monitoring?’ Brainstorm for ideas and chart them on the flip chart. Then introduce the concept and process of monitoring. Give inputs from Handout 9.3.1 and give them time to read and discuss. Clarify its various components.

Note to the trainer

During the discussion emphasise the rationale for monitoring a project-

1. To know whether the various activities are undertaken as specified in the project plan.
2. To know whether materials and other inputs are reaching the specific places in due time.
3. To know where the unexpected issues/problems are occurring.
4. To know whether the outcomes match pre-determined targets, and if not, why and to decide what corrective actions is to be taken.
5. To know what should be done to change course from the original plan, if the unexpected happens
6. To know alternative courses of action, given the new circumstances

Step 3. Inform the whole group that it is necessary to develop a systematic monitoring procedure for the implementation of any project. Present the following logical sequence for systematic project monitoring-

- List of the activities to be monitored (derived from plan).
- State the duration and deadlines for completion of different activities (derived from time chart).
- State the methods for monitoring the activities.
- State current progress on steps taken so far.
- State barriers confronted, if any.
- Suggest solution to overcome them.
Step 4. Brainstorm the participants on 'what to monitor in a watershed project'. Chart the responses of the participants on a flip chart.

Step 5. Synthesis the fact that various activities to be monitored in a watershed project can be classified under three broad heads, viz. physical progress, financial progress and the process through which progress is occurring. Inform that in order to understand these aspects more clearly now they shall be doing a group task.

Step 6. Distribute the Handout 9.3.2 on project monitoring format and instruct them to review the Handout developed earlier on construction of stream plug in a watershed. Ask them to imagine a hypothetical situation, where the farmers' organisation has launched the planned project, and now they are going to monitor its progress with the participation of all the members in the group.

Step 7. Ask the participants to divide into four groups and select a spokesperson. Instruct them to take the first activity in the project plan and go through the various columns in the Handout considering the physical, financial and process aspects, filling them appropriately, based on their responses. Add new ideas if required.

Step 8. Now ask the participants to move over to other groups and take up the next activity in the sequence. Instruct them to complete the rest of the activities, planning the Step 7, working in rolling groups, with members from one group moving to the other groups after every activity.

Note to the Trainer

- Explain the rationale behind the rolling group method and its usefulness in training for project work. Emphasise that in a situation where a responsible person has to move out or transfer before the completion of the activity and another person has to move in to take the place (which is a reality), she/he should be briefed properly and be ready to take on from that point of the project work.

- In preparing rolling groups, be sure that one member from each group moves on to the next group, and in this way all the members (except the spokesperson) in the group shall have changed their groups at least once by the time the session is completed.

- Have a flip chart with the names of group members to be "rolled" posted on the wall, and every 15 minutes read out the names of the participants moving on to the next group.

Step 9. After the exercise is completed, reconvene the groups and ask the spokesperson from each group to present his/her group's worksheet. Discuss and check with the whole group for any disagreements. Make the necessary modifications.

Step 10. Synthesise the four lists and prepare one master list. Display the final list developed after necessary refinement. Commend them on a task well done and close the session.

Adapted with modifications from: Gajanayake & Gajayanake (1993)
Handout 9.3.1

Concept and process of monitoring

Monitoring is the continuous or periodic review and surveillance (overseeing) by management at every level of the hierarchy, of the implementation of an activity to ensure that input deliveries, work schedules, targeted outputs and other required actions are proceeding according to plan.

Basic hypothesis is that despite proper project design, necessary inputs, technical resources and support services, projects can fail due to operational management problems. Here, Monitoring helps to examine the efficiency for corrective action.

Purpose of monitoring
- To achieve efficient and effective performance by providing feedback to project management at all levels;
- To enable management to improve operational plans and take timely corrective action to improve performance.

Monitoring is...
- Part of internal activity of the project
- Needed at every level
- To be undertaken by those responsible for implementation
- It is a management tool to get feedback

Steps in monitoring
- Decide the objective or why to monitor?
- Decide what to monitor - indicators related to physical progress, financial process
- Decide the levels of monitoring - at what levels monitoring has to be undertaken
- Decide how to monitor - what mechanism is to be used at different levels.
- How frequently - quarterly or monthly or weekly
- From whom to whom, format of the report, depth of information, etc.
- Communicate about monitoring mechanism, the formats and all instructions to everyone.

Handout 9.3.2

Project monitoring design worksheet

<table>
<thead>
<tr>
<th>1 Activity</th>
<th>2 Deadline</th>
<th>3 Monitoring Method</th>
<th>4 Progress</th>
<th>5 Barriers</th>
<th>6 Solutions</th>
</tr>
</thead>
<tbody>
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</tbody>
</table>

An Example

<table>
<thead>
<tr>
<th>Activity</th>
<th>Deadline</th>
<th>Monitoring Method</th>
<th>Progress</th>
<th>Barriers</th>
<th>Solutions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Building walls up to 5 ft. in height</td>
<td>July 31, 1997</td>
<td>Measure the height of the walls and check materials used</td>
<td>Walls on two sides completed</td>
<td>Head mason has left the project</td>
<td>Hire a new mason to undertake the responsibility</td>
</tr>
</tbody>
</table>

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Session 9.4

Managing contingencies

Objectives
- To enable the participants to understand the importance of managing contingencies, as project activities are subject to situational dynamics.
- To help them understand community projects as open systems, constantly interacting with the environment.
- To develop their skills in managing contingencies.

Time
3 hours

Materials
Flip charts, felt pens, chalk, white/black board
Handout 9.4.1- Case study (Part 1 and 2)
Handout 9.4.2- Contingency Management

Method
Case study

Procedure
Step 1. Inform the participants that the watershed projects are open system constantly interacting with the environment and therefore subject to situational dynamics. In this session we will try to develop our skills in managing contingencies.

Step 2. Divide participants into groups of five or six members. Distribute the case Study (Part 1). Ask each group to read it, discuss, share ideas and develop a plan of action. Instruct them to select a spokesperson/leader to present their plan to the whole group. Give them enough time to complete the activity.

MANAGING CONTINGENCIES

Case Study (Part 1)

You are a member of a five person team assigned to go on a mountain hike. The proposed hike is scheduled to start tomorrow and will take two days of climbing. You plan to begin the hike very early tomorrow.

The mountain peak, which is your destination, is about 950 ft. in height and almost three-fourths covered by forests. The flat land area below, has water and camping grounds. The climb is expected to be very steep after the half way point. People have seen bears and wild boars, but not many attacks have been reported. Snakes and other reptiles have often troubled hikers. There are many rare varieties of rare birds. According to the weather forecast, day one will be cloudy but there will be no rain. On day two, sunshine is expected, but rain is likely.

There are no roads, but the foot-paths of previous hikers could be traced. Your group has prepared a map to guide you to the mountain peak and you are following this map. You intend to camp the first night in the tent your group will put up and intend to start early the next day. Prepare a plan for the hike.
Step 3. Ask the spokesperson from each group to present the plan. After they have presented their plans, ask the question- “Are you ready to face any unexpected situations?” Allow each group to present their view points.

Step 4. Distribute Case study (Part 2). Give them a few minutes to read it. Ask the participants to go back to the same group and prepare an alternative plan.

MANAGING CONTINGENCIES

Case Study (Part 2)

You had a very successful first day. Your team was on schedule. You spent the first night in the tent. Today is day two and you are ready to start the hike to the summit of the mountain. A torrential rain comes down as you are about to start the journey. It rains for three hours and when it stops you find that a huge mass of earth has washed down as a result of an earth slip, wiping out the pathway completely. Prepare a plan to handle this situation.

Step 5. Ask the groups to consider what alternative action they can take. Let each group present its ideas. Discuss the importance of contingency plans. Point out that given the same situation, different groups may choose to employ different plans/strategies to achieve the same results.

Step 6. Share with the participants a personal experience in a project where an unexpected situation occurred as a result of situations factors. Explain how the situation was managed.

Step 7. Ask the group whether they have faced similar contingencies in their work situations. Requests two/three volunteers to share their experiences in handling unexpected situations.

Step 8. Reflect on experiences highlighting the need to manage contingencies. Explain to the group the significance of contingency management.

Note to the trainer

Emphasise the following points:
1. Unexpected events can happen and community projects are no exceptions.
2. Community projects operate as open systems, constantly interacting with the environment and managing contingencies is an essential part of this process.
3. There are no unique or defined ways of handling contingency situations but we must prepare ourselves for unforeseen circumstances. Contingencies should be handled in a way appropriate to the context.

Step 9. Distribute Handout 9.4.1 for reading. Ask the participants to reflect on the advantages of being able to manage contingencies. Highlight importance of contingency management.

Step 10. Sum up the session synthesising the major learning points.
Handout 9.4.1

Contingency Management

The contingency approach to managing projects is a product of the 1970s, which were characterised by turbulence and uncertainty due to economic, political and social upheavals. Contingency management emerged as an attempt to find solutions to encounter the uncertainties that affect planning processes by visualising probable uncertainties and planning how to respond, and mitigate them. In essence contingency is something that happens by chance without a warning, an unforeseen occurrence or emergency. Contingency management involves preparing a plan to take effect in case an emergency occurs.

In implementing community projects, it is necessary to identify, assess, and diagnose the important contingency situations that could occur so that the best decisions can be made. That is, the project should be implemented within an if-then framework. If certain scenarios occur in an unexpected manner, then an appropriate managerial action should be taken in order to respond to that situation. The contingency approach to project implementation is to ensure that the community group is oriented and prepared to meet the unexpected demands of the situation. Contingency design is the process of taking adaptive measures under the operating environment.
Module 10

Participatory evaluation

Introduction

Evaluation generally implies measurement appraisal, or making judgements. Frequently, it is a process designed to assess the degree to which the intended objectives have been achieved. In a project situation, evaluation implies a systematic examination of the project to determine its relevance, degree of success, impact, or benefits to the target population.

Sometimes, evaluation is considered to be the last step in the community project development process. However, it is interconnected to all the other steps in the life cycle of a project. Therefore, evaluation should not be considered as a last sequential step in a linear model but as interactive process linked to all the other stages. Evaluation is not a one-time activity at the end of a project. Rather, it is a continuous activity carried on throughout the life of the project. Evaluation is different from monitoring. Monitoring checks whether the project is on track; evaluation questions whether the project is on the right track. Monitoring is basically concerned with the short-term performances of the project while evaluation looks more at long-term effects in terms of project objectives.

Frequently, evaluation is perceived as an activity carried out by an expert (quite often an outsider) or a group of experts designated to assess the results generated by a particular project at its completion. This is a common misconception prevailing in most minds. It is important that evaluation is carried out as a continuous activity with the participation of all stakeholders of the project, most importantly, the beneficiaries. The results of evaluation should be fed in as quickly as possible when carried out as a continuous activity. Important principles that a community development worker or a group should know with regard to evaluation are:

- Evaluation should be a continuous activity
- Evaluations should be a participatory activity
- Evaluation should be a constructive activity

The purpose of this module is to help the farmers organisation involved in watershed development programmes to learn how to do more effective and appropriate evaluations themselves. This would lead to evaluations becoming a natural, built-in process in a watershed project which provides timely, relevant information to those who need to make decisions which effect that project. This also aspires to the ideal that all those farmers participating in the watershed development project will play an active part in the self-evaluation and decision making process. An evaluation should be able to address the questions of why, for whom, by whom, levels, when, what, how and the use of its finding, described briefly here.
Why Evaluate?

Whether as individuals, or as parts of larger organisations, we need to constantly get feedback on what we are doing in order to determine whether or not we are going in the right direction. This may involve a periodic stepping back to get perspective on the impact our actions are having on our own growth and their effect on others. Evaluation provides the basis for decision-making. The better we understand what is happening, the wiser we can be in making decisions concerning our activities.

Evaluation for whom?

The premise of this manual is that evaluation is for decision-making. Therefore, those who make the decisions concerning a project's day-to-day functions or general directions are those to whom the evaluation needs to be addressed. It thus makes no difference whether the decision-makers are the local participants or outsiders who run the project. Our bias here is towards projects in which beneficiaries and local staff are the decision makers. What are ways that evaluation addressed to their needs can also serve to communicate needed information to interested outsiders? Will those at different levels (local participants, and outside supporters) be willing to accept the result of evaluation and modify their behaviour accordingly?

Evaluation by whom?

If we agree that evaluation is for decision-makers, does it not logically follow that evaluation should be carried out by the same people? A strong argument in favour of local staff and beneficiaries conducting their own evaluation is that their participation, especially if the call for evaluation was initiated by themselves, is likely increase their commitment to the entire process. An argument against internal evaluation is that we are tempted to be extremely indulgent when it comes to judging our own performance. One way of overcoming this tendency is for an 'evaluation facilitator' to provide guidance to local participants in assessing their progress. This is best done when the role is seen as that of a trainer in evaluation, rather than the execution of the evaluation itself by the outsider.

Levels of Evaluation

We use the terms 'monitoring' or 'evaluation' to describe the process of obtaining information and using it to make an assessment for decisions at quite a variety of levels. Different forms of evaluation serve very legitimate purposes, but we should be careful to distinguish at which level we are evaluating, e.g. preparation, activity, action, impact, etc.

When to evaluate?

It is unfortunate that many of us have come to think of evaluation as that big dreaded event which occurs at the end of a course or a project. One might raise the question concerning the value of such a terminal evaluation for the participants of a rural development project, except perhaps as a post-mortem. It could serve a donor agency in learning from the mistakes and successes of one project in designing other projects in other places. But where does that leave the intended beneficiaries of the first project?

Evaluation for decision-making needs to be done whenever decisions are to be made. And if those decisions are made frequently by the local managers and participants of a project, a monitoring process needs to be in operation which provides the needed information in a timely manner. Of course, one needs to distinguish between day to day decisions, which require only routine monitoring or feedback (which should not take much extra effort to obtain), and periodic major decisions which may call for information requiring a more formal evaluative effort.

What to evaluate?

When we write measurable objectives, we generally tend to set them in terms of easily quantifiable criteria. Perhaps this is a good place to start. We hope to enable people to achieve tangible successes. Development projects need to show progress in such things, not only to please donors, but,
more importantly, to convince beneficiaries that they can make constructive changes in their lives. But often we hear local project people say something like, "Yes, but it is the qualitative changes which are taking place which are more important." What are these qualitative factors? Can we "get our hands on them" and measure them somehow? For example, if self-reliance is a qualitative effect we're looking for, perhaps we can find indicators, such as money contributed by the community, the frequency of attendance and degree of participation in meetings, and the growth in skills of community members.

**How to evaluate?**

There are a variety of simple and practical tools and techniques that can be used by rural development projects for evaluation. Those especially useful for projects dealing with health, nutrition, agriculture, watershed development, community development and human potential, described in this module, are evaluative tools as surveys, questionnaires, interviews, community meetings, diaries, pictures and forms of creative expression like drama, role plays, songs, etc. Criteria for deciding which technique is appropriate, includes, involvement of project participants in gathering and interpreting information, time/skills required, and obtaining of useful, timely, and reliable information.

**Communicating the findings / making decisions**

How many times have you known of an evaluation which was done on a project, a lengthy and very detailed report written up, and then the report was duly filed or shelved by those who received it? The results of many such evaluations have done little more than use up paper and collect dust.

How can this be avoided? Well, for one thing, if an evaluation is done with the full participation of those who are affected by a project, and if these are the persons who make the decisions, it can be a "living evaluation." Whether or not it is formally written down, those who need to know the findings of the evaluation will have done so as the evaluation process was proceeding, and so will be enabled to make the implicated decisions.

Whether or not an evaluation is written up in the form of a formal report, the important thing is that the relevant findings be communicated to those who need to make decisions and take actions. And they should be communicated in such a way as to make it as possible, for those who need to know, to learn what they need to learn in order to make the decisions they need to make.

This module focuses upon the principles of participatory evaluation The sessions are arranged in the following manner.

1. Evaluation- What it means?
2. Planning participatory evaluation and evaluation tools
3. A frame work for participatory evaluation
Session 10.1

Evaluation- what it means?

Objectives
- To help the participants understand the term evaluation and arrive at a working definition of evaluation.
- To enable them to identify the various dimensions of a systematic evaluation process.

Time
3-4 hours

Materials
Flip chart, felt pens
Handout 10.1.1- Understanding evaluation
Handout 10.1.2- Dimensions of evaluation

Method
Brainstorming

Procedure

Step 1. Inform the participants that in this session they are going to learn about a very integral component of village development projects, where people are involved in a continuous feedback system to improve upon their plan of action. They would try to understand what evaluation means and its important dimensions.

Step 2. Ask the participants to think about the team evaluation and what it means to them.

Step 3. Ask each participant to define evaluation in his/her own words and write it on a flip chart.

Step 4. Stick all the charts around the walls of the room and ask the participants to walks around the room and read them.

Step 5. In the total group discuss the variety of definitions and try to arrive at a common definition. Write it on a flip chart and post it on the wall for everyone to analyse the similarities and difference with their own definition.

Step 6. Also write two or three standard definitions of evaluation developed by specialists on a flip chart and display them. Compare there definitions with the group definition and commend the quality of the group effort and meaningful definition developed.

Step 7. Inform the participants that now the group has an idea about what evaluation is. Emphasise that now they shall aim at identifying and understanding various dimensions of evaluation. These dimensions are critical in making major decision before conducting an evaluation.

Step 8. Introduce the Handout 10.1.1 on understanding evaluation with a list of questions to be answered. Allow time for discussion.

Step 9. Explain the significance of each dimension to the participants. As the first step, take the question 'why should be evaluate?'. Brainstorm for ideas and chart them on a flip chart.

Step 10. Ask the participants to divide into four working groups and ask each group to brainstorm responses for 'What', 'How', 'Who', 'When' dimensions of evaluation. Ask them to chart their responses on the flip chart and prepare exhaustive lists for each. Allow sufficient time for discussions.

Step 11. Ask each group to present its list to the entire groups.

Step 12. Distribute the Handout 10.1.2 on dimensions of evaluation with probable answers for each. Read each dimensions and compare it with the list developed by each group. Ask the group to supplement their list with any new ideas they feel that need to be added.

Step 13. With the help of the participants now prepare a master list and display it on the wall.

Step 14. Close the session by highlighting the main learning's from the session.
**Handout 10.1.1**

**Understanding evaluation**

- Why would we evaluate?
- What should be evaluated?
- How should evaluation be done?
- Who should do the evaluation?
- How often or when should evaluation be done?
- What should be done with the results of evaluation?

**Handout 10.1.2**

**Dimensions of evaluation**

1. **"Why" should the project be evaluated?**
   - For the project committee to know why it didn't yield the expected results?
   - For beneficiaries to get an idea as to whether they have received the expected benefits?
   - For project implementors to decide whether to extend the project to other communities?
   - To learn to avoid similar mistakes in future projects.

2. **"What" should be evaluated?**
   - Whether the project objectives have been achieved?
   - Whether the results are satisfactory when compared to the resources invested?
   - How can the project be improved? What components should be changed?
   - What went right? What went wrong? What are the direct/indirect benefits and/or impact?

3. **"How" should the project be evaluated?**
   - Discuss and decide on the following points-
     - What information is needed? (e.g. economic benefits gained by the beneficiaries)
     - What are the sources of information? (e.g. informal leaders in the community)
     - What techniques should be used in getting the information? (e.g. group discussions)
     - What tools are necessary to get the information? (e.g. a checklist)
     - How should the information be analysed? (e.g. % people benefited by the project)
     - How will the evaluation results be used? (e.g. to make changes in policy directions)

4. **"Who" would carry out the evaluation?**
   - A special work group appointed by the community? Beneficiary group in the project?
   - Funding agency? External evaluation specialists?
   - All of the above categories combined?

5. **"When" should the evaluation take place?**
   - At the beginning? Middle? End? Six-months after the project is over?
   - Continuously? monthly? tri-monthly?...

6. **"What" would be done with the results of evaluation?**
   - To improve programme organisation and management
   - To improve planning
   - To assist in decision/policy making
   - To indicate where action in needed
   - To indicate where further research is needed
   - To provide materials and indicate approaches for training
   - To provide information for publicity
**Session 10.2**

**Planning participatory evaluation**

**Objectives**
- To enable the participants to understand the need to plan evaluation.
- To help them understand the use of indicators in evaluation.
- To provide an opportunity to examine a series of evaluation tools in order to improve their evaluation skills.

**Time**
6 hours

**Materials**
- Flip charts, felt pens, Black/White board, chalks,
- Handout 10.2.1 - What is participatory evaluation?
- Handout 10.2.2 - Steps in participatory evaluation
- Handout 10.2.3 - Indicators
- Handout 10.2.4 - Evaluation tools
- Handout 10.2.5 - Deciding which technique to use
- Handout 10.2.6 - Ten ways to spoil evaluation and make it invalid

**Procedure**

*Step 1.* Inform the participants to review the previous session. Tell them that after having found the answers to the questions asked now they can decide to evaluate. In this session they would learn the need to plan an evaluation and ways in which it can be done. Also they would learn about participatory evaluation. During the session they would also get insights on understanding the use of various indicators for evaluating their programmes.

*Step 2.* Ask them a very simple question, “Why do you need to plan evaluation?” Brainstorm them for ideas and chart them.

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**Note to the Trainer**

- Explain them that planning is an organised method by which you can work out how you intend to reach your evaluation objectives and when?
- Some possible responses could be:
  - select the priorities and objectives of evaluation
  - indicate the kinds of methods you need to use
  - decide what you need to do in detail
  - decide the role each person will play in evaluation
  - indicate how long the evaluation will take and how much it will cost
  - see how one part of evaluation relates to the others
  - increase skills in planning and organisation

*Step 3.* Inform them that there are different types of evaluation plans and the plan they choose, should depend on, primarily the following three factors-
- the objectives of evaluation
- the scope of evaluation, and
- the people who will be involved and the resources that are available

The best way to plan any evaluation is, first to look carefully at a programme in its own settings and consider the capabilities of the individuals, who are going to do it.
Note to the trainer

One way to begin making a plan is to decide what are the main parts of the programme that need to be looked at in the evaluation, and then ask questions relating to them. A plan helps you to focus on the main parts of the programme that you want to look at, decide which questions to ask, according to the evaluation objectives, plan how to obtain information, to answer them, decide who will do what in the evaluations and when and finally plan how to make the best possible use of material resources.

Step 4. Next, ask them a question "What is participatory evaluation?" Ask them to discuss in small groups of 5-6 participants each. Give them inputs from Handout 10.2.1. Ask them to read and analyse it. Ask each of the groups to present its outcome to the entire group.

Step 5. Synthesise the results of participants and summarise it for clearer understanding. Distribute the Handout 10.2.2 and explain the various steps involved in participatory planning.

Step 6. Next ask the participants "How can you measure change?" Give them some inputs on the different types of indicators and ask them to relate it to their project context. Divide the participants into three groups and brainstorm them on different types of indicators. Ask them to develop a list of different types of indicators they feel can be used to evaluate their day to day activities. Tell them they will have to present their findings. Give them sufficient time.

Step 7. Reassemble and ask each group to present its results. Give inputs from Handout 10.2.3. Emphasise on discussions. Help them synthesise their results and display them.

Step 8. Let them walk around the room and review what they have done so far.

Step 9. Inform the participants that having developed the indicators now the focus should be to examine a series of evaluation tools in order to improve their evaluation skills. Distribute Handout 10.2.4 on evaluation tools. Ask them to read it carefully and discuss.

Step 10. Explain the various techniques mentioned in Handout 10.2.4 to the participants and analyse as to which method can best be used in order to get a particular type of information. Distribute Handout 10.2.5 allow time for reading. Emphasise on comments and suggestions on the same.

Step 11. Review in a discussion the evaluation tools and who uses them for what purpose. Focus on collection, analysis, presentation and dissemination of information feedback systems, how to evaluate intangibles, the importance of involving users in developing the tools which they will use to get information that they decide is important and innovative techniques for evaluation role play group/community meetings, use of pictures/photographs.
Step 12. Distribute Handout 10.2.6 and allow the participants to go through it. Explain to them that as there are some good evaluations, there are also some don’ts which need to be carefully observed for making the evaluation successful.

Step 13. Close the session summarising the major learnings from the session.

**Handout 10.2.1**

What is participatory evaluation?

*Participatory evaluation is...*

- Based on our faith that people are interested in improving their practice and sharpening their vision
- Developmental in nature and in interest of those who are actual actors of activities to be evaluated
- A collective process of reflection and planning
- An educational experience for those involved in it

**Handout 10.2.2**

Steps in participatory evaluation

What happens during participatory evaluation? The following 10 points briefly and concisely outline the objectives and steps necessary for this process (Marie-Therese Feurstein, 1986).

1. All those involved in a programme need to decide jointly to use a participatory approach.
2. Next, they need to decide exactly what the objectives of the evaluation are. This is often harder than they think it will be.
3. When they have reached an agreement on the evaluation objectives it is time to elect a small group of “evaluation co-ordinators” to plan carefully and organise all the details of the evaluation.
4. Now is also the time to decide what methods will be best for attaining the evaluation objectives. The choice of method, such as analysis of programme records or use of a questionnaire, will also be influenced by the capabilities of the people involved, time and resources available for evaluation.
5. As these decisions are made, the written evaluation plan is formed. This plan shows why, how, when and where the evaluation will take place, and who will be involved.
6. Next the evaluation methods must be prepared and tested (for example, a questionnaire or a weighing scale may be needed). Selected programme participants will also need basic explanation of and training in interviewing, completing written or oral questionnaires, conducting various kinds of checks or examination etc. All programme participants will need explanations of the objectives and general methods to be used in the evaluation. The more they understand, the more they can participate in the entire evaluation process, wherever and whenever requested by the evaluation co-ordinators.
7. Having prepared and tested the evaluation methods, the next step is to use them to collect the facts and information required for the evaluation.
8. Then the information and data are analysed by the programme participants. The major part of their work will probably be done by the evaluation co-ordinators.
9. The results of the analysis (or the evaluation findings), are then prepared in written, or oral or visual form. There are different ways of reporting and presenting the evaluation findings to different groups connected with the programme. For example, a Ministry (or programme funders) will usually need a written evaluation report but community-level participants will be better able to share results, if they are presented as charts or pictures or if they are presented during discussion meetings.
10. Programme participants then need to decide exactly how the evaluation results will be used.
Indicators

Indicators provide a standard against which to measure changes brought about by project activities. They are determined on the basis of project objectives. Indicators can be social indicators, economic indicators, political indicators, environmental indicators.

Some examples of broadly used indicators are given below. This list is in no way complete and site specific indicators need to be developed depending on the situation.

Social indicators- Used to measure changes in the social status of the village group

Standard of living
- Access to potable water supplies
- Transportation
- Type of house and household sanitation facilities
- Access to recreation facilities

Poverty
- Percentage of rural landless
- Unemployment rate
- Percentage of homeless families
- Proportion of female headed household
- Malnutrition rates in children under 5 years.

Health status
- Nutritional status
- Incidence of sickness throughout one year
- Immunisation rate
- Enforcement of toxic pesticide laws
- Level of public sanitary facilities.

Education
- Percentage of children 5-15 years in school
- Literacy rate
- Access to adult education programme
- Average number of years of formal schooling among adults
- Ratio of agricultural extension workers to farmers
- Ratio of teachers to children of school age

Gender Equality
- Division of labour by hours of work by gender
- Mortality rate for female/male children
- Proportion of women in decision making and management committees
- Male/female wage differentials
- Percentage of females in farmer’s groups or agricultural co-operatives
- Percentage at decision-making/management levels.

Economic indicators- Used to measure changes in the economic status of the village community or family

Financial status
- Amount of debts
- Capital investment
- Amount of cash savings
- Access to institutional credit

Ownership of assets
- Number of buffaloes
- Size of land holding
- Number of vehicles per farm
- Amount of capital investment
Income
- Average income
- Monthly sales of grain or of handicraft production
- Wage employment
- Sale of capital

Production
- Rate of livestock reproduction
- Productivity per unit/Yield per hectare (weight or volume)

Mechanisation
- Number of tractors
- Electrical appliances e.g. milking machines
- Number of employees displaced by mechanisation

New modern technologies
- Percentage using agricultural credit to purchase modern technology
- Number of farmers using feed concentrates for livestock production
- Amount of mineral fertilisers using chemical pest control methods.

Labour and employment
- Number migrated out for work, by gender and age groups
- Number of hired labourers
- Number of adults employed
- Proportion of labour unskilled
- Proportion of workers on contract or piece rates, by gender.

Political indicators- Used in measuring political changes or changes in power structures.

Control over factors of production
- Access to subsidised agricultural inputs, control over irrigated water resources
- Percentage under various land tenure systems

Distribution of benefits
- Number of families below the poverty line
- Access to public facilities, by caste and gender

Leadership
- Number of local leaders trained in scientific agriculture
- Representation of women on committees
- Control over local organisations

Environment indicators- Used to measure environmental changes

Deforestation
- Ratio of forest and cultivable land
- Depth of top soil
- Incidence of flash floods and desertification

Coastal Ecosystem
- Rate of mangrove destruction
- Depletion of aquatic resources

Environmental awareness and practices
- Amount and type of material recycled
- Conservation behaviour e.g. planting trees
- Making availability and access to environmental education materials
- Integration of environmental concerns in the local festivals
- Areas of forest encroachment on natural forests

Reforestation
- Number of hectares of land under community reforestation
- Number of organisations involved in reforestation activities
- Number of villagers planting fruit trees per year
Some useful evaluation tools

There are some tools or techniques which can be useful in evaluating various dimensions of rural development projects. A few are mentioned here.

- **Surveys:** This is a rather broad category of techniques which can be used at different times, e.g. initial baseline survey and later follow-up surveys. Questionnaires might be used, but often just a few key questions asked informally can lead to the information sought. Where it is not feasible to survey all members of a community, a random sample procedures can be used. Comparisons might be made by surveying communities not reached by the project (control group) or by comparing with national statistics (recognising the limitations to their accuracy). Surveys can be specific or general (checking a variety of factors in the community).

- **Interviews** can be done with individuals or groups. They can be close-ended (limited to specific questions) or open-ended (allowing interviewees to introduce their own ideas). Interviewing is not just conversation. It is an information-gathering skill preceded by careful planning and developed with much practice. Since interviews are so commonly used. It will be helpful to interject here some suggestions for good interviews:
  - Plan questions carefully.
  - Start a visit with introductions rather than launching immediately into questions.
  - Ask questions so that you encourage the interview to show his/her knowledge rather than show off your own knowledge.
  - Be willing to spend more time. Don’t be in hurry.
  - Be sensitive to the feelings of individuals and groups.
  - Encourage the groups in what they are doing.
  - Don’t listen only to group leaders, but encourage other members to speak as well.
  - Feel free to ask and be questioned.

- **Small group meetings**, including meetings of particular segments within a community, can be conducive to airing of opinions and suggestions which may not get expressed in larger group meetings.

- **Analysis of records and reports** is probably where an outside evaluator would start. Staff and participants in a project can learn a lot from them, too, if the records are kept well.

- **Accounts and financial reports** reveal what funds have come in and how they have been spent. How resources have been used is an important part of evaluation. Financial reports are needed when decisions are made for subsequent budgets.

- **Diaries**, kept by staff and literate participants, record of activities as well as personal reflections. They can help the individual, and others, review what has happened over time.

- **Case studies** describe a particular experience in a way which helps others learn from that experience.

- **Tests of knowledge, skills, attitude, etc.** can be used not only for school children, but for assessing what adults have learned, as well. These help both the individual and the program by serving as a measure of achievement.

- **Participant observation**, a method commonly used by sociologists and anthropologists, involves spending time as a part of a community, observing behaviour, relationship etc.

- **Pictures**, including black and white photographs and slides, can help us recall who was involved in what, and what conditions were like, when. Visual images communicate to both preliterate and educated people- a picture is worth a thousand words.

- **Tape recordings** are an easier way to communicate a thousand words than writing them down. They can register the freely expressed feelings of participants. Though some editing may be necessary to reduce the length, recordings communicate in the actual words and emotional tones of the interview, retaining an authentic quality which can get lost in statistics from written questionnaires.

- **Mapping** can reveal interesting perceptions on the part of people. They are asked to make graphic representations of specific aspects of a community, showing in terms of lines drawn on paper the different structures and relationships. This can be used for physical situations, such as the layout of a neighbourhood, or organisational structures, such as co-operative.

- **Unobtrusive measurements** involve observation of behaviour or of physical evidence without distributing people. This can be useful in situations where people are apt to behave differently if they realise they are being
observed. Or it can simply mean collecting information which is obvious, or can be obtained from existing records, without bothering everybody in the process.

- Problem stories are narrative accounts of situations which help bring problems to light for discussions. Using fictional characters enables to be more open in sharing problems which otherwise may be suppressed.
- Creative expression can be a culturally acceptable means of communicating not only problems, but also joys and satisfactions. Artistic forms can include drama, role plays, songs, dances and drawings. Many projects are finding these to be valuable forms for both teaching and evaluation.
- Visits by others doing similar work can be opportunities for project participants to see themselves through the eyes of others. Visitors from other development projects can help teach project participants by sharing observations with them.
- Visiting other projects can also help us to gain perspective on our work. Villagers making such visits have often exclaimed that they now see their own problems and opportunities more clearly. Project staff benefit from establishing professional links with colleagues, which provide them with new ideas. And in the process of learning about what others are doing, we find ourselves reflecting on our own work.

**Handout 10.2.5**

**Deciding which techniques to use**

What are some of the criteria to be kept in mind when deciding which techniques would be most appropriate to use in evaluating a project? Here are some suggestions:

1. The technique used should complement the approach and philosophy of the project.
2. Community participants should perceive it to be a way to help them solve their problems, not just information about them gathered by or for outsiders.
3. Those involved in collecting information should understand why it is needed and, as much as possible, be a part of the process of analysing and utilising the findings.
4. Match technique used to the skills and aptitudes of participants.
5. The technique should not take too much time away from normal responsibilities.
6. It should focus on a minimum number of well-chosen indicators.
7. It should provide timely information needed for decision-making.
8. The results should be statistically reliable and, even if not quantitative, objective enough to convince other of their credibility.
9. The sophistication and cost of the techniques(s) used should be in keeping with the level of evaluation called for (simpler for more routine evaluation; perhaps more complex for occasional major evaluation.)
10. Whatever techniques are used, they should reinforce a feeling of community solidarity, co-operation and involvement.

In many cases there are advantages to using a number of different techniques in combination. One can reveal aspects of a project that another may miss. A combination of techniques adds reliability and validity to an evaluation.

Reliability: you can trust the consistency of a measure from one situation to the next.

Validity: the extent that a test measures what it is supposed to measure.

It is important to keep in mind that the tools or techniques used in collecting data have an influence on what is learned. If we use only a microscope, we won't see human dynamics; if only the most outspoken in a meeting are listened to, we may not learn what is happening in the poorest segment of the community; if only existing opinions are asked for, some facts may not be discovered which observations would reveal.
Ten ways to spoil evaluation and make it invalid

1. Assuming that changes are caused only by the existence of a programme. Changes sometimes happen just because time has passed; for example, people get older, learn more and change their opinions. So change may not just be caused by a programme. Certain changes may have happened anyway, even without the programme.

2. Ignoring influences outside of a programme. People are also influenced by many things going on outside a programme, like changes in government, policy, local plans, power groups, opportunities for work, availability of land, what they hear on the radio, what they see in a paper, the building of roads, and so on.

3. Forgetting that the same evaluation method may give different results when used by different people. For example, two interviewers ask the same questions, but, one interviewer is patient, friendly and sensitive, and the other is not. The answers they get to the same questions may be very different.

4. The bad choice of groups for comparison, such as groups of women from several villages who live at different distances from a water source and have different levels of income. All these facts influence the amount of water that they obtain and how they use it. You cannot, therefore, compare these groups with one another without taking account of these facts.

5. Loss of interest by programme staff and/or participants while the evaluation is in progress. If motivation and participation are seriously reduced, this will have some effect on the evaluation.

6. Repeating tests, interviews, or questionnaires when participants can still remember the questions which were asked before, or when they may also have other reasons (not understood by the interviewer) for answering differently.

7. Forgetting that people can respond particularly well just because the evaluation is taking place. People can be very enthusiastic about something new and want it to be a success. Then real problems or difficulties may be passed over quickly or remain hidden.

8. Claiming that the results of a small-scale evaluation also apply to a wide group of people or to a wide area, for example, evaluating traditional birth attendants in one region of the country and then claiming that the results are also true for all traditional birth attendants in the entire country. There may be some similarities but there are also differences according to individual, regions, customs, climate etc.

9. Planning evaluation badly from the start, for instance, evaluating a group of families who had attended nutrition education classes to find out how much they had learnt and were practising, and then claiming that the evaluation results also told you about the nutrition knowledge and practices of other groups of families who had never attended classes. The evaluation plan should have looked at both groups of families, then compared the results.

10. Using unreliable evaluation methods, for example, using the same scale to weigh a hundred babies, but not checking the scale regularly. If the scale was not working so well by the time the last babies were weighed the evaluation results were therefore not reliable for all one hundred babies, as the evaluation method had changed during the evaluation.

When evaluation results are valid for just the programme concerned they are said to have internal validity, that is, they are valid ‘inside’ the programme. When evaluation results are valid for not just one programme but for others which are similar, they are said to have external validity, that is, they are also valid ‘outside’ the programme.

Sometimes, even though you may not count every single person who visits every single community centre over a certain period of time, by looking at the total number of people who attend 100 centres over that period you can get a good idea of the average number of people who use each centre. This is called generalising results and is a valid way of obtaining useful information.
Session 10.3

Framework for participatory evaluation

Objectives
- To enable the participants to design a systematic framework for participatory evaluation.
- Understand the critical steps involved in evaluation.

Time
4 hours

Materials
Flip charts, felt pens
Handout 10.3.1- Sample evaluation framework for an ongoing activity
Handout 10.3.2- Evaluation design worksheet

Method
Framework mapping exercise and brainstorming

Procedure
Step 1. Inform the participants that in this session we would try and develop design for a systematic participatory evaluation of an ongoing project to assess its impact on the community to make necessary improvements in the project plan.

Step 2. Put the flip charts on the wall and ask for a volunteer to help record the discussion in writing or pictures. Distribute the Handout 10.3.1 to the participants and ask them to carefully study the format. Inform them that we shall be using this format for evaluation.

Step 3. Explain that the meeting is to discuss how the watershed development programmes are progressing and how improvements can be made.

Step 4. Ask the participants to describe a watershed development programme they are familiar of, that is being addressed though the project or in their community group. Ask them to describe the problem in terms of the number of people affected, why it exists, etc.

Step 5. On the first sheet of paper write Problem and describe, with pictures or words, the ideas presented by them.

Step 6. Ask them what they hope to achieve from the project.

Step 7. On the second sheet of paper write Goals/Objectives and describe them with pictures/words. Leave some space between each goal/objective.

Step 8. Then ask them what activities are taking place that relate to the first goal. Ask them to describe the activities, the beneficiaries and the resources used.

Step 9. On the third sheet, titled Activities, list the activities mentioned that relate to the goals.

Step 10. Discuss the positive and negative aspects of the activities. This may be the most interesting part of the discussion and “brainstorming” may encourage participation.

Step 12. List on two sheets of paper the positive aspects and the negative aspects

Step 13. Discuss how changes can be made to resolve the negative aspects: What steps can be taken and who will help?

Step 14. List these on the last sheet of paper entitled Improvements. After discussing positive and negative aspects of each activity and possible improvements, discuss the second objectives in the same way.

Step 15. Before going on to discuss the next objective, one could take time to play a game to provide some amusement and relaxation in between a hard working session.

Step 16. Continue with the evaluation until all the goals mentioned have been discussed.
Note to the trainer

- This simple evaluation framework is helpful for involving the community members in evaluation. An ongoing analysis of the positive and negative aspects of the activities can help make changes to improve the projects in order to help alleviate community problems.
- If possible take the participants to a nearby watershed and allow them to practice this exercise with the village community for better understanding its impact.

Step 17. Inform the participants that sometimes it is important to evaluate the impact of a completed project/programme on a community to serve as a lesson for future programmes or to learn from the mistakes or simply because the funding agency demands it.

Step 18. Ask the participants to imagine a hypothetical situation in which the project they had planned during one of the earlier session, “Construction of a stream plug in a watershed”, was completed six months ago. The funding agency, as well as some of the members of the executive committee, feel that an evaluation of the project should be done to assess its impact on the community. Ask the participants how they should carry it out.

Step 19. As the participants to present their ideas. Write these down on the flip chart. Follow a pattern of your own which will later help you in categorising the responses into a systematic framework. (E.g. If the participants say that we have to know what the objectives of the project are in order to evaluate the project, write the responses on the top of the board. If they indicate that they should decide what techniques should be used, list them towards the centre).

Step 20. After brainstorming for possible ideas, indicate that all the ideas presented are important parts of a systematic design for an evaluation exercise. Review the ideas with the participants and arrange them in a logical order. Distribute the Evaluation Design Worksheet (Handout 10.3.2). Discuss the different columns in the worksheet and compare it with the pattern of ideas presented by the participants on the board/flip chart and emphasise the similarity.

Step 21. Go through each column on the worksheet with participants.

Step 22. Ask the participants to go back into their small groups and complete the worksheet. Remind them that they have to present their plan. Give them enough time to develop plans.

Step 23. Reassemble the groups. Ask each group to present its plan/report. Consolidate the four plans/reports into one and develop it into a comprehensive and complete evaluation plan.

Step 24. Encourage the participants to ask questions for any clarification on column items or the plan. Review the process and conclude the session emphasising that what they just completed is a systematic framework for an evaluation of a project/programme.

Step 25. Wrap up the session highlighting the difference between evaluating an ongoing project activity and a completed project/programme and other learning. Commend them on a job well done.
### Handout 10.3.1

Sample evaluation framework for an ongoing activity

<table>
<thead>
<tr>
<th>Problems</th>
<th>Objectives</th>
<th>Activities</th>
<th>Positive Aspects</th>
<th>Negative Aspects</th>
<th>Improvements</th>
</tr>
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*An example:*

<table>
<thead>
<tr>
<th>Problems</th>
<th>Objectives</th>
<th>Activities</th>
<th>Positive Aspects</th>
<th>Negative Aspects</th>
<th>Improvements</th>
</tr>
</thead>
<tbody>
<tr>
<td>Children are malnourished because of low food production.</td>
<td>Reduce the amount of malnutrition</td>
<td>Feeding program; Weighing children; Nutrition and health education</td>
<td>100 children go to feeding program</td>
<td>Only 20 come to the weighing sessions</td>
<td>Talk to the mothers about the importance of weighing the children</td>
</tr>
<tr>
<td>Increase local food production</td>
<td>Plant vegetable gardens</td>
<td>Good production and people are eating vegetables.</td>
<td>Not enough water</td>
<td></td>
<td>Start building water systems.</td>
</tr>
</tbody>
</table>

### Handout 10.3.2

Evaluation design worksheet

<table>
<thead>
<tr>
<th>Objective</th>
<th>Information Needed</th>
<th>Sources of information</th>
<th>Techniques or Method to collect information</th>
<th>Instruments</th>
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