Commonwealth Youth Programme
Asia Centre

PROJECT MANAGEMENT

A LEARNING PACKAGE

Commonwealth Secretariat

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May 1989

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F O R E W O R D

During the last few years, the Asia Centre of the Commonwealth Youth Programme has organized a number of short-term regional courses for youth work trainers. The main objective of these courses was to build a cadre of trained youth work trainers so that they were in a position to organise national and local-level training programmes for youth workers and leaders, on more effective lines. As an extension of this objective and also as a response to the changing requirements of member-countries, the Commonwealth Youth Programme undertook the task of developing appropriate learning material on selected topics/areas for use in various youth training programmes. This was a part of the institution building focus of the Commonwealth Youth Programme and represented diversification of its activities. On its part, the Asia Centre incorporated this as an important component in the work plan for the year 1988-89. Accordingly, the Centre invited suggestions from member-countries of the region on the areas/topics on which learning material could be developed. Project Management was identified as one such area.

For the task of preparing a Learning Package on Project Management, the Centre enlisted the services of a group of experts from the Educational Management Centre of the Technical Teachers' Training Institute, Bhopal, India. (The Institute is one of the leading educational institutions of the country and a major function of it is to prepare educational and instructional packages on various topics/areas). The experts visited the Centre several times and discussed the contents and format of the proposed Learning Package with the Centre Faculty and also with a cross-section of youth work functionaries, including trainers. They spent considerable time in perusing the material available at the Centre's Library, especially Factbooks and other reports

prepared by the Diploma Course participants. This exercise not only enabled them to understand the nature and range of youth projects undertaken by various government and non-government youth organizations in member-countries, but also helped them to identify the parameters for the Package.

The Learning Package has been written in simple, easy-to-comprehend form. It opens with an Overview, followed by Introduction (Chapter I). Subsequently, there are ten more Chapters, each dealing with an aspect of Project Management viz. Planning, Network Analysis, Decision Analysis, Cost-Benefit Analysis, Potential Problem Analysis, Proposal Design, Organizing for Implementation, Working in Groups, Implementation of Projects, and Project Evaluation - in that order. Each Chapter begins with General and Specific Objectives and has two parts: (i) Trainer's Notes and Guidelines; and (ii) Self-learning Package for Trainees and Assignments. Two chapters have Content Update as part of Trainer's Notes and Guidelines. A set of 20 transparencies has also been developed as part of this Package. The format and design for the transparencies are provided at the end (all duly numbered). The trainers are advised to prepare transparencies accordingly, for use in the training programmes, as indicated under various Chapters.

We hope that this modest contribution of the Asia Centre will provide useful material for youth work trainers, specializing in the area of Project Management. This Package is not designed to provide answers to all queries nor solutions to all problems which one encounters in Project Management, but we are confident that it will enhance the potential and capability of trainers, interested in this area. Of course, they would need to do supplementary readings, drawing from the references given under each Chapter. It is expected that the trainers will be able to broaden the

'horizons of thought and action' of youth workers, induce appreciation of Project Management and develop in them skills related to all aspects of Project Management.

Even at the cost of emphasising the obvious, we, at the Asia Centre, would like to convey our deep sense of gratitude to the authors for bringing out this comprehensive Package within a relatively short period of three months. Their enthusiasm and hard work could be a source of inspiration to anyone engaged in similar efforts. We will also like to thank the Principal of Technical Teachers' Trining Institute, Bhopal, for his consistent support and guidance in completing this Package.

Now, on to the Package.....

May, 1989
Chandigarh.

Devendra Agochiya
Regional Director (Asia)

OVERVIEW

PROJECT MANAGEMENT

* A Learning Package

CONTENTS

A NOTE FROM THE AUTHORS

We, the authors of the Learning Package on Project Management, acknowledge with a deep sense of gratitude the assistance provided to us and the various contributions made by the following persons in the development and preparation of this Learning Package.

1. Mr. Devendra Agochiya, Regional Director of the Asia Centre of the Commonwealth Youth Programme.

2. Mrs. P.Ratnayake, Tutor, and other officers and employees of the Asia Centre of the Commonwealth Youth Programme.

3. Various officials connected with youth services whom the authors met at Chandigarh, India.

4. The Principal and staff of the Technical Teachers' Training Institute (Western Region), Bhopal, India.

R.K.MANI

D.V.CHANDRASEKHARA

S.B.L.SHRIVASTAVA

N.S.KAPRUAN

Mrs. M.SAXENA

GENERAL OBJECTIVES

The participant will:-

(a) Appreciate the dimensions of Project Management.

(b) Formulate plans for the projects undertaken by him.

(c) For a given short-run project, prepare an activity network, determine project duration and critical path, free and total floats of activities in the network.

(d) Apply Decision Analysis to decision situations arising in familiar projects.

(e) Apply Cost Benefit Analysis to youth projects.

(f) Apply Potential Problem Analysis to familiar projects and their activities.

(g) Suggest relevant improvements on a Project Proposal made available to him.

(h) Given a project description and plan, devise an infrastructure for implementing the project.

(i) Appreciate the factors influencing the development of volunteer groups into effective project teams.

(j) Devise appropriate follow-up measures given a project plan and certain likely problems that may arise during implementation.

(k) Be able to evaluate the effectiveness of project implementation.

PREAMBLE

The Learning Package on Project Management is intended to be used in a variety of ways: as self-learning material, an accompanying text to classroom instruction and for distance-learning with some modifications. This could be a segment of a long-term programme like a Diploma or the essence of a short-duration programme. A schedule for a two-week skills-development programme is enclosed in this document for reference.

The Learning Package is organised in eleven chapters and each chapter also provides Instructional Notes and Guidelines to the Trainer/Tutor to make an optimum use of the instructional resources in this package. The resources included are:

- Handouts, Content Updates
- Cases and Incident Descriptions and Illustrations
- A Variety of Individual and Group Assignments
- Checklists and Formats
- Models
- Overhead Projector Transparencies.

The Trainer/Tutor is expected to employ these resources and add to them from his experience of planning and implementing youth projects.

ABSTRACT

Skills associated with Project Management could assist youth leaders, workers, volunteers, and coordinators in ensuring that the projects they get involved in or they undertake become successful most of the time. Since many of these projects are shrouded in ambiguity, uncertainty and complexity, there is a need to use a wide variety of techniques and skills in managing projects and programmes.

This document highlights some of the more relevant skills of Project Management. The skills included here are-

PLANNING AND DESIGNING PROPOSALS

How plans are formulated in detail for projects?

How information is used to make planning decisions?

What are the components which constitute a project proposal?

NETWORK ANALYSIS

This is one way of presenting plans to facilitate implementation. A number of planning decisions are also simplified by this technique. The text in this case is restricted to the use of the Critical Path Method.

DECISION ANALYSIS

How are selection decisions made ?
What are the stages in a rational decision making process?

COST BENEFIT ANALYSIS

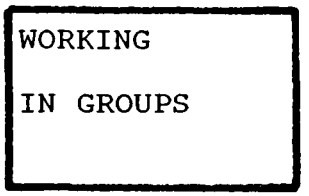
Any project undertaken would lead to certain Costs and Benefits. There are methods of computing these elements. The analysis of Benefits and Costs leads to ideas about which projects should be undertaken.

POTENTIAL PROBLEM ANALYSIS

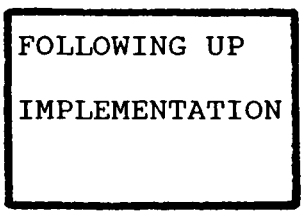
This is one of the normally missing elements in Planning. It incorporates concepts on what could be the problems associated with implementation?
Can we prevent some of these before they could occur?

CREATING INFRASTRUCTURES FOR IMPLEMENTATION

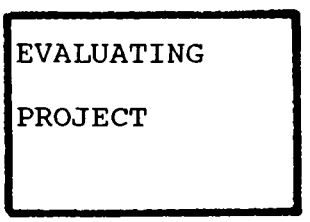
How are the youth workers to be organised for implementation?
How could responsibilities be shared by them ?



Group operation is crucial to project success. The manner in which teams should work and make creative and effective decisions is highlighted here.



The implementation process requires the same extent of concern and managing as planning although the processes may be different. 'Managing Implementation' is the focus here.



Once a project has been completed, its impact has to be assessed. Approaches to evaluating impact and outcomes form the basis of this chapter.

This document is a Learning Package. It is not a text book. It is an aid to Classroom Instruction. It includes Tutor's Notes and Guidelines which would offer suggestions to Tutor about the manner in which this package could be integrated with other classroom activities.

Certain chapters in this package are of the 'self instructional' category, in which the participant learns on his own with some guidance from the Tutor. Some other chapters require an exposition from the Tutor with the help

of certain Audio Visual Aids. Each chapter contains a number of illustrations and assignments which link the concepts of the chapter with the activities of youth services and youth development.

A variety of learning experiences, case studies, incidents, anecdotes and challenging assignments have been included in the document.

Tutor's Notes and Guidelines are part of each chapter of the Learning Package. It is not the intention of the authors to impose any idea on the Tutor's scheme of action. The Notes and Guidelines are collections of suggestions and the authors would add that the Trainers/Tutors should freely modify any of the learning events and experiences presented in the package to suit the conditions in which they would be operating.

Project Management is a field of challenge and action. Learning in this field is a continuous activity. This package should be treated as an intermediate slot in the sequence of learning which is likely to occur in this sphere for participants. Much more will be learnt and probably many new ideas will be gathered from a more significant Tutor- the world of field experience.

ASSUMPTIONS

ABOUT THE LEARNER/PARTICIPANTS

* He/she is a youth worker, or a youth Leader or a youth volunteer.
* He/she is an adult.
* He/she is familiar with the English language.
* Previous to this development exercise he/she has undergone training in certain aspects of management and social work.
* He/she is familiar with different Teaching/Learning methods - individual assignments, group discussions, case studies, structured assignments.
* He/she is willing to receive feedback on performance from a Trainer/Tutor.

ABOUT THE TUTOR/S

* He/she possesses a wide experience of Youth Service and Welfare activities.
* He/she is familiar with the wide variety of instructional methods suggested in the package.
* He/she is aware of the manner in which the Learning Resources included in the package can be put to use.

* He/she is familiar with the content of the different topics and techniques included in the package (If not,a programme may be organised to provide this orientation).
* He/she can and is willing to innovate and experiment with certain additional learning sequences in case the participants find it difficult to grasp a topic or component of a topic. (For this he/she may have to create, on the spot, some innovative learning sequence).
* He/she is willing to use the Learning Package only as a guidance document and to encourage 'thinking and stretching of imagination' beyond the boundaries apparent in them.
* He/she can draw from his/her own experience to add to the illustrations and anecdotes presented.

SUGGESTED SCHEDULE FOR A SHORT DURATION PROGRAMME

SESSIONS / DAY	9.30 AM To 12.45 PM			2.00 PM To 5.15 PM	
ONE	INTRODUCTION	PLANNING	L	PLANNING	PLANNING
TWO	PLANNING	PLANNING		PLANNING	NETWORK ANALYSIS
THREE	NETWORK ANALYSIS	NETWORK ANALYSIS		NETWORK ANALYSIS	NETWORK ANALYSIS
FOUR	NETWORK ANALYSIS	NETWORK ANALYSIS	U	DECISION ANALYSIS	DECISION ANALYSIS
FIVE	DECISION ANALYSIS	DECISION ANALYSIS		COST BENEFIT ANALYSIS	COST BENEFIT ANALYSIS
SIX	COST BENEFIT ANALYSIS	POTENTIAL PROBLEM ANALYSIS	N	POTENTIAL PROBLEM ANALYSIS	POTENTIAL PROBLEM ANALYSIS
SEVEN	ORGANISING FOR IMPLEMENTATION	ORGANISING FOR IMPLEMENTATION	C	ORGANISING FOR IMPLEMENTATION	ORGANISING FOR IMPLEMENTATION
EIGHT	WORKING IN GROUPS	WORKING IN GROUPS		WORKING IN GROUPS	PROPOSAL DESIGN
NINE	PROPOSAL DESIGN	PROPOSAL DESIGN	H	IMPLEMENTATION OF PROJECTS	IMPLEMENTATION OF PROJECTS
TEN	PROJECT EVALUATION	PROJECT EVALUATION		FEEDBACK ON PROGRAMME + ACTION PLANNING	VALEDICTION

CHAPTER-1

INTRODUCTION

* General and Specific Objectives
* Trainer's Notes and Guidelines
* Self-Learning Package for the Trainees and Assignments

GENERAL OBJECTIVE

The participant will appreciate the dimensions of project management.

SPECIFIC OBJECTIVES

The participant will -

(a) appreciate the need for project management.

(b) describe certain project patterns in reality.

(c) list macro skills that are crucial to effective management of projects.

TRAINER'S NOTES AND GUIDELINES

INTRODUCTION

THEME OF THE CHAPTER

Projects for youth and community welfare are being continually planned and implemented. Some of them are quite successful and some others not so successful. However, effectiveness of project planning and implementation of most projects could be improved through application of project management techniques. This Chapter elaborates on the need for project management based on the project patterns in reality and suggests a list of useful macroskills for managing projects.

PREREQUISITES

(a) The participant should have some experience in project planning and implementation.

(b) The Tutor should have managed a few projects.

PREPARATORY ACTIVITIES FOR TUTOR

(a) The Tutor should have gone through all the Chapters of the Learning Package on Project Management.

(b) The Tutor should be prepared to illustrate the project patterns in reality through practical examples.

INSTRUCTIONAL GUIDELINES

(a) The participant may be provided time to read the Chapter.

(b) The Tutor will then have a discussion on the Theme of the Chapter with the participants, using OHP Transparency 1.1.

(c) The schedule of activities for 1 1/2 hours suggested for this Chapter is given below.

Sl. No.	Activity	Time in Hours
1.	Introduction of Tutor and participants.	1/2
2.	Self - Learning from package	1/4
3.	Tutor presents Project Patterns in Reality through OHP Transparency 1.1 and discusses the salient aspects of the Chapter with the participants through narrating examples and inviting narrations from participants	3/4

(d) One OHP Transparency 1.1 on Project Patterns in Reality has been provided to enable the Tutor to initiate discussion on macroskills crucial to effective management of projects.

SELF-LEARNING PACKAGE
AND
TRAINEE'S ASSIGNMENTS

INTRODUCTION

Projects are specific time-bound schemes or programmes. They are undertaken with an improvement or development motive. They can be of short or long duration depending on the goals of development conceived and finalized. They are specific to organisations (communities can also be thought of as organisations) and are normally confined to a few sections of organisation life (specific in purpose).

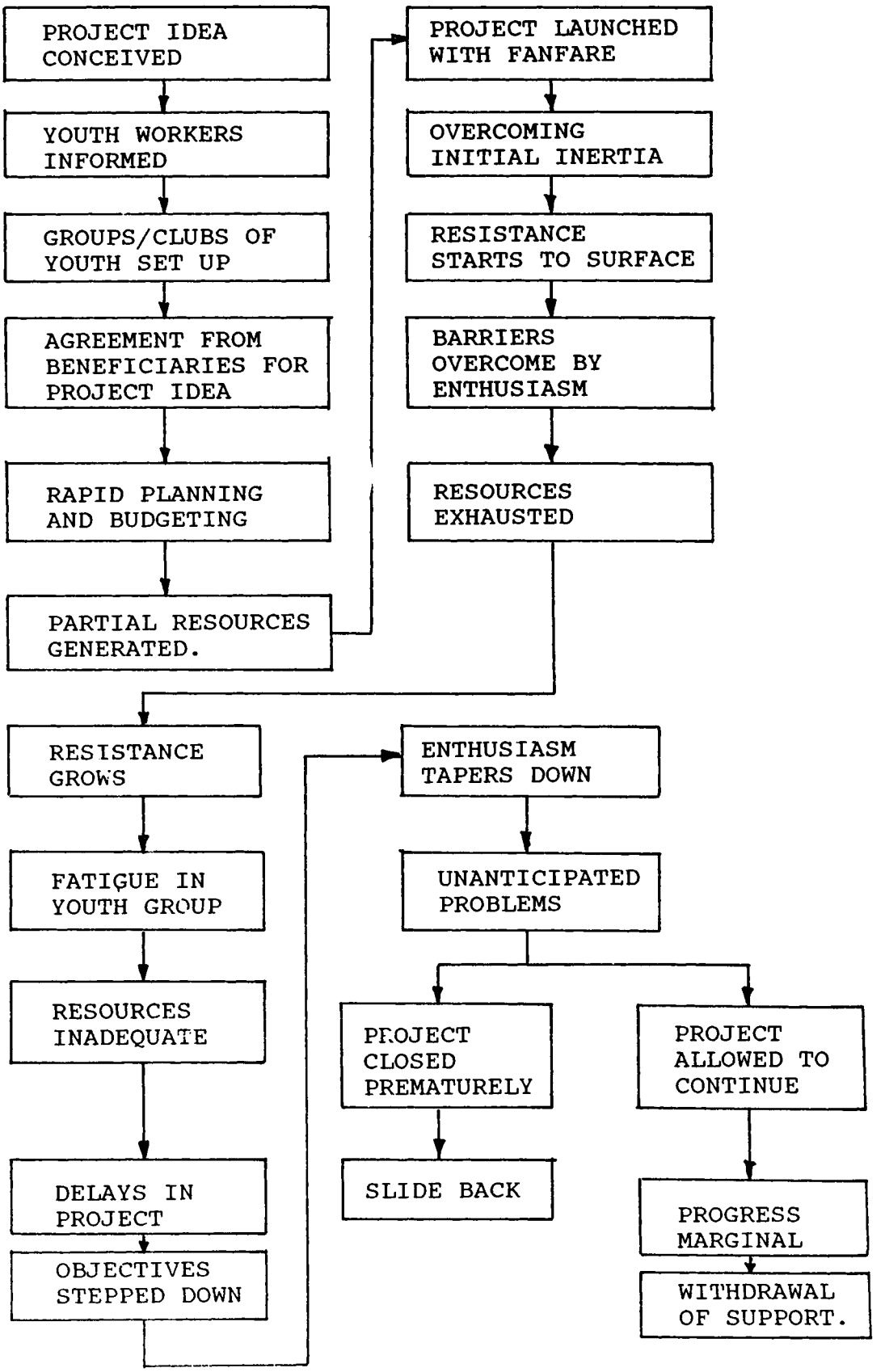
Projects have to be managed to bear fruits and to result in positive developments. The managing of projects can be conceived basically as PLANNING and IMPLEMENTATION endeavours.

The spheres of youth and community development have been accommodating a large number of projects in recent years. Unlike technical projects like high-rise building construction, dam construction, developing parks and forests that dot landscapes and are easily visible, the projects and programmes concerning youth and community life and development are more 'abstract and ambiguous'. For example, an organized youth group activity like an 'adventure trek' appears to result in only a few visible and many invisible outcomes.

Further it must be conceded that at least in the early stages when youth decide to launch a 'self-help' programme for themselves or for the community in which they live it would be difficult to know precisely what could be the goals or ultimate targets of the conceived development. Another distinguishing feature that surrounds youth development is the uncertainty that plagues projects. One can neither be certain that a strategy will succeed, nor the outcomes acceptable to the proposed beneficiaries.

Under these circumstances, when projects pertaining to youth life and development are pregnant with ambiguity and uncertainty it becomes all the more necessary to plan and implement them with greater care and caution. In other words Project Management has to be undertaken in all its profoundity and seriousness and cannot be treated casually.

When youth or community development project experience is examined it is a matter of concern that in only a few cases (probably the less abstract and ambiguous cases) was success total and accomplishment to the fullest extent. Most of the other attempts either failed or ended in partial fulfillment. When correlating these less-than satisfactory results with the in-project experiences, a curious pattern emerges, the substance of which is depicted on the next page.

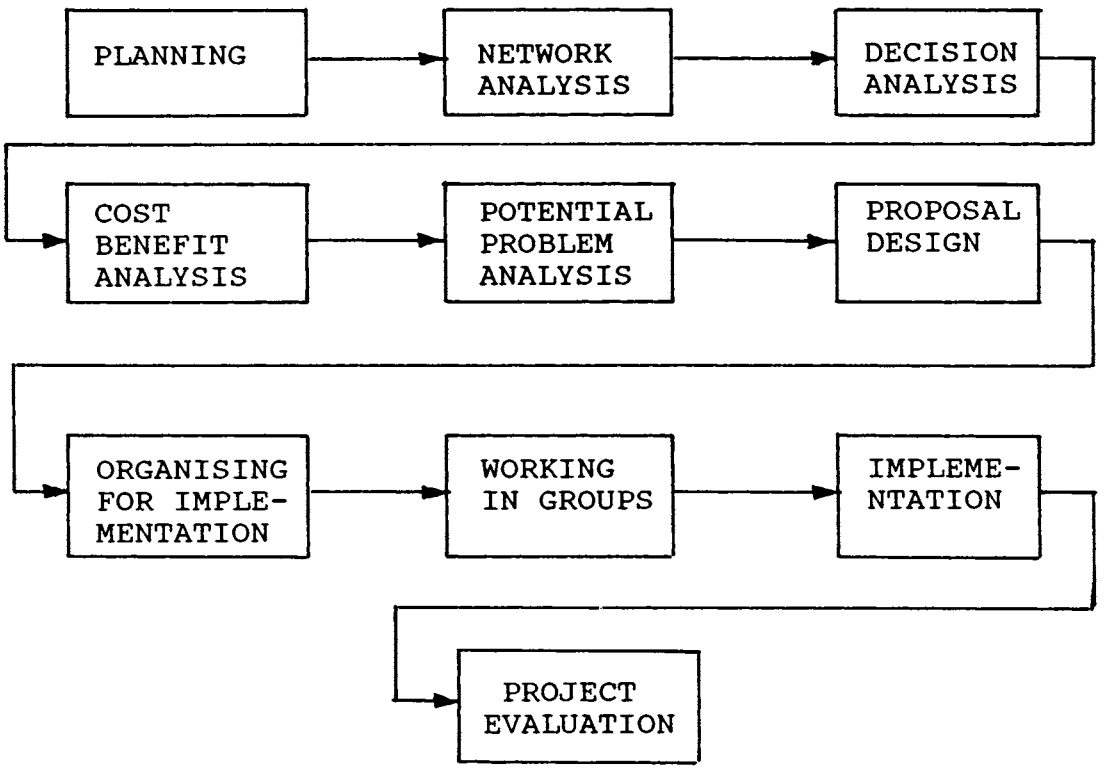

PROJECT IDEA CONCEIVED
YOUTH WORKERS INFORMED
GROUPS/CLUBS OF YOUTH SET UP
AGREEMENT FROM BENEFICIARIES FOR PROJECT IDEA
RAPID PLANNING AND BUDGETING
PARTIAL RESOURCES GENERATED.
PROJECT LAUNCHED WITH FANFARE
OVERCOMING INITIAL INERTIA
RESISTANCE STARTS TO SURFACE
BARRIERS OVERCOME BY ENTHUSIASM
RESOURCES EXHAUSTED
RESISTANCE GROWS
FATIGUE IN YOUTH GROUP
RESOURCES INADEQUATE
DELAYS IN PROJECT
OBJECTIVES STEPPED DOWN
ENTHUSIASM TAPERS DOWN
UNANTICIPATED PROBLEMS
PROJECT CLOSED PREMATURELY
SLIDE BACK
PROJECT ALLOWED TO CONTINUE
PROGRESS MARGINAL
WITHDRAWAL OF SUPPORT.

Such experiences or patterns inevitably suggest the need to employ a range of suitable techniques to manage projects. These techniques are required to 'enrich' both the Planning and Implementation phases.

The techniques and approaches associated with Project Management in the Youth Development sphere are not far different from those that are used in technical projects. But the MANNER in which the techniques are to be employed definitely is different. Secondly, the diversity is much more in the Youth and Community Development sphere and the scope for use of techniques increases.

The Learning Package on Project Management introduces many useful techniques. It also extends the techniques into a variety of applications mainly in the Youth Clubs and Youth Services area.

THE CHAPTERS TO FOLLOW:



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CHAPTER-2

PLANNING

* General and Specific Objectives
* Trainer's Notes and Guidelines
* Self-Learning Package for the Trainees and Assignments

GENERAL OBJECTIVE

The participant will formulate plan for the projects undertaken by him.

SPECIFIC OBJECTIVES

The participant will:-

(a) Justify the need to plan projects.

(b) Describe the basic steps in the planning process.

(c) Describe the applicability of plans to different situations.

(d) Explain how the process of planning and control are linked.

(e) Describe the barriers to effective planning and explain how they can be reduced or eliminated.

(f) Given a project, develop a plan for the project.

TRAINER'S NOTES AND GUIDELINES

PLANNING

THEME OF THE CHAPTER

Planning is a fundamental step in managing projects. This Chapter in effect provides a description of the preparations one does before actually commencing action on the project. Almost all the other chapters 'emerge' from planning.

Without appropriate PLANNING it is difficult even to contemplate successful completion of projects. Thus PLANNING lays the foundation by:

- converting what has been an idea so far into a form which can be achieved in real life,
- providing the project with relevance,
- anticipating and arranging in order all dimensions of the project, and
- ensuring project success through identifying and strengthening weak spots.

PROJECT PLANNING is itself a macro-technique, enveloping a number of micro-techniques like formulating objectives, activity sets, etc. It demands a variety of skills. This Chapter hopes to develop an appreciation in the mind of the participant of these skills. Comprehensive skills development is likely to follow through real life practice of the skills indicated.

In the youth services, PLANNING becomes more significant, given the ambiguous nature of projects undertaken. Again, youth services are areas which are relatively new and unfamiliar in many countries. Under the circumstances in-depth and profound PLANNING is an absolute necessity.

PREREQUISITES

(a) With respect to this package, the Chapter on Introduction (Chapter-1) is a prerequisite, which should have been completed.

(b) Past experience in PLANNING would help the participant learn this Chapter with comparative ease and 'relish'

(c) The Tutor would possess considerable PLANNING skills and experience. In other words the Tutor must have actually formulated a number of project plans before guiding trainees.

PREPARATORY ACTIVITIES FOR TUTOR

(a) - Study of the Chapter and completion of all its assignments.

(b) - Further study from Reference -1.

(c) - Some practice with writing objectives, decomposing objectives into activities.

(d) - Collection of a set of cases similar to the one given in Assignment - Five, as replacements for the case if desirable.

INSTRUCTIONAL GUIDELINES

(a) (i) The Chapter follows a very familiar model:

Project Objectives - Activity Sets - Resource and Support Needs Identification.

(ii) Other components (or techniques) mentioned in the model, but elaborated in subsequent Chapters include Decision Analysis, Cost Benefit Analysis, Potential Problem Analysis and Organising for Implementation. The Tutor need not explain these techniques in detail in this Chapter. Their purposes alone may be stressed.

(iii) This Chapter, unlike many others which follow, carries a fairly balanced proportion of Self-Instruction and Tutor - Instruction Components for the participant.

Self - Instruction Component: Start to Assignment - One, Defining current situation to Assignment - Four, Barriers to Effective Planning, Flexibility of Plans upto end of Chapter.

Tutor - Instruction Component: This is the set of Content Updates:-

I. Sources of Objectives

II. Effectiveness and Efficiency

III. Overcoming Resistance to Change

IV. A Model of Planned change

(b) The suggested scheduling of activities for this Chapter for 7 1/2 hours is given below.

Sl No.	Activity	Time in hours
1.	Introduction to Planning by Tutor using OHP Transparency 2.1, Self - Learning up to Assignment -One.	1 3/4
2.	Tutor instruction on Content Update -I, Self-Learning up to end of Assignment-Four.	1
3.	Tutor instruction on Content Update -II through discussion, resolution of participant difficulties.	1/4
4.	Self Learning with Tutor's guidance on Barriers to Effective Planning, Tutor instruction on Resistance to Change and Planned Change (Content Updates -III and . IV).	1
5.	Self Learning on 'Flexibility in Planning' and 'Planning and Implementation', Summarization through OHP Transparency 2.2.	1/2
6.	Assignment - Five	3

(c) The Tutor will introduce the topic of planning by emphasising the need for plans and their purposes. OHP Transparency 2.1 should also be used.

(d) The Tutor will check at frequent intervals with the participants their progress in the self - Learning components.

(e) (i) The Tutor will distribute the Content Updates as per the schedule given above, allow the participants to go through the Updates, discuss the Content Updates with the participants through provocative questions and finally summarize the essence of the Content Updates using chalkboard or OHP.

(ii) For Assignments - One to Four, the Tutor shall provide feedback to individuals on their responses.

(iii) For Assignment - Five which is to be done in groups, the Tutor will have to provide continual guidance to ensure the comprehensiveness of the group plans. The Tutor is free to substitute the given case with another appropriate case, if he so desires.

(f) Two OHP Transparencies have been provided.

2.1 Fundamental issues in Planning

2.2 Planning Model

SUGGESTED RESPONSES TO ASSIGNMENTS

Assignment - One

Relevance	-	Okay
Description of terminal point	-	Incomplete (Twenty youth is fine, but time frame, nature of skills and the agricultural implements not specified)

Precise description - Incomplete (type of agricultural implements and nature of repairing could be included)

Measurability - No

A Restated objective could be :

20 youth will be provided skills training on repairing 6 most commonly used threshing equipment/implements within six months of project initiation.

Assignment - Two

The relevant dimensions are :

1. Location details, distances
2. Climatic information
3. Local resources availability
4. Earlier experiences in the context of development
5. Preparatory actions taken
6. Nature of youth group and volunteers

Assignment - Three

Project Objectives :

(a) to assess the needs of the community through meetings with four categories of people (adult men, adult women, youth, and children below the age of thirteen) using questionnaires and discussion with representative groups within one month of initiation of the project.

(b) to prepare the youth group to take part in community development activities through a one-week training programme in project management within one month of the strengthening of the youth group.

(c) to obtain the consent of the community for a one - year plan of development activities through meetings with community leaders and beneficiary groups within 3 months of initiation of the project.

Activity set : (the activities are <u>not</u> in chronological order)

1. Preparation of questionnaires
2. Administration of questionnaires
3. Meetings with categories of people for needs assessment (also interests and problems)
4. Analysis of data
5. Finalisation of one - year plan
6. Identification of representative groups
7. Constitution of strengthened youth group
8. Training of youth group
9. Identification of community leaders
10. Identification of representative group of beneficiary groups
11. Obtaining consent for the one - year plan

12. Establishing rapport with the community
13. Acceptance of youth group by community
14. Identification of needs and interests of youth group through discussions

Assignment - Four

For the activity set suggested in answer to Assignment - Three, only activities 1 and 8 may require manpower resources from outside the area of operation of the youth worker. The nature of support from external agencies required would be

- expertise in preparation of questionnaires/prepared questionnaires
- training material
- conduct of training by trainers

However, the learners could include in the activity set activities which may require other kinds of resources and support from external agencies. The Tutor has to examine in such cases the learner's response and provide appropriate feed-back.

Assignment - Five

The Tutor may have several proposed projects (cases) similar to 'The Farm Youth Programme of Malaysia' (by Mr. A.H. Ahmed). He has to use the case most appropriate to his trainee group.

Further, the Tutor has to examine the responses of each group and offer feedback.

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CONTENT UPDATE-I

SOURCES OF OBJECTIVES: It is important to consider how projects and consequently their objectives are derived. What are their sources ? In what manner are these sources tapped? How are then objectives identified and finalized ? The main source of objectives are the projects themselves. The issue then becomes one of identifying project sources.

Among the many sources of projects the more frequently encountered sources are:

GOVERNMENT POLICIES, SCHEMES, THRUSTS,DIRECTIVES	The Government, on the basis of its development policies and considerations, initiates certain schemes and programmmes. It is willing to support these schemes through the provision and creation of various resources like finance, infrastructures, manpower, technical assistance, etc. Projects arise from such schemes and programmes.
YOUTH WORKERS GENERATE IDEAS AND SELECT ONE OR TWO TO BE PURSUED AS PROJECTS.	This may be by an individual volunteer or by a group of youth workers. A creative process is indicated here. (More about creativity in a subsequent chapter).

BENEFICIARIES REQUEST FOR A PROJECT

Here the persons to be benefited ask for a certain project or make a request for a certain development scheme, like for the provision of drinking water, or an access road. One crucial point that must be emphasized here is that it is important that no project idea must be pursued by the Youth Group or 'planning agency' until it is certain that the idea is acceptable, in general, to the beneficiaries or the population on whom the project is supposed to have an impact. An agreement from the beneficiary is a precondition to project planning. It is a preparatory step that cannot be omitted.

Sometimes there could arise among beneficiaries differences about the nature and type of project or its objectives that are to be pursued. For example some might feel that drinking water provision is more important than a road or vice-versa. Some others might think that both these ideas are 'not worth it' and would like 'a small hospital' instead.

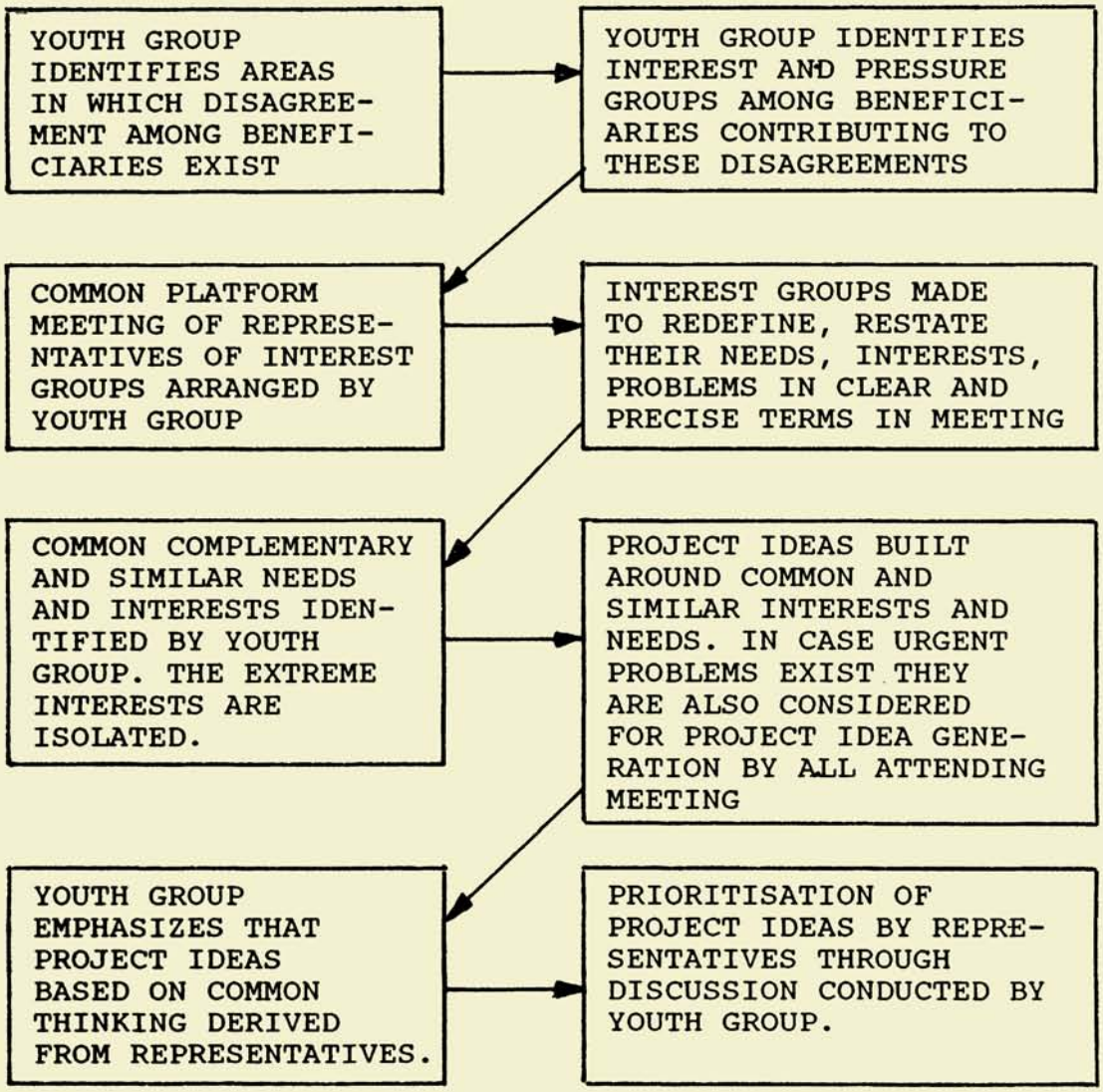
When interests clash and decisions become difficult the selection of the project may get delayed. To get out of this 'impasse',the youth worker has to resort to a number of techniques. Through these techniques the youth worker can clarify and even 'market' his decisions to the

beneficiaries. Some of the techniques which get explained in detail in this package at a later stage are -

☐ DECISION ANALYSIS - Making selections between options or alternatives considering a wide range of criteria or factors (Chapter 4).

☐ COST BENEFIT ANALYSIS - Determining Benefit-Cost Ratios of different options or alternatives to assist the selection process (Chapter 5).

One more technique which could be considered is briefly described below. Only a framework is provided here. The detailed approach can be developed by youth workers in the light of their experience.



Sometimes the youth group members may disagree among themselves about the project or its objectives (or about planning decisions subsequent to setting of objectives). The aspects associated with collaboration of member in a group been elaborated in Chapter 9 of this document.

In general project purposes are the main sources of objectives. Project purposes could themselves emerge from many sources. Only a brief outline of these sources has been presented in this chapter with a reference to certain useful techniques that can assist the process of finalising project purposes. Some of these techniques have been elaborated in subsequent chapters since they have much wider applicability that merely being used for finalising project purposes.

CONTENT UPDATE - II

EFFECTIVENESS AND EFFICIENCY

Reddin defines these terms with clarity when he states that -

-EFFECTIVENESS IS DOING THE RIGHT THINGS

-EFFICIENCY IS DOING THINGS RIGHT.

Since in this Chapter the concept of Planning has been initiated from the formulation of objectives, the aim of this Chapter is also to develop EFFECTIVE plans.

It is normal to expect that an effective plan will also be efficient. But even weak and irrelevant objectives can be achieved in an efficient manner. The whole focus is to 'DO RIGHT THINGS IN THE RIGHT MANNER'.

CONTENT UPDATE - III

OVERCOMING RESISTANCE TO CHANGE

A major obstacle to the implementation of projects enveloping innovations, new technologies and new policies would be the resistance of both people within the youth group and the would-be beneficiaries to such changes. Sometimes the resistance could be so strong that the project may be rejected at the conception stage itself. On some other occasions the resistance would be `subtle' and `hidden' and would result in sabotage', `delays', and `unanticipated outcomes',when the project is in progress.

In Community Development and Youth Programmes resistance to change would be a normal feature and should be anticipated.

SOURCES OF RESISTANCE TO CHANGE

SINCE CHANGE IS NEW AND UNFAMILIAR THERE MAY EXIST AN UNCERTAINTY ABOUT ITS EFFECTS IN THE MINDS OF THE PEOPLE LIKELY TO BE AFFECTED	SOME PEOPLE MAY RESIST CHANGE SINCE IT MAY DEPRIVE THEM OF CERTAIN EXISTING ADVANTAGES AND BENEFITS	PEOPLE CONCERNED MAY BELIEVE IN CHANGE BUT MAY DOUBT THE FEASIBILITY OF THE CHANGE ATTEMPT INCORPORATED IN THE PROJECT

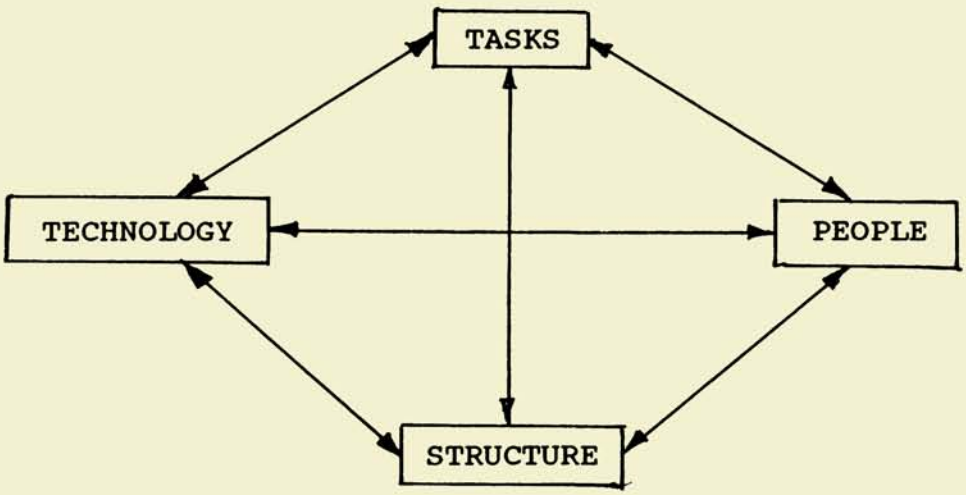
DEALING WITH RESISTANCE TO CHANGE

PRECONDITIONS	APPROACH	ADVANTAGES	DEMERITS
YOUTH WORKERS LACK INFO-RMATION OR POSSESS IN-ACCURATE IN-FORMATION ON COMMUNITY, CHANGE	EDUCATION+ COMMUNICA-TION	ONCE PERSUAD-ED PEOPLE WILL OFTEN COOPER-ATE	TIME-CONSUMING ESPECIALLY IF MANY PEOPLE INVOLVED
YOUTH WORKERS ARE UNCERTAIN ABOUT BOTH COMMUNITY AND THE CHANGE PROCESS	PARTICIPATION + INVOLVEMENT	-COMMITMENT TO IMPLEMEN-TATION -SHARING OF RESPONSIBI-LITIES	COULD BECOME TIME-CONSUMING, CLASH OF INTER-ESTS MAY DISTO-RT PARTICIPAT-ION
RESISTANCE PRIMARILY DUE TO PEOPLE UNABLE TO ADJUST	FACILITATION + SUPPORT	HIGHLY SUITED WHEN CHANGE IS UNFAMILIAR AND REQUIRES PEO-PLE TO ADJUST CONSIDERABLY	-TIME-CONSUMING -RISK ORIENTED
CERTAIN PRESSURE GROUPS ARE ACTIVE IN THE RESIST-ANCE	NEGOTIATION + AGREEMENT	EASY WAY TO AVOID MAJOR RESISTANCE	PROJECT OBJECT-IVES MAY HAVE TO BE ALTERED, PURPOSEFULNESS OF PROJECT MAY REDUCE
YOUTH WORKERS ARE POWERFUL	-COERCION -FORCE	-SPEEDY -CAN OVERCOME ANY FORM OF RESISTANCE	-NOT LONG LAST-ING -ONLY SUITED FOR THE SHORT TERM CHANGE -CAN DESTROY RELATIONSHIPS

CONTENT UPDATE-IV

A MODEL ON PLANNED CHANGE

H.J.Leavitt suggests a model which can help design change and introduce it successfully in organisations (including communities). The model incorporates four interdependent, interacting elements as shown below.



The diagram indicates that in case it is contemplated that new objectives or new TASKS are to be undertaken, it cannot be changed independently. The other three interlinked elements must also be modified correspondingly. They are:

- PEOPLE (Attitudes, Values, Motivation, etc), TECHNOLOGY (expertise, resources, etc) and STRUCTURE (Power relationships, Authority, Leadership, etc). This is a necessary condition to successful performance of the new tasks.

This implies that while casting plans a more comprehensive approach must be selected. Only introducing new tasks in a plan is not adequate. Corresponding changes in PEOPLE (Training, Participation, etc), in STRUCTURE (Leadership) and in TECHNOLOGY (Training, Resources, etc) must also be incorporated in the plan.

It is beyond the scope of this package to elaborate these concepts. 'Managing Change' demands a wide variety of skills and techniques which need to be presented through a separate package or programme document.

SELF-LEARNING PACKAGE
AND
TRAINEE'S ASSIGNMENTS

P L A N N I N G

Before the youth worker or youth leader can organise and lead his group, he must make plans. These plans will provide the purpose for which he will organise and lead.

PLANNING is the basic process by which

(i) goals or objectives for projects are selected (or formulated) and

(ii) approaches for achieving these goals and objectives are determined.

In other words a plan provides purpose and direction to the group undertaking the project. This is done through obtaining answers to four basic questions.

* WHAT NEEDS TO BE DONE ?
* WHEN DOES IT NEED TO BE DONE ?
* HOW IS IT TO BE DONE ?
* WHO IS TO DO IT ?

Irrespective of the nature or type of the project, PLANNING is a basic requirement in managing the project. It should not be avoided for reasons mentioned later. Managers who commit themselves to action without planning would soon find that they are wasting their time and their actions are leading to or resulting in poor outcomes. Ideas that are

not accompanied by definite ways to utilize them have no practical effect.

Planning provides many advantages.

* Planning provides definite ways for utilising ideas and for putting them into practice.
* Planning provides means for committing resources to reach desired objectives (targets, goals).
* Planning helps to reduce the uncertainties associated with certain projects and certain activities in projects.

STEPS IN PLANNING PROJECT

(A)---------> (B) ---------->(C) ---------->(D)

ESTABLISH OBJECTIVES OR TARGETS OR GOALS	->	DEFINE THE CURRENT SITUATION THE START-ING POINT	->	DEVELOP A SET OF ACTIVITIES TO TRAVER-SE FROM (B) TO (A)	->	IDENTIFY SUPPORT AND RESOURCE NEEDS FOR (C)

A. OBJECTIVES OF PROJECT

The objectives constitute the precise description of the anticipated outcomes of the Project. In other words they are the terminal or end events of the project. Objectives are also referred to as Goals or Targets occasionally.

ILLUSTRATIONS:

1. For a project - Organizing a Youth Peace March', the objectives could be:-

   "Four hundred youth would reach destination `D' (terminal point of march) by 4.00 p.m. on Saturday, 19th July after a Peace March and plant ten peace flags in the square at destination D".

2. If, on the other hand, a project on `Social Forestry' is considered, then there would be multiple objectives or terminal events like -

   - "In eleven hectares of waterlogged land near the water tank, a variety of trees will be planted as per directions of the Forests Department, during the last week of December 1990".
   - "Each child in the village will assure survival of at least one planted fruit bearing tree in the garden of their house during the course of 1990".
   - "For each tree cut in the village, at least five new trees shall be planted within a week of the cutting of the tree".

There are certain characteristics which objectives must possess. That is when objectives are set (or written) these characteristics must be clearly projected in them.

CHARACTERISTICS OF OBJECTIVES

-The objective must be specific and precise (a)
(as opposed to vague, broad).

-The objective must be measurable or at least (b)
observable. Its achievement must be clearly
noticeable (Objectives are generally tangible).

-The objective must describe the terminal event (c)
of the project (as against a starting point or
an intermediate stage).

-The objective must be relevant to or must (d)
clearly reflect the purpose of the project.

ILLUSTRATION

Consider an objective -

'Four hundred youth would reach Destination 'D by 4.00 p.m. on 10-7-89 after a Peace March and plant ten peace flags at the square opposite to 'D'.

The presence of the characteristics in this objectives could be explored thus:

RELEVANCE - Yes. The purpose of the project was PEACE MARCH by youths and the objective reflects this.

DESCRIPTION OF TERMINAL EVENTS - The planting of ten flags after reaching destination 'D' is the end activity of the project.

SPECIFICITY - The description is specific and not vague. There are also limits to which we can stretch specificity. For example each of the ten flags need not be detailed out in the objective. What is important is that anyone interpreting the objective must derive the same meaning from it as any other .

MEASURABILITY, TANGIBILITY - Measures or 'Observable Indicators' included in the objective are destination D, planting 10 flags.

ASSIGNMENT-ONE

Given below is an objective of a project. Tick appropriately to indicate which characteristics are present in it. Restate the objective to incorporate all the four characteristics mentioned. Check your conclusions with the Tutor.

PROJECT - SKILLS TRAINING FOR VILLAGE YOUTH

OBJECTIVE - Twenty youth will be provided skills training on repairing agricultural implements.

Tick appropriately to indicate the characteristics possessed by the objective. (The tick must be placed in the box).

RELEVANCE - [ ] ; DESCRIPTION OF TERMINAL POINT - [ ];

PRECISE DESCRIPTION - [ ] ; MEASURABILITY - [ ] ;

RESTATED OBJECTIVE _____

_____

_____

_____

(B) DEFINING THE CURRENT SITUATION

Consider the following description of the current state of affairs at a location in which a project is contemplated. The community is located near a posh and expensive locality of City 'C'. It is one of the many slums around the area. There are about 125 families in the community. Of these many are construction workers, scavengers and sweepers who are engaged in the most menial type of work. There are 30 young people living in this community. The youngsters are either employed or are studying in schools and colleges or unemployed.

This description appears to include some quantitative and qualitative information which details out and provides some form of a picture of the starting point in the project or the current state of affairs.

However on reading the para one may conclude that the information is inadequate particularly if the project is 'TRAINING YOUTH FOR SELF EMPLOYMENT'. This conclusion is logical since one must know ---- how many need the training; what their aptitudes and interests are; whether there is potential for small scale business and industry in the locality; and such other information. To obtain such relevant information a set of preliminary search or survey operations will have to be performed.

Now, in the context of the need for comprehensive information here is another sample -

---

PROJECT - A QUESTION OF MARRIAGE DOWRY

The group first made a survey of feelings of the people about dowry. They found that only people who had more money (the well to do) supported it but about 70% of the rural community did not want it. But those who did not like dowry felt they had to follow the tradition due to social pressure.

Next the group called a meeting of the people who disapproved of the dowry system. A discussion was held on the consequences of giving and taking dowry. Out of this meeting emerged a consensus for a project of (a) avoiding dowry (b) sharing marriage expenses in the community.

70% of the village families agreed to join and contribute towards the project under the guidance of a special group' consisting of a few youth workers and few village elders. The special group was given the responsibility for keeping the project concept alive and for community participation and contribution to each marriage.

In this sample a set of preparatory steps have been described which provide some idea of the preparatory activity that occurred before the project started. As a matter of fact the objectives appeared to get finalised during the preparatory activity. One noticeable factor is that there is a clear link between project objectives and the current situation.

What are the dimensions that could be used to describe the current situation? A set of dimensions are given below. One or more of them could prove adequate. The whole point is that just as objectives present a clear picture of the 'end of the Project', there must also be a clear picture of the beginning, i.e. the Current Situation.

LOCATION, DETAILS, DISTANCES	CLIMATIC INFORMATION	LOCAL RESOURCES AVAILABILITY	EARLIER EXPERIENCES IN THE CONTEXT OF DEVELOPMENT AND OTHER ACTIVITIES
POPULATION, SOCIO-ECONOMIC CATEGORIES	CATEGORISATION OF PEOPLE ON THE BASIS OF INTEREST, NEED	AGE DIFFERENCES AND CATEGORIES	POTENTIAL FOR DEVELOPMENT IN THE GEOGRAPHIC AREA
PREPARATORY ACTIONS UNDERTAKEN	NATURE OF YOUTH GROUP AND VOLUNTEERS	GOVERNMENT AND OTHER AGENCIES ENGAGED IN ASSOCIATED FUNCTIONS	

ONLY THOSE DIMENSIONS WHICH ARE NEEDED TO DESCRIBE THE RELEVANT CURRENT SITUATION MUST BE SELECTED. RELEVANCE OF THE CURRENT SITUATION IMPLIES ITS LOGICAL LINKS WITH PROJECT OBJECTIVES.

ASSIGNMENT-TWO

For the given project objective, you have to select dimensions from above which would be relevant to describing the current situation or starting point of the project.

PROJECT OBJECTIVE - Youth group will assist members of the community to complete a small primary school play field by the end of December 1989 through voluntary work.

RELEVANT DIMENSIONS

(1) _____ (2) _____

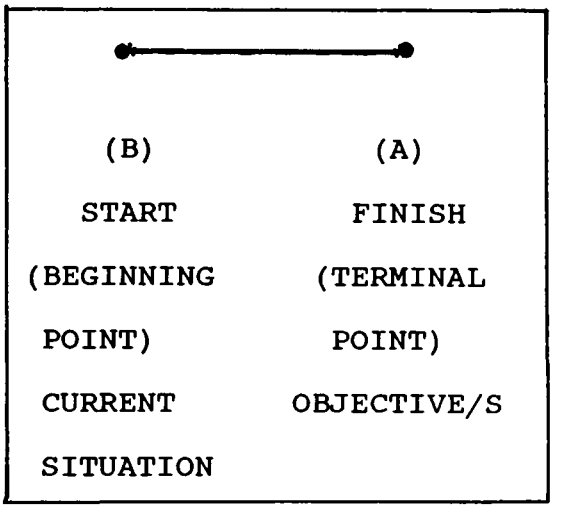
(3) _____ (4) _____

(5) _____ (6) _____

(7) _____ (8) _____

(C) DEVELOPING AN ACTIVITY SET

The figure in the adjacent space describes the two steps that have been elaborated so far in this Chapter on PLANNING.



The gap between the start and finish has to be bridged through a set of activities which shall help people involved to traverse through the project.

The basic logic underlying this step can be explained as follows:-

(i) A set of activities are needed to move from start to finish.

(ii) These activities are linked with each other through a set of dependency relationships. Some actions follows others, some precede others, and some can occur simultaneously. It is preferable to derive the logic in plan and follow this logic during implementation.

(iii) Unless all these activities get completed the project will not end.

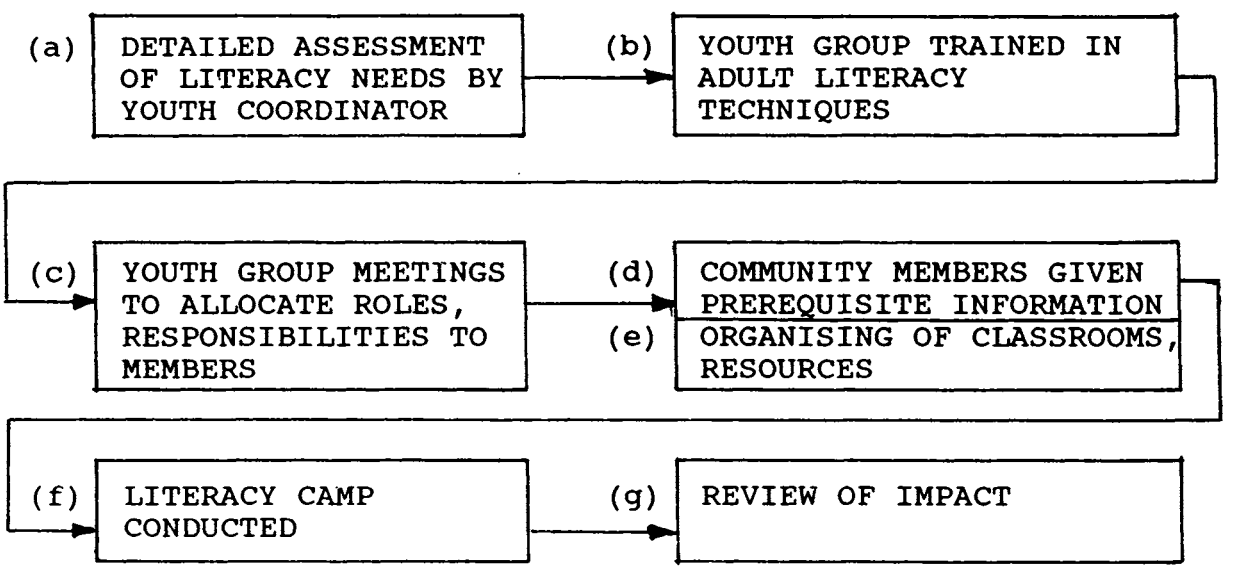
ILLUSTRATION

Project Objective - Developing a youth group to the point where it undertakes specific development activity like running an adult literacy camp.

STARTING POINT - Community consists of 120 families; 60 Adults need functional literacy and are willing to attend evening classes during summer; Youth group consists of eight volunteers.

Resources available - School building; printed resources from voluntary agency; trainer for youth group from Government.

ACTIVITY SET



The ILLUSTRATION presents an activity set which satisfies all the conditions mentioned earlier.

(i) There are a set of activities from start to finish.

(ii) The activities are linked with each other. For example (a) is followed by (b), (b) by (c) and so on. Only (d) and (e) are concurrent activities.

(iii) The logic of the sequencing or dependence of activities is clear, since their order of completion will definitely allow the traverse from the START to the FINISH of the Project. The activity set is also relevant to both the project objective and the description of the current situation.

ASSIGNMENT THREE

A description of some functions of a youth worker is given below. Can you (a) decide the youth worker's objectives (b) construct an activity set for him, from the description.

No community work can be successful without a sound relationship between the worker and the community. The worker uses his relationship for making the youth group accepted by the community. For this he has to have comprehensive knowledge about the problems, needs and interests of the community as well as the youth group. The worker constantly strives for motivating the community to recognize youth potential.

The youth worker also strengthens the youth group. He then prepares it to take part in community development activities. Here the consent of the community is essential and the youth worker waits till such consent is available.

PROJECT-OBJECTIVES

(a)_____

_____

_____

(b)_____

_____

_____

ACTIVITY SET

_____

_____

_____

_____

_____

_____

NB - The activity set which you could derive from the descriptions may prove inadequate to assist the youth worker accomplish the two objectives mentioned in the description.

Chapter-3 on NETWORK ANALYSIS will extend the discussion of activity sets and incorporate many more necessary details. For the purposes of this Chapter this brief introduction is adequate.

(D) RESOURCE AND SUPPORT NEEDS

Various kinds of resources - MANPOWER, FINANCE, RAW MATERIALS, PRINTED INSTRUCTIONAL RESOURCES, VISUAL MEDIA, etc.- are needed for the performance of the activities in the set. These are estimated in advance during planning for three reasons.

-They can be procured and made available for each activity at the right time and in the right quantity.

-In case resources are in short supply or inadequate then certain decisions like either reducing the scope of the objectives, or slowing down or postponing the project till resources can be generated, have to be taken.

-Preventive and contingent actions for avoiding delays in resources availability can be thought of (discussed in detail in Chapter-6).

The first reason is crucial for projects which require resources of either a wide variety (a 'clean the slum' campaign or 'establishing a small service centre' would require multifarious resources) or in which resources from external agencies are to be procured (adult literacy

programme may require print, audio visual resources and models which are prepared by certain Government and Voluntary agencies). Planning reduces the uncertainty in acquiring such resources since we can anticipate in advance the nature and quantity of resources needed.

On the other hand the second reason is usually associated with long term projects, which would demand a variety of resources at regular intervals for a prolonged time span. If a school building is to be constructed for a community or a child immunisation campaign is to be launched in a large number of villages and the project is likely to take about 2 years or more, the resources needed may not be all available at the very start of the project.

Sometimes youth groups have to depend on experts or expert support from other agencies, like a team of doctors for handling an immunisation programme, or a few engineers to help dig tubewells, or a group of experienced trekkers to guide an adventure trek. Here again it is preferable to fix up' the availability of the experts in advance.

One very important resource is TIME. Target dates for project completion and approximate duration for each activity in the set are included in the plan. The starting date is normally fixed by working `backwards' from the

target date for completion if the activity durations are known or can be estimated.

The next chapter on NETWORK ANALYSIS elaborates the use of time as a resource and related concepts in detail.

ASSIGNMENT-FOUR

For the activity set you have finalized in Assignment-Three, determine the nature of resources needed for each activity. Also identify support from external agency required for activities. Your answers may be written down in the spaces provided. Check your answers with your TUTOR.

INDIVIDUAL ACTIVITIES IN THE SET	RESOURCES NEEDED			NATURE OF SUPPORT FROM EXTERNAL AGENCY REQUIRED
	MAN-POWER	FINANCE	OTHERS	

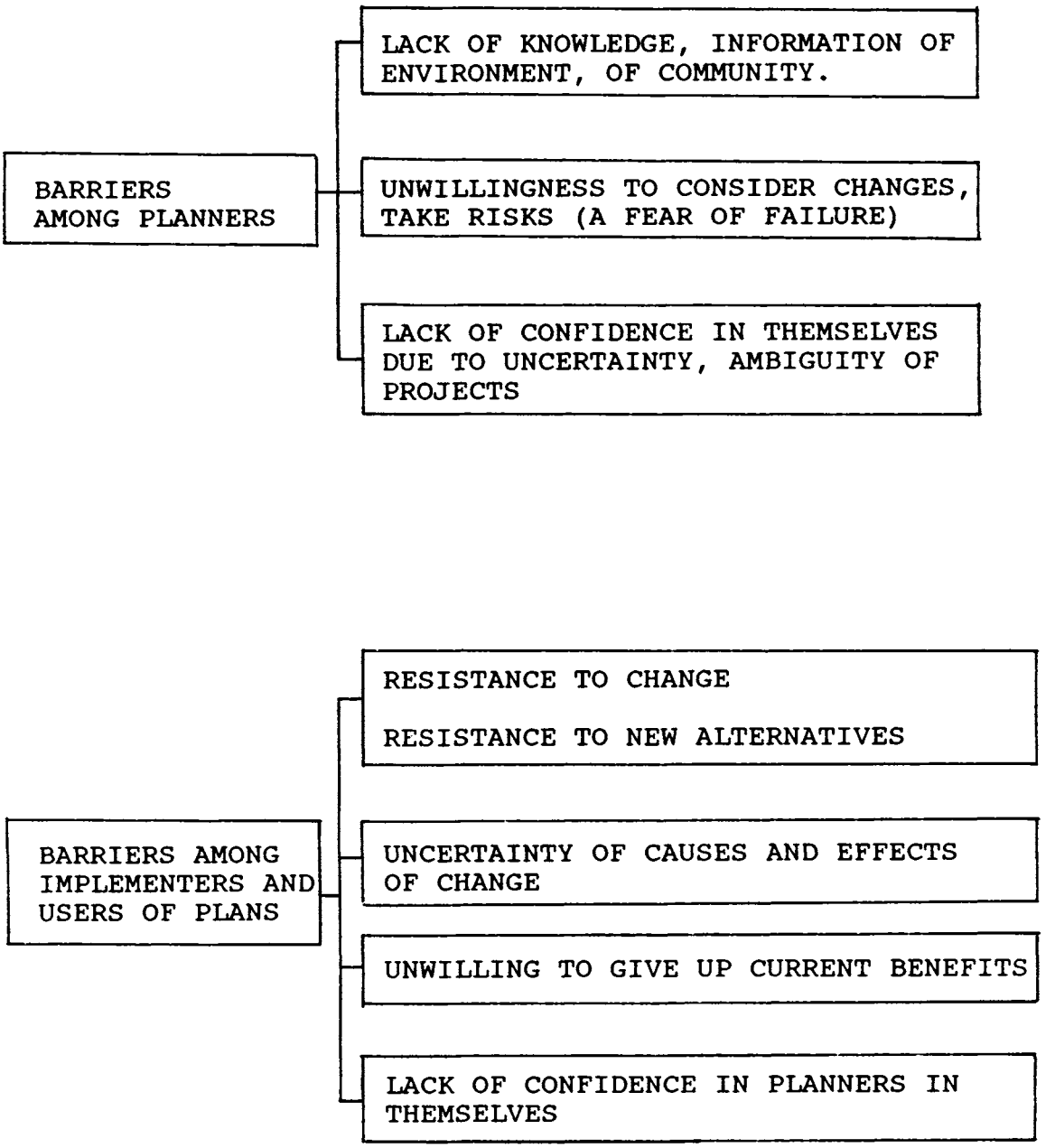
THE OTHER STEPS IN PLANNING

There are two additional steps (more than the four mentioned) in planning which are only to be briefly mentioned in this Chapter.

One step which normally makes it appearance after step C (Activity Set) or after Step D (Resource and Support Needs) is known as Potential Problem Analysis. This step emphasizes the need to anticipate in advance, during planning itself, the problems that can arise during implementation of the plan. An analysis of these anticipated problems leads to the identification of actions which can prevent these future (or potential) problems or reduce their impact. These preventive actions are appended to the activity set in the plan at the right locations (before the anticipated problem is expected to occur). Chapter-6 of this document is totally devoted to POTENTIAL PROBLEM ANALYSIS.

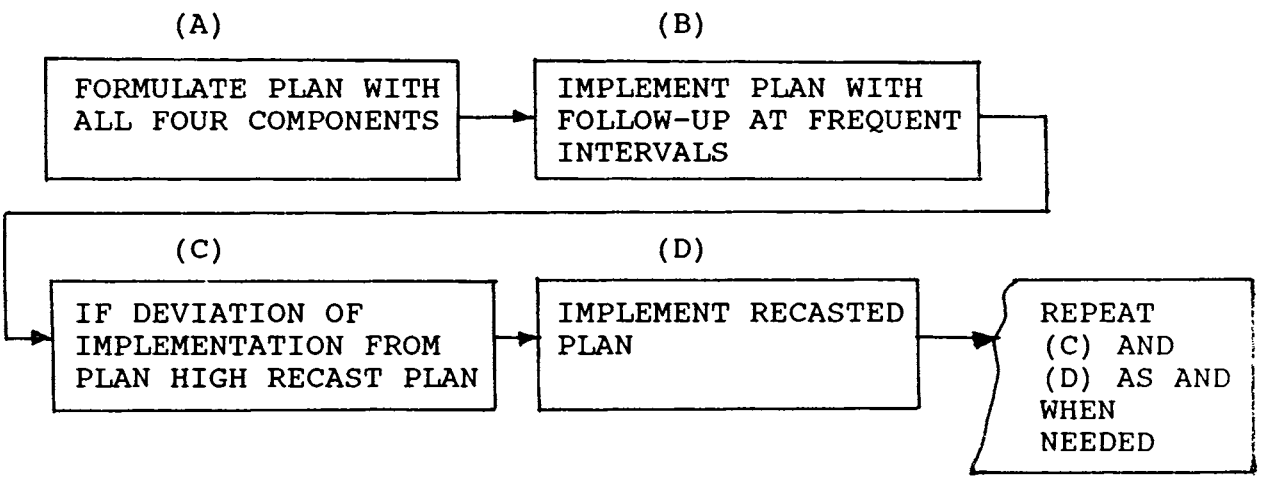
The other step is a sort of final step which comes after (D). This step deals with developing infrastructures, and allocating specific functions to different members of the team which undertakes to manage the project. Chapter-8 on ORGANISING FOR IMPLEMENTATION extends this concept and presents some illustrations.

BARRIERS TO EFFECTIVE PLANNING



FLEXIBILITY IN PLANS

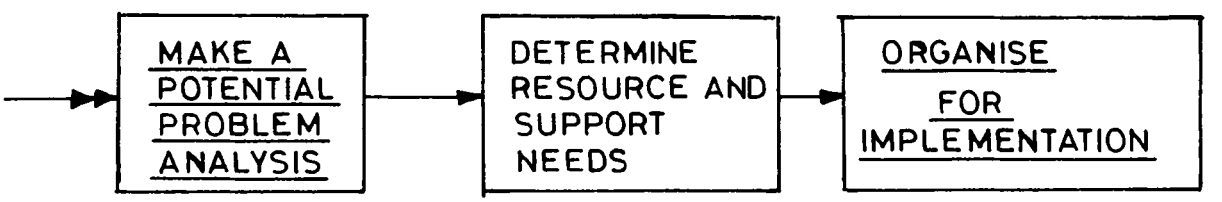
Certain projects associated with Youth Welfare and Development or with Community Development appear ambiguous and uncertain in terms of achievement. This is because experience in these areas of work is very `thin' and there are a number of extraneous (environmental) factors beyond the control of the planners or implementers which could intervene and disturb progress in projects. Under the circumstances instead of assuming that a plan once made is to be rigidly adhered to in implementation, it is possible to think of a more practical alternative which is indicated below diagrammatically.



PLANNING AND IMPLEMENTATION

A majority of past experiences in the field of social development reveals that implementation deviates frequently from plan. Even though plans are formulated meticulously, with great care, implementation of these plans presents difficulties and gets distorted at times.

It is observed that plans are linked with implementation, one made for the other to occur. Without implementation the objectives considered in the plan can never be accomplished. This relationship also suggests that the more comprehensive the plan, the less will the implementation deviate from the plan. Hence the first need undoubtedly is for detailed and thorough planning, taking care not to miss any step. (Remember that apart from the four steps, two more have been suggested in planning.)



Many of these steps have been elaborated later in subsequent chapters.

ASSIGNMENT-FIVE

A case description entitled `The Farm Youth Programme of Malaysia' (by Mr.A.H.Ahmed) has been provided to you. Participants, working in groups, will for a proposed similar project (or the project in the case assuming that it has yet to occur.):

(a) Identify the objectives

(b) Provide a brief description of the current situation.

(c) Develop an Activity set, and deploy Resources for different activities.

(d) Diagnose three or four factors which will ensure success of the project.

C A S E S T U D Y

THE FARM YOUTH PROGRAMME OF MALAYSIA

by Mr.Abdullah Haji Ahmad (Malaysia)

BACKGROUND

The Farm Youth Programme (F.Y.P.0 or the "Belias Paladang" in Malay) was launched in 1972 with the objective of increasing youth involvement and participation in agriculture for:

(a) employment especially self-employment;

(b) development of a new breed of young agro-entrepreneurs;

(c) increase in food production; and

(d) growth and development of agro-based industry.

This programme was introduced after considering the following:

(a) The problems of youth in society especially the youth in rural areas; unemployment, lack of opportunities for self-improvement, the strong tendency to migrate to urban areas in search of jobs in factories without having adequate preparation, and

(b) the need for productive involvement of youth in national development,and given top priority in view of the following:

(a) it is a self-employment programme;

(b) an effort to improve the rural standard of living; and

(c) it has greater capacity to create employment opportunities.

PROGRAMME TARGET

In Malaysia only rural youths who are members of youth clubs are allowed to participate in the FYP. Because of limited facilities, money and staffing the programme cannot include those who are not in youth clubs. This strategy is adopted because:

(a) before the programme is actually implemented on the ground, the youth will have first to be organised to facilitate briefing on the programme by youth officers. If they are already organized then contacts can be made through their clubs;

(b) it is good to involve youth clubs because it will give them an opportunity for participation at planning and implementation levels through their elected representatives;

(c) a sense of responsibility for success or failure of the programme is created among youth leaders through their participation;

(d) channeling of facilities and financial grants will be easier;

(e) follow-up action especially for evaluation of the programme will be easier.

It is hoped that youth clubs in this role will be catalystic in causing a faster rate of agro-development in the rural areas.

In this regard, the FYP is on record for the major role it has in bringing about and assisting in the development of the Green Book Programme launched by the Government of Malaysia.

THE GREEN BOOK PROGRAMME AND THE FYP

The Green Book is a major effort by the Malaysian Government to organize those in agriculture who receive Government aids at the grass-roots on the one hand and the Government agencies on the other for a better collaborative effort in bringing about accelerated agro-development.

The Green Book Plan (Second Phase) was launched in 1976 at the beginning of the Third Malaysia Plan with a revised aim for higher achievements:

a) to increase the income of farmers as a means of eradicating poverty;

b) to increase the country's agricultural production by stages;

c) to continue backyard gardening programme for home consumption.

The launching of the Green Book Programme has assisted in the expansion of the FYP from a small programme with an annual budget of less than half a million to a Five-Year Development Programme with a budget of $13 million Malaysian. This certainly is a remarkable success for the FYP. This success is not entirely from the point of view of budgeting. It is also a result of the very achievements of the programme itself. When the programme was launched in 1972 it had only 131 youth projects with 344 youths fully employed but in 1974 it had 527 projects employing 3,804 youths on it and by the end of 1975 there were 886 projects giving full time employment to 7,378 youths.

ADMINISTRATION OF THE FYP

The overall responsibility for planning and implementation of the programme has been given to the Ministry of Culture, Youth and Sports. For effective implementation especially at the grass-root level, a committee system at all levels was therefore introduced to serve as a coordinating body between the various existing government agencies concerned for the channeling of services and monitoring the programme of implementation. Since the launching of the Green Book Programme the Ministry officials directly supervising the programme work within the administrative machinery of the GBP.

FINANCING THE PROGRAMME

The financing of the Programme is a critical aspect of planning. The money comes from the government. But in view of the fact that money is provided for the services already assigned to various Government agencies, some form of financing will therefore have to be advised to ensure that the programme will not suffer because of uncertainty regarding who is to finance what aspect of the programme. In this respect the Ministry of Culture, Youth and Sports undertakes to provide the following:

a) Subsidy in the form of an initial grant for those who are starting the project. Only part of the total cost of starting the project will be provided;

b) Buying of tractors and other agricultural implements for the projects;

c) Subsidies to assist those who wish to expand their projects. Subsidies are only given on the basis of the working paper provided;

d) Initial grants for agricultural related projects, such as processing of agricultural produce.

Since one of the aims of the FYP is to create self-employment for the youths by developing agro-based businesses, the Ministry will also have to finance all projects of such nature undertaken within the Programme. The other aspects of the FYP projects will have to be financed by the other agencies.

CHAPTER-3

NETWORK ANALYSIS

* General and Specific Objectives
* Trainer's Notes and Guidelines
* Self-Learning Package for the Trainees and Assignments

GENERAL OBJECTIVE

The participant will for a given short-run project, prepare an activity network, determine project duration and critical path, free and total floats of activities in the network.

SPECIFIC OBJECTIVES

The participant will -

(a) Identify activities that constitute projects in which he would be involved.

(b) Develop dependencies between the activities on the basis of logic and translate a set of interdependent activities into a network using relevant norms and rules.

(c) For given or assumed activity durations, determine Earliest Start and Finish Times and Latest Start and Finish Times for each activity in the network. (EST, EFT, LST AND LFT).

(d) From the information available in (c) above,locate Critical Path, determine Free and Total Floats of activities.

(e) Given a network with complete information as described above in (d), list out the precise implications of Critical Path, Free and Total Floats and other such information in the implementation of the network.

TRAINER'S NOTES AND GUIDELINES

NETWORK ANALYSIS

THEME OF THE CHAPTER

Network Analysis is a technique associated with Planning. It is normally employed after the objectives and current situation of a project have been finalised. The activity set which is necessary to traverse from current situation to objectives can be presented diagrammatically in the form of networks. Such networks are very useful for :

- scheduling project in detail
- specifying and providing resources
- following up on project progress.

Amongst the many techniques available for network analysis, the one chosen in this Chapter is known as CRITICAL PATH METHOD (CPM).

PREREQUISITES

(a) This Chapter has to be taken up only after completion of the Chapter on Planning (Chapter - 2).

(b) Both the Tutor and the participants must be familiar with the self-learning mode.

(c) The Tutor should have sufficient expertise in :

(i) decomposing a project objective into an activity set, and

(ii) establishing the inter-dependency between activities through logic.

(d) The participants should have experience in managing youth programmes.

(e) the Tutor should be familiar with :
- guiding self learning of participants
- conducting individual and group assignments.

PREPARATORY ACTIVITIES FOR TUTOR

(a) The Tutor should have throughly gone through the Learning Experiences of the Chapter including assignments.

(b) The Tutor should have studied References 2 and 3 and solved some sample exercises.

(c) The Tutor should have prepared and analysed at least 3 networks for projects managed by him.

(d) The Tutor should keep in mind the specific instructions provided in the Chapter at various places.

INSTRUCTIONAL GUIDELINES

(a) The Chapter consists of 11 units and 16 exercises. Instructions to users (i.e. participants) are set forth at the beginning of the Chapter.

(b) The whole Chapter is in the Self-Learning mode. The expected time for learning the topic is 10 1/2 hours (minimum). The suggested break-up is as follows :

Sl. No.	Activity	Time in hours
1.	Units 1 to 4	2 3/4
2.	Use of OHP Transparency 3.1	1/4
3.	Units 5 to 8	3
4.	Units 9 to 11 (except Exercise - Sixteen)	2 3/4
5.	Use of OHP Transparency 3.2	1/4
6.	Exercise - Sixteen	1 1/2

(c) The Tutor will link this Chapter with the appropriate stage in Planning and also briefly mention the purposes of network analysis (5 to 10 minutes).

(d) (i) The Tutor will keep in mind the instructions to participants given in the Learning Package. While the participants would learn at their own pace, he will be sensitive to learning needs of participants and provide assistance as and when need arises. Assignment Answers may be distributed by the Tutor all at once when the participants start learning or as and when required by the learners.

(ii) The Tutor will take special care in ensuring that the participants learn the significance and application of certain difficult concepts such as dummy, total and free floats, decomposition of project objectives into activity set.

(e) The Tutor has to guide the participants in completing Exercise - Sixteen which is a group exercise. The Tutor is welcome to modify or change the project titles. He has to ensure also that the group answer is satisfactory.

(f) The Tutor will use the OHP transparencies 3.1 and 3.2 as per the schedule presented earlier to reinforce learning and to clarify any difficulties of the participants.

(g) Since this is a self-learning package, it is not essential to have a concluding plenary session.

ANSWERS AND SUGGESTED RESPONSES TO EXERCISES

EXERCISE - ONE

(i) Event representing end of an activity is allocated a higher numeral than the event for the beginning of the activity.

(ii) Activities are represented by letters of the alphabet.

(iii) More than one activity may start from an event.

(iv) More than one activity may end at an event.

(v) Activities B and D may be performed concurrently (i.e. at the same time).They are known as parallel activities.

(vi) Event numbers are not repeated.

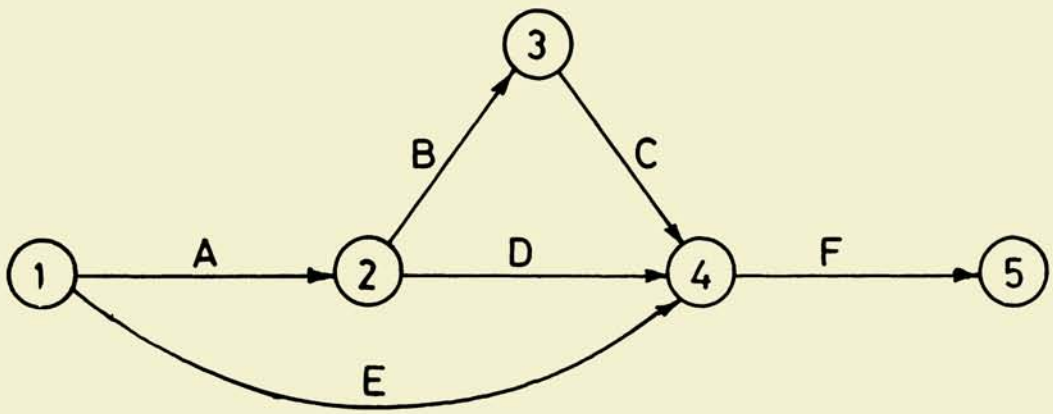
(vii) Activity names are not repeated.

The participant may proceed to the next unit if he has identified at least two of the above conclusions.

EXERCISE - TWO

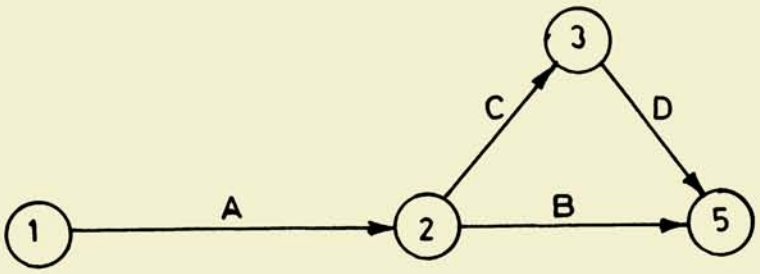
ACTI-VITY	START EVENT	END EVENT	DEPENDS ON	ACTI-VITY	START EVENT	END EVENT	DEPENDS ON
A	1	2	-	G	4	6	J,B,K
B	1	4	-	H	5	7	D
C	1	3	-	I	6	7	G,E
D	2	5	A	J	2	4	A
E	3	6	C	K	3	4	C
F	4	7	J,B,K	-	-	-	-

EXERCISE - THREE



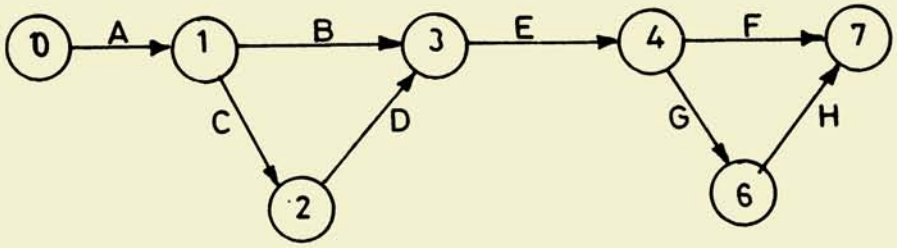
EXERCISE - FOUR

(a)



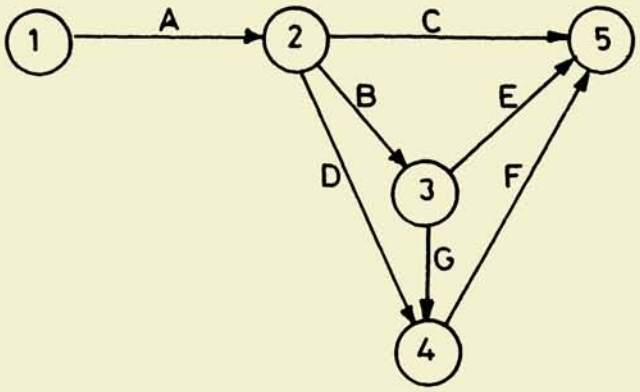
The network should end with only one event.

(b)



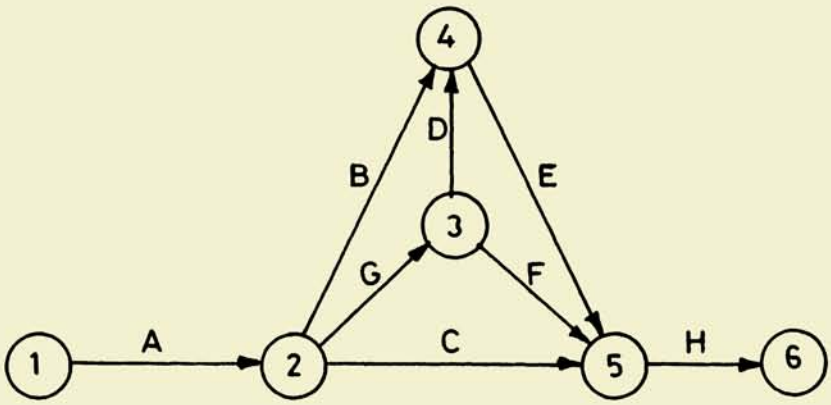
Network should end with only one event and an activity should have its end event numbered higher than its start event.

(c)



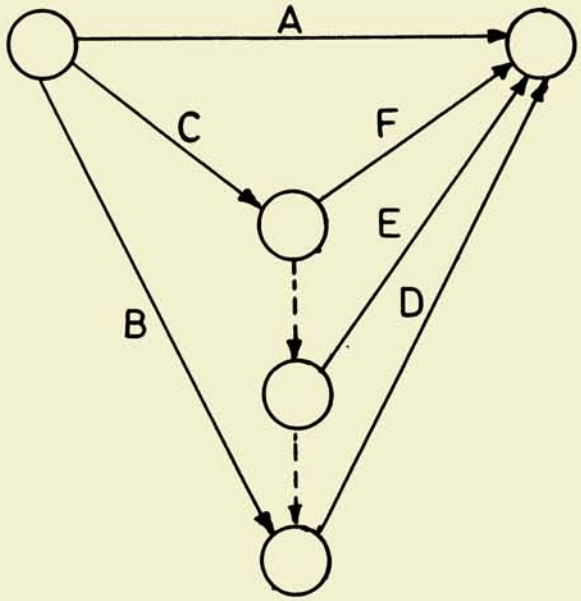
An end event of an activity should be numbered higher than its start event and two activity lines may not cross each other.

(d)

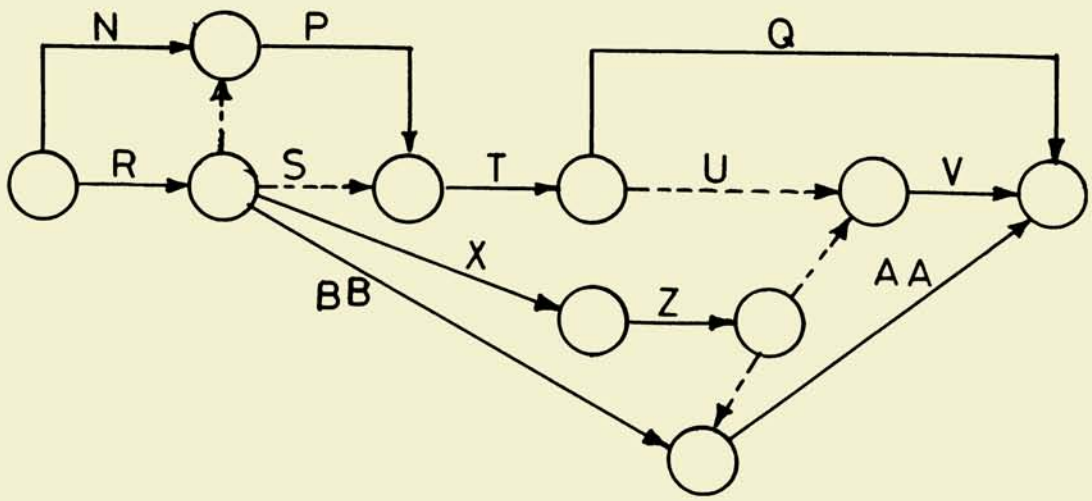


There should not be two nodes having the same number and criss-crossing of activity lines should be avoided.

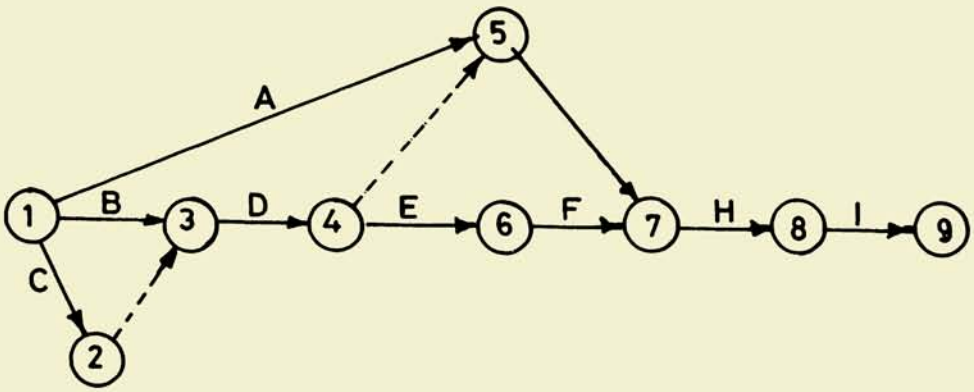
EXERCISE - FIVE



EXERCISE - SIX



EXERCISE - SEVEN

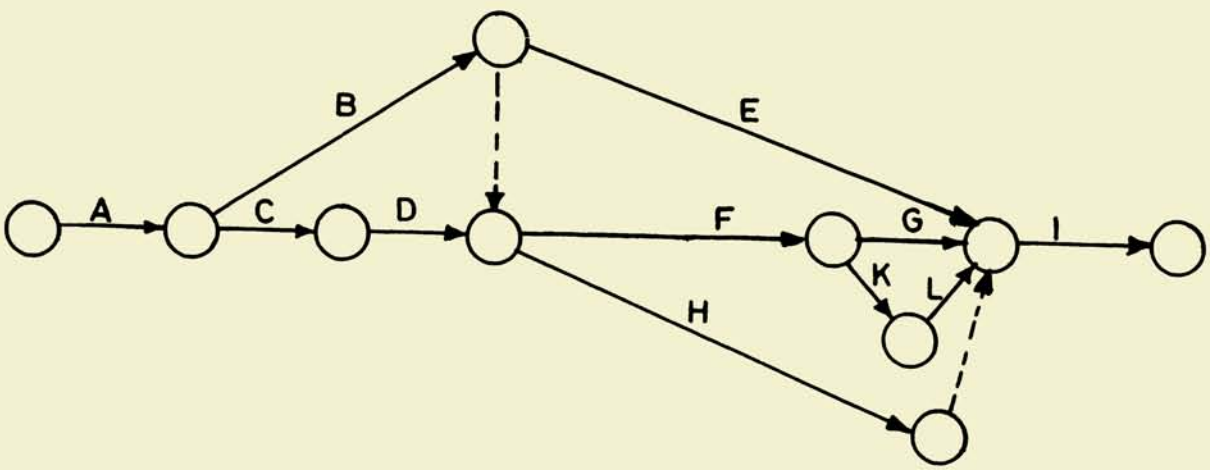


The Tutor will collect the suggestions for improving the match between the activities and the objective from the participants, scrutinise them and present to the participant group the acceptable suggestions.

EXERCISE - EIGHT

SYMBOL	DEPENDS ON
A	-
B	A
C	A
D	C
E	B
F	B,D
G	F
H	B,D
I	E,G,H,L
K	F
L	K

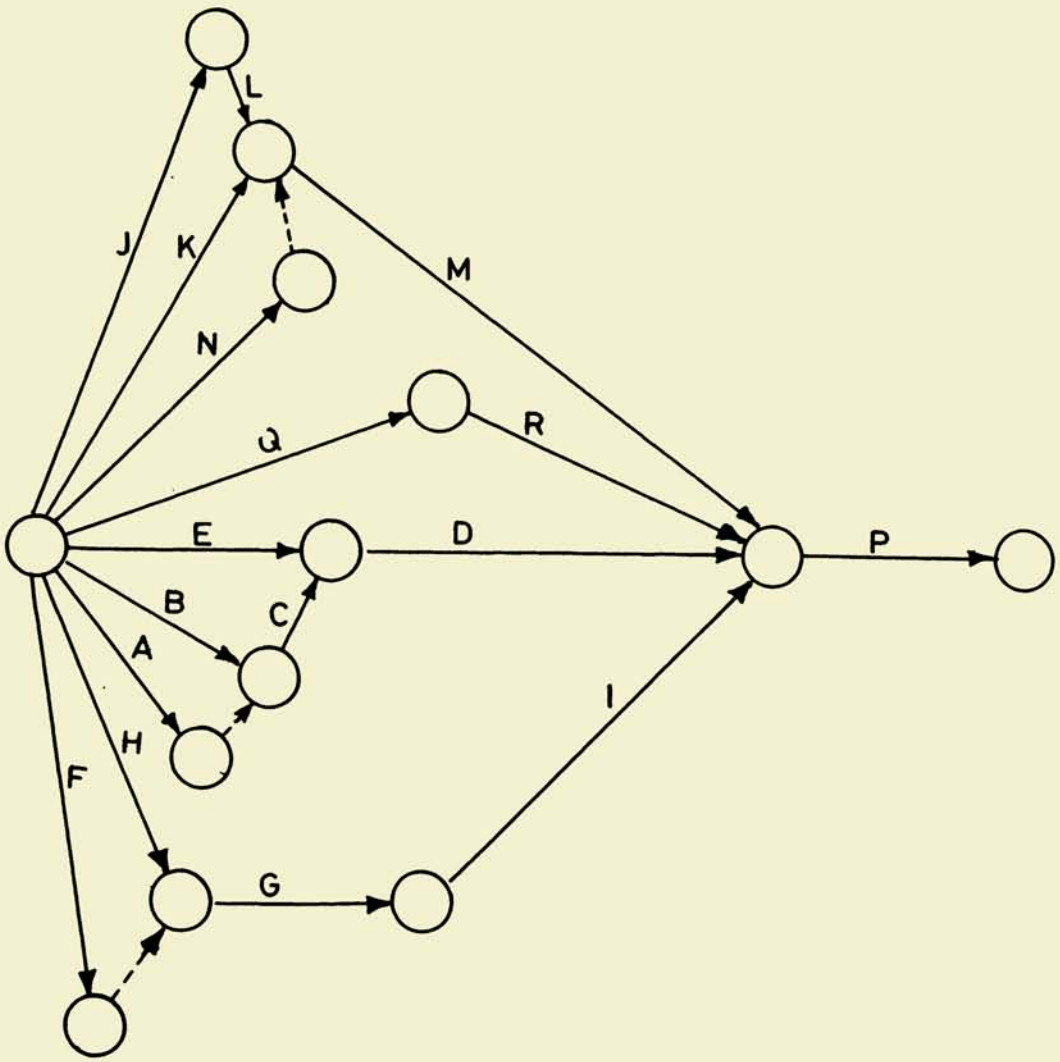
The network for this project is given below.



EXERCISE - NINE

The set of activities for the Drug Addiction Campaign is given below.

Act. Name	Activity Description	Depends on
A	Devising Illustration for newspaper advertisement	-
B	Writing the accompanying text for illustration	-
C	Making half-tone blocks	A,B
D	Sending blocks to newspapers	C,E
E	Negotiating contract for press advertising	-
F	Designing poster	-
G	Printing poster	F,H
H	Contracting for printing poster	-
I	Distributing poster	G
J	Preparing script for television film	-
K	Negotiating contract with the film company	-
L	Completing film	J,K
M	Sending films to the programme company	L,N
N	Reaching agreement with the programme company	-
P	Arranging a press conference	D,I,M,R
Q	Agreeing upon date for launching the campaign	-
R	Drawing a detailed plan of the campaign	Q



NOTE : TUTOR WILL CLARIFY TO THE PARTICIPANTS THAT THE ALPHABETS REPRESENTING ACTIVITIES NEED NOT BE IN SEQUENTIAL ORDER.

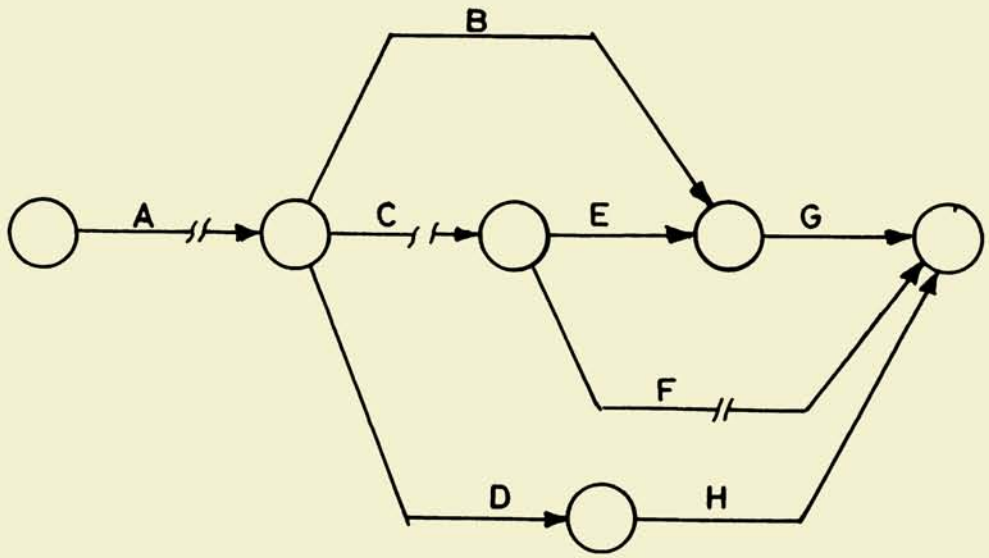
EXERCISE - TEN

The Tutor will collect all suggestions - eliminations, additions, combinations of activities, modifications, etc. of the participants, scrutinise them and present the acceptable suggestions.

EXERCISE - ELEVEN

PROJECT DURATION

= 25 days



EXERCISE - TWELVE

(a) Non-critical Activities: C,F,D,G and H

(b)

Non-critical activities	Total Float (days)
C	6
F	6
D	1
G	1
H	1

(c)

Path	Total Float (days)
A-C-F-I	6
A-D-G-H-I	1

EXERCISE - THIRTEEN

Total float = LPO of succeeding event - EPO of preceding event - duration of activity.

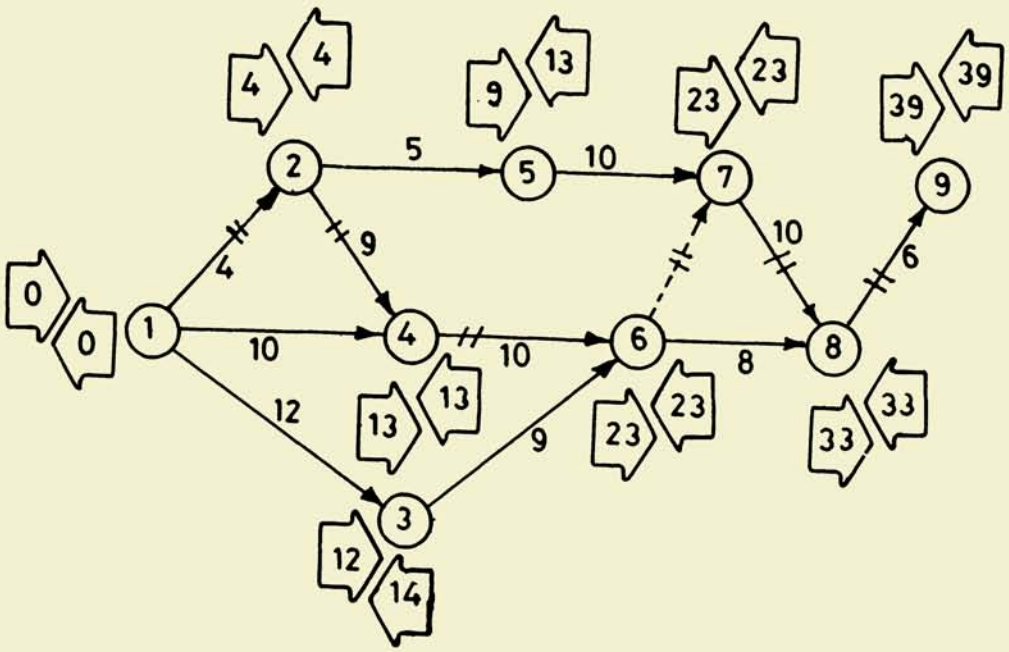
EXERCISE - FOURTEEN

Activity	Duration in days	EST	EFT	LST	LFT	Free Float	Total Float
A	4	0	4	0	4	-	-
B	18	0	18	6	24	6	6
C	2	4	6	6	8	2	2
D	4	4	8	4	8	-	-
E	9	4	13	13	22	-	9
F	1	8	9	17	18	-	9
G	7	8	15	8	15	-	-
H	3	8	11	12	15	4	4
I	2	15	17	22	24	2	7
J	2	17	19	18	20	1	1
K	5	15	20	15	20	-	-
L	4	20	24	20	24	-	-

Critical Path is A-D-M-G-K-L = 24 days, where M is a dummy activity.

EXERCISE - FIFTEEN

(a)



(b)

Activity	Duration (Days)	EST	FFT	LST	LFT	FF	TF
1-2	4	0	4	0	4	0	0
1-3	12	0	12	2	14	0	0
1-4	10	0	10	3	13	3	3
2-4	9	4	13	4	13	0	0
2-5	5	4	9	8	13	0	4
3-6	9	12	21	14	23	2	2
4-6	10	13	23	13	23	0	0
5-7	10	9	19	13	23	4	4
6-7	0	23	23	23	23	0	0
6-8	8	23	31	25	33	2	2
7-8	10	23	33	23	33	0	0
8-9	6	33	39	33	39	0	0

(c) CRITICAL PATH IS 1 - 2 - 4 - 6 - 7 - 8 - 9
and PROJECT DURATION = 39 Days

(d) The new CRITICAL PATH is 1 - 2 - 4 - 6 - 8 - 9
and new PROJECT DURATION = 40 Days.

EXERCISE - SIXTEEN

It is suggested that this final exercise of the Structured Assignment be done in groups of 4-6 participants. Each group will select a different project. The list of the projects suggested may be increased by the Tutor, if he so desires. The suggested duration of group work is one and a half hours, but the Tutor may provide more time if the groups are unable to complete the exercise in the allotted time. The Tutor will request spokesman of each group to present the group analysis in a plenary session. The Tutor will finally suggest the improvements that could be brought about in the group analyses.

REFERENCES

1. `Learning Package on Industrial Management' by R.K. Mani and others, published by Vikas Publicatons, Bhopal on behalf of TTTI, Bhopal, 1982.
2. `Network Analysis' by Battersby, Macmillan, London, 1967.
3. `Planning and Control with PERT/CPM' by Levin and Kirkpatrick, McGraw-Hill, New York, 1966.
4. `Modern Production Management' by E.S.Buffa, Wiley-Eastern, Delhi, 1971.
5. `Youth Mobilisation for Development in Asian Settings', UNESCO, 1978.
6. `Youth Work Series - No 5' by Banmala, Vishwa Yuva Kendra Publications, Delhi, 1976.

SELF-LEARNING PACKAGE
AND
TRAINEE'S ASSIGNMENTS

NETWORK ANALYSIS

INSTRUCTIONS TO USERS

This is a self-instructional package. You are expected to learn from it primarily through your own efforts. The Tutor will be available for guidance and clarification.

The topic "Network Analysis" has been divided into a number of units and each unit has been provided with a title. You are advised to proceed unit by unit.

As part of learning each unit, you will be required to understand the unit and attempt exercises. You are expected to check your answers with the Tutor. The Tutor may either suggest that you go through the unit again or that you proceed to the next unit.

You are now welcome to start the module.

GOOD LUCK !

C O N T E N T S

UNIT - 1 ACTIVITIES AND EVENTS

What is a network?

A network is a diagrammatic representation of all jobs that need to be carried out in the implementation of a project and provides information about how the various jobs are interrelated with one another. In other words, it is a graphic representation of a project plan.

Networks have two significant features. These are:

(a) ACTIVITY

represented by an arrow 

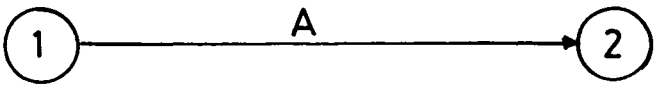
(b) NODE or EVENT

represented by a circle 

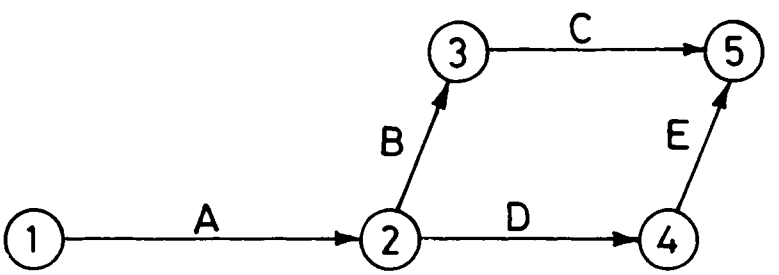
The physical meaning associated with these two terms can be derived from the following description.

Writing a page is an activity. However, the instant of starting to write the page and the instant of completing it are events. Activities involve actions and operations and consume time. They may continue for hours, days, or months. On the other hand an event is a momentary or instantaneous occurrence. It occupies no time but it identifies the beginning or end of an activity. The instant of beginning a meal and the instant of completing the meal are events, while the act of eating the meal itself is an activity.

In the diagram shown below:



1 and 2 are EVENTS and A is the ACTIVITY. The event 1 denotes the beginning of the activity A and 2 denotes the end. The arrow head is always placed alongside the end node. When more than one activity is considered in a network the diagram will appear as follows:



The interpretation of this diagram will be:

a) 2 denotes the end of the activity A and also the beginning of B. Hence, B cannot start until A is completed.

b) The activities A, B, and C are in sequence. So are A, D and E.

c) Arrow heads are placed at the end of the activity lines.

d) Events are usually identified by numerals.

EXERCISE - ONE:

Some more conclusions can be drawn. Can you identify them? Write them down below and check with the Tutor.

(i)

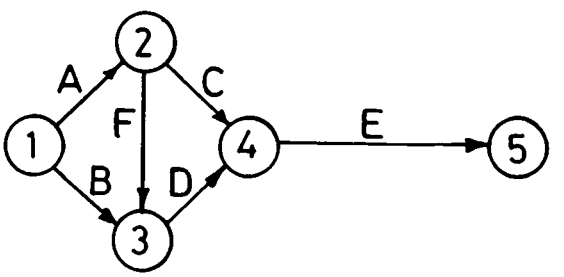
(ii)

(iii)

(iv)

UNIT - 2 INTERRELATIONS BETWEEN ACTIVITIES AND EVENTS

A project consists of many activities. Some are done in sequence, some are done in parallel. Definite interrelationships exist between various activities and, consequently, the events. An example can help you to explore these.



(a) The project starts with the event 1 and ends with the event 5.

(b) The activities A and B start simultaneously from the event 1 and are parallel to each other. However, they may not end at the same time. A and B are <u>independent</u> of each other.

(c) The activities C and F can commence only when A is over. In other words, C and F are <u>dependent</u> on A, but independent of each other.

(d) D can only start when B and F are both completed. Hence D is dependent on both B and F.

(e) Similarly the activities C and D control the activity E.

(f) Activity A has C and F as its successor activities.

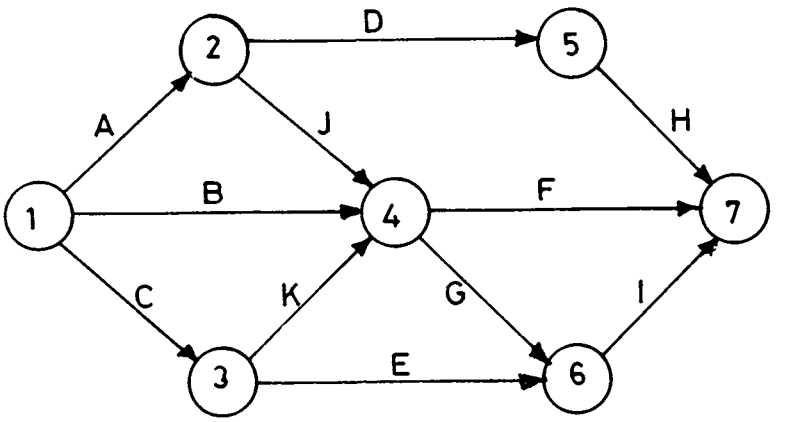
(g) Activity D has B and F as its predecessor activities.

This can be summarised in the table given below:

ACTIVITY	STARTING EVENT	END EVENT	DEPENDS ON ACTIVITY/ ACTIVITIES
A	1	2	-
B	1	3	-
C	2	4	A
D	3	4	B, F
E	4	5	C, D
F	2	3	A

EXERCISE - TWO:

A project has the following network



Fill up the table given below indicating the dependency relations.

ACTIVITY	START EVENT	END EVENT	DEPENDS ON
A			
B			
C			
D			
E			
F			
G			
H			
I			
J			
K			

EXERCISE - THREE:

On the basis of the table shown draw a network in the space given below:

ACTIVITY	START EVENT	END EVENT	DEPENDS ON
A	1	2	-
B	2	3	A
C	3	4	B
D	2	4	A
E	1	4	A
F	4	5	C, D, E

UNIT - 3 RULES FOR DRAWING NETWORKS

Some rules which are to be kept in mind while drawing networks are:

1. A project will begin with only one event and similarly end with only one event. These are usually denoted as START of Project and FINISH of Project.

2. While numbering the network, each activity shall start with an event of a number lower than that of the end event of the activity.

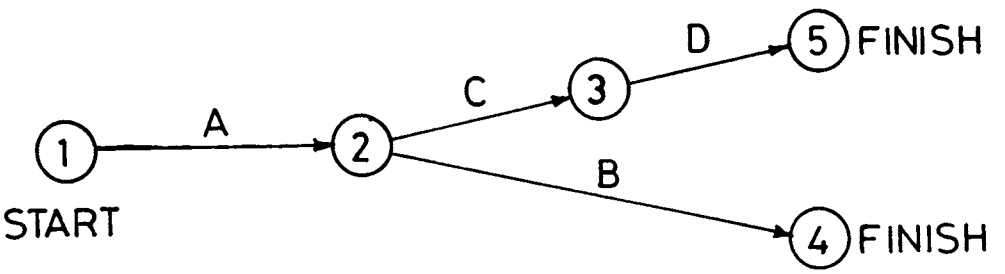
3. Activities are denoted by letters of the alphabet or by description like conducting a 100-m race, presenting a drama, etc. and designated by the node numbers at their two ends.

4. The arrangements of activity arrows in a network should be such that criss-crossing of arrows is avoided as far as possible.

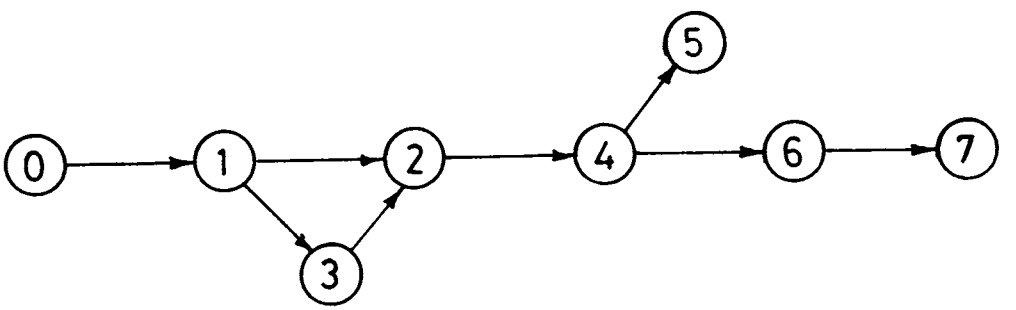
5. An event number or an activity alphabet should appear only once in the network to avoid confusion.

EXERCISE - FOUR:

The following are incorrectly drawn networks of projects. Redraw each network using the network rules, in the space provided.

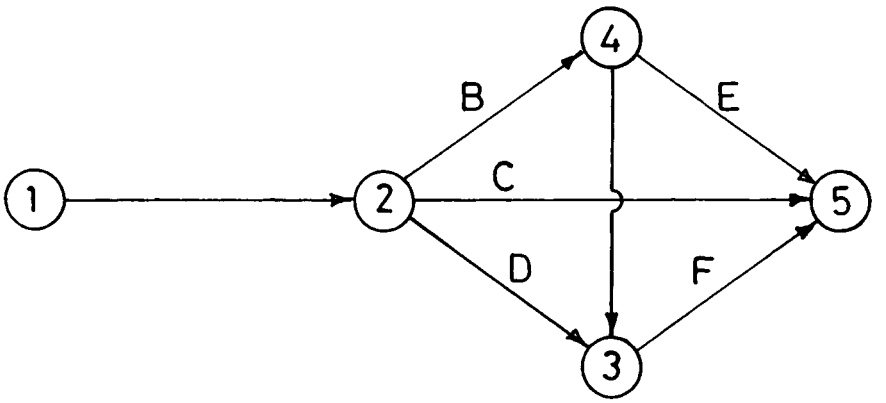


(a)

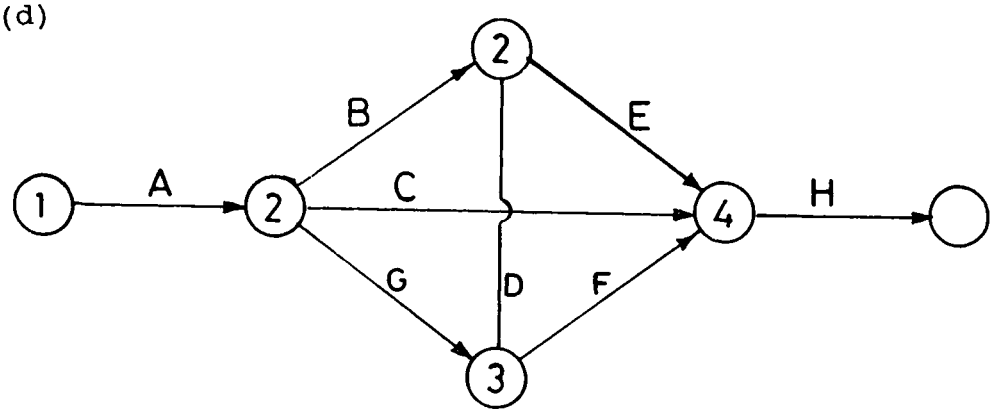


(b)

(c)

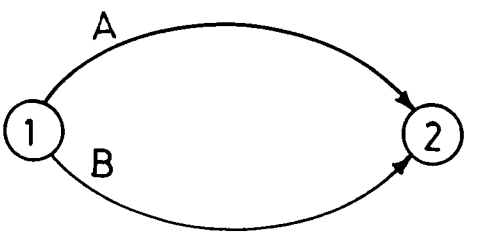


(d)

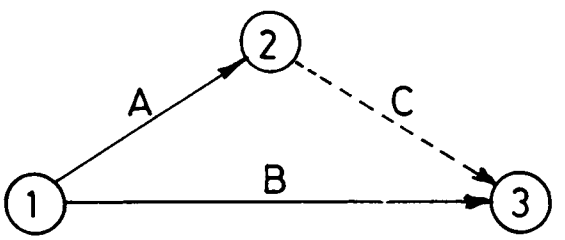


UNIT - 4 DUMMY ACTIVITIES

In drawing networks sometimes situations arise where between two successive events two activities may exist. An illustration would be :



Since such a representation would create confusion and difficulties in analysis, the representation should be modified, as follows.

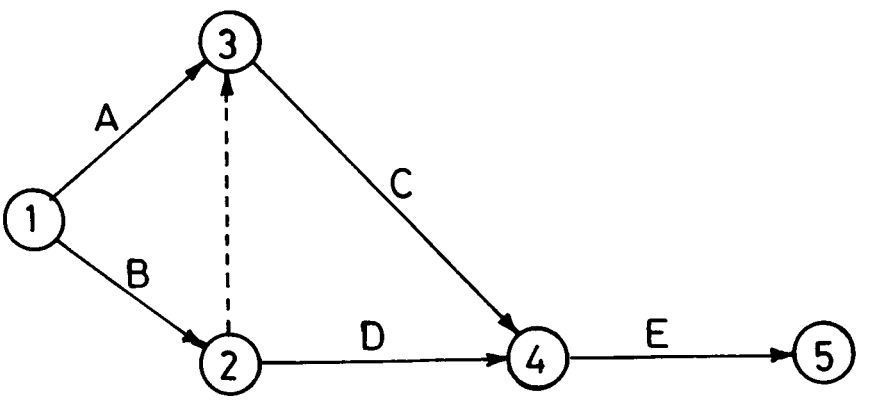


You will notice that an additional event '3' has been introduced and also a new activity 'C' has appeared. Activity C is called DUMMY activity. It has no physical significance, i.e. it will not consume any time or manpower or other resources. It is therefore a fictitious activity introduced for the sake of computational convenience. If dummies are not used many advantages of event numbering and

identity of activities will be lost in project networks. Dummies prove very useful additions. Consider a project with five activities A, B, C, D, E. Their relationships are indicated in the table.

ACTIVITY	DEPENDS ON
A	-
B	-
C	A, B
D	B
E	C, D

The corresponding network would be:



Can you notice the need for the dummy activity? Notice the placement of the dummy arrowhead to conform with the dependencies.

EXERCISE - FIVE:

Draw a network in the space given below to represent the following six activities. Activities A, B and C are concurrent. Activity D is dependent on B , E on B , C and F on C. The project is completed when A, D, E and F are completed.

EXERCISE - SIX:

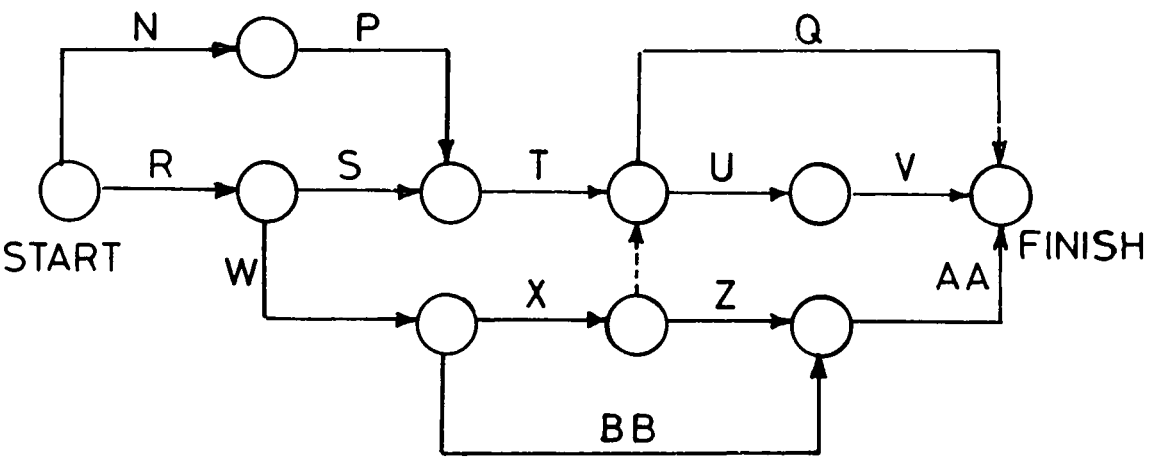
Change the network given below to allow the following alterations.

(a) Q is not dependent on X

(b) V dependent also on Z but not on BB

(c) P dependent also on R

(d) W no longer necessary at all.



UNIT - 5 CONSOLIDATION OF LEARNING

A consolidation step is now necessary. The essential rules or conventions to be adhered to in preparing a network for a project may be summarised as follows:

1. Each activity is represented by an arrow which starts at one event and finishes at another event.
2. Each activity is denoted by the numbers of the events at its two ends.
3. The event number at the tail of an arrow should be smaller than that at the head.
4. The sequence through the network should be from left to right.
5. Dummy activities which consume no time and cost are used in order to preserve the logical sequence of the activities.
6. An activity may have more than one predecessor activities and more than one successor activities.

EXERCISE - SEVEN:

Draw the network for a project which has the following activities. Seek feedback from Tutor.

Project: Slum Community Development Initiation

Objective: Initiating two simple group activities for slum communities.

Activity Identification	Activity Description	Immediate Predecessor(s)
A	Youth worker contacts different people in community	-
B	Youth worker discusses welfare activities to be organised by youth and obtains acceptance from community	-
C	Data collection on community by organisers and youth volunteers	-
D	Welfare ideas generated in meetings between organisers and community	B, C
E	Plans cast for welfare areas- sports club and sewing classes	D
F	Formation of infrastructure for the two welfare areas	E
G	Selection of community groups to benefit from the welfare areas	A, D
H	Organising sports club functions and sewing classes	F,G
I	Review at end of year.	H

Offer suggestions for improving the list of activities suggested above so that there is a satisfactory match between the activities and the objective.

UNIT - 6 IDENTIFICATION OF ACTIVITY DEPENDENCIES

One of the first operations in network formulation is the identification of activities which comprise the project. Once this is done the next step is to derive, through logic, the dependencies among them. This second operation is as complex as the first and demands considerable technical expertise about the project.

EXERCISE - EIGHT:

You may now try to identify dependencies for a project whose activities are listed below in the column adjacent to the activities. And then draw the network.

Project: ORGANISING THE COMMUNITY TO BUILD A 1\2 KM ACCESS ROAD, THROUGH VOLUNTARY SERVICE

Symbol	Activity Description	Depends on
A	Youth worker suggests project idea and builds a youth team	
B	Youth team contacts villagers through meetings and convinces them about project idea	
C	Engineer in nearby town contacted to provide technical expertise for converting foot track to access road	
D	Engineer submits plans	
E	Voluntary donation of land by landowners	
F	Organising community into work groups	
G	Allocation of tasks to work groups	
H	Collection of road construction hand implements from villagers	
I	Construction of road	
J	Inauguration of road	
K	Funds raised for refreshments	
L	Refreshments arranged for	

UNIT - 7 IDENTIFICATION OF PROJECT ACTIVITIES

As mentioned earlier the first step in formulating a project network is to identify various jobs involved. While it is easy to provide an overall description of a project it is a difficult task to break the entire project into clear-cut activities without gaps and duplications. A practice example will be worthwhile at this stage.

EXERCISE - NINE:

A description of a project is given below. After going through it, you are to:

(a) List component activities of the project

(b) Establish dependencies

(c) Draw the network

After each step check up with your TUTOR before proceeding ahead.

An agency is planning an advertising thrust to launch a new Campaign against Drug Addiction' among youth, usino poster, television and newspaper displays. The illustration for the newspaper advertisement will be devised while its accompanying text is being written, and half-tone blocks will be made when both are ready. The blocks will then be sent to newspapers, but only after the contract for the press advertising has been negotiated. This part of work is then finished. The poster is to be designed and printed after which, again subject to a satisfactory contract, it will be distributed, so completing this part of the campaign. The script for the television film is to be prepared while the contract with the film company is negotiated. The film when completed must be sent to the programme company, with whom a separate agreement has to be reached before hand.

As soon as all these preparations are made, a press conference has to be arranged with the help of an agency for a previously agreed date on which this campaign will be officially launched. The agency allows a fortnight for drawing up a detailed plan of the campaign.

UNIT - 8 ACTIVITY ANALYSIS

When we are interested in preparing a network for a project, our first aim is to list all activities. When the list is ready, it is likely that some activities are very significant with large durations and some activities are of very short durations. Further, there may be a logical way of combining or breaking up activities or eliminating some of them. Then, before we proceed further with establishing dependencies and preparing a network, it becomes necessary to make a critical analysis of the listed activities and preparing a revised list.

EXERCISE - TEN:

The list of activities given below pertains to a project for 'enabling the elderly in a community to get engaged in useful occupation.' The project is to be taken up by youth. You are required to analyse critically the list and suggest modifications such as eliminations, additions, combinations of activities and modifications if necessary. Provide justifications.

ACTIVITIES

- Youth team formed
- Generation of ideas on relevant schemes
- Identification of interests of elderly
- Survey performed for determining suitability of schemes
- Action plans formulated
- Preparatory work in community
- Programmes launched
- Programmes conducted
- Review of programmes.

UNIT - 9 CRITICAL PATH AND TOTAL FLOAT

So far in the previous units we have been concentrating on drawing the network. This involved decomposing the project in terms of activities, establishing inter-dependencies between activities, and completing the network for the whole project. This needs both creative and analytical skills.

The networks we have seen so far are sometimes called Arrow Diagrams. It does provide useful information to a youth worker for planning and implementing of project. However, the youth worker is also interested in setting targets. A most obvious target is the duration required to complete the project, may be in days, weeks, months, or even in years in some cases. Which means additional data are required, namely the duration of each activity in the Arrow Diagram. The youth worker in consultation with his co-workers will have to fix the duration of each activity. These are in the nature of estimates drawn from the total experience of the group entrusted with this job. Some of the considerations that affect the estimation of such time durations are:

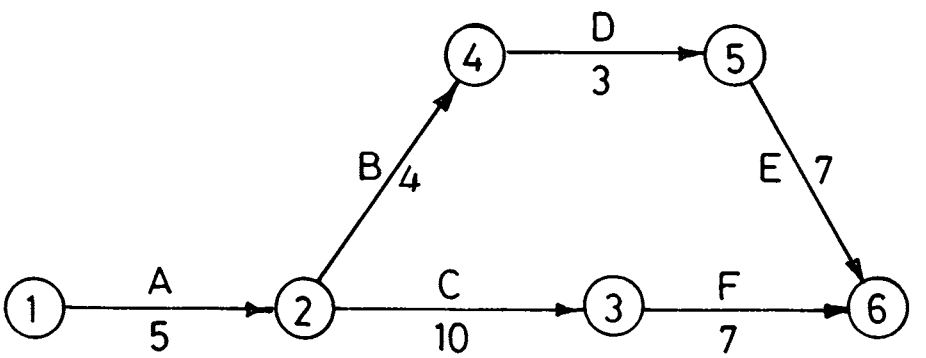
* Estimators' previous experiences
* Risk-taking capacity
* Consequences of making errors in estimates
* Resources available and resources that can be procured

* Methods and techniques that will be used during implementation
* Possible unforseeable delays
* Commitment of the group to the successful implementation of project.

Once the duration estimates are available, we may move on to the analysis of networks. This includes :

(a) determining the shortest possible time to complete the project.
(b) Identifying the activities which are critical, i.e. such activities which control the completion of the project in the shortest possible time and which demand concentrated attention and concern to avoid delays.
(c) Determining the amount of time by which the completion of non-critical activities can be delayed without affecting the shortest possible time of project completion.

Let us take a simple example and look into these aspects of analysis. The network for a project is shown below. The duration of each activity in days is given beneath the alphabetic symbol of each activity. It may be noted that the length of the activity line bears no relationship with the duration of the activity.



We can traverse from the beginning to end of the project along two paths, viz.

I Path : 1 → 2 → 3 → 6 via A, C and F

II Path : 1 → 2 → 4 → 5 → 6 via A, B, D and E.

The total time path I will take is 5 + 10 + 7 = 22 days and path II will take 5 + 4 + 3 + 7 = 19 days.

Since the completion of the project involves completion of all activities, the project will get completed only in <u>22 days</u> and NOT in 19 days. You will also notice that the activity A is common to both the paths.

A few conclusions could be drawn from the above network.

i) While the activities C and F are going on, the activities B, D and E will also be under operation.

ii) The minimum time required to complete the project is 22 days. This is the time by which the project can be finished earliest.

iii) The path II can be delayed by 3 days without affecting the earliest finish time of the project.

iv) Since A is common for both the paths, the duration of A cannot be increased but the duration of either B or D or E, or combination of them can be increased without affecting the completion date of project.

v) Any delay in activities A, C and F will delay the project completion. Hence to ensure that the project gets completed in 22 days, no delays or increase of duration can be permitted in the activities of path I. Therefore, the path I is called the CRITICAL PATH and the activities A,C, and F the CRITICAL ACTIVITIES. The term 'Critical' is related to planned implementation and completion of project.

A chain of critical activities from project start to finish form the critical path. There will be at least one such chain in every project. All activities (critical) in the critical path will have zero total float and hence zero free float (discussed later).

Normally the critical path in a network is indicated by thickening the activity lines or by placing a double strokes sign (//) on the critical activity lines.

The following characteristics of critical paths are significant:

a) All critical jobs or activities lie on at least one critical path.

b) There may be more than one critical path in a project.

c) The project duration equals the sum of durations along any critical path from project start to project finish.

d) A delay in the start or finish of a critical activity will delay the project completion by an equal amount.

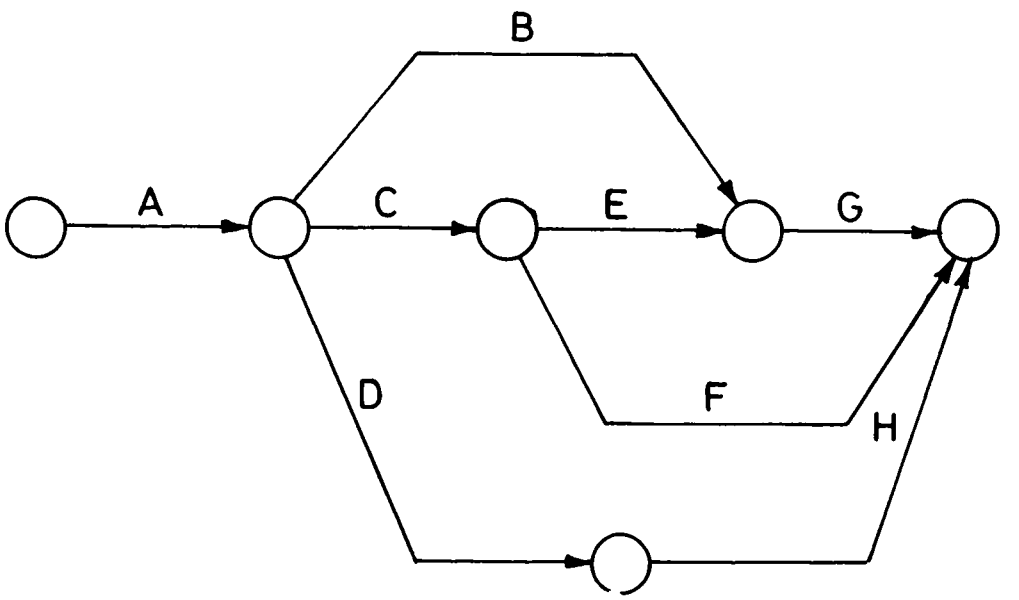
e) If more resources become available then, to reduce project duration, they must be used on jobs that are critical.

f) Priority of resource allocation must be given to critical jobs to ensure no delays.

EXERCISE - ELEVEN:

In the project network given below :

Write in ACTIVITY DURATIONS (using data provided in the table). Mark CRITICAL PATH and find PROJECT DURATION.



ACTIVITY	DURATION (Days)	ACTIVITY	DURATION (Days)
A	6	E	5
B	2	F	10
C	9	G	3
D	5	H	7

From the illustration network given previously in this unit it is clear that the activities B, D, and E have some built-in margin of time reserve in completion time. This margin is called FLOAT. A non-critical activity can be delayed upto an extent represented by the float without delaying the scheduled start of critical activities. The complete critical path has a float of zero.

Total float for activities B, D and E is 3 days. Total float for activity B will be 3 days if no reserve time is allowed for activities D and E. Similarly either D or E could have a total float of 3 days.

Alternately, if activity B needs to have a reserve time of one day, then activities D and E taken together, can have a total float of only 2 days.

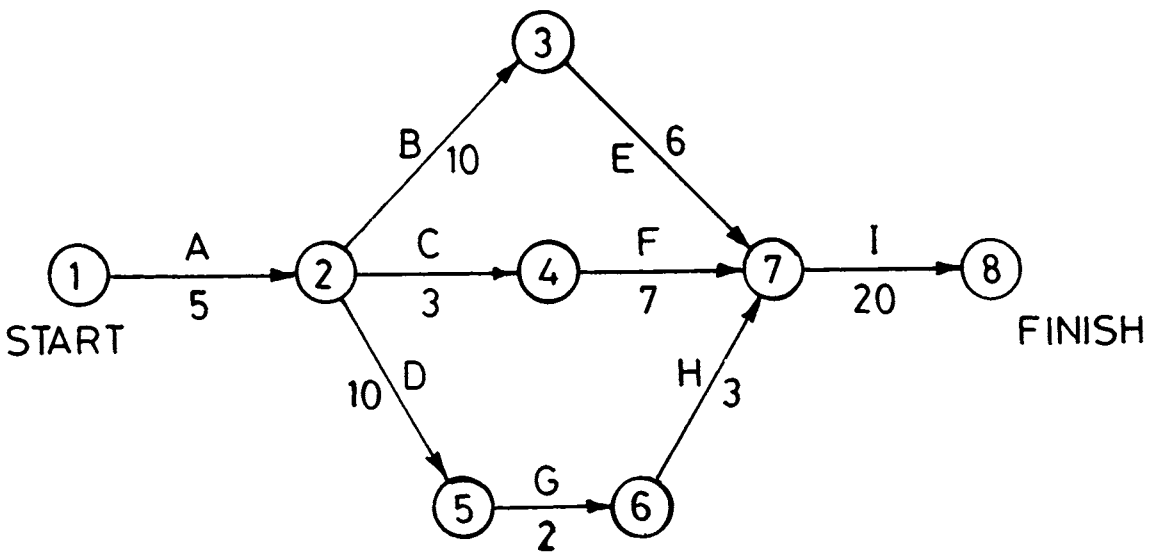
EXERCISE - TWELVE:

In the network given below :

a) identify the non-critical activities

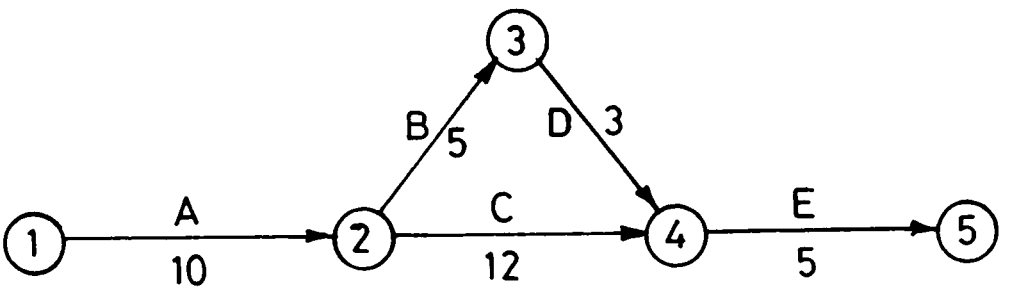
b) determine the total float for each non-critical activity

c) determine the total float for each path between the start and finish of the project.



UNIT - 10 FREE FLOAT, START TIMES AND FINISH TIMES

In analysing a network it would be of great use if each event is marked with the time when it should occur. Consider the network given below:



Event 2 occurs when activity A has finished. So the earliest time for event 2 is 10 days after the start of the project.

Event 3 can occur 15 days after the start.

Event 4 cannot occur until activities C and D are both completed.

Event 4 can occur only 22 days after the start.

Event 5 can occur only 27 days after the start.

These times are the earliest times for the events.

They are called EARLIEST POSSIBLE OCCURRENCE (EPO) and are calculated by proceeding from left to right in the network.

In this case the critical activities are A, C and E and the project duration is 27 days. As we want to keep the duration of the project to 27 days, event 5 should be completed in 27 days. This time is called LATEST POSSIBLE OCCURRENCE (LPO) for that event, and these are calculated from proceeding from the last event of the network backwards.

Latest time for event 4 is 22 days.

Consider the event 3 Although it can occur 15 days after the start, it does not have to occur until 19 days after the start (22-3=19). This will still allow 3 days for activity D. This can be summarised as shown below:

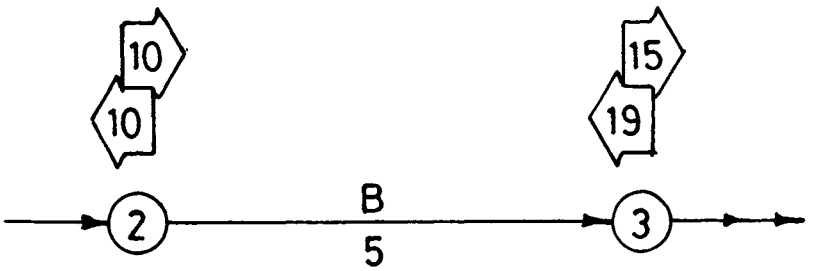
Event	EPO(days)	LPO(days)
1	0	0
2	10	10
3	15	19
4	22	22
5	27	27

Note that for some events the earliest and latest times are the same.

These events lie along the critical path.

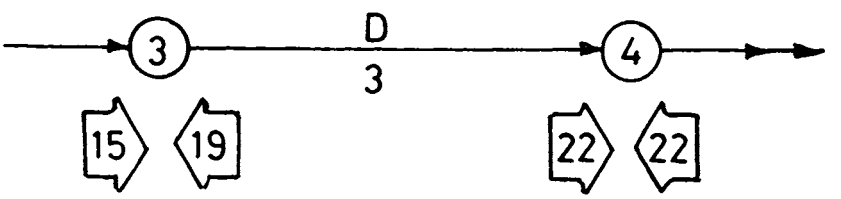
Let us see now how total float can be calculated from LPOs and EPOs.

Consider activity B (No other activity emanates from 2).



Activity B can start on day 10 but it does not have to finish until day 19. This leaves a total of (19-10=9) days for activity B. Therefore, B has a margin of 9-5=4 days. This implies activity B could be delayed for upto 4 days without extending the project duration. Activity B has a total float of 4 days.

Now consider activity D.



Consider again activity B. This can be delayed for upto 4 days without extending the project duration. If it was delayed for 4 days, event 3 would occur at its latest time i.e. 19th day. This would mean that activity D could not start until then. If we want to start the activity D as early as possible, activity B must finish by day 15. This leaves (15-10) = 5 days for activity B.
Then spare time for B = 5-5 = 0.

Thus, the amount of time an activity can be delayed without affecting the earliest possible start of the immediately following activity is called FREE FLOAT.

Free float for activity D = 22-15-3 = 4 days.
In general, Free float = EPO of succeeding event - EPO of preceding event-duration of activity.

Looking at the equations for Total Float (TF) and Free Float (FF), it can be seen that:

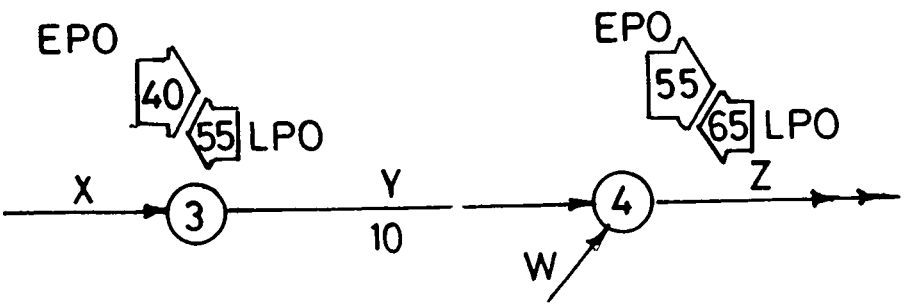
TF - FF = (LPO-EPO) of the immediately following event.

Now let us look into the relationships between event times and activity times. We know that EPO is the earliest time for the occurrence of an event and LPO is the latest occurrence time for an event.

EXERCISE - THIRTEEN:

Now can you write down the formula for total float in terms of EPO,LPO, and activity duration ?

Consider a section of a network shown below.



EVENT	EPO	LPO
3	40	55
4	55	65

Activity	Free Float	Total Float
Y	5	15

Activity Y can be started only when event 3 has occurred. This means Y can be started by earliest on day 40. This time is known as EARLIEST START TIME (EST)

It is clear that EST = EPO of the preceding event.

Activity Y, by latest, can be started on day 55

This latest time for the start of an activity is called LATEST START TIME (LST).

LST = LPO of the following event
- duration of activity.

Similarly the earliest time the activity Y can be finished is 50 days and the latest time Y can be finished is 65 days. They are called EARLIEST FINISH TIME (EFT) and LATEST FINISH TIME (LFT) respectively.

EFT = EPO of the preceding event + duration of the event

LFT = LPO of the immediately following event.

For activity Y,

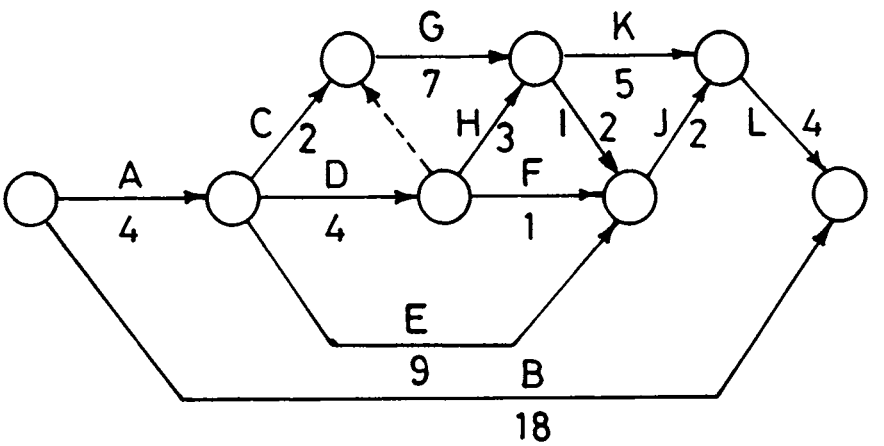
EST = 40 LST = 55

EFT = 50 LFT = 65

Total float can help in deciding which activity can be extended or delayed. When EPO and LPO are equal to each other at the nodes of an activity, the activity has zero total float and is critical. The absence of float is the indication of criticality of an activity. This means that there is no leeway or margin available for extending or delaying an activity. No latitude can be taken with critical activity. It demands attention and concern to ensure that no delays occur. In fact it lies on the critical path.

EXERCISE - FOURTEEN:

For the network shown below estimate EST, EFT, LST, LFT, free float and total float for each activity. Complete the Table given on next page. Check up your answer with the Tutor.



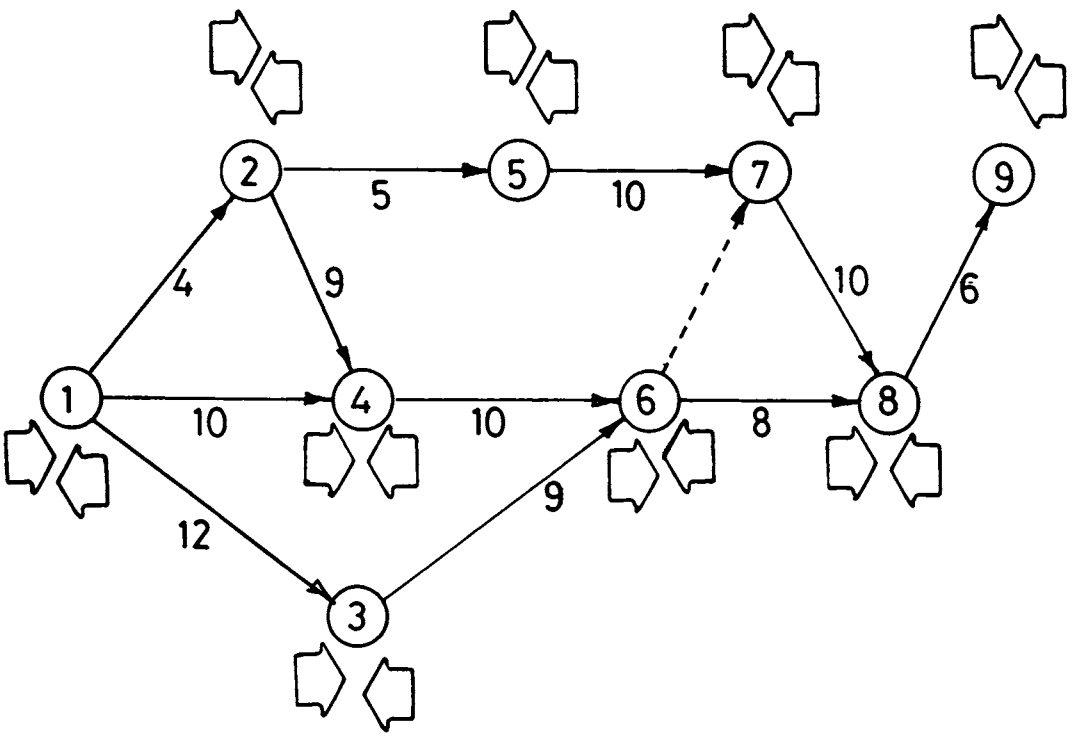
It is useful and convenient to indicate the EST, EFT, LST and LFT of all activities in a systematic manner.

Activity	Duration in days	EST	EFT	LST	LFT	Free Float	Total Float
A							
B							
C							
D							
E							
F							
G							
H							
I							
J							
K							
L							

UNIT - 11 CONSOLIDATION OF NETWORK ANALYSIS CONCEPTS

This unit will help you to reinforce some of the major concepts you have learnt in the last two units. It is in the form of an exercise.

EXERCISE - FIFTEEN:



FOR THE NETWORK SHOWN ON PREVIOUS PAGE :

a) FILL UP THE EPOs AND LPOs OF EACH EVENT IN THE NETWORK.

b) FILL UP THE FOLLOWING TABLE.

ACTIVITY	DURATION (DAYS)	EST	EFT	LST	LFT	FF	TF
1 - 2	4						
1 - 3	12						
1 - 4	10						
2 - 4	9						
2 - 5	5						
3 - 6	9						
4 - 6	10						
5 - 7	10						
6 - 7	0						
6 - 8	8						
7 - 8	10						
8 - 9	6						

(C) WHAT IS THE CRITICAL PATH ?

(D) IN CASE ACTIVITY 6-8 IS EXTENDED BY 3 DAYS IN DURATION WHAT IS LIKELY TO HAPPEN TO THE CRITICAL PATH ?

EXERCISE - SIXTEEN:

A. For any one of the following projects, identify important activities (in groups of 5 to 10):

1. ENABLING SELECTED YOUTH TO BECOME SELF-EMPLOYED
2. PROMOTING SOCIAL FORESTRY IN A VILLAGE
3. CONDUCTING ADULT LITERACY CAMPAIGN IN A CLUSTER OF VILLAGES
4. PRESERVING TRADITIONAL CRAFTSMANSHIP AND ENABLING CRAFTSMEN TO MARKET PRODUCTS

B. Establish dependencies between the activities

C. Draw the Network for the project

D. Estimate the project duration and identify critical path after assuming appropriate activity durations.

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CHAPTER-4

DECISION ANALYSIS

* General and Specific Objectives
* Trainer's Notes and Guidelines
* Self-Learning Package for the Trainees and Assignments

GENERAL OBJECTIVE

The participant will apply Decision Analysis to decision situations arising in familiar projects.

SPECIFIC OBJECTIVE

The participant will:-

(a) Become familiar with the steps of Decision Analysis.

(b) Describe steps involved in Decision Analysis.

(c) Given a decision situation from a familiar project, apply the various steps of Decision Analysis and select one alternative from amongst generated alternatives.

(d) Given a description of an application of Decision Analysis Technique, critique the application.

TRAINER'S NOTES AND GUIDELINES

DECISION ANALYSIS

THEME OF THE CHAPTER

This Chapter deals with a Technique in rational Decision Making. Decision Analysis is a technique which could be used for making a selection from among the available alternatives in a rational way. This technique is based on APEX METHOD of KEPNER AND TREGOE.

Decision Making is undoubtedly one of the more difficult tasks a project manager performs. A systematic and rational approach to Decision Making is necessary and very valuable. Decision Analysis provides such an approach.

PREREQUISITES

- This Chapter is to be taken up only after completion of the chapter on Planning (Chapter - 2).
- Both the Tutor and participants must be familiar with the self learning mode.
- The Tutor must have knowledge of rational Decision Making.
- The participants should have experience in making decisions and some familiarity with the concept of rational Decision Making.
- The Tutor must also be familiar with ;
  - guiding self learning of participants
  - conducting individual and group assignments.

PREPARATORY ACTIVITIES FOR TUTOR

- The Tutor should have thoroughly gone through the learning experiences of this Chapter, including assignments.
- The Tutor should have gone through some Decision Analysis exercises and should have made all the calculations required for making a choice.

INSTRUCTIONAL GUIDELINES

(a) The Chapter consists of two content updates, a model, four illustrations and an assignment. The Tutor must keep in mind that the illustrations are key to effective learning.

(b) The expected time for learning this Chapter is 6 hours. The suggested activity scheduling is as follows:

Sl. No.	Activity	Time Allocation
1.	Self learning upto the application of principles to trek illustration	3/4
2.	Reading Content Update I and Tutor explanation, using OHP Transparency 4.1	3/4
3.	Self learning upto the end of second illustration	3/4
4.	Content Update II reading and Tutor explanation	1/2
5.	Self learning upto Assignment with Tutor's explanation of Model for Decision Analysis in Summary	1 1/2
6.	Assignment	1 3/4

(c) The Tutor while introducing the Chapter will link this Chapter with the appropriate stage in Planning and briefly mention the purpose of Decision Analysis by providing small day to day examples.

(d) The Tutor's role in self learning of participants is to:

- Explain/clarify learning and resolve difficulties of the participants.
- The Tutor may use OHP/Chalk Board to explain the points to all the participants.

- The Tutor should take special care to ensure understanding of weighting and scoring for WANTS CRITERIA. Tutor must explain using OHP Transparency 4.1 and ensure that participants have understood these concepts properly.

(e) The Tutor should explain Content Updates I and II and by question - answer technique, ensure that the participants have understood the contents, concepts, procedure and mode of weighting, scoring, seriousness/impact and probability. Content Updates I and II should be taken up as per activity schedule given above.

(f) (i) The Tutor can change the project in the assignment if he so desires.

(ii) A small briefing on assignment and on the procedure of group work will be done by the Tutor.

(iii) The Tutor shall divide the participants into two groups (A and B).

(iv) Group A will decide purpose and objectives of festival for group B and vice-versa.

(v) Groups will prepare for collecting information from the other group, and also for the type of the information likely to be demanded by the other group. Time allotted for preparation is half an hour.

(vi) The Tutor may provide assistance to groups whenever necessary.

(vii) After half an hour, both the groups will provide information to each other.

(viii) Groups will go through the information provided by the other group and list additional information necessary.

(ix) Exchange of additional information between the groups will take place.

(x) Groups will work on generating criteria, classifying them and performing the analysis including consideration of adverse consequences. Each group will prepare its recommendations.

(xi) The Tutor should assist groups without imposing his views or becoming a 'member' of the group.

(xii) One member of each group will make presentation of his group work in a plenary session and at the end, summarisation will be done by the Tutor.

(g) Before giving the final assignment the Tutor should use transparency 4.2 to explain briefly all the steps of the process. The Tutor may use question - answer technique to ensure clear understanding of the model components.

SUGGESTED RESPONSES TO ASSIGNMENT

(a) Information on the following aspects may be required/demanded by the groups.

- Who would be participating in the festival ?
- Number of participants
- Duration of festival
- Activities during the festival
- Information on resources which would be made available for the festival.
- Current state of affairs of all the clubs
    - Financial
    - Facilities available
    - Memberships
    - Manpower with experience
    - Experience of organising such activities in the past
    - Reputation
    - Views of the members of the club in general on undertaking project
    - Views of youth on the youth clubs under consideration.

REFERENCES

1. "Management" by J. Stoner and C. Wankel, Prentice Hall of India, Delhi 1988.

2. "The Rational Manager" by C.H.Kepner and B.B. Tregoe, McGraw-Hill, New York, 1965.

3. Instructional Package prepared by Education Management Centre, TTTI, Bhopal for use in departments of the State Government of Madhya Pradesh, India, 1988.

4. "Management-an integrated approach" by Torgerson and Weinstock, Prentice Hall, USA, 1972.

CONTENT UPDATE - I

1. SETTING CRITERIA AGAINST WHICH TO CHOOSE

These are derived from the following:

- Results expected from a decision
- Resources available to implement a decision.

In order to achieve best results possible individual criteria must be clearly established at the outset and information/answers to specific questions applicable to these criteria must be gathered. It is the responsibility of each manager to make his enquiry complete in order that important data will be furnished.

RESOURCES

It is important that capital investment be kept minimum without jeopardising the process. Estimates of projects should be carefully assessed to ensure sufficient funds are available to meet the cost of components of the scheme.

2. CLASSIFY THE CRITERIA ACCORDING TO IMPORTANCE

All the criteria that have been listed will have some degree of influence on a selection. However some will be of absolute and overriding importance and some will be important but not mandatory. Thus criteria could be classified as Musts (essential) and Wants (desirable). The Musts set limits which cannot be violated by any alternative. Must criteria help to recognise and screen out the impossible alternative right at the outset. Capital cost limitations are MUST criteria. This Must should be adhered to rigidly.

Criteria that are Wants do not set absolute limits, but express relative desirability. For instance it is desirable to have minimum river crossings. It is desirable to have minimum hill climbs. Wants criteria are concerned with relative advantages and disadvantages. Some Wants will always be far more important than others and, therefore, it is necessary to use good judgement in assessing the degree of importance. For this it is necessary to weigh each one carefully.

The first step in this weighting process is to establish the position of each Want criterion in relation to the next. This is done by giving it a numerical weight of importance. Weighting can be done by giving the most important Want criterion, a weight of say 10 and then weighting less important criteria relatively, using lower numbers. For example - Opportunities for leadership may be given a weight of 10 and less important Number of river crossings may receive a weight of 6. Judgement as to the weight of each Want criterion is drawn from individual experience and from the experience of others. What is essential is that some assessment of relative importance be made.

EVALUATING ALTERNATIVES AGAINST THE CRITERIA TO MAKE A CHOICE

Now each alternative has to be evaluated against the criteria. This must be done systematically, and each alternative is studied in rotation. On no account must an alternative be checked against more than one criterion at a time.

MUST CRITERIA

Assessment of Must criteria operates on a GO/NO GO basis. If an alternative fails to comply with a Must criteria it must be immediately discarded as NO GO. And no further assessment of this alternative is necessary.

WANT CRITERIA

Those alternatives which meet Must requirements, may be evaluated further against the Want criteria. To judge the performance of each alternative against the Want criteria (criteria attainment), it is necessary to give a score which is set against each criterion separately. As with weighting scoring should range from say 10 to 1. It is essential that the best alternative when checked against a criterion should receive the top score of 10 and others be scored relatively. If two or more alternatives have equal merit, they may receive the same score.

These scores reflect the way that each alternative performs against the specific criterion. They do not reflect the relative importance that has been placed on each objective. Therefore, an overall judgement of the relative worths of each alternative is needed and can be obtained by a weighted score. This weighted score expresses the performance of the alternative with due regard to criterion importance and criterion attainment. Treating each Want criteria in similar manner, columns of weighted score are developed which are finally totalled.

CHOOSE THE BEST ALTERNATIVE AS TENTATIVE DECISION

The alternative that receives the highest weighted score on performance against the criteria is presumably the best selection. However, this is only a tentative decision on the basis of evidence so far considered. It has been checked out as the best of alternatives available, which indicates it will probably be the best choice. However, it will not be a perfect choice. It may only be the least worst of the alternatives under consideration, but it will represent the most favourable balance between good and bad as these have been defined by the criteria set down.

CONTENT UPDATE - II

ASSESS THE ADVERSE CONSEQUENCES FROM THE CHOICE

These alternatives should now be considered for adverse consequences. Each one should be studied independently for potential problems and short-comings.

Not all consequences will be equally threatening to the decision. Some will be more serious than others, if they actually occur. Therefore, the consequences should be weighted in terms of seriousness and impact as the Want criteria were weighted in terms of importance. In addition to seriousness it is necessary to judge how probable any of the consequences are. This is to find out the total degree of threat an alternative poses.

The method employed to arrive at the various threats to a choice is to give rating from 0.1 to 1.0 for probability and from 1 to 10 for seriousness. These two ratings when multipled together will give a value which represents the total degree of threat.

It now becomes necessary to pass judgement since all the facts are available. It is now a question of betting present performance against future problems. By using experience, and common sense an endeavour to achieve the best possible balance is needed.

SELF-LEARNING PACKAGE
AND
TRAINEE'S ASSIGNMENTS

DECISION ANALYSIS

THE FIRST ILLUSTRATION

There was this Youth Coordinator in the district-young, enthusiastic, wanting to do something worthwhile. His earlier attempts had not been very happy experiences. This was not for want of trying. He, the village youth leaders, the urban community lads, they were all interested. But at the 'campaign sites' and the project locations, youth leadership was found 'wanting'. And this Coordinator could not act as leader everywhere. He had his own office to attend to.

So he thought 'Why not concentrate on Leadership Training. The youngsters are good, interested, hardworking. What they need is a set of Leadership Skills. None of them was a born leader. Why not make them into leaders ? '

What he then did was to approach his Counsellor at the capital. The Counsellor got convinced about the need for it. The district belonging to the Coordinator was sensitive and needed youth service and youth contribution. Government interest was high in that area. He said 'Okay . I will support. But what I think you should do is organise an adventure trek for these young fellows. Give them chance to become leaders for different aspects in that trek. And you can guide them. May be the university authorities can be

convinced to lend you a few guides and trainers. Moreover, you need a bit of money for this. Look,I will give you the money, provided you don't waste it on lavish dinners. Use it for something worthwhile'.

Now that support was available, the Coordinator went about looking into details. About 20 potential leaders were there for the trek. This was an ideal number - 15 boys, 5 girls. One trek would be good to start with. If it went off well, then may be one more group activity. But the emphasis would be on 'training by doing'.

Before he could start organizing things, it became necessary to select the trek route. This was a crucial decision. Much depended on the route.

A) This is how he went about selecting the route. First he wrote down the details as he knew them.

- One route had to be chosen.
- Period of trek must be about 20 days: 6-day trek; 1-day rest; 6-day trek; 1-day rest; 5-day trek; 1-day final group camp;
- There must be sufficient variety in the route like a mountain to climb; a river to cross; camping on open ground (if possible); trekking through forest, grassland, halt in village guest houses;

- No cooking was to be done by the trekkers, except in the final group camp. The meals were to be arranged for at appropriately placed villages.
- The 20 with two guides from the University and himself were to stay together from start to finish of trek.
- During the trek leadership would be rotated among all twenty, like for the trek, for food and stay arrangements, for the morning and evening group songs, the final camp, the pre-trek arrangements, and so on.

B. Next, the Coordinator tried to find out which of the three trek routes suited the needs he had noted. His conclusions :

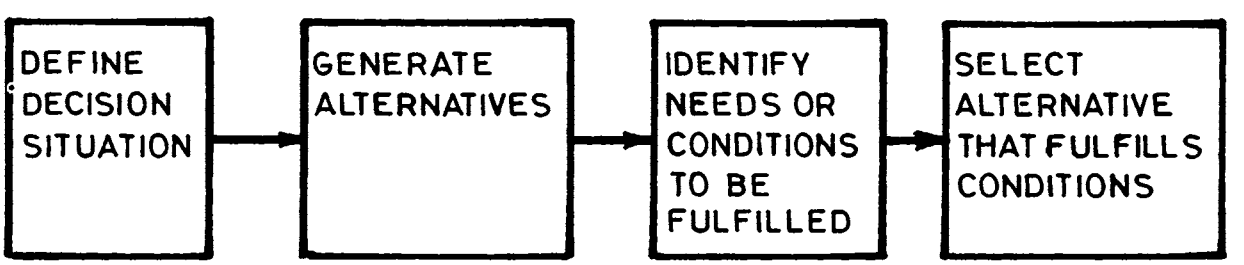
TREK ROUTE ONE - Okay for 20 days, hill climb, forest trek, river crossing, rest places, food arrangements, final camp. In addition beautiful hill country enroute.

TREK ROUTE TWO - Okay for 20 days, many hills and forests, rivers, rest places and food arrangements easily available, final camp place available. Additional advantage was that the trek was close to a main road and help was always available.

TREK ROUTE THREE - Okay for 20 days, hill climb, forest trek, river crossing, rest places, food and final camp arrangements. In addition good forests enroute.

C) The Coordinator got confused next. This was because all routes were equally attractive. It was obvious they would be since they were official trek routes offered by the Government to tourists who wanted to trek. All this analysis only confirmed that any one would do. So the Coordinator selected Trek Route Two by a Lottery.

Why did the whole exercise of selection end in a fiasco? It appeared as if our friend, the Coordinator, started off right by identifying the possible alternatives and then defining needs. May be it would be better if we sequence the steps used by the Coordinator in the decision making process.



When we analyse his approach, it was not bad at all. There appears to be some logic, some rationality, in his 'scheme of thinking'. The spots where the sequence did not work well were in identifying needs and conditions, and in selecting one alternative to fulfill needs and conditions. Let us go through the analysis a little more intently using a process which would be more suited to such selection decisions. In fact the name we attach to such a process is DECISION ANALYSIS.

DECISION STATEMENT - What is the decision to be made ? A single, precise statement providing an answer to this question itself is the Decision Statement.

"SELECTING THE BEST 20-DAY ADVENTURE TREK ROUTE'.
This was the precise decision the Coordinator was trying to make.

GENERATE ALTERNATIVES - These are options to choose from. Making a decision is choosing one alternative or option from a number of alternatives or options.

"In the Adventure Trek case, three options were available i.e. the three trek routes. In a way, the Government had provided these alternatives and the Coordinator accepted them. There could have been more generated but three appeared sufficient to choose from.

For many decisions, unlike the trekking example, alternatives would not be readily available.. They would have to be generated (using creative thinking sometimes). Too many alternatives or options would complicate matters. Very few options will leave little scope for choice. The issue is that a reasonable number must be generated (may be 3 to 5).

GENERATING (IDENTIFYING) NEEDS AND CONDITIONS TO BE FULFILLED

Other terms (in fact more appropriate terms) used for needs and conditions are CRITERIA, or OBJECTIVES. The word CRITERIA is preferable. What are CRITERIA ?

Criteria are requirements specified by the Decision Maker or demanded by the Decision Situation which must be satisfied by the selected option. All criteria or requirements are not of the same type or sort. Some of them are 'overriding'and must be satisfied in their entirety (or in totality). Those options that violate these overriding criteria are to be totally eliminated from further consideration. Such criteria are the 'essentials' or the MUSTS.

There is another category of criteria wherein relaxation of specifications is permissible. These criteria are the 'desirables' or the WANTS. Here the issue becomes one of relative degree or extent of satisfaction of criteria, which implies that options which score more in one WANT criterion are relatively more desirable than others only as far as that particular criterion is concerned.

Some more important points to remember are:

(a) Options have to be compared first against MUSTS. Those which are GO in all MUSTS are then compared against WANTS. Those which are NO GO in a MUST are immediately dropped.

(b) Comparing Options in the WANTS CRITERIA zone is done differently than in the MUSTS zone. Here all the WANTS matter. The alternatives are to be compared against the whole range of WANTS.

(c) Now all WANTS are not the same. Some of them are very significant specifications. Others are less important. Hence the comparison of alternatives is done on the basis of WEIGHTS (for each criteria) and SCORES (for each alternative relative to other alternatives in that criteria). The totals of the WEIGHTED SCORES enable comparison of alternatives. Scoring has always to be in positive terms.

Let us apply these principles to the Trek Case.

CRITERIA GENERATED	MUST	WANT
- 20 day tour		
- 17x20 km of Trekking Available		
- 6 Halt -Villages enroute		
- Food facilities in 6 villages		
- One camping point for final camp		
- At least one river crossing		
- At least one hill climb		
- At least 20 km of forest trek		
- Minimum river crossings		
- Minimum hill climbs		
- Minimum forest trek		
- Panoramic beauty enroute		
- No threat to human life		
- Opportunities for Leadership		
- Guest House Facilities		

CRITERIA		ALTERNATIVES		
		ROUTE ONE	ROUTE TWO	ROUTE THREE
MUSTS				
- 20 DAY TOUR		GO	GO	GO
- 17 DAYS X 20 KM PER DAY		GO	GO	GO
- 6 HALT VILLAGES ENROUTE		GO	GO	GO
- FOOD AVAILABLE IN 6 VILLAGES		GO	GO	GO
- FINAL CAMPING POINT		GO	GO	GO
- ATLEAST 1 RIVER CROSSING		GO	GO	GO
- ATLEAST 20 KM FOREST TREK		GO	GO	GO
- ATLEAST 1 HILL CLIMB		GO	GO	GO
- THREAT TO HUMAN LIFE		GO	GO	NO GO
WANTS	WT			
- Minimum River Crossings	6	8x6=48	3x6=18	
- Minimum Hill Climbs	6	8x6=48	2x6=12	
- Minimum Forest Trek	6	8x6=48	2x6=12	
- Panoramic Beauty Enroute	8	10x8=80	10x8=80	
- Opportunities for Leadership	10	7x10=70	9x10=90	
- Guest House Facilities	3	5x3=15	10x3=30	
TOTAL		309	242	

It is clear that the analysis indicates TREK ROUTE ONE as better. Please note :

(a) When criteria like 'minimum hill climbs' are used, the route with higher hill climbs obtains lesser marks.

(b) Also hill climbs, river crossings and forest treks appear in both MUSTS and WANTS. The idea is that a certain minimum experience was needed (absolutely essential) but too much of it was not wanted.

(c) The scores and weights and, consequently, weighted scores, were arrived at through judgement. This can be subjective (biased). To reduce subjectivity (bias) it is preferable to allot weights and scores for the WANTS in groups rather than individually.

(d) Unfortunately ROUTE THREE became NO GO in the last must Criteria - Threat to life - and was instantly dropped from the proceedings. Only ROUTES ONE and TWO were analysed further.

(e) The listing of criteria is a Creative Activity and could be better done through groups. Classification of Criteria into MUSTS and WANTS is an analytical exercise but, again, group work is recommended for it.

(f) With a bit of practice groups can develop the skill needed to apply this technique (DECISION ANALYSIS). It is highly suited to selection decisions.

One more step that needs to be done after the selection process has been made is in analysis of the ADVERSE CONSEQUENCES.

Let us consider some adverse consequences for the two trekking routes - ONE and TWO.

- Delays in Summoning Assistance - More for ONE
- Lack of Medical Facilities - More for ONE
- Need for Extra Guidance - More for ONE

It is obvious that though ROUTE ONE is better through WANTS CRITERIA it appears to possess more adverse consequences than ROUTE TWO. But if we are confident of preventing these adverse consequences then the problems and adversities reduce.

Prevention is possible through carrying First Aid kits and some patent medicines, and ensuring guides are available.

Hence, if adverse consequences can be prevented, ROUTE ONE is better. On the other hand if the adverse consequences had been very serious then the choice of ROUTE ONE would have posed problems even though its advantages were more (as indicated by WANTS). It is all a matter of judgement, after analysis.

A SECOND ILLUSTRATION - This is a Case Study. My friend tells me it happened, it is true. I never doubted it, or its authenticity. It was a fascinating anecdote for me.

The whole story starts with a group of students - Engineering students - who, as part of National Youth Service Scheme, have to make a compulsory contribution towards rural development during their student days. It is a Governmental directive. There were fifteen students in this group under a Youth Welfare Officer. Many such groups had contributed in the past. But the contributions had been routine and mundane like teaching the farmers about tractor maintenance, cleaning the village streets, may be a feeble and incomplete attempt at adult literacy. In general the students considered the Youth Service Scheme as a sort of 'ritual'. You do it because you are forced to do it. So finish it early. Take up a project which demands little from you and which will soon be forgotten.

But times had changed. The scheme had been reviewed and the demand from the authorities was that the projects should be challenging. Youth interest must not be allowed to fade.

The Youth Welfare Officer was new. He had considerable training and experience in both Youth Welfare and Community Development. He was definitely unhappy with past efforts and experiences. He was interested in generating a success story which would then be used to convince and attract future contribution. He chose this group for generating a successful effort. Actually he made it clear to the group right at the beginning that his expectations were beyond the normal and he expected the group to respond. The group, fortunately for the officer, agreed to collaborate probably more to relieve their boredom rather than for any other reason.

Village 'V' was chosen for their efforts. It was a dull village of 200 inhabitants located on a hillslope. A small rivulet skirted the village. Farming was the main occupation with crops grown in a few valleys near the village. There was electricity available but supply of electricity was restricted and power cuts or breakdowns were not infrequent. Another feature was that the school building was in ruins. It had never been a sturdy building and floods from the skirting rivulet had brought down part of the roof. Literacy was not a great problem. About 30% of the adults (about 40 people) needed it.

The youth group became aware of this information during their first few visits. 'What are the problems that need attention?' they asked the village chieftain. He outlined some:-

(a) Agricultural production was poor, the land was not rich and water for agriculture was scarce except during the monsoon.

(b) The primary school building had to be reconstructed.

(c) In fact all houses in the village needed strengthening since the annual flooding of the rivulet had weakened them. The floods swept right across the village at least four times every monsoon.

(d) Adult literacy,since it was high on Government priority.

(e) Non-Conventional sources of energy had been heard of but no device had reached the village yet.

Considering the interests of the youth group, and the priorities of the village, it was decided that one project would be selected from among four options. The four options were:

OPTION ONE - INSTALL SOLAR ENERGY DEVICES

OPTION TWO - RECONSTRUCT SCHOOL BUILDING

OPTION THREE - ALTERED CROP PATTERNS IN AGRICULTURE

OPTION FOUR - CONDUCTING ADULT LITERACY CLASSES

While the discussion was going on, one member of the group, a Civil Engineering Student suggested -"Why not build a dam across the rivulet ? This will help agriculture. Further the damage to buildings and the annual evacuation of villagers during floods will go. It will also provide plenty of water for domestic use'. It was agreed that this was a good suggestion. The village elders also liked it. It became the fifth option.

OPTION FIVE - DAM THE RIVULET AND USE STORED WATER FOR MULTIPLE PURPOSES.

With five options created, the criteria to compare them were formulated. The end product was as follows.

MUSTS CRITERIA	WANTS CRITERIA
(1) Acceptance by villagers	- Low investment
(2) Acceptance by Youth Group	- Scope for voluntary work by village residents
(3) Completion within one year	- Use of local resources
	- Increase in income
	- Generation of employment
	- Increase in literacy
	- Creation of shelter
	- Loss to village reduced
	- Village safety increased
	- External Agencies involved less.

There is no point in going through the whole analysis in this case. Only a few points must be made. Firstly all five passed the Musts Criteria. When the WANTS criteria were applied, OPTION FIVE outscored all the other options by

a considerable margin. But then adverse consequences were yet to be considered. It was decided that they will only be calculated for OPTION FIVE and extended to others only if necessary. Adverse consequences for option Five were:

- Design difficulties
- Procuring the six or seven bags of cement needed
- Regular visits to village by youth group needed at least during construction.

The adverse consequences were not considered serious. Designs were to be done by the Civil Engineering students with the help of a Professor (who agreed). The bags of cement were readily donated by a landlord living nearby. And a phased visit programme was drawn up by the group so that at least two or three members would be present near the dam site during construction.

Plans were made. Designs were formulated. In 9 months the dam and the other works were completed. You know the dam is still there.

A THIRD ILLUSTRATION

In this example a selection of one person is to be made from among three prospective candidates for Youth Exchange Mission. The Youth Officer, responsible for the selection mad4e this analysis, and the criteria and judgements are his and his alone. Another person may arrive at a different result.

This illustration has been provided to highlight the process of using MUSTS and WANTS. You will observe that no Adverse Consequences have been considered.

DECISION STATEMENT - Selecting the best available Youth Volunteer for a Youth Exchange Mission.

OPTIONS - YOUTH VOLUNTEERS - ONE, TWO AND THREE.

CRITERIA	WT	VOLUNTEERS ONE	TWO	THREE
MUSTS				
- Between 21 years and 30 years of age		GO	GO	GO
- Completed High School		GO	GO	GO
- Can speak and write English		GO	GO	GO
- Has no Police Record		GO	NO GO	GO
WANTS	WT			
- Higher Studies in the Liberal Arts	5	10x5=50		5x5=25
- Hobbies	7	4x7=28		10x7=70
- Awareness of culture of host country	6	9x6=54		3x6=18
- Adjust to different food habits	2	2x2=04		10x2=20
- Physical fitness	8	6x8=48		9x8=72
- Can speak fluently on Youth Services and Problems	9	10x9=90		5x9=45
- Will be spared by employer for mission	4	5x4=20		8x4=32
TOTAL		294		282

CANDIDATE ONE APPEARS MORE SUITED.

A FOURTH ILLUSTRATION

This illustration has been provided to explain in detail the application of the technique of Decision Analysis. Included within the analysis are the details of the scoring approaches in WANTS and ADVERSE CONSEQUENCES. It is quite possible that there may not be an agreement on the list of criteria generated, their classification, and even on the weights assigned to different criteria. However, the basic purpose is to illustrate details of the technique rather than to justify the selection of any of the alternatives given in the illustration.

DECISION STATEMENT - Selecting the type of people to be counselled by the 'Counselling Cell for Delinquent Youth' in the initial period of its existence.

OPTIONS

A - Cell for Boys only

B - Cell for Girls only

C - Cell for Boys and Girls combined

CRITERIA		OPTIONS A	OPTIONS B	OPTIONS C
MUSTS				
- Agreement of elders		GO	GO	GO
- Cost limit of establishing Cell		GO	GO	GO
- Availability of support from voluntary agencies		GO	GO	GO
- Acceptability of Counselling Cell		GO	GO	NO GO
WANTS	WTS			
- Number of youth to be counselled	7	8x7=56	7x7=49	
- Percentage of delinquency	8	9x8=72	6x8=48	
- Expertise available for counselling	9	5x9=45	7x9=63	
- Expansion of youth activities	3	3x3=9	3x3=9	
- Medical facilities available	6	4x6=24	4x6=24	
- Media available	4	3x4=12	3x4=12	
- Other resources	5	4x5=20	3x5=15	
TOTAL		+238	+220	

ADVERSE CONSEQUENCES	SERIOUSNESS AND IMPACT	OPTIONS A	OPTIONS B
- Interference from interest groups	8	0.2X8=1.6	0.4X8=3.2
- Credibility of counsellor	7	0.3x7=2.1	0.2x7=1.4
- Inadequate time available for counselling	6	0.1x6=0.6	0.3x6=1.8
- Interference by other voluntary agencies	3	0.2x3=0.6	0.3x3=0.9
	TOTAL	- 4.9	-7.3

FINAL POSITION

	OPTIONS A	OPTIONS B
WANTS	+238	+220
ADVERSE CONSEQUENCES	-4.9	-7.3

OPTION 'A' APPEARS MORE SUITED

APPLICATIONS

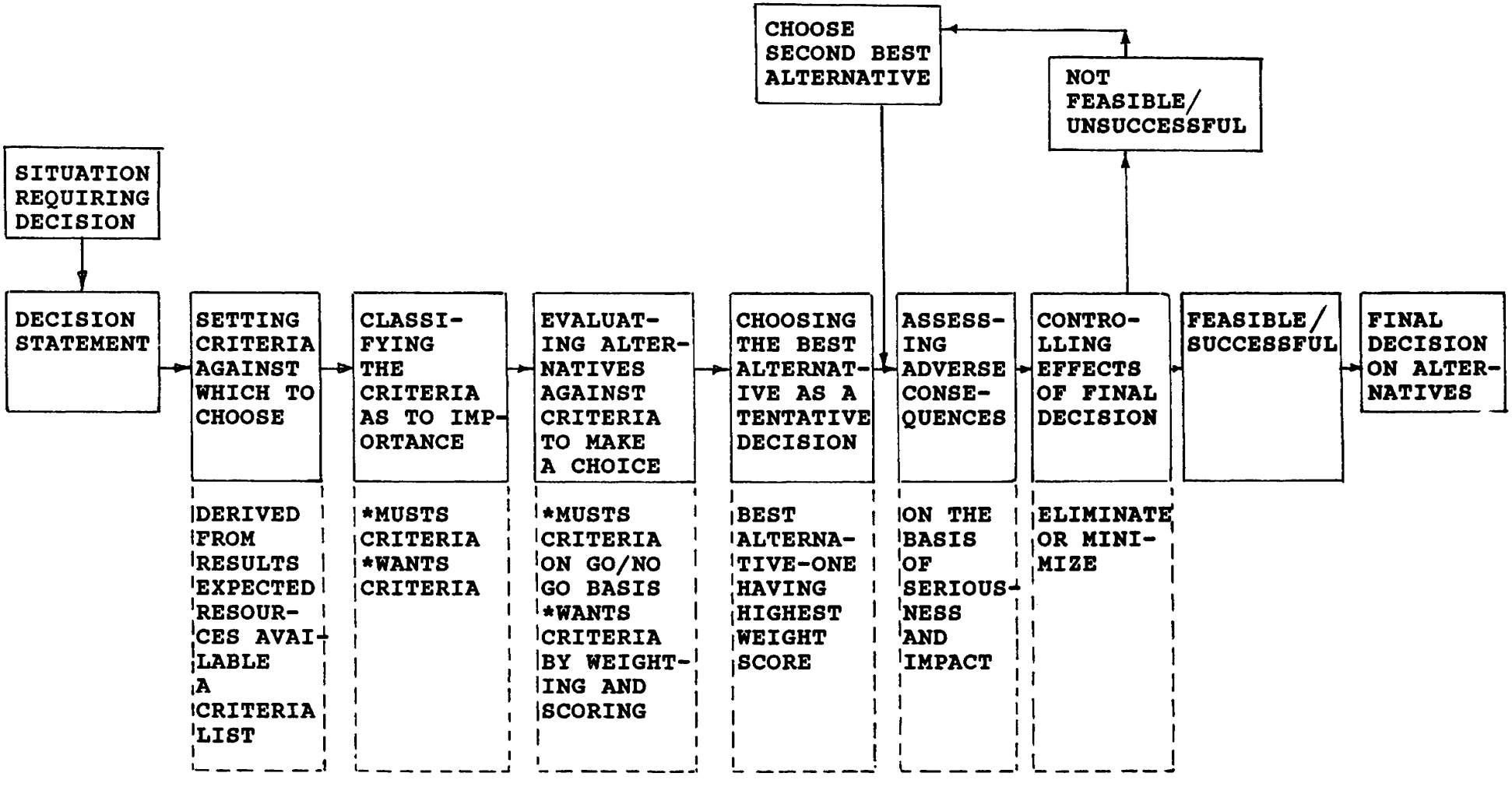
Decision Analysis can be applied to a wide variety of selection situations arising in projects as well as in small activities. When selections of people, locations, equipment, projects, and agencies are to be made Decision Analysis can prove helpful. However, when detailed strategies are to be identified and formulated the technique may not help much.

One great advantage that Decision Analysis appears to provide is the detail which gets generated in the use of the technique. These details could be used for justifying the selection in a proposal on the project. In fact there are certain similarities between Decision Analysis and the approach of Cost Benefit Analysis (Chapter - 5).

One point to keep in mind is that the use of the technique requires detailed information. If information is not available then some assumptions will have to be made. This may not be very accurate and may emerge out of bias and personal views. Group work will tend to reduce these difficulties as it would make the judgements involved more 'objective' than 'subjective'. The Chapter on Working in Groups (Chapter - 9) can be helpful to the process.

In case information is not available it is very easy to conclude that the technique is not applicable. This is what precisely should not happen. The rationality behind the technique cannot be substituted by selection through 'rough guesses' or by 'intuition'. Using the technique inspite of lack of information is better than not using the technique at all. A diagram indicating the model appears in the next page.

MODEL FOR DECISION ANALYSIS



ASSIGNMENT

A Youth Festival is to occur within the next three months. It has to be organised at one out of four youth clubs in the area.

Participants shall be divided in two Groups A and B. Group 'A' will generate information to be used by Group 'B' to make a selection and vice versa. This information should be adequate to apply the technique of Decision Analysis in making the selection. After Groups A and B have made their selections they will justify them to each other (In case some information is to be assumed the groups may do so during their analysis).

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CHAPTER-5

COST BENEFIT ANALYSIS

* General and Specific Objectives
* Trainer's Notes and Guidelines
* Self-Learning Package for the Trainees and Assignments

GENERAL OBJECTIVE

The participant will apply Cost Benefit Analysis to youth projects.

SPECIFIC OBJECTIVES

The participant will : -

a) Become familiar with the concepts involved in Cost Benefit Analysis.

b) Identify Costs and Benefits involved in familiar projects.

c) List indicators for intangible Costs/Benefits.

d) Determine Benefit-Cost Ratio for the familiar projects.

TRAINER'S NOTES AND GUIDELINES

COST BENEFIT ANALYSIS

THEME OF THE CHAPTER

A significant analysis that should be a component of all project proposals, namely Cost Benefit Analysis is the theme of this Chapter. A satisfactory analysis in which all Costs and Benefits are considered and a Benefit - Cost Ratio computed provides the following advantages to the project team managing the project.

- Clarity to the project Costs and Benefits
- Highlighting of the attractiveness of the project for funding agencies, beneficiaries and youth volunteers
- Basis for evaluation of project implementation

PREREQUISITES

(i) The participant should have gone through Chapter - 2 on Planning and Chapter - 3 on Network Analysis.

(ii) The participant should have been involved intimately in several projects so that he is aware of the nature of costs and benefits in welfare projects.

(iii) The Tutor should have managed a number of projects involving justification of expenditures.

PREPARATORY ACTIVITIES FOR TUTOR

(i) The Tutor should have gone through the Chapter intensively and attempted the assignments completely.

(ii) It is desirable that the Tutor should have studied References 1 and 5.

INSTRUCTIONAL GUIDELINES

(a) The Chapter is in the Self - Learning mode and includes 4 illustrations and 2 assignments.

(b) The schedule of activities for this Chapter estimated to require 4 1/2 hours, is given below.

Sl. No.	Activity	Time in hours
1.	Introduction to the Chapter by the Tutor using OHP Transparencies 5.1 and 5.2	1/2
2.	Learning of the Chapter by participants upto Assignment - Two	2
3.	Assignment - Two under Tutors's guidance along with Report Back and Tutor's summarisation	2

(c) The Tutor will introduce the Cost Benefit Analysis technique using O.H.P Transparencies 5.1 and 5.2 and providing examples to clarify the concepts of Willingness to Pay, Benefit - Cost Ratio and Sources of Intangibles.

(d) During the learning of the Chapter by the participants, the Tutor will offer assistance in reinforcing the understanding of concepts.

(e) The Tutor will encourage the participants to think creatively for identifying specifically intangible Costs and Benefits and for providing justifications for the assumptions made in the analyses.

(f) Two OHP transparencies are provided for enabling the Tutor to introduce the Chapter.

5.1 Overview of CBA Analysis.

5.2 Steps in quantification of intangibles.

SUGGESTED RESPONSES TO ASSIGNMENTS

Assignment-One:

The Tutor will examine the responses of the learner groups based on the information provided in the Chapter and on his own experiences with youth and community development programmes and offer appropriate feedback.

Assignment - Two :

The Tutor will organise the group work and the 'presentation' session effectively to ensure a high level of learner participation. The participants may be encouraged to 'stretch their imagination' and to provide justifications for the assumptions they may have to make in arriving at a Benefit - Cost Ratio. It has to be emphasised that though this ratio is 'subjective', it has high utility for justifying the project as a whole.

REFERENCES

1. "Guidelines for Project Evaluation" - United Nations , Oxford and IBH, Delhi, 1972.
2. "Management Handbook for Public Administrators", Edited by Sutherland, Van Nostrand Reinhold Company, New York, 1978.
3. Instructional Package prepared by Educational Management Centre, TTTI, Bhopal for use in Departments of the State Government of Madhya Pradesh, India, 1988.
4. "Cost Benefit Analysis" By E.J. Mishra, George Allen and Unwin, 1975.
5. "Youth Work Service - No. 5" By Banmala, Viswa Yuva Kendra Publication, Delhi, India, 1976.

SELF-LEARNING PACKAGE
AND
TRAINEE'S ASSIGNMENTS

COST BENEFIT ANALYSIS

Many worthwhile and feasible community welfare schemes can be proposed. However, all of them cannot be simultaneously taken up, mainly because of non-availability of adequate resources. The most important resource is funds and collecting or obtaining it in adequate quantities from governmental and/or non governmental sources generally poses problems and difficulties. And funding agencies may have to select schemes to support from amongst many which have been proposed. Thus a youth worker who has a necessary and useful scheme has to make it attractive enough to the funding agencies to be assured of adequate funds. Even when a campaign for funds from donors is mounted, the utility of the scheme has to be made clear to the donors. One technique that will greatly assist the youth worker in projecting the utility of the scheme and making the scheme attractive is called Cost Benefit Analysis (CBA).

Every scheme will involve expenditures (called Costs) and positive outcomes (called Benefits) resulting from implementation of the scheme. One criterion for judging the feasibility of a project is the ratio of Benefits, expressed in monetary units to the Costs which would normally be in

monetary units. This is called the Benefit-Cost Ratio. On the face of it, a scheme is viable only if the Benefit - Cost (B/C) ratio is larger than one. This may not always be the case, as will be discussed later in this Chapter.

A youth worker may generate ideas for several schemes. Then it is desirable that he carries out Cost Benefit Analysis for all the schemes to determine what scheme he must undertake and HOW BEST HE CAN ALLOCATE RESOURCES AT HIS DISPOSAL FOR MAXIMUM GOOD OF THE COMMUNITY.

Most of the costs involved in the implementation of schemes or projects are tangible or measurable, i.e. they can be expressed in monetary units. However, a few may not be easily converted into monetary units. They are called "intangible costs".

Benefits may be physical outputs (commodities or products) which are consumed by people OR services which people make use of OR intangible Benefits which accrue to the people. A particular project may result in one or more of these Benefits.

ILLUSTRATION - ONE :

Let us consider the project, "YOUTH EXCHANGE PROGRAMME". Some of the Costs and Benefits are as follows.

COST :

1. Travel, Internal and External
2. Boarding and Lodging
3. Preparation
4. Books, Stationery, etc.
5. Equipment
6. Separation from family, work and normal activities
7. Adjustment to new cultures.

Item Nos 1 to 5 are tangible costs and 6 and 7 are intangible costs.

BENEFITS :

1. Adding to life and work experience by living and working in another community/ country
2. Awareness of youth welfare programmes in other communities/countries
3. Acquisition of new knowledge and skills
4. Sharing of experiences of youth welfare projects
5. Greater appreciation of one's own country.

All the above Benefits are intangibles.

ILLUSTRATION - TWO:

Some of the Costs and Benefits of a project, "TREKKING ADVENTURE" are given below.

COSTS	BENEFITS
TANGIBLES:	TANGIBLES:
1. Purchasing/Hiring equipment	1. Promotion to 'trekking' business
2. Boarding/Lodging	
3. Travel	
INTANGIBLES:	INTANGIBLES:
1. Organisation	1. Togetherness
2. Opportunity cost due to loss of time in regular activities and other resources.	2. Oneness with Nature
	3. Relaxation from normal activities
	4. Trained/experienced trekkers.

The illustrations provided indicate that a majority of benefits that result from youth projects are intangibles. However, it is useful to identify some tangible benefits from such projects.

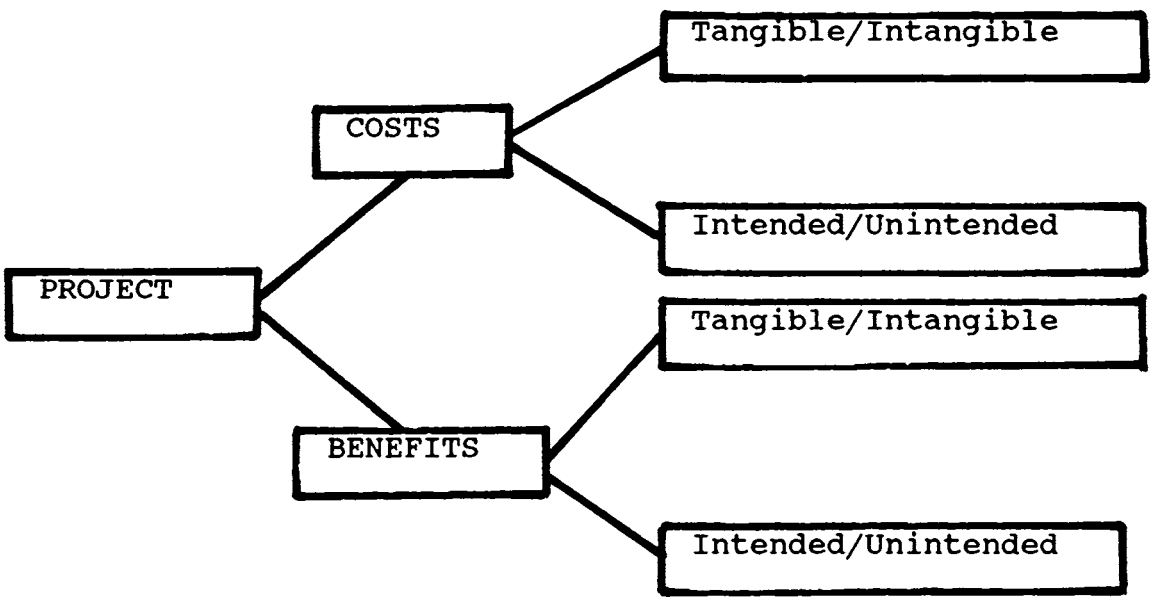
In an entrepreneurship development project, one tangible benefit is the estimated earnings of new entrepreneurs.

In the project on promotion of local resources, the estimated savings in not purchasing non-local goods and materials is a tangible benefit.

While identifying intangibles, it is necessary for the youth worker to think in a broad and diversified manner.

The initial viability of a project or scheme depends on certain Costs and Benefits associated with it. These are called 'INTENDED' Costs and Benefits. However, a more detailed analysis indicates that there will be other Costs and Benefits which have not been initially considered and which are by-products of the project implementation. These are called UNINTENDED Costs or Benefits. For example, in illustration - one, 'Adjustment to new cultures' is an unintended Cost and 'Greater appreciation of one's own country' could be an unintended Benefit.

Thus, the effects of a project can be indicated in the following diagram.



ASSIGNMENT - ONE

In groups of 5 to 7, identify and list the Costs and Benefits for any one of the following projects.

Further, classify them into tangibles/intangibles and intended/unintended effects.

PROJECTS

1. ARRANGING SKILLS TRAINING FOR VILLAGE YOUTH.
2. ORGANISING A TRAFFIC SAFETY WEEK.
3. ORGANISING A TRAINING PROGRAMME FOR YOUTH WORKERS ON PROJECT PLANNING AND MANAGEMENT.
4. ORGANISING A RALLY.
5. SETTING UP A GUIDANCE AND COUNSELLING CENTRE FOR DELINQUENT YOUTH.
6. ORGANISING A SPORTS MEET FOR A CLUSTER OF FIVE COMMUNITIES.

After finishing the exercise, check with the Tutor.

WILLINGNESS TO PAY

Having identified the effects of a project in the form of Costs and Benefits, it will be necessary to convert them into monetary units. The tangibles (costs and benefits) do not present difficulties as measurement units will be clear, the unit rates prevalent at the time of analysis known and also the estimated quantities. However, the prevalent unit rates may have to be modified in a few special cases, when the products, i.e. outcomes of the project are consumed at a time much later than the time at which Cost Benefit Analysis is made. Then an estimate of the possible unit rate may have to be made based on data available and on present value of the unit rate in the analysis.

ILLUSTRATION - THREE: Considering social forestry, though trees may be planted today, they will bear fruit may be only five years later. Hence the value of benefits (bearing fruit) will depend upon the value placed on them by the beneficiaries at that time i.e five years later.

Since the product is consumed by people, the unit rate is governed by what they are prepared to pay for the product. This is termed WILLINGNESS TO PAY. The factors that affect the willingness to pay are:

- Features of the product/service/intangible benefit
- Age of the purchaser

- Economic status of the purchaser/beneficiary group
- Time when the benefit is made available to the consumer
- Alternatives available to the consumer
- Unanticipated events.

Thus the willingness to pay is not an absolute value but a relative one and depends partially on data and partially on subjective assumptions. For example :-

In a project, "SKILLS TRAINING FOR ENTREPRENEURSHIP", estimates of willingness to pay by a trainee will depend on his perception of how easily he can obtain a job (and consequently earn a regular income).

In a project, "INOCULATION CAMPAIGN FOR A COMMUNITY", the willingness to utilise (i.e consume) the service may be dependent on several factors. For example, if a family has suffered in the past because of the disease, a higher willingness to pay should occur.

'Willingness to pay' plays a crucial role in the quantification of intangibles, i.e. in the fixation of unit rate for either Costs or Benefits. Since this may depend on assumptions, it is 'subjective'. In the illustration that is presented later in the Chapter, the unit rates assumed are the willingness to pay. The consumers of the intangible benefits may be the youth group itself or the beneficiaries or the society at large.

The quantification of benefits from intangibles as compared to tangibles like products is more complex. The steps involved are shown in the diagram below.

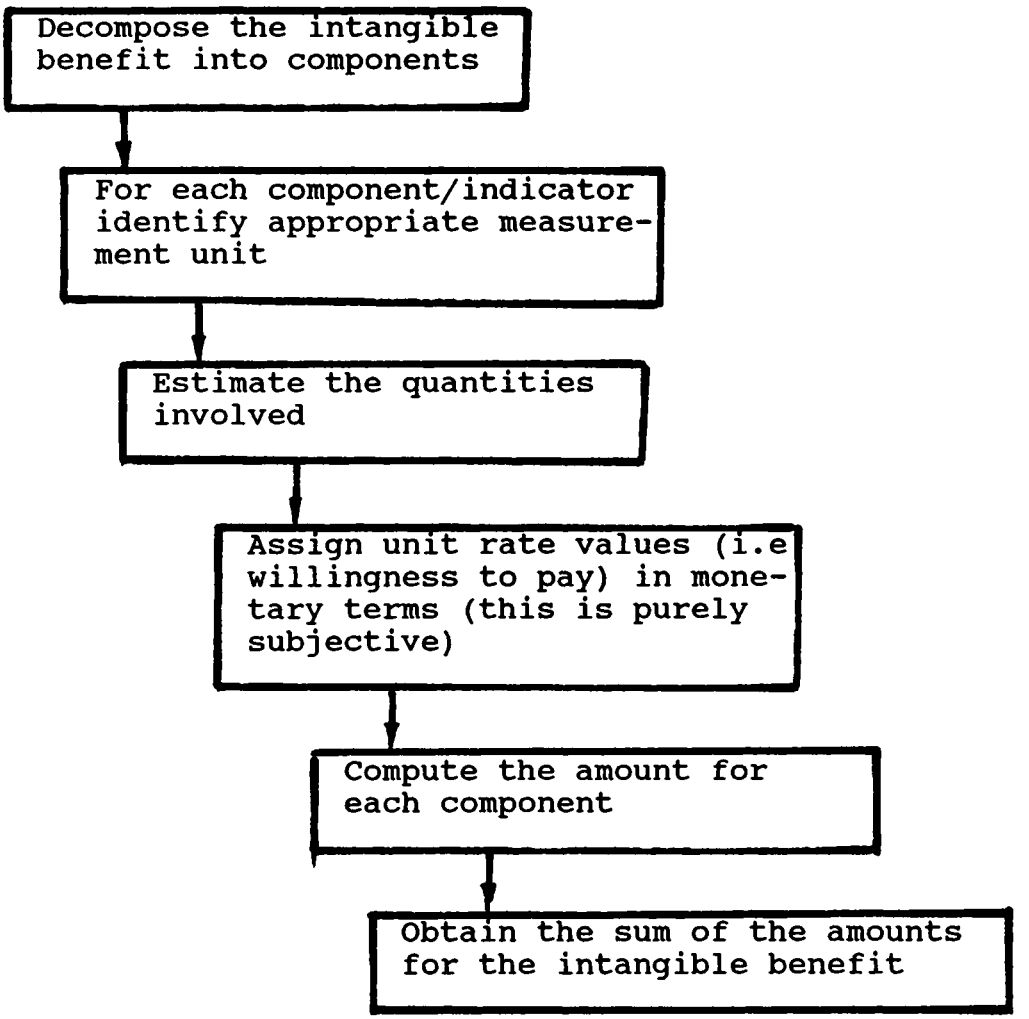


ILLUSTRATION - FOUR:

Let us consider the Benefits from an 'Inoculation Campaign". The computation of Benefits are given in the table below. It is to be noted that the unit rate is a subjective decision of the youth worker in charge of the campaign.

Sl. No.	Indicator	Measurement Unit	Qty	Unit Rate	Amount
1.	Children inoculated	Number of children	60	10	600
2.	Removal of fear or concern of being affected by disease	Number of families	40	25	1000
3.	Publicity for activities of youth centre resulting from campaign	Lumpsum	-	-	1000
4.	Satisfaction of doing good to community	No. of youth involved	10	100	1000
5.	Savings from future medical expenses	Probable number of affected children	5	500	2500
				TOTAL AMOUNT =	6100

The possible measurement units in quantification of Benefits are :

a) Length unit, i.e meters or kilometers

example : length of good road made available to a community due to a 'Road Building' Project

b) Area unit, i.e square meter or square kilometers

example : area of slums cleared in a 'slum clearance' project

c) Volume unit, i.e cubic meters

example : volume of garbage/dirt removed in a 'cleaning the community surroundings' project

d) Time unit, i.e minutes, hours, days, etc

example : Time saved in the use of appropriate technology devices in a community
Time of utilisation of the facilities of a youth club.

e) Weight Unit : Kilogram

example : The quantity of local resources utilised as a consequence of a project implementation

f) Numbers :

example : The number of youth who become entrepreneurs as a result of a skills training programme

g) Lumpsum : Used where it is not possible to identify an appropriate measurement unit and the youth worker making a CBA has to assign an amount to the component/indicator.

Sometimes combination of units may be desirable like :

* man days (product of number of youth volunteers and average days of contribution to project)
* area hours (product of area of an adult literacy class and average hours of use)

Quantities involved in the quantification of Benefits are estimated quantities and are part of the detailed plans prepared for the project. These may require as prerequisites certain data collection/information.

The specification of the unit rates is the most difficult part of the quantification of the process and therefore is better determined by a group, rather than by an individual youth worker.

SOURCES OF INTANGIBLE BENEFITS

The benefits from a project, particularly related to intangible benefits arise from the following sources.

a) Physical outputs/consumables :

e.g. Handicrafts, potable water, enterprise goods, etc.

b) Services consumed by beneficiaries :

e.g. healthcare, guidance and counselling on agricultural practices, employment opportunities, obtaining bank loans, etc.

c) Physical satisfaction of (i) youth workers/volunteers

(ii) beneficiaries of youth projects

d) Mental satisfaction of youth and beneficiaries

e) Publicity

f) Health and childcare

g) More congenial surroundings

h) Interpersonal relationships and resources sharing

i) Better future

j) Acquisition of knowledge and skills

k) Better awareness of self and environment

l) Keeping in tune with the times

m) Preservation of tradition and culture

n) Appreciation of nature

o) Team working

p) Local resources (goods, materials) utilisation

q) Leadership development

r) Promotion of national and ethnic integration

s) Better time utilisation

t) Self Reliance

u) Preparation to cope with disasters, crises

v) Appreciation for art, music, culture, etc.

w) Liaison with government and other agencies

x) Safety and security

y) Attitude change

For a particular project, the relevant sources of benefits can be identified and the monetary value of the benefits computed.

The costs involved for a project can also be computed. If intangible costs are present, they have to be converted into monetary terms in a manner similar to that of conversion of intangible benefits.

Finally, when the benefits of a project are divided by costs, we obtain Benefit - Cost Ratio. For example, if the Benefits of a project are 6000 monetary units and the costs are 5000 units, then the Benefit - Cost Ratio for the project is 6000/5000 = 1.2.

While for industrial and technological projects, it is necessary for this ratio to be always greater than one, for welfare projects, this may not be treated as the limiting constraint. However, amongst several feasible projects, the one having the largest Benefit - Cost Ratio may be chosen.

ASSIGNMENT - TWO

In groups of 5 to 7, carry out a Cost Benefit Analysis for the project chosen by you in ASSIGNMENT-ONE and arrive at a Benefit - Cost Ratio. The group spokesman will present the group consensus providing justifications for assumptions and unit rates to the whole group of participants and seek their suggestions for improving the quality of the analysis.

*****

CHAPTER-6

POTENTIAL PROBLEM ANALYSIS

* General and Specific Objectives
* Trainer's Notes and Guidelines
* Self-Learning Package for the Trainees and Assignments

GENERAL OBJECTIVE

The participant will apply Potential Problem Analysis to familiar projects and their activities.

SPECIFIC OBJECTIVES

The participant will -

(a) Become familiar with the concept of Potential Problem Analysis (PPA).

(b) Describe the steps in PPA and apply them to a given Potential Problem.

(c) For a set of activities in a project :

- identify Potential Problems
- segregate the crucial Potential Problems
- apply PPA to these crucial problems
- indicate how preventive and contingent actions for Potential Problems can be integrated with the plan.

TRAINER'S NOTES AND GUIDELINES

POTENTIAL PROBLEM ANALYSIS (PPA)

THEME OF THE CHAPTER

PPA is a step in Planning, normally overlooked or avoided, but which adds a very high value and worth to the plan.

PPA's main purposes are-

(a) To bridge Planning and Implementation.

(b) To reduce deviations of Implementation from Plan.

(c) To reduce the uncertainty in outcomes of projects.

PREREQUISITES

(a) This Chapter has to be taken up only after completion of Chapter - 2 on Planning, Chapter - 3 on Network Analysis and Chapter -4 on Decision Analysis.

(b) The Tutor should have sufficient expertise in problem solving, grading problems on the basis of frequency and seriousness of occurrence.

(c) Additional expertise is required by the Tutor in creatively designing a variety of remedial actions.

(d) The participants should have experience in coping with problems in projects.

PREPARATORY ACTIVITIES FOR TUTOR

(a) The Tutor should have thoroughly gone through the learning experiences of the Chapter, including assignments.

(b) The Tutor should have attended certain training programmes on problem solving.

INSTRUCTIONAL GUIDELINES

(a) The Chapter has been presented in such a form that the learner can manage to learn by himself through understanding illustrations and attempting assignments.

(b) The suggested time for learning this Chapter is 4 1/2 hours. The suggested break-up is an follows:

Sl. No		Activities	Time in hours
1	-	The whole learning package except Assignment-5	2 1/2 hours
2	-	Use of OHP transparencies 6.1, 6.2 and 6.3 for summarising the Chapter.	1/2 hour
		Use of content update for enabling participants to identify different potential problems and their categories in projects.	1 1/2 hours
3.	-	Assignment - 5	1 1/2 ours

(c) The introduction to this Chapter may be brief and limited to the links this Chapter has with chapters 2, 3 and 4, as elaborated below.

Chapter - 2: (PLANNING)	>	PPA should be done after identification of resources and support needs
	>	Potential problems emerge from the activity set for the project
Chapter - 3: (NETWORK ANALYSIS)	>	The project decomposition into a set of activities is key for any PPA.
Chapter - 4: (DECISION ANALYSIS)	>	The adverse consequences analysis is in fact a PPA.

(d) (i) While the participants are learning at their own pace, the Tutor will be sensitive to their learning needs and provide assistance as and when needed.

(ii) The Tutor has to ensure that the participants will be able to generate creatively, preventive and contingent actions for causes of potential problems.

(e) (i) The Tutor should see to it that not more than two groups work on a project listed in Assignment - Five. Therefore, the Tutor may add to the list, other projects, if needed.

(ii) The Tutor may ensure the use of content update on 'Potential Barriers in a Project' by the participants in attempting Assignment - Five. Further, guidance may be provided by the Tutor depending on needs.

(iii) In the Report - Back session the Tutor will promote interaction and comment on the analyses presented.

(iv) The Tutor will give samples of potential problems and the categories they belong to immediately after distributing content update.

(f) The Tutor will use the OHP transparencies 6.1, 6.2 and 6.3 as per the schedule indicated earlier.

SUGGESTED RESPONSES TO ASSIGNMENTS

ASSIGNMENT - ONE:

This is an open-ended assignment and could elicit a wide spectrum of responses, most of which could be appropriate.

SAMPLES - (a) Mode of transport available could cause delays.

(b) Not enough travel time provided for.

(c) Queue at ticket counter.

(d) Cinema hall is full.

(e) Appropriate seats not available.

ASSIGNMENT - TWO:

This again is open-ended and the Tutor must be prepared for a variety of responses. Three sample responses are given below.

(A) Potential problems

- The location of your residence may be unfamiliar to some youth volunteers
- The volunteers may have other engagements.
- One late comer could delay the meeting.

For Justification Tutors will look for rational reasoning.

(B) This depends on (A). What is suggested is that the Tutor demand a sense of specificity from the participants when they amplify WHAT, WHERE, WHEN and TO WHAT EXTENT.

ASSIGNMENT - THREE:

This is to be done in groups. Tutor will please ensure that there is ample participation of members in the discussion. Responses are likely to vary from group to group depending on conditions assumed by the groups.

ASSIGNMENT - FOUR:

Again this is a group assignment. Tutor will check for rationality in approach and use of the steps worked out in PPA.

ASSIGNMENT - FIVE:

The Tutor will give his observations on the presentations of the various groups. Since the projects selected by groups will be diverse and the assumptions will be varying, it is difficult to suggest responses. The Tutor may ensure that the PPA model is adhered to and the application is logical.

REFERENCES

1. 'The Rational Manager' by C.H.Kepner and B.B., Tregoe, McGraw Hill, New York 1965
2. Instructional Package prepared by Education Management Centre, TTTI, Bhopal for use in departments of the State Government of Madhya Pradesh, India, 1988.
3. 'Solving Educational Problems' by Havelock and Huberman, Praeger Publications, New York, 1978.
4. 'Youth Mobilisation for Development in Asian Settings' by UNESCO, 1978

CONTENT UPDATE - I

POTENTIAL BARRIERS IN THE COURSE OF A PROJECT

Difficulties and barriers manifest themselves normally as delays, conflicts, shortages or speaking generally, problems. Many of the barriers can be predicted well in advance. Either they can be overcome or persons can get well prepared to face them in the course of a project.

These difficulties can be categorised for simplifying assimilation and understanding.

A. GEOGRAPHIC

a) Long distance between places.

b) Slow transportation or difficult access.

c) Isolation from other establishments or related agencies or support organisations.

d) Difficulty in contacting users or persons related to the project.

e) Climatic conditions, persistent difficulties in movement, work and contact.

B. HISTORICAL

a) Frequent changes in leadership.

b) Past project management vastly different than proposed system.

c) Previous experience with support agencies tends to create suspicion.

d) Administrative elite opposed to project.

e) Structural disorder due to poor leadership, teams etc. in the past.

C. SOCIAL AND CULTURAL

a) Conflict among ideologies about project (its nature and need, its environmental impact).

b) Poor organisational climate for sharing ideas openly.

c) Inadequate social harmony and good relations among project team members.

d) Significant cultural differences in attitudes and values.

e) Poor interest and, consequently, poor attendance during project meetings.

D. POLITICAL

a) Disputes among political groups or factions.

b) Objections to project by special interest groups.

c) Lack of support, interest and understanding by political leaders.

d) Certain important political leaders opposed to project.

e) Poor communication among political leaders.

f) Managers, administrators and workers do not understand political realities.

g) Political opposition to outside technical assistance.

h) Change in government and introduction of new policies.

i) Political pressure for early results, expectation of accomplishment in too short a time.

j) Fear of political and power conflicts due to project.

E. ECONOMIC

a) Inadequate financial support in terms of timeliness and quantity from internal and associated external sources.

b) Inflation and cost increases.

c) Under - estimation of costs.

d) Mismanagement of funds.

e) Significant delays in delivery of funds.

f) Sudden alteration in economic conditions and policies, rapid change in priorities for funding.

g) Low priority for project.

h) Economic realities not understood in advance, not prepared for in advance by the managers of the project.

i) Poor economic advantage (from cost-effectiveness/ cost benefit studies).

F. PROCEDURAL

a) Formal authority to begin project was delayed.

b) There was a lack of clear lines of authority.

c) There was no clear structure for decision making.

d) There was too much decentralization of decision making to different groups.

e) There was too much centralization of decision making.

f) There was not enough co-ordination of people in different roles.

g) There was a lack of common understanding of project objectives.

h) There was a lack of agreement on project objectives.

i) Outside technical assistance was faulty.

j) Materials for the project were of poor quality.

k) Materials for the project were of insufficient quantity.

l) Materials for the project were not ready or not delivered on time.

m) There was a lack of skilled manpower to implement the project as planned.

n) The departure and replacement (turn-over) of key persons in the project happened too quickly to preserve continuity.

o) The project was implemented too quickly.

p) The project was implemented too slowly.

q) There were too many rules and regulations.

SELF-LEARNING PACKAGE
AND
TRAINEE'S ASSIGNMENTS

POTENTIAL PROBLEM ANALYSIS

If a youth worker can act before a problem develops rather than after the problem surfaces, he will find it more rewarding. This could avoid trouble and prevent problems from occurring, or minimise their undesirable effects. The technique used for making this happen is called Potential Problem Analysis. The basis here is the well known proverb - "An ounce of prevention is worth a pound of cure". In other words it requires a certain amount of time and attention to tackle tomorrow's problems right today so that they do not assume undesirable or disastrous proportions.

While project leaders and managers may not be using this technique regularly in practice, there are instances of the use and application of this technique in certain spheres associated with day to day life. For example -

a) Parents get their children inoculated to prevent certain diseases.

b) A person contemplating a long journey by car takes some precautionary measures like checking tyre pressure, quantity of fuel, etc.

One reason for managers neglecting PPA in their official work may be the normal human tendency to overlook the 'critical consequence' of an action. The question 'what could go wrong?' is rarely asked or answered because of the faith placed in plans. Everyone appears convinced that a plan is eminently workable. What could go wrong is rarely included as a step in planning. And yet people who implement always mention that things have gone wrong, that things will continue to go wrong, and things will always go wrong.

There is always a readiness to consider that only when problems occur they should be tackled. In other words opportunities for prevention are missed out and troubles are permitted to result. Potential problems (problems not prevented) can wreck, jeopardise actions however well conceived they are. The utility of PPA lies in preventing or reducing such problems and outcomes.

Normally potential problems can be anticipated by just thinking on a project. But this procedure is arbitrary and lacks focus. On the other hand, a more systematic approach would be to consider the component activities in the activity set (Refer chapter -2 on Planning and chapter -3 on Network Analysis) as the primary source of potential problems. In this case, the potential problems that may arise in the performance of each activity can be anticipated.

ASSIGNMENT - ONE

Identify and write below Potential Problems (at least three for 'GOING TO A MOVIE THEATRE TO SEE A FILM'.

1. ---

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2. ---

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3. ---

(Check with your Tutor)

Potential Problem Analysis has to be done in a systematic manner. Seven questions lead to PPA -

1. WHAT COULD GO WRONG ?

A plan is really a series of 'shoulds' or 'performance points' at which some things planned are supposed to occur. After making the plan a manager must go over this plan and think of problems that might crop up. He can find plenty of potential problems if he looks carefully at those elements where trouble starts so often.

Sources of Potential Problems are -

(a) When something new, complex or unfamiliar is tried.
Steps to 'reduce Drug Addiction' or 'to make a group of Adults literate' are complex projects and would contain a high proportion of Potential Problems.

(b) When deadlines are tight.
Given one week's time to hold a sports meet for a cluster of communities can prove to be a tight deadline and will present numerous Potential Problems.

(c) When an action is critical or has effects on other actions.

Acceptance of a scheme by beneficiaries is critical to the success of various activities in the scheme. If acceptance is low, Potential Problems will surely arise.

(d) When actions involve more than one person, function, or department.

A self employment generation scheme may involve numerous government and non government agencies. The more the agencies the more the likelihood of Potential Problems.

(e) When responsibilities are difficult to assign, or lie outside the manager's area.

Organising a blood donation camp involves a number of functions, some of which lie outside the youth worker's skills and knowledge areas. This would lead to many Potential Problems.

2. WHAT, SPECIFICALLY, IS EACH PROBLEM ?

For each Potential Problem it is important to find out

* What is it ?
* Where will it occur ?
* When will it occur ?
* To what extent or degree ?

ASSIGNMENT - TWO

You are a Youth Worker. You have fixed a project planning meeting of eight youth volunteers at 7.30 pm tomorrow at your residence.

A. Identify three Potential Problems that may arise in the activity (Project planning meeting).

(1) ----------

---

(2) ----------

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(3) ----------

B. For any one of the Potential Problems identified by you in A, describe the problem as follows -

WHAT IS THE PROBLEM ?

WHERE WILL THE PROBLEM OCCUR ?

WHEN IS IT LIKELY TO OCCUR ?

TO WHAT EXTENT ?

---

3. HOW RISKY IS EACH PROBLEM ?

A manager cannot cope or bother with every Potential Problem. He must eliminate those with small risks and concentrate on those which are more threatening to his plan.

To prioritise between Potential Problems two questions or criteria become necessary :

- How serious will it be if it happens ?
- How probable is it that it might happen ?

The adverse effects of a Potential Problem on plans can be considered to be the product of SERIOUSNESS and PROBABILITY OF OCCURRENCE.

Imagine a project or set of activities, for which ten Potential Problems have been identified. For each of them, seriousness and probability have been estimated. Their products i.e. adverse effects, have been computed.

It is the usual practice to assign seriousness values from 1 to 10 and probability values from 1 to 100. For example, in case a Potential Problem has a seriousness weight of 5 and probability of occurrence of 40% then the adverse effect would have a value of 5x40=200.

Diagram A shows the adverse effects of each one of the ten Potential Problems and these effects have been rearranged in the order of decreasing effect in Diagram B. Further action is also suggested in Diagram B.

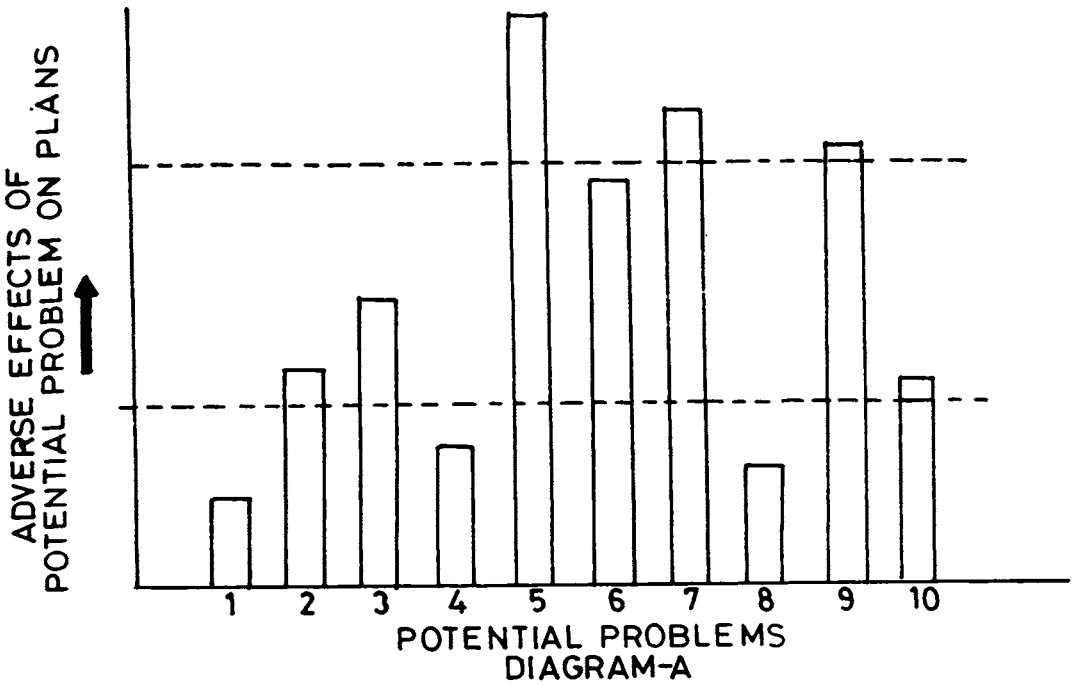

DIAGRAM-A

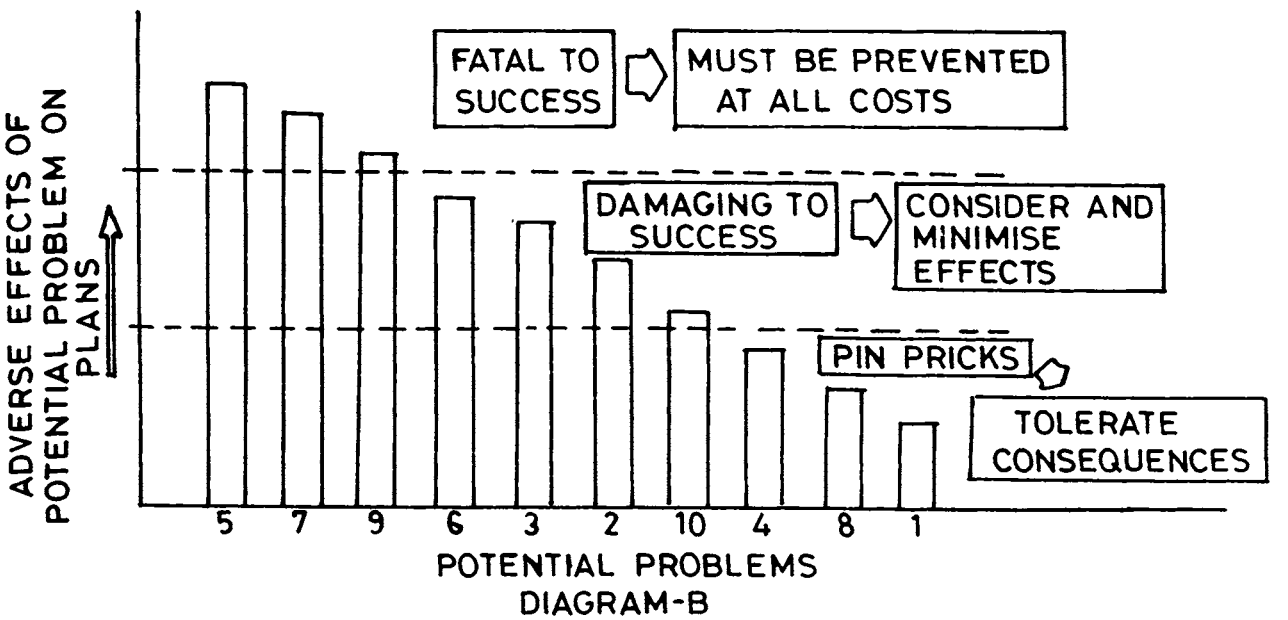

DIAGRAM-B

Thus, the Potential Problems in any project can be categorised into:

(a) FATAL
(b) DAMAGING
(c) IRRITATING (Pinpricks)

Actions to be contemplated on each of the categories are indicated in Diagram - B.

ASSIGNMENT - THREE

The following Potential Problems have been identified for a youth welfare project, "BLOOD DONATION CAMP".

You are to :

(a) Indicate the seriousness and probability of occurrence of each of the above Potential Problems.

(b) Compute adverse effects values

Sl. No.	Potential Problems	Seriousness weight	Probability of occurrence	Adverse effects value
1.	Donors not adequate in numbers			
2.	Donors frightened			
3.	Insufficient space			
4.	Surroundings not hygienic			
5.	Doctors having limited time			
6.	Identified doctors do not turn up			
7.	Not enough medical equipment			
8.	Inadequate Funds			

(c) Draw a diagram similar to Diagram - B for the Potential Problems.

This assignment should be performed in groups of 5 to 9.

CHECK YOUR ANSWERS WITH THE TUTOR.

4. WHAT ARE THE POSSIBLE CAUSES OF EACH PROBLEM ?

The listing of causes for problems is done on the basis of experience. Probably some of these causes will never come into being to produce a problem. But this should not stop the detailing of causes.

5. HOW PROBABLE IS EACH POSSIBLE CAUSE ?

Here again a manager relies on his judgement and experience. For each cause the probability of occurrence is to be judged. The causes with high probability need more attention. It is suggested that such estimates be done in groups.

6. HOW CAN A POSSIBLE CAUSE BE PREVENTED OR ITS EFFECTS MINIMISED ?

The best action is to eliminate or reduce the probability of occurrence of a Potential Problem. This is generally referred to as PREVENTIVE ACTION. In fact, there may be more than one preventive action for one cause.

Remember, the preventive action tries to eliminate the cause.

7. WHAT IF DOUBTS ARISE ABOUT SUCCESS OF PREVENTIVE ACTIONS ?

In case a potential problem is too serious, a manager cannot be certain about the success of preventive actions. Then he has to do more than rely on preventive actions. Some 'CONTINGENT ACTION' will also be needed. Contingent action is like insurance or 'fail-safe' action. They are like evacuating passengers through lifeboats on a sinking ship.

The plan must contain preventive actions and contingent action whenever necessary. Both these types of actions may require preparation.

Preventive actions must occur before the likely occurrence of the Potential Problem. Plans must clearly locate these actions in such a manner that causes of Potential Problems do not arise.

Contingent action is normally contemplated after the potential problem has surfaced despite preventive action. This means preventive action has not worked. The use of contingent actions should be at the earliest and as soon as the problem becomes visible. It should not be delayed till the problem has assumed disastrous proportions.

ILLUSTRATION - ONE

A Partial Potential Problem Analysis for a project "TREKKING IN A GROUP OF 20" is given below. Amongst the many serious Potential Problems, only three have been considered in this illustration.

PROJECT : 'TREKKING IN A GROUP OF 20'

POTENTIAL PROBLEM 'A' - Trekkers do not assemble at the right time at the starting point

Causes	Preventive Action	Contingent Action
Assembly time not convenient	Assembly time fixed after consultation with the trekkers	-
Information of assembly time inappropriate	Complete information in simple/ graphic presentation (map), Frequent reminders or communication	-
Dropouts	Keep substitutes ready	Smaller group

POTENTIAL PROBLEM 'B' - Food not available at resting points.

Causes	Preventive Action	Contingent Action
Inadequate food stocks at resting points	Food stocks to be carried	
Breakdown in cooking facilities	Resting point equipped with solar/coal cooker	Use of available fire wood

POTENTIAL PROBLEM 'C' - Trekkers fall ill during trekking

Causes	Preventive Action	Contingent Action
Inadequate physical protection against adverse weather condition	Communicate before trek about need for appropriate protective clothing Without necessary gear not allowed to trek	Keep an essential stock of necessary clothing
Low resistance to adverse environmental conditions among trekkers	Select physically fit trekkers only	Instructors trained in elementary first aid and simple medication, Carry stocks of medicines
Polluted environment	Avoid the trek, Select other time periods for trekking	Stocks of medicines to be carried

ASSIGNMENT - FOUR

An analysis of a potential problem is given below. You are required to comment upon the analysis and finalise your comments in groups of 5 to 9. Show your analysis to the Tutor.

POTENTIAL PROBLEM : Potential donors do not respond to requests for funds.

Causes	Preventive Action	Contingent Action
1. Requests are made only through written communication	1. Prepare a document with details about project 2. Plan to meet personally to distribute document	Use personal influence also
2. Too many requests from voluntary units to some donors	1. Start early to influence the donor to attach high priority to your request	Influence donor through other sources
3. No acknowledgement on previous donations	Present evidence of the work and the fruits of investment in past projects of your organization.	Give personal assurance

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ASSIGNMENT - FIVE

For any one of the following projects:-

(a) identify at least three critical activities and for each one of them specify one potential problem.

(b) perform a PPA on any two of the identified potential problems

(c) present your analysis to the rest of the participants and seek their suggestions.

PROJECTS

1. Organising a skills training programme for youth.
2. Organising a youth rally.
3. Promoting self-help programme among villagers for better utilisation of local resources.
4. Setting up a guidance and counselling cell for delinquent youth.

The assignment is to be carried out in groups of 5 to 9.

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CHAPTER-7

PROPOSAL DESIGN

* General and Specific Objectives
* Trainer's Notes and Guidelines
* Self-Learning Package for the Trainees and Assignments

GENERAL OBJECTIVE

The participant will suggest relevant improvements on a project proposal made available to him.

SPECIFIC OBJECTIVES

The participant will:-

(a) Describe the components which a project proposal could include.

(b) Determine what should be the components to be included in proposals to be designed for a given project.

(c) Given the proposal of a project, suggest improvements to make the proposal relevant and purposeful.

TRAINER'S NOTES AND GUIDELINES

PROPOSAL DESIGN

THEME OF THE CHAPTER

Agencies funding projects on youth services and programmes would naturally like to have a clear picture of investment in terms of time, efforts, finances and other resources on the one hand and the benefits derived out of the investment on the other hand, before the project is accepted for implementation. A project proposal is actually 'Marketing' the project to different associated agencies.

This Chapter details out the various components of a good proposal including some skills required for formulation of proposals.

PREREQUISITES

(a) Completion of chapters on Planning (Chapter 2), Network Analysis (Chapter 3), Decision Analysis (Chapter 4) Cost Benefit Analysis (Chapter 5), Potential Problem Analysis (Chapter 6) and Organising for Implementation (Chapter 8) is essential to undertake this Chapter. It would be preferable if Chapter 9 - Working in Groups is also considered a pre-requisite.

(b) The Tutor must have experience of designing project proposals.

(c) The participants must have at least read through a few project reports.

PREPARATORY ACTIVITIES FOR TUTOR

(a) The Tutor should have read this Chapter and completed assignments included in it.

(b) The Tutor should collect and keep ready copies of some proposals for use in Assignment - Two.

(c) Since it is difficult to obtain literature on designing proposals, it is suggested that the Tutor would from his own experience, jot down illustrations of components of proposals for use in the class if necessary.

INSTRUCTIONAL GUIDELINES

(a) This Chapter has been presented for facilitating self learning. Tutor's guidance rather than instruction is suggested, primarily to provide clarifications during self learning.

Reference to and use of the outcomes from the techniques related to previous chapters form the basis of a proposal. The implication is that before formulating a proposal detailed plan, information about fulfillment of certain crucial criteria, generation of benefits and such data would be available with a proposal designer. The proposal should include these components at different locations.

(b) The scheduling of activities for this Chapter, which requires 4 1/2 hours is given below.

Sl No.	Activity	Time in hours
1	Learning from the package upto Assignment- Two, together with Tutor's guidance and Tutor's summarisation using OHP Transparency 7.1	1 1/2
2	Assignment - Two in groups including discussion session	3

(c) The Tutor will introduce by emphasising the advantages gained by designing a comprehensive proposal.

(d) While the participants are engaged in self learning, the Tutor may assist them by indicating the appropriate references in earlier chapters. For example Benefits from Cost Benefit Analysis (Chapter 5) should be employed at different points of the proposal i.e. justification and selection. The Tutor will also check on participants' responses to Assignment - one.

(e) OHP transparency (7.1) may be used by the Tutor to summarise the Chapter. This may be done just before starting Assignment - Two.

(f) For Assignment - Two the Tutor will divide the participants into groups and supply these groups with adequate copies of a proposal. Each group may receive a different proposal.

The Tutor will sit down with the participants of the groups and enter into discussion with them on their responses to the Assignment. Of importance is the justification for their responses.

SUGGESTED RESPONSES TO ASSIGNMENTS

ASSIGNMENT - ONE

Sl.	Proposal Components	PROJECT			
		ONE	TWO	THREE	FOUR
1.	Project title, summary of Project	✓	✓	✓	✓
2.	Need and Prospects considered	✓	-	✓	-
3.	Various Alternatives considered	✓	✓	-	-
4.	Objectives and Intended Impact	✓	-	✓	-
5.	Background Information - The Current Situation	✓	-	✓	✓
6.	Detailed Plan	✓	✓	✓	✓
7.	Potential Problem Analysis	✓	✓	-	✓
8.	Creation of Infrastructure for Follow-up	-	✓	-	✓
9.	Linkages with External Agencies	✓	-	✓	✓
10.	Phasing of Financial Resources	-	-	✓	✓
11.	Factors to ensure success	✓	✓	✓	✓

ASSIGNMENT - TWO

Responses of groups will be different since different proposals have been provided to them. Hence it is not possible to suggest responses here.

All that is suggested is that the Tutor discuss justifications for modifications and additions to proposals in each group and satisfy himself that the thinking in the group has been rational as per the learnings suggested in this Chapter.

SELF-LEARNING PACKAGE
AND
TRAINEE'S ASSIGNMENTS

PROPOSAL DESIGN

Most projects which involve a substantial investment of time, effort, finances and other resources, have to be proposed to Government or other agencies for acceptance and approval. Getting approval is normally looked upon as a 'passport for action' on the project. Such proposals have to be designed and submitted in writing as opposed to 'verbal proposals' that are made for projects of a 'less eventful nature'. The process of designing and putting in writing a proposal also requires some skill since the manner in which the proposal is presented or projected will be one of the primary determinants for its approval.

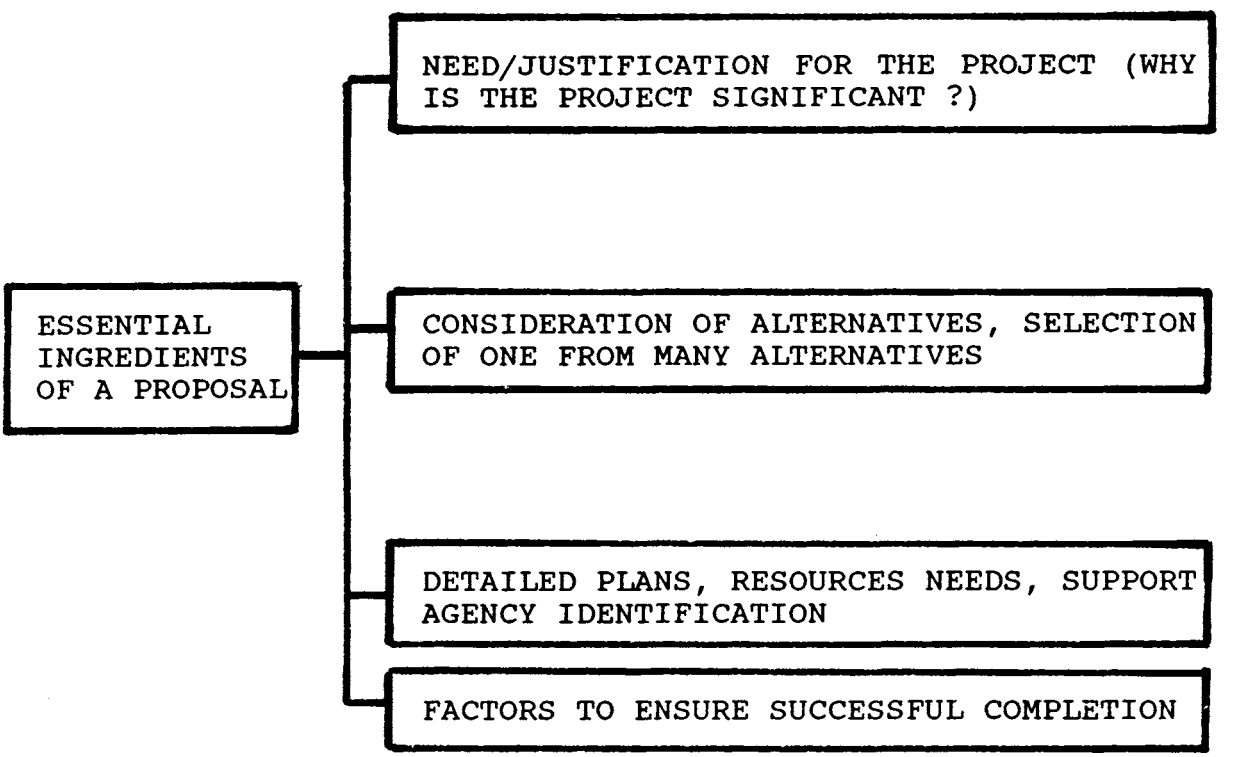
ILLUSTRATIONS

(a) For obtaining government support in 'providing treated drinking water' to a group of villages, a proposal will have to be submitted to the appropriate Government agency which constructs tube wells and treatment plants, lays pipe lines, and maintains water supply.

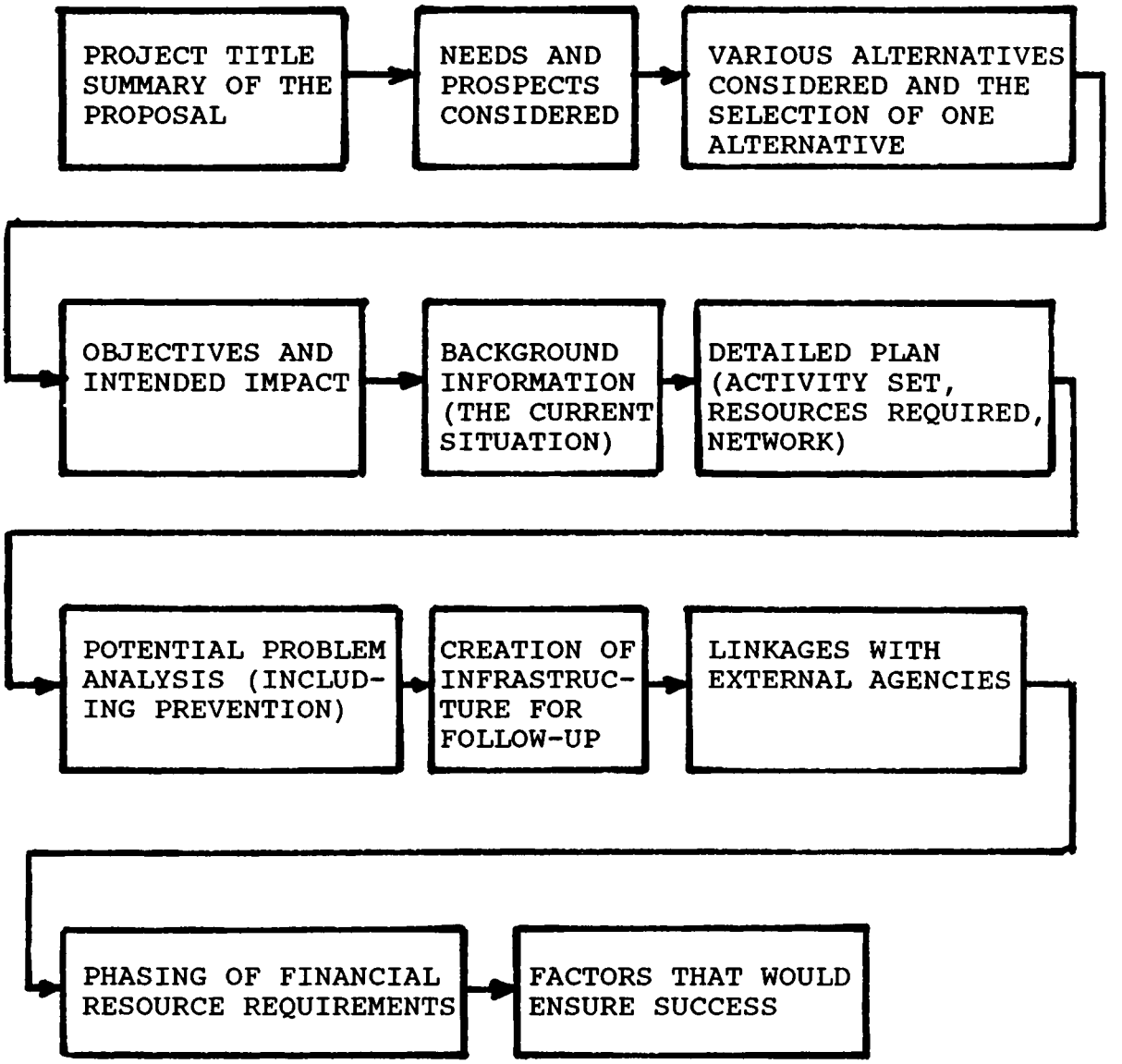
(b) Government intervention in a large way is needed to support a drive by a youth group for popularizing use of solar energy devices and such electricity-saving approaches. To obtain Government support the youth group will have to design and submit proposals to the relevant government agency.

Occasionally proposals may be required by the district level or regional level youth services officer if he wants to allocate funds to a particular programme. Proposals may also be employed as a means of attracting voluntary agencies and philantrophers to support certain conceived projects which require support.

COMPONENTS OF A PROJECT PROPOSAL



To ensure that these ingredients make their appearance in the proposal, components should be in a sequence as shown on the next page.



Some of the components shown above may get omitted if the project proposal does not require them.

JUSTIFICATION for the project will emerge from Needs and Prospects and Consideration of Alternatives.

ASSIGNMENT-ONE

Four projects have been listed below. For each one of them, proposals are to be designed. Which of the project components shown will be included in the proposals? Indicate this by ticking in the appropriate space.

PROJECT ONE - AN ENTREPRENEURSHIP PROMOTION PROGRAMME

PROJECT TWO - AN ATHLETICS MEET FOR A VILLAGE

PROJECT THREE - A YOUTH EXCHANGE PROGRAMME

PROJECT FOUR - AN INTER-COMMUNITY INTEGRATION PROMOTION DRIVE

S.No.	PROPOSAL COMPONENTS	PROJECTS			
		ONE	TWO	THREE	FOUR
1.	Project Title, Summary of Project				
2.	Need and Prospects considered				
3.	Various Alternatives considered				
4.	Objectives and intended Impact				
5.	Background Information - The Current Situation				
6.	Detailed Plan				
7.	PPA				
8.	Creation of Infrastructure for follow-up				
9.	Linkages with External Agencies				
10.	Phasing of Financial Resources				
11.	Factors to ensure success				

Some of the components listed already in this chapter need some elaboration. The `learning events' provided in the previous chapters could indicate the nature of details to be included within certain components.

SUMMARY OF THE PROJECT:- This should normally be written after the rest of the proposal has been formulated. To be included here are the broad purposes of the project, the time frame in mind for the project, the target groups or beneficiaries that would gain from the project.

NEEDS AND PROSPECTS CONSIDERED:- In general needs, aspirations and interests that are proposed to be considered for fulfillment through the project must be in quantitative and qualitative terms. Also to be mentioned are the means by which these needs and aspirations have been determined (through a summary or discussion). In this component, the dependence of the project on certain Governmental policies and priorities could be highlighted.

VARIOUS ALTERNATIVES CONSIDERED:- This point of the proposal should project the various alternative projects considered to fulfill needs and aspirations. To be included are processes like Decision Analysis (selecting one alternative from a number of alternatives - Chapter 4), and Cost Benefit Analysis (computing Costs and Benefits - tangibles and intangibles of various alternatives - Chapter 5). One

advantage that would arise from Cost Benefit Analysis would be that the list of benefits if projected properly at appropriate locations in the proposal would help `market' the proposal to concerned agencies. (In fact both Decision Analysis and Cost Benefit Analysis contain information which could be utilised at a number of places in the proposal).

OBJECTIVES AND INTENDED IMPACT:- Now that one alternative (the selected project) has been identified, it has to be detailed out in a logical manner. The starting point is its objectives and intended impact. The Chapter on Planning (Chapter 2) and the Cost Benefit Analysis and Decision Analysis could provide needed help to the proposal designer in formulating this component.

THE CURRENT SITUATION:- This is a description of the state of affairs' in the locality where the project is to occur, prior to the introduction of the project. Some details are provided in the Chapter on Planning. In case the previous component on Needs and Prospects includes adequate information on the current situation, there is no need for a separate component on Current Situation.

DETAILED PLANS:- This component will consist of units like determining the Activity Set, Drawing the Project Network, Identifying Resources and Support Requirements, Deploying Resources, all of which have been explained in Planning.

Another important component of detailed plans is the phasing of activities over a period of time. This is particularly significant for projects which would last for a number of years. In such situations, the project must be divided into several stages, with each stage having concrete outcomes.

POTENTIAL PROBLEM ANALYSIS (PPA):- A reference to Chapter 6 in the package will indicate what is to be included in this component. This component is another key factor in making the package attractive to authorities since the indication is that precautionary measures have been taken to avoid implementation difficulties as far as possible.

CREATION OF FOLLOW-UP INFRASTRUCTURES:- As indicated in the Chapter on 'Organising for Implementation' (Chapter 8), it is essential to suggest selected infrastructures for follow-up in the proposal. Responsibilities allocated to the team managing the project are also to be included here.

LINKAGES WITH EXTERNAL AGENCIES:- Structures indicating the links which the project will have with outside agencies must be noticeable in the proposal. If support is to be provided by external agencies the nature of support must also be shown (Refer Chapter 8).

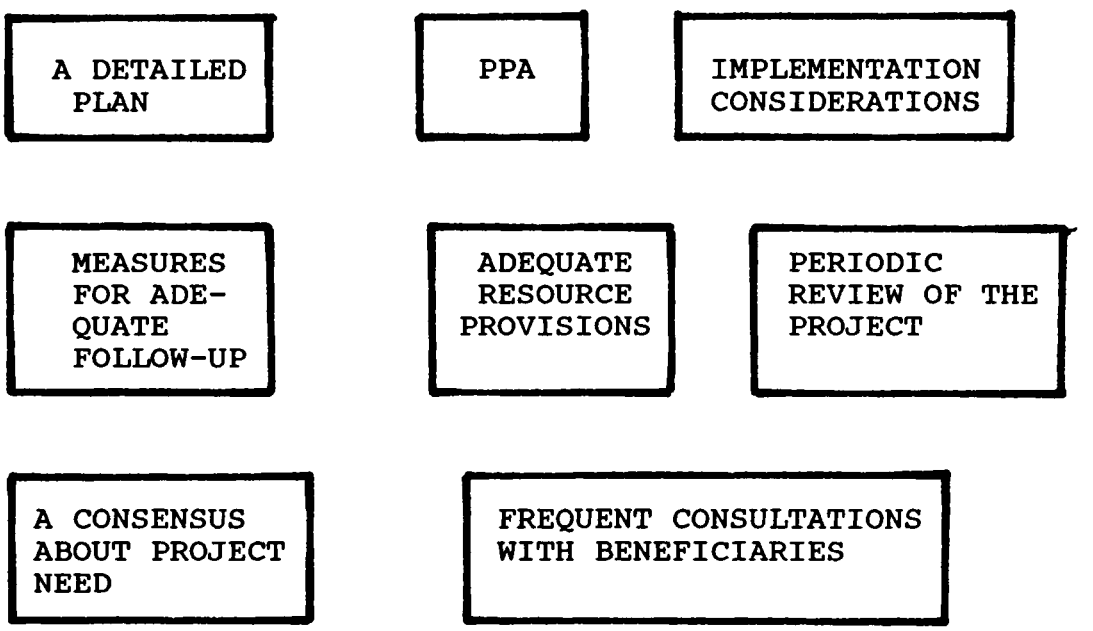
PHASING OF FINANCIAL RESOURCES:- Phasing of resources refers to an yearly anticipated need for financial resources. For example in case a project is likely to extend for three years, all its investment is not likely to occur at once. On the contrary, the investment has to be phased out on an annual basis for three years. The phasing of funds could be on a quarterly/monthly basis for short term projects.

It is also necessary to segregate needs for recurring and capital grants. Salaries, travel expenditure, stationery, contingent expenses are of a recurring nature while investment in buildings, equipment and furniture is counted as Capital Grants.

A phased financial resources statement could appear like -

TYPE OF EXPENSE	YEARLY AMOUNT			
	1989	1990	1991	TOTAL
CAPITAL				
RECURRING				
TOTAL				

FACTORS TO ENSURE SUCCESS OF PROJECT:- This is a crucial component. In fact it is a summary of the insurance' built into the project to ensure that the intended outcomes and benefits will occur. The proposal is to reflect very clearly those factors which constitute the insurance'. They could be one or more of the following:-



What this Chapter attempts to project to the approving authority is the fact that the proposal designer has taken special consideration and care to incorporate such checks and precautions which will ensure successful achievement of objectives. This must be supported by evidence of the use of techniques in the preceding chapters of the proposal. In a way this will demonstrate the sincerity and commitment of the proposal designer and hence enhance the marketability of the proposal.

ASSIGNMENT-TWO

A project proposal will be given to you. In groups of 5-10, you are to arrive at a consensus on:

- Components that need change, components that need to be added or deleted.
- Suggestions for improving the contents of each component.

You will then seek comments on your views from other groups. The Tutor will arrange a discussion session'.

*****

CHAPTER-8

ORGANISING FOR IMPLEMENTATION

* General and Specific Objectives
* Trainer's Notes and Guidelines
* Self-Learning Package for the Trainees and Assignments

GENERAL OBJECTIVE

Given a project description and plan, the participant will devise an infrastructure for implementing the project.

SPECIFIC OBJECTIVES

The participant will -

(a) List the key factors which should be kept in mind while devising infrastructures.

(b) Describe different forms of infrastructures used in implementing youth projects.

(c) Analyse the implications of group structure, member accountability, interaction with external agencies and coordination on infrastructures.

(d) Given a project description, its plan and an infrastructure for implementation, provide a critique of the infrastructure on the basis of suitability.

(e) Given a project and its plan, devise alternative infrastructures that could be used for implementation, select one alternative, allocate roles to suit the infrastructures evolved.

TRAINER'S NOTES AND GUIDELINES

ORGANISING FOR IMPLEMENTATION

THEME OF THE CHAPTER

This particular theme represents a set of essential actions which is to be made prior to implementation of a project. In other words 'Organising for Implementation' can be considered as a part of 'Planning'. In the planning process it can only be accommodated after the identification of 'Resource and Support Needs' and the completion of 'Potential Problem Analysis'.

This Chapter focuses on the manner in which Project Teams or Groups (normally small groups) would be organised to ensure effective management of the project. Since in a project there would be a variety of 'function clusters' how are these clusters to be allocated to the team members managing the project ? The answer to this has been elaborated in this Chapter. In addition, the Project Team may have to develop links with external support agencies. The nature of these links have also been described.

On acquiring some of the characteristics mentioned in the previous para 'a Project Team' becomes what is known as an 'Infrastructure'. Links with external agencies are also structural configurations. Hence this Chapter deals with

design of project management structures. It has been realised, though rather late, that well designed structures can accelerate project progress and prevent many problems in implementation.

PREREQUISITES

(a) The prerequisite Chapters are

- Chapter 2 on Planning
- Chapter 3 on Networks
- Chapter 6 on Potential Problem Analysis

(b) The Tutor must possess -

. Considerable experience in leading and coordinating Project Teams.

. Decomposing projects into activities, and clustering these activities in a manner suited for allocation to individual team members.

. Familiarity with typical project structures and their characteristics - bureaucratic, committees, task groups, flexible groups, etc.

(c) The participant must be familiar with the concept of structure, and must have some experience of working in Project Teams.

PREPARATORY ACTIVITIES FOR TUTOR

(a) Before embarking on guiding participants in this Chapter, the Tutor must thoroughly read it and complete all assignments. The assignments are not simple.

(b) The Tutor may reinforce his knowledge by reading relevant chapters of Reference 1.

(c) Though certain responses to assignments that may be anticipated from participants have been suggested, it is preferable that the Tutor generate some more as a means of dealing with diverse classroom situations that are likely to arise.

INSTRUCTIONAL GUIDELINES

(a)(i) While the Chapter is in the self-learning mode, the participants are likely to have difficulties in understanding a few concepts like 'function clusters', 'accountability', 'coordination',. The Tutor may interact with the whole class at appropriate intervals to ensure clarity in learning these concepts.

(ii) The package comprises of:

- introduction of the concept of infrastructure.
- different alternative infrastructures contemplated for a project, and
- crucial factors governing the choice of appropriate infrastructure.

(b) The suggested time for learning this Chapter is 6 hours. The suggested break-up is as follows:

Sl.No.	Activity	Time in hours
1.	Learning upto Assignment-Three with Tutor's intervention for clarifying concepts as mentioned in (a)(i) above and use of OHP Transparencies 8.1 and 8.2.	3 3/4 hours
2.	Assignment-Three	3/4 hour
3.	Assignment-Four including Tutor's summarisation.	1 1/2 hours

(c) The Tutor will briefly introduce the Chapter, establishing links with the prerequisite chapters.

(d) The Tutor may have to intervene on a number of occasions to clarify difficult concepts like `functions clusters', `accountability', `coordination'. In each of these cases, the Learning Package provides adequate information. It is necessary that this Chapter be made available to the participants totally before the learning begins.

(e) All assignments are open-ended and could elicit a variety of responses. The Tutor will have to encourage creative thinking amongst participants. The last two assignments assist in integrating most of the concepts discussed in the Chapter. The Tutor may bear this in mind.

(f) Two OHP transparencies have been provided.

8.1---- Criteria for comparing infrastructures

8.2---- Factors for devising infrastructures.

They may be used at appropriate moments in the progress of the participants.

SUGGESTED RESPONSES TO ASSIGNMENTS

ASSIGNMENT - ONE

Other purposes -

1. Experimenting with innovative designs of Cattle powered implements.
2. The use of by-products of cattle-shed operation like cow dung.
3. Sales of products like milk.

ASSIGNMENT - TWO

COOPERATIVE SPORTS SHOP OF YOUTH CLUB

1. Functions of Project Team members (a suggestion) :

A --- Holding meetings.
Keeping members informed

B --- Procurement of goods.
Maintaining inventory

C --- Keeping accounts.
Managing finances

D --- Dealing with sales.
Customer service

E --- Advertising promotion of sales

2. Linked External Agencies

Agency	Purpose
(a) Sports goods retailers	Procurement
(b) Customers	Sales
(c) Share holders	Dividends, youth welfare
(d) Youth clubs	Promotion of games and sports

ASSIGNMENT - THREE :

Different answers are possible in terms of making critical comments on the infrastructure. The answers suggested below are only guidelines to the Tutor.

1. Project objectives

Objective 1 may not be accomplished as the number of classes started are few.

Objective 2 may be partially accomplished as out of the 4 youth volunteers 2 are primary school passouts.

Objective 3 may be partially achieved.

2. Ambiguities and uncertainties
   (a) No communication links between different literacy youth volunteers and the problem solving mechanism.
   (b) There is no sharing of problems between youth volunteers.
   (c) No opportunity for members of the literacy classes to indicate their problems and difficulties.
   (d) There is little scope for changing strategies during implementation.
3. Expectations of different agencies/interest groups
   (a) The expectations of the beneficiaries are not obtained.
   (b) The expectations of youth volunteers are not clear.

4. Division of responsibilities
   (a) The functions of youth volunteers are not classified
   (b) The role of youth worker in the project has not been amplified
   (c) Involvement of parents/other people in project implementation not included.

5. Time Frame of Project
   (a) Time frame not indicated.
   (b) Phasing not made.
   (c) Phase groups not identified.

6. Resource constraints

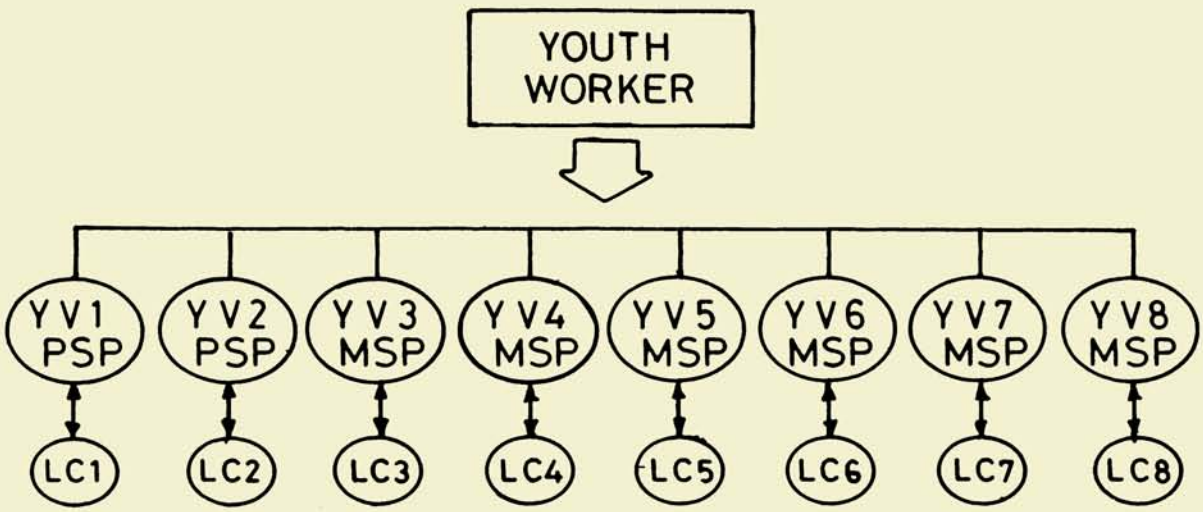
(a) Contingent actions in case volunteers withdraw, not given.

(b) Arrangements of classrooms not indicated.

(c) It is not clear whether any funds are required. If so, how funds will be raised ?

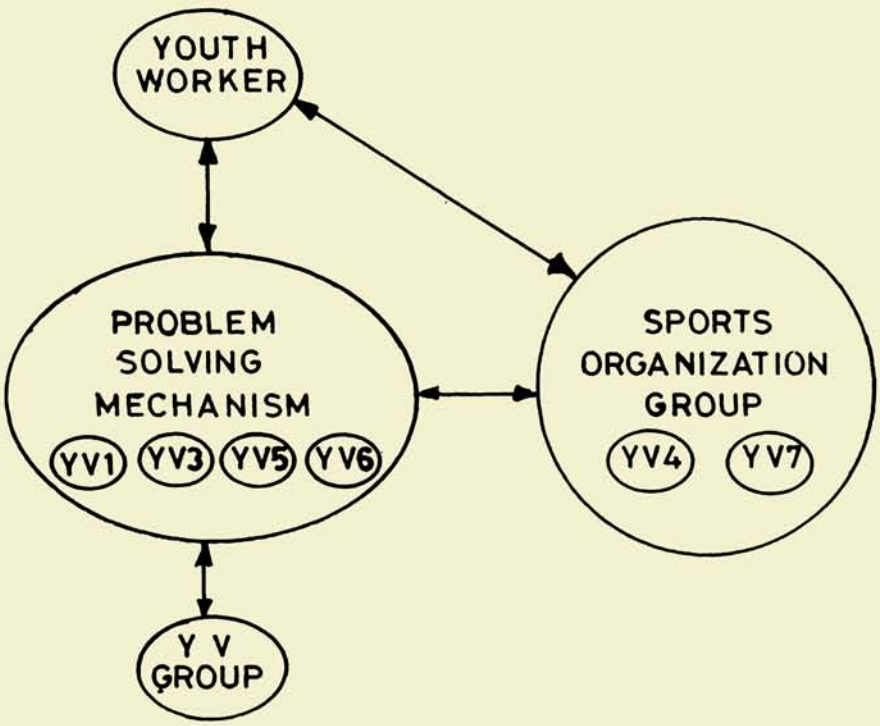
(d) Training mate ·ial requirements and acquisition are not detailed out.

The suggested alternative infrastructure is given in two diagrams (a) and (b). The Tutor may also present any other infrastructure he may think appropriate for the situation.



PROJECT DURATION 3 YEARS
Y V – YOUTH VOLUNTEER
L C – LITERACY CLASS – DURATION 3 MONTHS
–SIZE 30
PSP – PRIMARY SCHOOL PASSOUT
MSP – MIDDLE SCHOOL PASSOUT

INFRASTRUCTURE (a)



INFRASTRUCTURE -(b)

ASSIGNMENT-FOUR

FUTURE YOUTH CLUBS - SOMEONE'S DREAM

This assignment is too open for providing any definite suggestions. The participant responses will be based on:

- understanding of the presentation and text
- derivation of the pioneer's suggested infrastructures
- perceptions of the feasibility of these instructions for the participants' own situations.

The Tutor should examine the groups' responses for rational thinking.

REFERENCES

1. `Organisational Behaviour and the Practice of Management' by Hampton, Summer and Webber; Scott, Foresman and Co., USA, 1978.

2. `Planned Change - A new Manual' - a document prepared by Education Management Centre, TTTI, Bhopal for State Government of Gujarat, India, 1987.

3. `Solving Educational Problems' by Havelock and Huberman; Praeger Publications, USA, 1978.

4. `A Diagnostic Approach to Organisational Behaviour' by J.Gordon; Allyn and Bacon Inc, Boston, USA; 1987.

5. `Managing Organisational Behaviour' by Tossi, Rizzo and Carroll; Pitman Publishing Inc; Massachusetts, USA, 1986.

SELF-LEARNING PACKAGE
AND
TRAINEE'S ASSIGNMENTS

ORGANISING FOR IMPLEMENTATION

In Chapter 2, the different steps and stages of Planning have been introduced and elaborated. One additional aspect of Planning that is significant but which rarely gets the attention it deserves is ORGANISING FOR IMPLEMENTING the plan.

The term ORGANISING normally refers to deploying members of a youth team by suitably allocating to them specific roles, functions and responsibilities and ensuring that the project objectives get accomplished. The term ORGANISING is also sometimes referred to as 'designing infrastructures'. In fact organising is an important project management dimension and is undertaken for the following reasons.

* Bringing clarity to the inter-dependence of roles and functions
* Avoiding working at cross-purposes
* Ensuring that all activities get completed as per plan.
* Identifying, diagnosing and resolving problems
* Promoting team-work.

The above advantages arising out of satisfactory organising for implementation are exemplified through the following illustration.

ILLUSTRATION - ONE:

A youth project has the following objective:

- CONDUCTING AN ADVENTURE TREK for a group of thirty youth by the end of 3 months from now.

Activities in the project :

(1) Identification of the trek route

(2) Arrangements at halting places

(3) Collection of funds

(4) Procurement of materials required for the trek

(5) Selection of youth to participate in the trek

(6) Arrangement of guides

(7) Training of youth (if necessary)

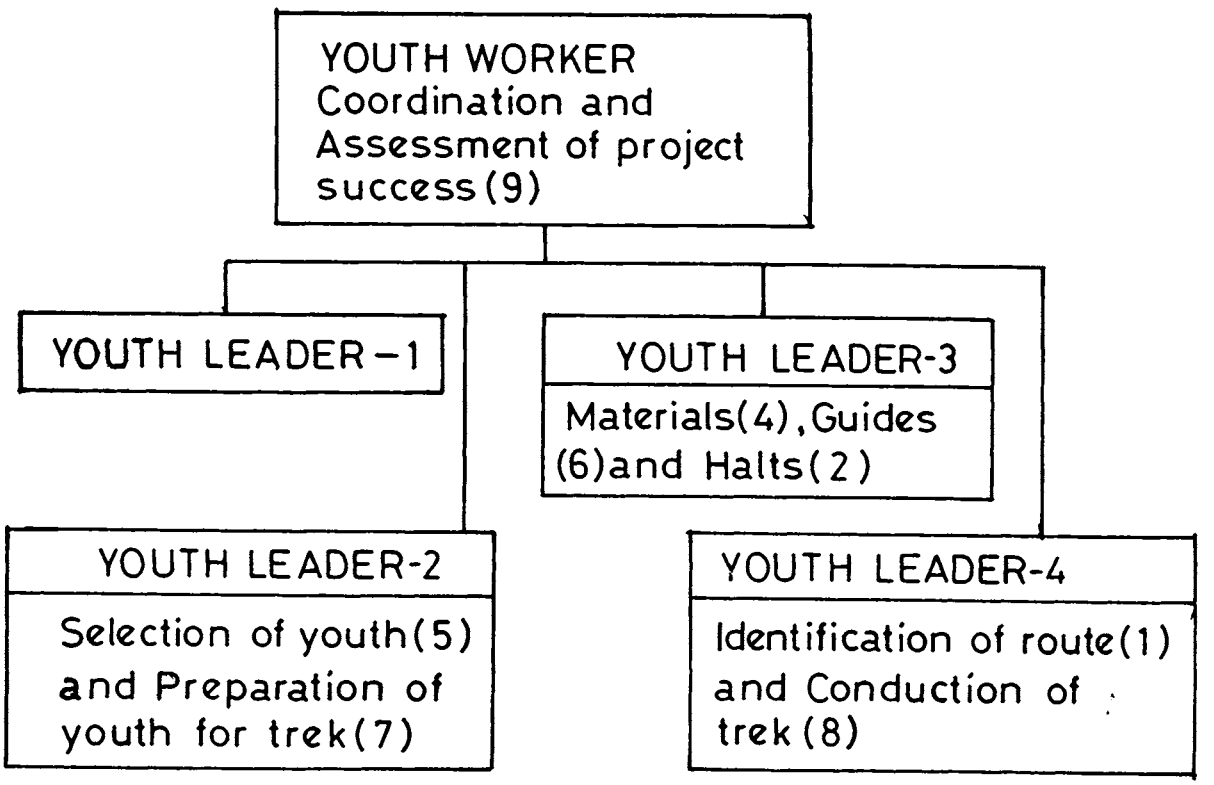
(8) Conduction of trek

(9) Assessment of project success

Three possible infrastructures for organising the trek are given in the following pages.

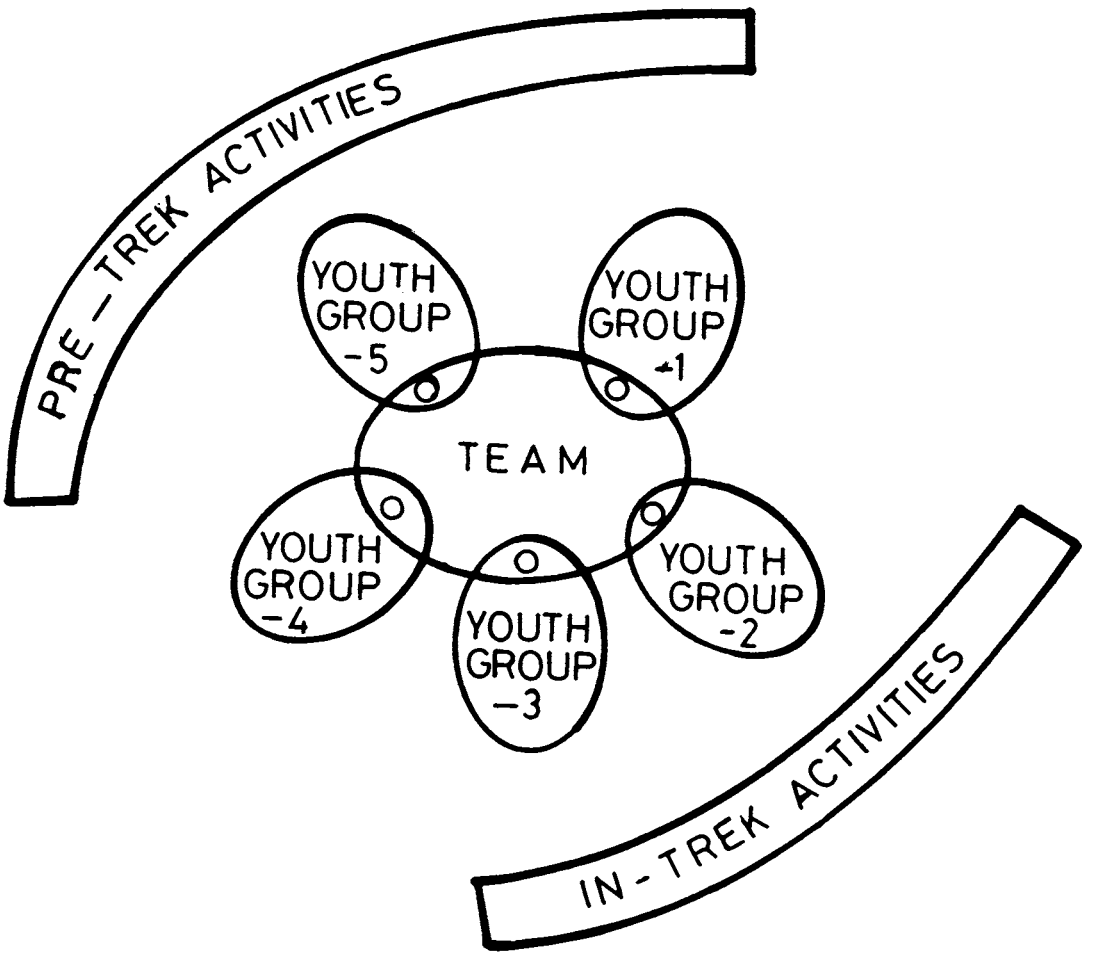
ORGANISING THE TREK - Alternate Infrastructures

Alternative - 1 :

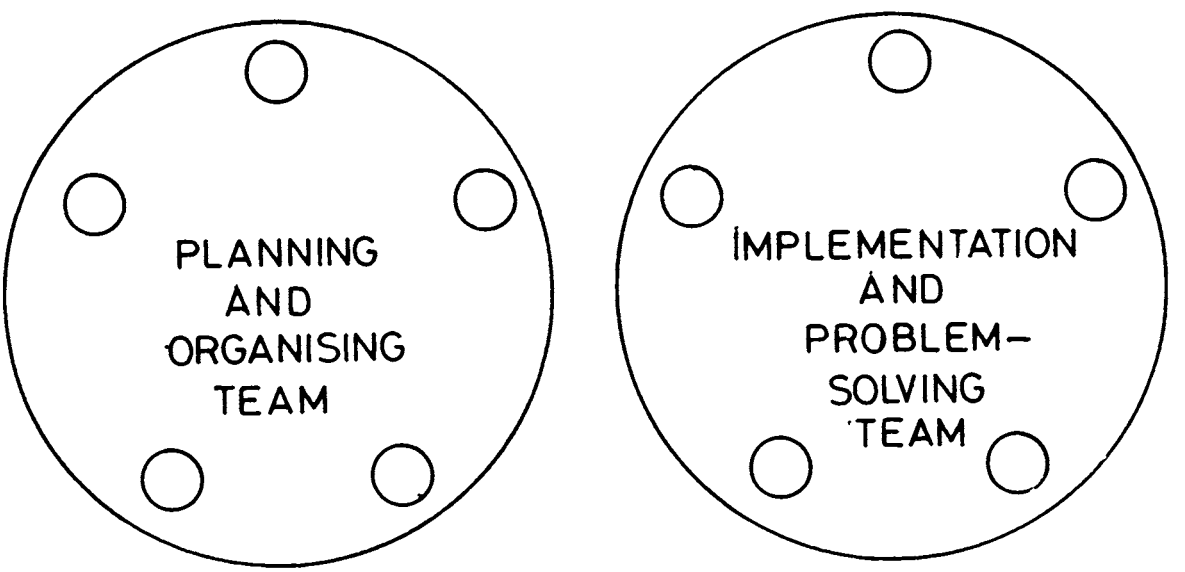


Note: The numbers within parentheses represent numbers of activities given in the activity list.

Alternative - 2 :



Alternative - 3 :



Which of the three alternatives is the best ? This can be decided only if criteria for comparing the alternatives are generated. The suggested criteria are listed in the table given below. The satisfaction of these criteria by the three alternatives is also indicated in this table.

Sl. NO.	CRITERIA	ALTERNATIVES 1	2	3
1.	Allocation of responsibilities	-	Yes	Yes
2.	Involvement in decision making	-	Yes	Yes
3.	Coordination between different activities	Yes	Yes	Yes
4.	Early solution of problems	-	-	Yes
5.	Equality of status and shared leadership	-	Yes	Yes
6.	Team - work	-	Yes	Yes
7.	Effectiveness of communication	No data available		
8.	Role clarity	Yes	Yes	Yes
9.	Contact with trekkers	-	Yes	-

Thus, for the adventure trek the infrastructure shown in alternative - 2 is likely to be more effective than the other two alternatives. However, new alternatives which could be at least as effective as alternative - 2 could be generated.

INFRASTRUCTURES are necessary to manage projects. In other words these infrastructures become useful for both the `planning' and `implementation' phases. These are generally developed on the basis of effectiveness. For a majority of youth service projects, the selected infrastructure should ensure the satisfaction of team - work and group decision making criteria, for enhancing:

(a) use of creative approaches,
(b) sensitivity to problems, and
(c) sharing of responsibilities.

Hence, a bureaucratic approach to organising (alternative - 1) should be avoided as far as possible and alternatives 2 and 3 could be selected, perhaps with certain modifications.

Infrastructures have other purposes as well. Two of them are explained through the illustration given below:

ILLUSTRATION - TWO:

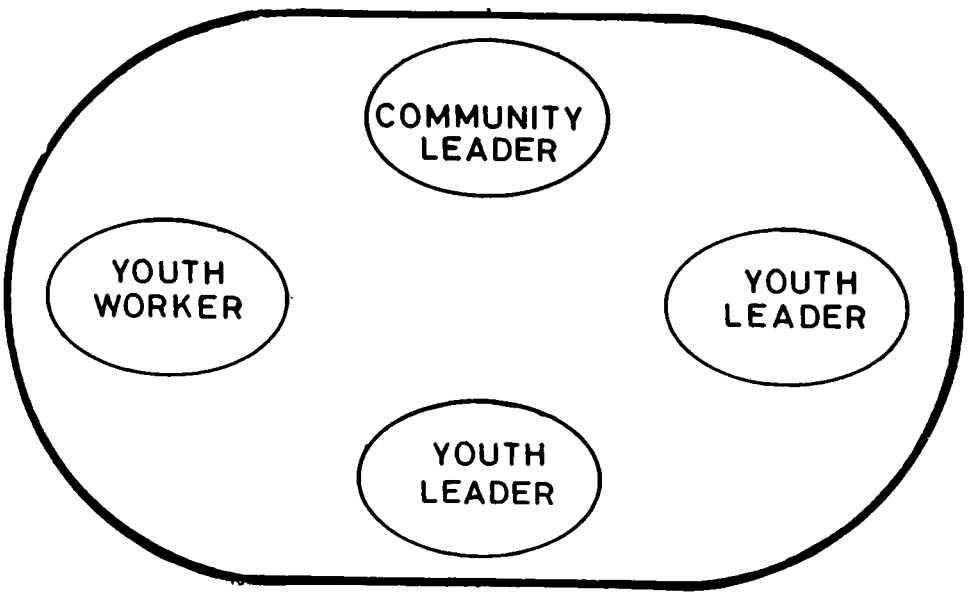
The project considered here has the objective, PROVIDING CAREER GUIDANCE TO SLUM YOUTH.

This project demands establishment of satisfactory linkages with a number of agencies. You, as youth worker, may set up youth groups to assist you. The activities required could be :

> Identification of youth needs
> Identification of agencies in the neighbourhood for providing guidance to youth
> Collecting funds
> Conducting a career guidance seminar for the youth beneficiaries through invited personnel from different agencies
> Follow - up activities

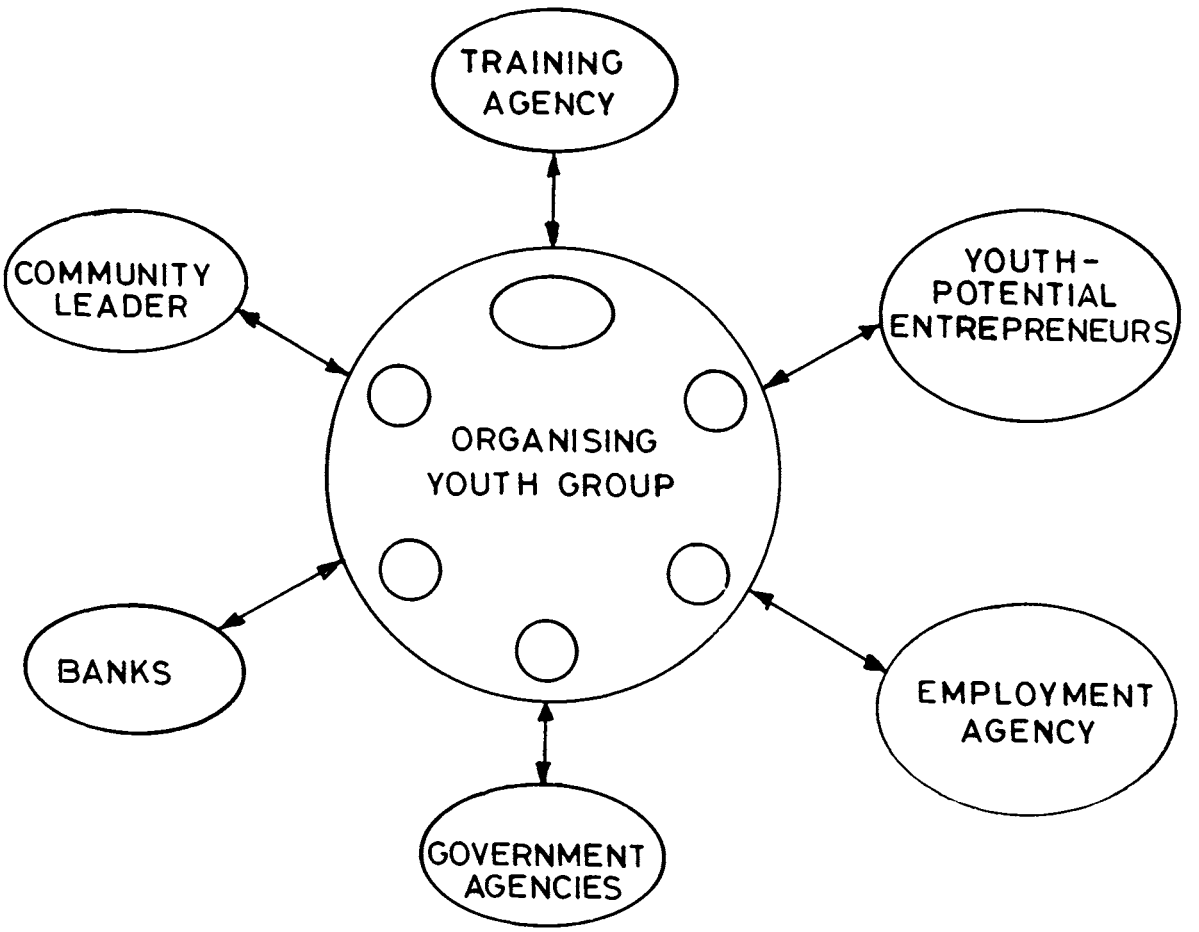
To meet the demands of these activities, two infrastructures were developed by the project organisers (the youth group)

Infrastructure - I : (Problem-solving)



This infrastructure was primarily meant to diagnose needs and problems and fulfill/resolve them in the course of the project. This was the main responsibility. In other words, here was an infrastructure created to assist the implementation process and to ensure that deviations between plan' and `implementation' (unanticipated difficulties) did not unduly distort or delay the progress of the project.

Infrastructure - II : (Linkages)



This second infrastructure shows the linkages between the organising youth group and the other groups/agencies involved in the project. These linkages were meant to promote interaction and mutual cooperation in the accomplishment of project objectives. It is important to note that before constructing such structures the agreement of involved groups/agencies is necessary.

Thus, the youth worker may need to devise more than one infrastructure for ensuring the achievement of project objectives. Each infrastructure will have specific purposes to cater to. There may be a need in complex or long - term projects to ensure linkages between the different infrastructures constructed for the project.

GROUP STRUCTURE

This refers to the roles and relationships among the members of a youth team. They have to engage themselves in key group functions. They also have to undertake individual responsibilities or functions.

ILLUSTRATION - THREE:

The Project Team members for a Skills Development Programme (of six months duration) for youth had to undertake the seven major functions indicated below.

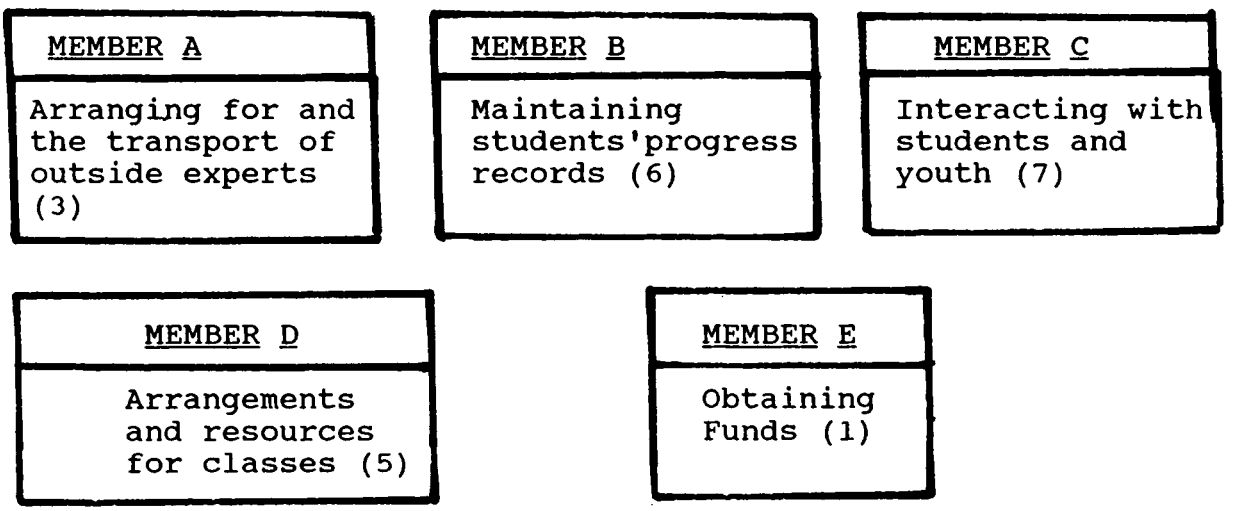
1. Obtaining funds on a regular basis.
2. Acquiring different resources like raw materials, stationery, duplicated classnotes and assignments.
3. Arranging for and the transport of outside experts who had agreed to impart skills to students (youth).
4. Housekeeping of classrooms, workshops.
5. Ensuring that arrangements and resources for classes are ready on time.
6. Maintaining records of progress of students.
7. Interacting with students (youth) and getting feedback from them about learning and about the arrangements.

The five members of the youth team had their own interests.

Member A	Interacting with outside people, developing outside contacts
Member B	Keeping accounts and maintaining records
Member C	Talking to youth, mixing with young boys and girl
Member D	Organising and arranging functions and programmes
Member E	Interacting with grown - ups, marketing ideas to them.

Though the mix of interests appeared confusing, it was quite easy allocating functions which were acceptable to members of the team.

The first allocation was as follows.



Two more functions had to be allocated. And B and D had functions that were to be regularly performed but which were not as demanding as the other functions.

Hence, Function 2 - 'Acquiring resources' was assigned to D and Function 4 - Housekeeping to B.

It was also decided that the allocation of functions would be reviewed during the first week of each month. Incidentally the decisions about the allocation were made by the team members themselves.

Some Project Groups or Teams enter into project assignments too quickly. They run the risk of having gaps in work, duplications,and counter production. These can slow down the project and reduce the effectiveness of implementation of project. Assigning functions and roles is a crucial step in `organising for implementation'.

Another complicated aspect of organising is ROLE DESIGN. Members may not volunteer for some functions. Or too many may volunteer for a choice assignment. Some may like to do the 'easy work', while others may make a mess by trying to experiment with what they are doing.

Though it is impossible to please everyone, it is preferable to spend time making decisions on allocating functions with care. If the youth team has a competent leader this would be one of his main responsibilities.

The matrix given in the next page focuses on some of the bases behind the decision.

		MEMBER'S ABILITY TO PERFORM TASK		
		<----------		---------->
		LOW		HIGH
MEMBER'S INTEREST	*	Probably the member wants to learn and thus may introduce risk.	*	No difficulty here.
	**	Train or pair him with an experienced and competent person.	**	Give the person the task. If more than one person is interested in the task, ensure rotation or sharing of task.
HIGH				
LOW	*	No difficulty here.	*	This can lead to performance !
	**	Avoid assigning function to the person. Give it to someone else who is more competent and interested.	**	If task is undesirable for many, rotate or share.

Roles and functions have to be attended to unambiguously. Clear definitions of functions must be available for satisfactory allocation and implementation.

As mentioned earlier the concept of role is obligationary. Extension of this concept is beyond the scope of this Chapter and package.

LINKING WITH EXTERNAL AGENCIES

A project team cannot operate in isolation. It has to have links for various purposes with a number of external agencies.

ILLUSTRATION - FOUR

A youth team undertook to manage the construction and operation of temporary cattle sheds just outside a village to house all the cattle belonging to a group of villages. The motives of this project were many, prominent among which were :

- healthcare for cattle,
- cleanliness in the village,
- reducing the burden of some villagers who were struggling to maintain their cattle in their small backyards, and
- improving milch and drought cattle performance.

The agencies which got linked to the youth team in their operations were :

* The beneficiaries
* Milk product cooperatives
* Construction contractors
* Construction material suppliers
* Cattle feed suppliers
* Healthcare officers
* Utilities department
* Malaria eradication agency
* The Government Veterinary Services Department
* A research organisation which was engaged in improving the design of bullock carts and cattle-powered agricultural implements.

It is obvious that with some of these agencies the interaction of the youth team will be much more intense, intimate and regular than with others. The agencies which are closer to the youth team form crucial links which the youth team has to sustain with special care. Frequent meetings (formal and informal), guidelines and norms for interactions, and even the designation of a special person to liaise with the agency are all means by which the crucial link is cared for.

The purposes of the links between the project team and the external agency could be 'manifold'. For example, for the construction of temporary cattle sheds, some of the purposes of links are :

Assured flow of funds/materials as planned

Continual availability of expertise

Flow of data/findings

Prompt preventive/curative actions related to health of people and cattle

Needs assessment

Feedback on performance

ASSIGNMENT - ONE

For the illustration on Construction of Temporary 'Cattle Sheds', identify three purposes of links with external agencies other than those mentioned earlier.

Indicate your response in the space provided below. Check your responses with the Tutor.

(1) _____

_____

(2) _____

_____

(3) _____

_____

The purposes of linkages between the youth team and the external agencies are intimately connected with INPUTS, ACTIVITIES and OUTPUTS of a project. The events of project implementation which are related to purposes are elaborated below.

INPUTS TO PROJECT	PROJECT ACTIVITIES	OUTPUTS OF PROJECT
* Supplies of raw Materials, Equipment, other Physical Resources	* Care of Cattle surroundings.	* Gains/losses to affected people
* Provision of Funds, payments	* Assistance to workers.	* Products and services
* Ideas for Plans, strategies	* Problem Solving	* Feedback on outputs
* Training and Development	* Experiments	* Increase in acceptance and credibility of Project team
* Information sharing	* Follow-up	
* Directives, Guidelines	* Production	

In brief, the Project Team interacts with its environment (external agencies) with some overlapping motives in mind.

* Ensuring Survival of project

* Bringing about development/improvement

* Increasing credibility and acceptance of Project

An elaboration of Communication Patterns between the youth team and external agencies is given later in this Chapter.

ASSIGNMENT - TWO

Consider the setting up of a Cooperative Sports Shop by a youth club for supplying sports goods to a large number of youth clubs in the neighbourhood. The sports club is to be manned by a team of youth selected by youth club members.

Answer in brief in the space provided, the two questions given below.

(1) Given that there are five members in the youth team managing the Cooperative Sports Shop, what could be the functions allocated to each of the five ?

A _ _ _ _____

_____

B _ _ _ _____

_____

C _ _ _ _____

_____

D _ _ _ _____

_____

E _ _ _ _____

_____

2. List four external agencies which would be linked with the youth team. Give the main purpose of the linkage.

Linked External Agency	Purpose of Link
(a)	
(b)	
(c)	
(d)	

CHECK ANSWERS WITH TUTOR

COORDINATING GROUP FUNCTIONS

It is often quoted that once Project Team members are allocated responsibilities in a project, they get so much immersed in their work that they 'forget to talk to each other'. This is more so true of specialists who it is said 'are people in one field who often have a trained incapacity to deal with total problems in the real world'. It is noticeable that this phenomenon totally destroys the very concept of 'team' and 'group'.

WHAT IS COORDINATION ? - It is the extent and means by which a youth team integrates or holds together its members, and facilitates their working together to accomplish activities, and project objectives.

WHAT ARE THE MEANS AVAILABLE FOR COORDINATION ?

Probably the best known means is the very feeling or attitude of 'Collaboration'. If the collaborative spirit among members is high then coordination is very likely.

In many teams 'informal links' are gradually established. Thus if the 'fund raiser' informs the 'resources procurer' he can start purchase, or if one member tells another that the beneficiaries are resentful about the forceful role adopted by the team, the informal link is in operation. Openness, understanding and mutual adjustment among members leads to the forming of such informal links.

The more usual approach to coordination adopted is to allow the leader of the team to undertake this task. In effect, members are willing to accept coordination decisions made by the leader.

Probably clarity of role, task interdependence, and indepth planning can facilitate coordination. And lack of coordination can ruin implementation.

Coordination is itself a skill.

Projects contain a set of interdependent activities, most of which would need support or resources of different kinds. Firstly to ensure that all these events occur at the right time, in the right places, with a high degree of certainty is by no means a casual or trivial activity. Secondly keeping information networks active so that flow in different directions does occur is an activity requiring `Constant Vigil'. Thirdly diverting less active members to help those who are confronting problems is `tricky and delicate'. Finally the coordinator's contribution is significant in sustaining the `team'. Under these circumstances coordination can be termed as a complex function. It carries with it a certain hit and miss approach.

INTERGROUP COMMUNICATION

A project team is not an independent group. It has links and interdependence with other groups (external agencies, beneficiaries etc) for the purposes of work and communication.

ILLUSTRATION - FIVE

Consider a project team which has been set up for a 'Promoting Skills Development among Youth in a Community' programme. This team will necessarily link up with, say, a group of 'skills trainers'. What could be the communication processes between them ?

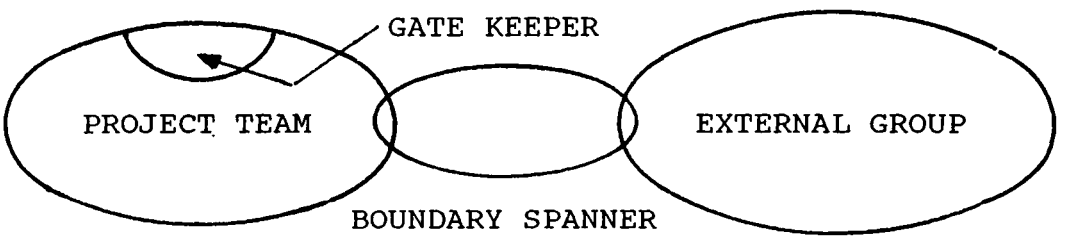
- Requests by trainers to project team.
- Nature of language used, channels used
- Verbal or written communication, or both
- Distortions in messages, requests
- Sharing of problems
- Empathy between communicating groups
- Nature of links and channels - direct, long term
- Time taken for communication.

When communication between two groups becomes important, barriers of different kinds are likely to impede it.

Communication is an exercise of power between the groups. Hence the first condition that must be fulfilled is that the two groups must collaborate rather than compete with each other.

Other barriers are associated with distortion of messages, delays, ineffective listening, lack of feed back on communication.

Under the circumstances to improve the flow and use of communication certain strategies can be thought of like:



Gatekeepers receive information and control access to it. They switch communication among members and ensure quick flow. In other words all external communication is received by them. They screen the information and direct it to the member concerned. Gatekeepers are significant members in Project Teams.

Boundary spanners are like representatives of a team who are housed in the other group for meeting the needs of liaison. One of the functions they perform is to collect information and quickly send it across to the right location in the Project Team.

With regards to other strategies, it is assumed that the participant is knowledgeable, since they are similar to phenomena in intra group communication and decision-making. In case the participant is unfamiliar, it is advised that he reads about communication strategies in books on 'Organisational Behaviour' (like References 2, 3).

ACCOUNTABILITY

The dictionary definition of 'accountability' stresses terms like answerable, liable, and responsible. The implication is that a youth worker or youth volunteer should show (or openly indicate) that he can answer whether or not he has behaved responsibly and 'done the best with what he has!' Youth workers (or even youth teams) have to be prepared to demonstrate just that to answer that he has/they have done his/their best within the limits of the technology, expertise and resources available to him/them.

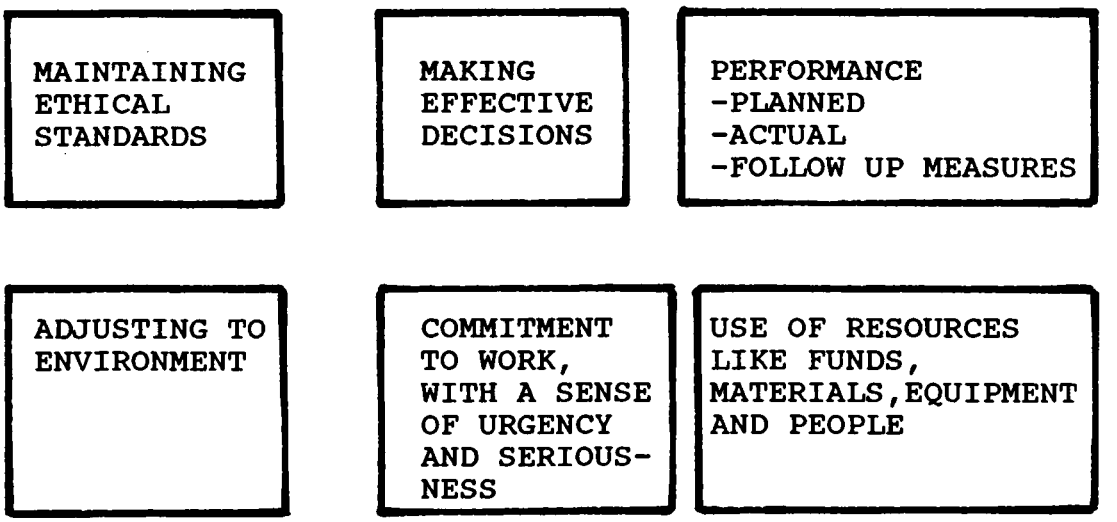
Accountability has necessarily to be performed. It is sort of 'obligational'. There is no need for regulations or directives for accountability. It must occur automatically. Youth workers who take on certain functions or youth teams which undertake to become responsible for project management also agree to become accountable for performance. Inherent in their accepting responsibility is the parallel accountability factor which includes an assurance from them

that they would put in their best. And even if they are not asked about it, it becomes their duty to report to certain concerned people on what they did. This is what differentiates accountability from 'evaluation'.

Accountability need not be written down, or ordered. The person does it more as a duty. This makes it an attitude, a part of the commitment of the person. Those who hide their work and performance from others, or those who misuse the opportunity to contribute have much to answer for.

One question that could be termed as a derivative of the concept is 'whom to answer to, report to, or inform ?' In fact the response to this question would be- To many like the other team members, the beneficiaries and affected parties, the donors, the Government, other people, interested parties and the general public. But then many of these agencies and groups may not be interested in all the information reported. Secondly accountability should not turn the situation upside down where the time taken to report to people is so large that it acts as a detriment to the progress of the project or work. Hence accountability leads to meeting one's obligation of reporting in a selective manner. At different stages of the project different sets of agencies will be reported to.

The dimensions on which accountability reports focus could be summarised as -



When a person reports he must present concrete evidence rather than only use phrases like :

- Doing my best
- Trying very hard
- People have not cooperated
- Don't know why this is so
- I'm honest and sincere
- Everything is okay.

Normally accountability gets reflected in the behaviour and responsiveness of the youth team members or yóuth workers. Some actions which project a high degree of accountability are listed below.

REPORTING TO
COLLEAGUES, LEADER

REPORTING TO
COORDINATORS

DETAILED PLANNING
(GOING THROUGH ALL STEPS)

ENSURING ROLE
CLARITY AMONG TEAM MEMBERS

KEEPING ACCOUNTS

FREQUENT CHECKING
WITH BENEFICIARIES

RESPONSIVE
FOLLOW-UP

EFFECTIVE PROBLEM SOLVING
AND CONFLICT RESOLUTION

CONSENSUS DECISIONS
ON DELICATE ISSUES

BEING HONEST ABOUT
PROGRESS REPORTING

ALLOWING INTERESTED
PARTIES TO VIEW PROGRESS

ARRANGING SITE VISITS
FOR AGENCIES INVOLVED

ACKNOWLEDGING SUPPORT
AND CONTRIBUTIONS

EXTERNAL AUDIT OF
PERFORMANCE, ACCOUNTS
(in effect PROJECT EVALUATION)

A general scheme of reporting can be observed in projects. Some examples, are given below.

ACTION	AGENCIES
Responsive Follow up	Donors, other agencies involved, beneficiaries, coordinators
Keeping Accounts	Donors, Auditors, anyone else who is important and who needs to be shown
Ensuring Role Clarity among Team Members	Coordinators, Donors, Government

Accountability requirements, since they are obligational', must be worked out by the project team itself. This may be considered to be a part of the `planning process'. Often proposal designs may contain a preview of what accountability requirements are and how they are likely to be fulfilled.

Many youth activities require external funding, from Government or from voluntary agencies or from donors. When the teams, and project managers accept the responsibility to plan and implement the project with external funding, the issue of accountability becomes crucial. They must, from the outset, ensure that they fulfill accountability requirements.

Accountability and evaluation are quite close to each other but are not the same. Now that the concept of accountability of project teams has been elaborated, remember to think of it again when you do Chapter 11 on 'Project Evaluation'.

FACTORS TO BE KEPT IN MIND WHILE DEVISING INFRASTRUCTURES

For a project, infrastructures of one type or another or a combination of types need to be designed to accomplish its objectives. The following are some of the factors which require to be considered while devising infrastructures.

(1) Project objectives and Project Plan

(2) Ambiguities and uncertainties during implementation (anticipated)

(3) Expectations of different agencies/youth volunteers/beneficiaries/interest groups involved

(4) Division of responsibilities

(5) Capability and expertise of youth volunteers

(6) Time frame of project

(7) Resource constraints.

ASSIGNMENT-THREE

Given below is a project description, its plan and an infrastructure for its implementation.

MAKE CRITICAL OBSERVATIONS ON THE INFRASTRUCTURE ON THE BASIS OF THE ABOVE 'FACTORS FOR DEVISING INFRASTRUCTURES' (Make any assumptions you deem fit), and CHECK your observations with your Tutor.

Situation :

Maku is a village having a population of 5000 (including 300 children below 3 years of age). 50 adults have completed middle school education. 200 adults possess only primary school education. 300 boys and girls are attending various schools in the village and in its vicinity.

P. Roy, a youth worker of 28 years, possesses a Bachelor's degree in Arts and desires to engage in an adult literacy campaign. He has developed a project plan, the details of which are given below.

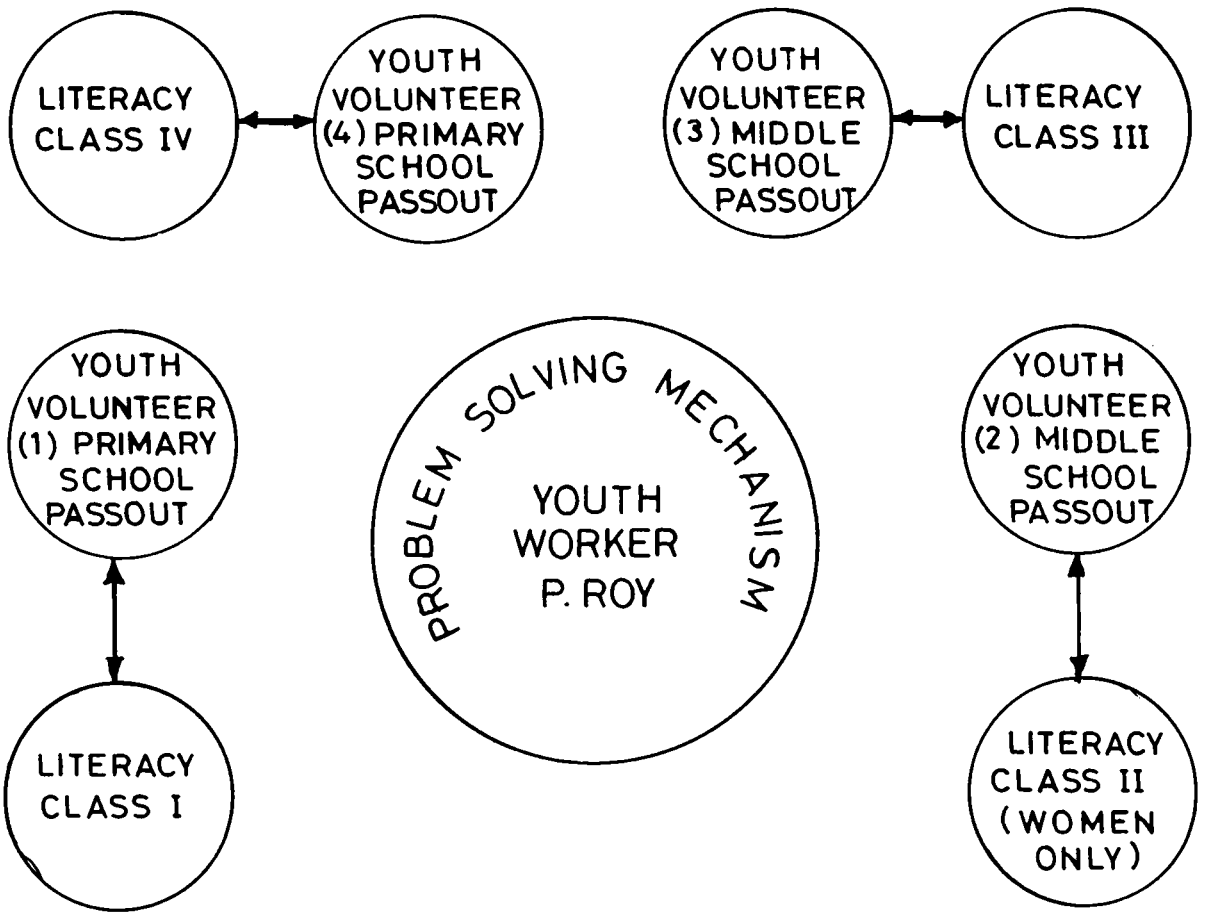
Objectives :

1. To conduct literacy classes for about 2000 adults during a span of 3 years
2. To make the illiterate adults capable of reading, writing and understanding primers
3. To reduce barriers like unwillingness, adult shyness and adult apathy towards literacy

Activities :
- Four literacy classes every third day for 30 adults
- Counselling adults in their homes
- Organising sports every Sunday

Potential Problems

Potential Problems	Solutions
1. Parents preventing their adult children from attending literacy classes	Create scope for gainful activity which is dependent on literacy
2. Some people disturbing the conduct of classes	Form interest groups to oppose such disturbances
3. Some youth volunteers withdrawing from the project	Keep a reserve force
4. Resources created by Government agencies not available in time.	Procure resources well in advance


LITERACY CLASS IV
YOUTH VOLUNTEER (4) PRIMARY SCHOOL PASSOUT
YOUTH VOLUNTEER (3) MIDDLE SCHOOL PASSOUT
LITERACY CLASS III
YOUTH VOLUNTEER (1) PRIMARY SCHOOL PASSOUT
PROBLEM SOLVING MECHANISM
YOUTH WORKER P. ROY
YOUTH VOLUNTEER (2) MIDDLE SCHOOL PASSOUT
LITERACY CLASS I
LITERACY CLASS II (WOMEN ONLY)

ASSIGNMENT-FOUR

FUTURE YOUTH CLUBS - SOMEONE'S DREAM

I once had a conversation with a man who had pioneered the youth club movement in this part of the country some time ago. Though he was disillusioned with the track the movement had taken of late, he still had hopes that youth would rebuild their own movement. He liked to talk not only out of old memories, but because of the visions of the future he had. So I made him talk for I thought his ideas were very provocative. What I write now are his views, only some of them, on the Future Youth Club.

A youth club is established under the principles of direct democracy. These principles - voluntarism, cooperativism, and egalitarianism - aim at the complete identification of the individual with society. Individual members internalise these goals and feel that no conflict exists between their personal desires and the needs of the club. This process is facilitated by the psychology of 'total inclusion', wherein each member joins a work group which is interdependent on another or overlaps with another work group. So we could have the ecological work group overlapping with the social work group, the social work group developing an interdependence with the education unit, which in turn links closely with the economic productivity

unit and so on. This 'inclusion' ensures that you can pursue personal interests as well as integrate with other spheres of activity.

Hierarchy should gradually vanish and be replaced by nonformalised member (or public) opinion as the means for control. This 'general assembly' must meet every week. Communications, validation of group decisions, discussion on problems in these meetings should be open, to integrate and to serve as a balance for various interests. Why separate out executive, legislative and judicial powers and functions in a youth club ? Why emphasize, as we do today, that hierarchy and bureaucracy can only perform when it doesn't ?

Unit and small group leadership is important. They may be elected and replaced by the 'general assembly'. After all about 10 leaders are enough. And we need a secretary for the whole club. Chairman is elected for each meeting, may be a rotation process.

What is important is that certain social conditions like small work groups are needed. Size must be linked to feasibility cf decision-making. And every member in a unit must be inducted through display and expression of personal interest. Self realisation for members must be goal for these groups, apart from performance in a sector. Voluntary commitment has to be made use of.

I must terminate his exposition here for he became more 'abstract' after this.

BRIEF:

Participants will, after reading the presentation given above, offer 'critical comments' on the feasibility of the infrastructures and linkages proposed in the presentation. This is to be done in groups of 5 to 10, with a report back session. The Tutor will organise the report back and summarise group conclusions.

GROUP WORK	-	45 mins
REPORT BACK	-	30 mins
SUMMARIZATION	-	15 mins

*****

CHAPTER-9

WORKING IN GROUPS

* General and Specific Objectives
* Trainer's Notes and Guidelines
* Self-Learning Package for the Trainees and Assignments

GENERAL OBJECTIVE

The participant will appreciate the factors influencing the development of volunteer groups into effective project teams.

SPECIFIC OBJECTIVES

The participant will:-

(a) Describe the characteristics of effective teamwork.

(b) Analyse the implications of factors like collaboration group size, group homogeneity, group creativity on team performance.

(c) Given the description of the performance of a team, diagnose gaps in teamwork and suggest remedies.

TRAINER'S NOTES AND GUIDELINES

WORKING IN GROUPS

THEME OF THE CHAPTER:

Closely related to Chapter-8 - Organizing for Implementation - this Chapter explores further into the manner of working of project teams and the factors that influence it. While Chapter-8 dwelved into the functions and roles of project teams and their links with external agencies, Chapter 9 will deliberate on how and why members within the team cooperate with each other, and the effects of certain factors like group size on cooperation. Also discussed are concepts like group creativity and its utility to project teams.

The work of project teams is crucial to both planning and implementation of projects. That project teams are preferred to other forms of infrastructures for managing projects is well known. But the requirements that lead to team work are never very clear. These requirements get dismissed as 'cohesive working', 'team spirit', 'effective group working' and other such abstractions. This Chapter probes into these requirements profoundly and attempts to provide some concrete meaning to them.

PREREQUISITES

It can be said that none of the preceding chapters, except Chapter 8 on Organizing for Implementation, is an essential prerequisite for 'Working in Groups'. At the same time, since this Chapter is one in a long sequence, it can be said that to understand the context of the presentation and illustrations, Planning (Chapter 2) must have been completed. Since Network Analysis (Chapter 3), Decision Analysis (Chapter 4), Cost Benefit Analysis (Chapter 5), Potential Problem Analysis (Chapter 6) and Organizing for Implementation (Chapter 8) are all linked to Planning, this Chapter should be taken up only after their completion. Moreover this Chapter will provide the first peep into Implementation and hence it heralds the transition from planning to implementation in the package.

It is anticipated that both Tutor and participant would have a wide experience of working in groups and teams. The Tutor, of course, must have lead teams, and attended training programmes in related spheres.

PREPARATORY ACTIVITIES FOR TUTOR

Apart from a thorough study of this Chapter (including completing the Assignments), the Tutor may study about Groups - their working and their dynamics, from References 3 and 4.

The Tutor must also be prepared to offer clarifications, additional illustrations, and may be even narrate his own experience on certain topics in the Chapter since it is anticipated that the participant (in some cases) may have difficulty with concepts like Group Norms, Superordination, interpreting the influence of Group Size on certain factors.

INSTRUCTIONAL GUIDELINES

(a) The contents of the Chapter are conceptual. Effective Working of Groups has been linked with six factors - Collaboration, Homogeneity, Structure, Leadership, Creativity and Size. Of these Group Structure has been extensively analysed in the Chapter - 8. Leadership and Creativity have only been 'fleetingly mentioned' in this Chapter since an elaboration would mean adding new chapters to the Package. Collaboration has been dealt at length because of its significance for youth groups in general.

This Chapter has a strong dependence on the Chapter on 'Organising for Implementation' (Chapter 8) and can be considered to be a logical extension of that Chapter. It is preferable if the previous Chapter is available to the participant for reference while he is learning from this Chapter.

(b) A proposed schedule for 4 1/2 hours for this Chapter would be as follows:-

Sl.No.	Activity	Time in hours
1.	Introduction to Chapter by Tutor	1/4 hours
2.	Learning the Chapter until Assignment Five with Tutor's guidance and use of OHP Transparencies 1 and 2	3 3/4 hours
3.	Assignment Five	1/2 hours

(c) For introducing the Chapter the Tutor may stress two or three issues like importance of the topic, links with previous Chapter, and the fact that this Chapter will have implications on both planning and implementation. May be some Tutor instructions may have to be given on the assignments too.

(d) Most of the Chapter is in the self-learning mode. Some assistance may be needed from the Tutor by some participants for understanding certain concepts (mentioned earlier). The Tutor could move around the class assisting individual students, while they are learning in the self learning mode at their own pace.

Some of the illustrations may need to be elaborated to establish, with clarity, the application of a related concept. Given the somewhat abstract nature of some of the concepts it will not be surprising if such demands arise. The Tutor may fulfill these participant needs. He may also add a few narrations from his own experiences of a similar nature.

There are five assignments in the Chapter. All of them are individual assignments. All of them require that the Tutor check the responses of the participants on completion. In case the Tutor feels this would be time consuming he may collect participants who have completed the assignment in a small group and validate their responses in a discussion. The Tutor will announce this strategy after introducing the Chapter to the whole class so that each participant understands what is expected of him.

(e) Two OHP transparencies accompany the Chapter.

9.1 - Differences between collaborative, competitive and individualistic actions.

9.2 - Factors influencing collaboration.

These transparencies link up with the appropriate content components of the Chapter and their use is quite simple. OHP Transparency 9.1 can be used as an introduction to the concept of Collaboration. Transparency 9.2 can be used after Assignment Three has been completed by participants and checked by Tutor. This will help prepare participants to understand the 'graphs' provided in this component.

SUGGESTED RESPONSES TO ASSIGNMENTS

ASSIGNMENT ONE (YOUTH TEAM FOR PROVIDING TEXTILE/DRESS MATERIAL DESIGNS)

A. REASONS FOR LOW EXTENSION MOTIVATION.

- No sensitivity, respect towards each other.
- Excessively tight controls.
- Leadership not responsive to members, and vice-versa.

B. SUGGESTED REMEDIES.

The team must sit down and enter into an introspection about why they are not behaving as a team. Assurances to support each other have to be given and taken.

ASSIGNMENT TWO (PROJECT TEAM FOR SLUM COMMUNITY HEALTH CARE)

(a) PROBLEMS IN THE TEAM - No Superordination, poor Group Norms and rewards, Extension Motivation low in some, Leadership lacking; in fact no Collaboration.

(b) ACTIONS FOR IMPROVING SITUATION - Team development, Team reformation, ensuring that all essentials for Collaboration gradually sprout.

ASSIGNMENT THREE

(a) (CONFLICTS) CAUSES OF CONFLICT - Disagreements among members due to different perceptions, different knowledge of facts, different goals.

(b) WHY COLLABORATION REDUCES CONFLICTS ? - In fact Collaboration will tend to reduce more serious conflicts due to affiliation to group norms, superordination, trust.

B. (HELPING RELATIONSHIP)

Column I	1	2	3	4	5
Column II	(ii),(iv)	(i)	(v),(iii),(i)	(v),(iv)	(v),(i)

ASSIGNMENT FOUR (INOCULATION CAMPAIGN)

ALTERNATIVE ONE - Through some street plays (or similar effort) highlight the great benefits of inoculation; also reduce the fear of inoculation by showing live examples of people who have 'survived' it.

ALTERNATIVE TWO - Get people from other villages who have been successfully inoculated, and get them to narrate experiences, benefits.

ALTERNATIVE THREE - Select one of the people from the village. Train her/him. Make her/him attend campaigns elsewhere. Then use him to convince the people in the village.

ASSIGNMENT FIVE:-

SITUATION-1 (NATURE CAMP)

1. WHY COULD THIS HAVE HAPPENED ? - Each faction has its own hidden agenda' There is no trust between leaders. They also appear to have no Superordination. No Group Norms exist. In short there is no Collaboration.

2. REMEDIES - Strong leadership at meeting. Appeal to them. Point out that they appear to be engaged in a Zero sum Game.

SITUATION-2 - RURAL HEALTH PROGRAMME

FACTOR	PRESENCE OR ABSENCE	JUSTIFICATION
EXTENSION MOTIVATION	ABSENT	Disagreement
TRUST	ABSENT	Nobody respects another
SUPERORDINATION	PRESENT	They all believe in the primary objective. They are suggesting alternatives
CREATIVE THINKING	PRESENT	A variety of alternatives suggested
GROUP NORMS	ABSENT	Very little order and structure in meeting

REFERENCES

1. 'A Systems Approach to Small Group Interaction' by S.L.Tubbs; Addison Wesley Publishing Company, Massachusetts, USA, 1978.

2. 'Managing Conflict and Collaboration' by Udai Pareek; Oxford and IBH Publishing Company, Delhi, 1982.

3. 'Managing Organisational Behaviour' by Tosi, Rizzo and Carroll; Pitman Publishing Inc, Massachusetts, USA, 1986.

4. 'Organisational Behaviour and the Practice of Management' by Hampton, Summer and Webber; Scott, Foresman and Co., USA, 1978.

5. 'A Diagnostic Approach to Organisational Behaviour' by J.R.Gordon; Allyn and Bacon Inc; Boston USA, 1978.

6. 'Lateral Thinking for Management' by Edward de Bono; McGraw Hill, UK, 1971.

SELF-LEARNING PACKAGE
AND
TRAINEE'S ASSIGNMENTS

WORKING IN GROUPS

As Elton Mayo (1945) and many people after him have emphasized, to understand a substantial portion of human behaviour one must look beyond the individual and the organization and focus on groups of people. One must sharpen one's appreciation of groups as a factor that contributes to high or low performance. This is more than true in the field of youth services and youth programmes.

Youth clubs and communities organise people into groups, which are generally large in size and may be loosely held together. On the other hand one can think of project teams consisting of youth undertaking the management of programmes, schemes and services. These project teams are usually small groups with a specific ethos and purpose. It is the small teams and groups that this chapter will be concerned with, particularly those which manage projects.

Most projects in the youth services are managed by project groups' or project teams'. These groups consist of volunteers or workers. It is in the belief that a team can accomplish much more than could be accomplished by an individual working alone' that the team approach is preferred. Another assumption underlying the selection of the team approach' (as opposed to individual operation) is

that team work can be more satisfying, exciting and enjoyable. But then it must be realised that the 'team approach' could only succeed in the youth programmes and services, or for that matter in any sphere of human endeavour, if the team work is for real and not merely a set of individuals working together in a setting as individuals.

There are several reasons for the increasing use of teams in youth service and youth programmes.

(i) Youth services and programmes need infrastructures for ensuring that 'things get done' and 'results are accomplished'. Unlike the traditional bureaucratic structures which suit the regimentation of government and industrial work (on occasions), the need here is for a more democratic and informal types of infrastructures. The team or group is a highly preferred infrastructure in youth services since it offers a democratic way of functioning, without much of status differences among members, and which promotes high involvement.

(ii) The very nature of youth services is full of ambiguity and uncertainty. There are no defined norms or specifications about 'what to do' and 'how to do'. Under the circumstances groups are more appropriate in formulating, modifying and refining project strategies

and plans, and in resolving problems that arise during the course of implementation. Participative and consensus approaches emerge out of groups. It is such approaches that are needed to cope with highly ambiguous situations.

(iii) In the youth services there is a need to pool mental faculties of different kinds in decision making, problem solving, design of strategies, making selections, innovating and experimenting, and in general, during planning and implementation. A group can provide scope for this. Hence a youth project team which includes people from different fields, with varied experiences, and with diverse expertise and skills, can perform highly effectively. In both creative and analytical thinking youth teams can make significant contributions.

The presence of team work and group operation manifests itself in many ways. What is aimed for is 'good teamwork'. This aim emerges from the knowledge that 'bad team work' is also possible. The presence of good or bad teamwork is specifically noticed (or looked out for) in meetings, in the expressions of members of team when engaged in work, in their relationships, in the manner of accomplishment of activities, and finally in the results produced in the project.

SYMPTOMS OF POOR TEAMWORK

(a) When team members (some or many) get frustrated, lose their inspiration, and seem to lack commitment and motivation towards project objectives or their responsibilities.

(b) When the team members appear to be unhappy or carrying burdens on their shoulders.

Similar occurrences are withholding information, ideas and opinions; too much is hidden from others; and there is low openness between members .

(c) When team members appear to lack cohesion and mutual respect and indulge in unhealthy competition.

Indications here are `backbiting', internal politics, and the forming of cliques, and the whole lot of `dirty tricks' that are frequent in intensive rivalry between adversaries. Conflicts are common in such situations.

(d) When lack of trust and shallow relationships are observable.

Members do not confide in the leader. The conversations between members and leaders are on trivial topics. Sometimes the leader or a member may appear totally isolated from other members.

(e) When jobs are done twice, functioning is counter-productive, creativity is poor, and delays, errors, and incomplete accomplishment are noticeable in activities and results.

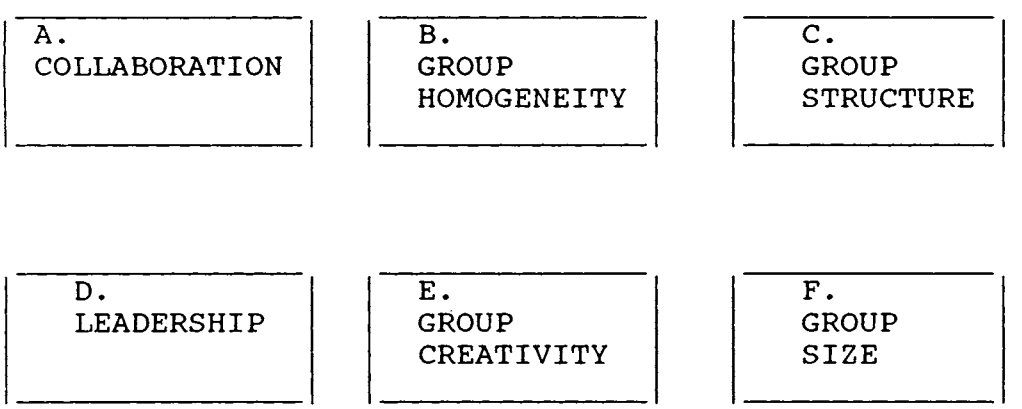
These are the performance outcomes of poor teamwork and are in fact the best symptoms of the need for improvement. It can be concluded that these are but the consequences of the symptoms described in (a), (b), (c) and (d) on the actual work or jobs undertaken by groups which lack teamwork.

CHARACTERISTICS OF EFFECTIVE TEAMWORK

An effective team, in general achieves three important goals.

- Meets the purpose for which it has been set up, like completing activities and project without much of deviations from plan,
- Maintains harmony among members and sustains a happy and fruitful relationship,
- Becomes increasingly effective (as a team) with the progress of time.
- Assists in the development and growth of individual team members.

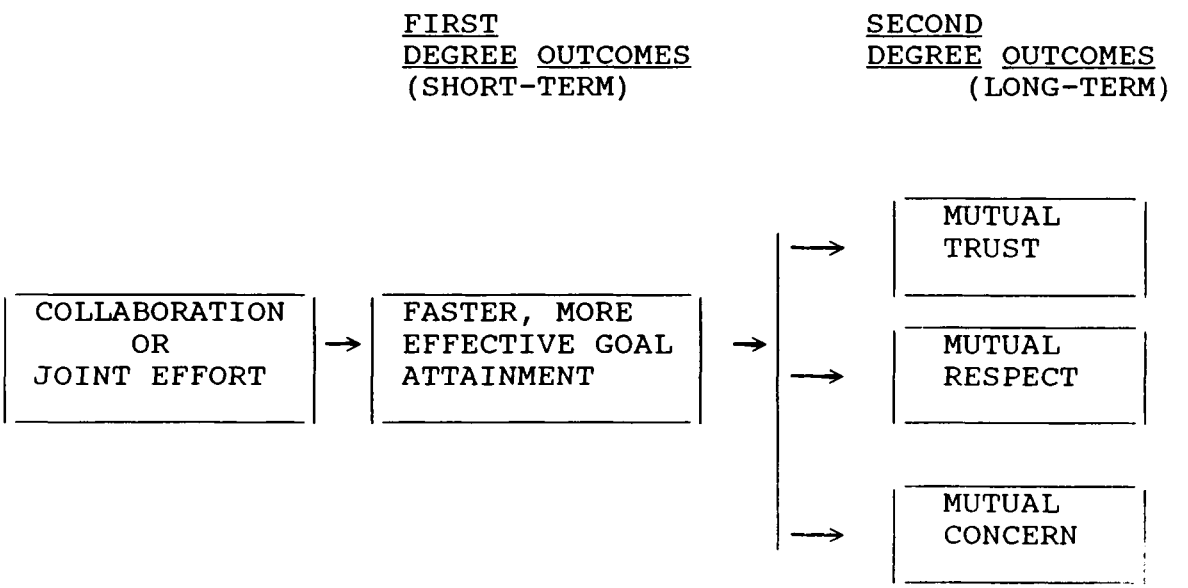
What, then, are the characteristics of effective teams? They could be summarized into six blocks.



Each of these blocks needs elaboration.

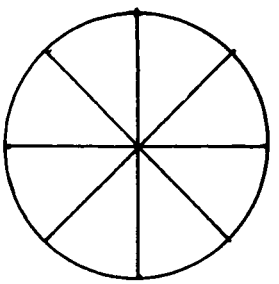
A. COLLABORATION

Functional Collaboration (or Cooperation plus) can be looked upon as the tendency to contribute to joint effort for faster and more effective goal attainment. This results in mutual trust, mutual respect, and mutual concern among group members. Such Collaboration increases self-worth of the group and its members.



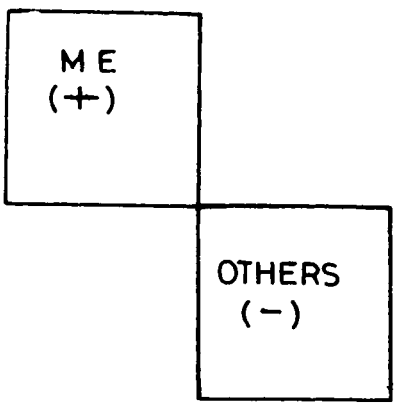
One can distinguish between three different motives that can exist within the members of a group or between groups.

COLLABORATION MOTIVE



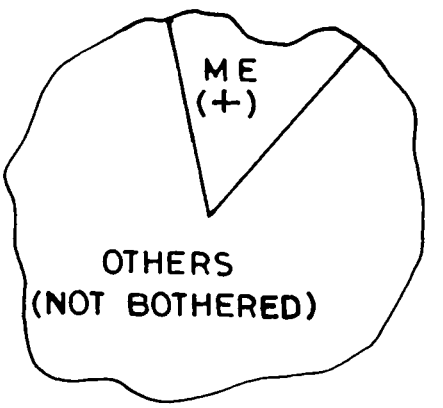
- SHARING SUCCESS WITH OTHERS
- SEEKING BENEFITS, REWARDS FOR ALL
- ALL WIN

COMPETITION MOTIVE



- WINNING AT THE COST OF OTHERS

INDIVIDUAL MOTIVE



- SEEKING AN OUTCOME THAT IS BEST FOR HIMSELF, REGARDLESS OF WHETHER OTHERS ACHIEVE OR NOT

What are the factors that contribute to the development of Collaboration between individuals ?

(1) EXTENSION MOTIVATION - There exists a basic need in human beings to care for, help and become useful to others. In this need, which is sometimes to referred to as Extension Motivation, the basic urge is to extend oneself to others, and be of service to others. There is concern for the other individual, and for the society itself. Herein is the basis of Collaboration.

Extension Motivation is not something one is born with. It emerges or gets impeded because of many forces, some of which are explained later in the chapter.

The presence of Extension Motivation in a person can be noticed by the concern he expresses for others, and his desire to forego or postpone his gains for the benefit of others in the group.

If such a motivation exists and is matched by reciprocal motivation from others in the group, then extension motivation will increase. On the contrary if other members do not respond with a corresponding measure of extension motivation then the individual is likely to reduce his concern for others.

ILLUSTRATION - ONE:

In the book 'Future Shock', Alvin Toffler, the author, quotes among his strategies for survival a new approach to adaptation as suggested by Dr. Gerjuey a psychologist. Dr. Gerjuey advocates the forming of 'situational groups' and adds -

Membership in the group would of course be temporary, just enough to help a person with transactional difficulties. By bringing together people who are sharing or are about to share a common adaptive experience, we help equip them to cope with it. A person who is required to adapt rapidly to change loses some self-esteem and could start doubting his own abilities. If this person joins some others who are going through a similar experience then we have a group in which members can identify with each other and who can share troubles. They could begin to see problems more objectively. They could trade useful ideas and insights and suggest future alternatives to each other. They must help each other.

The very reason that they would rise to mutually help each other would be 'extension motivation'. If within the group there is no mutual respect and concern then this situational group may not succeed at all.

ASSIGNMENT ONE

A group of girl youth formed a team to provide innovative 'textile and dress material' designs to a large community of handloom weavers. These girls were trained and were in employment elsewhere. Helping this community was a side job for them where payment was not the main criterion. It was being done for mere satisfaction.

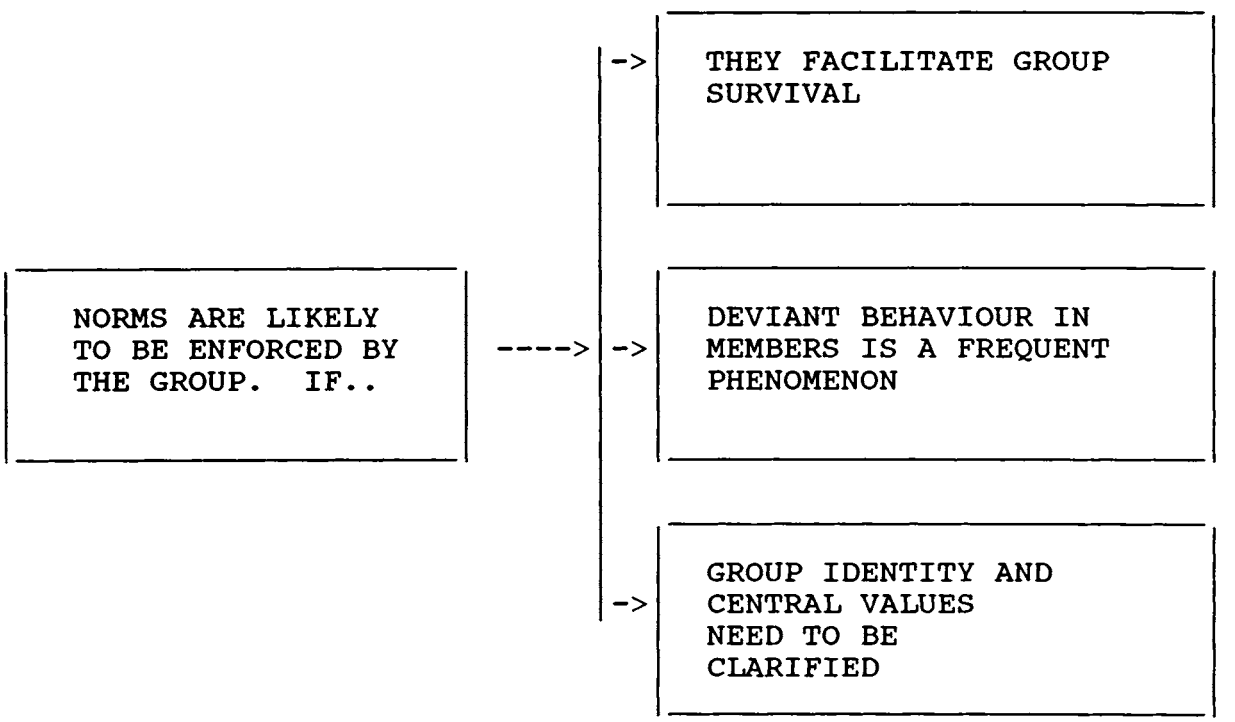
There were six designers in the team, and one girl acted as supervisor. Within three months of establishment, this team was in utter chaos. Arguments were a regular feature. Three designers were unhappy since the supervising girl always insisted on tight scheduling, and they believed that schedules were unnecessary in designing. The other two designers were upset because the supervisor had a habit of frequently (i) reviewing and changing the schedule and (ii) changing priorities of designs. Tension in the team was growing day by day.

Given this description of events, participants will judge and comment briefly upon -

A REASONS FOR LOW EXTENSION MOTIVATION AMONG TEAM MEMBERS

B SUGGESTED REMEDIES FOR ENHANCING MOTIVATION

(2) GROUP NORMS - These are the informal rules that groups adopt to regulate and regularize group member behaviour and to channelise group efforts towards goal accomplishment. Norms are not meant to cover every conceivable situation.

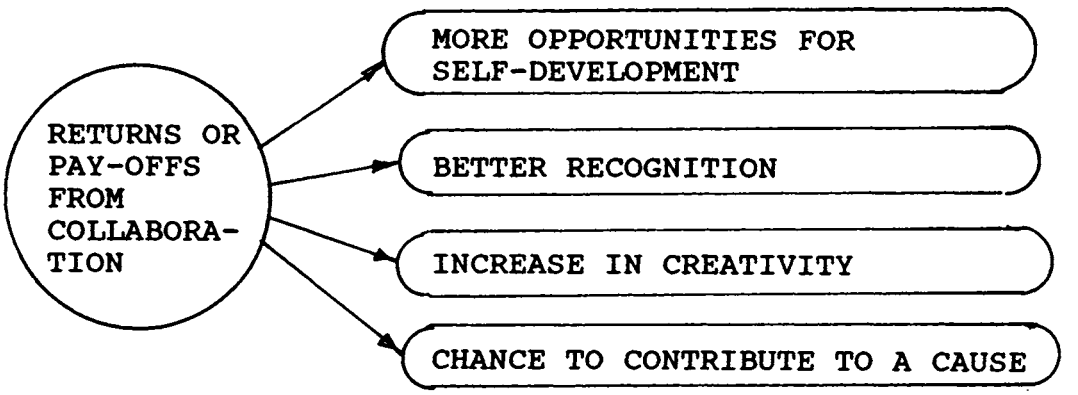


Groups develop norms gradually, when members learn that certain rules become necessary for the group to work effectively.

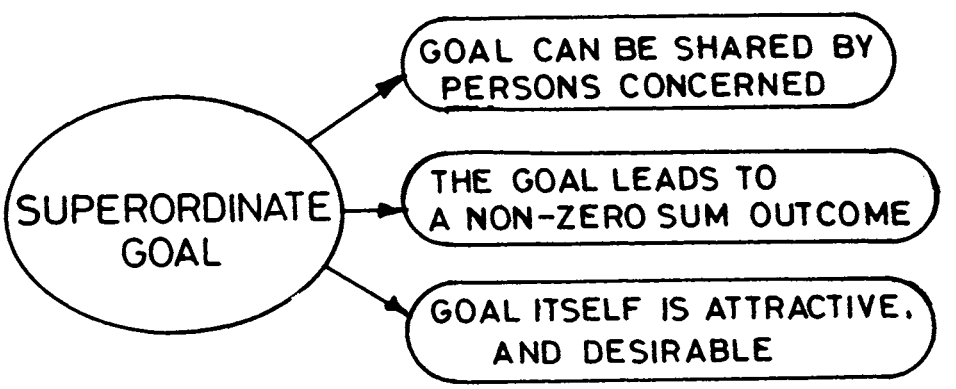
Group norms have a strong influence on 'extension motivation' and tend to increase or lower it among members. If a member has a low level of 'extension motivation' (the member prefers to compete) then group norms can gradually help increase levels. On the contrary norms could prevent members from receiving positive responses to their 'extension motivation' and result in a reduction in the motivation.

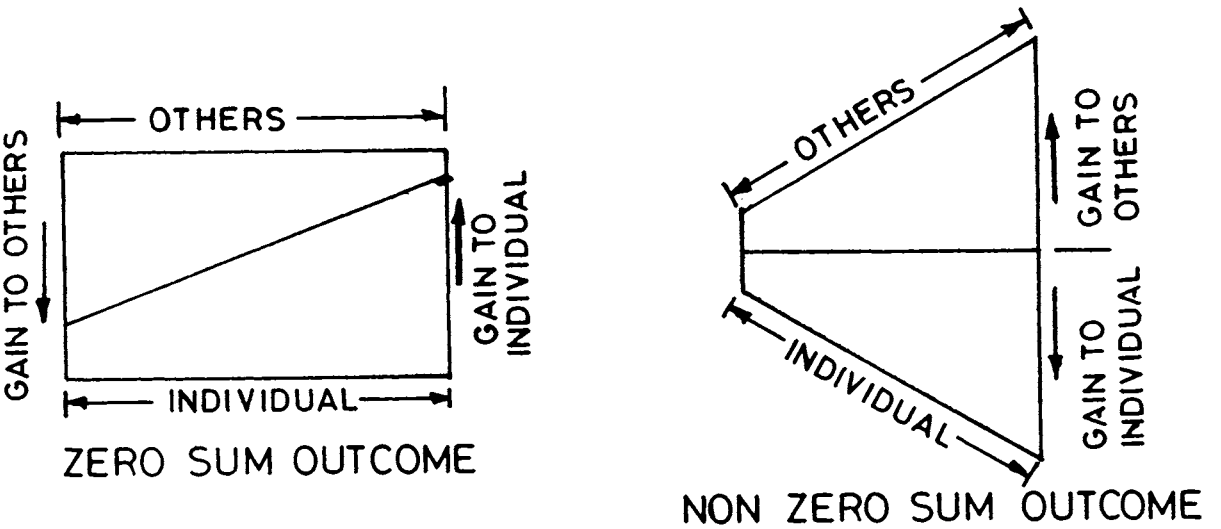
(3) HIGHER RETURNS FOR COLLABORATION - Generally an individual behaves in accordance with the perception he has on the returns or rewards he will get for the behaviour. Thus if the rewards he expects are high then he is likely to repeat the behaviour. Motivation then depends to a large extent on perceived returns.

If Collaboration is rewarded or produces higher returns, people will tend to collaborate more. For example, if Collaboration leads to better results in a project than competition, or to a successful completion of some activities, then 'extension motivation' will increase.



(4) SUPERORDINATION - There are many situations in which the individual, by himself, cannot achieve much. But if he shares the goal with others, the degree of achievement increases considerably. This goal which gets shared can be referred to as a `SUPERORDINATE GOAL'.





The Zero sum Game or outcome ensures that the individual wins at the expense of others. (A WIN-LOSE COMBINATION). On the contrary a Non-Zero sum Game or outcome leads to both individual and other collaborators gaining from events (A WIN-WIN COMBINATION OR SUPERORDINATION).

Superordinate Goals arise out of joint goal setting, and designing work and goals with high member participation.

ILLUSTRATION - TWO:

When the members of a project team for SLUM CLEARANCE visited the slum for the first time they were avoided by the slum dwellers. Nobody even bothered to acknowledge their 'Hellos' properly. This initial disappointment only spurred the team to try harder, to try other approaches to win the confidence of the dwellers. Within the team the single purpose of 'getting the villagers to clean the slum and its surroundings by voluntary effort' almost became an obsession. The adherence to this goal appeared to get stronger day by day.

They knew they had to get an agreement from the slum dwellers on the purpose, the goal. To do it they had to get themselves accepted first, and then get the villagers to start thinking on the whole issue. What the team did was to start the cleaning effort on their own. They got hold of a number of 'sweeping, gathering, and transporting implements' and started shifting garbage. After a few days, some slum dwellers started watching. Within a month a few slum youth joined the 'cleaning brigade'.

But the youth team knew that till the project objective got accepted, and till slum dwellers got committed to it, progress would be marginal. What was needed was 'superordination'.

ASSIGNMENT - TWO

A Case Description-

A project team has been set up to manage a health care project in a slum community. It consists of six youth. They are all voluntary workers. The project coordinator is a senior health worker who oversees the project, provides resources and guides the team when it is in trouble. She does not interfere or influence unreasonably. Considerable freedom has been vested in the team to decide what they want to do.

Miss `M' was a young lady who has recently completed a Diploma in Home Science. She was interested in doing some voluntary healthcare work and had received some training in that area during her Diploma programme. She joined the project team. Incidentally she was readily accepted by the team.

There was no training or `indoctrination' carried out by the team for her benefit. After a few weeks Miss `M' began to regret her decision to join this team. Each member of the project team had his/her own perspective as to what needed to be done in the project. Some members were frustrated and pessimistic about accomplishment of the job. Nobody respected the senior health worker. Everybody and nobody was the leader in the team, it appeared.

Now that you have read the Case Description, please answer the two questions given below briefly, in the space provided.

(a) Diagnose the problems in the project team.

(b) What can be done to improve the situation ?

(5) POWER AND TRUST - Every person in a group has some kind of power. Through the use of this power, persons could help others in the group, or annoy others. For example, sharing a valuable piece of information is a positive use of power. On the other hand delaying a decision or activity beyond normal periods is a negative use of power. What is important is that in a group, power should be accepted as a means by which mutual benefit and support can occur.

Mutual trust arises out of the perception that power will not be used against someone. Thus if one party feels that the other will use its power to support it, trust will increase between them.

Trust and power combine together to lead to a stage of cooperation. This means that trust arises when coercion and exploitation of some members by others is virtually absent.

In the matrix (two-dimensional diagram) given below, the implications of power and trust between two persons are indicated.

ME ----------RELATIONSHIP----------> THE OTHER MEMBER

<----------POWER----------->

		ONLY WITH ME	ONLY WITH THE OTHER MEMBER	WITH NEITHER	WITH BOTH
TRUST	LOW	COERCION, EXPLOITATION OF THE OTHER	SUBMISSION OR COMPLIANCE TO THE OTHER	INDIFFERENCE TO EACH OTHER	COMPETITION WITH THE OTHER
	HIGH	NURTURANCE OF THE OTHER	DEPENDENCE ON THE OTHER	MUTUAL SYMPATHY	COOPERATION WITH THE OTHER

---

(6) Collaboration also gets enhanced due to:

- Proper communication between members
- Members staying together, working together
- Demonstration of the willingness of members to sacrifice personal gain for the sake of others.

ASSIGNMENT - THREE

Though youth groups members may not be in conflict with each other every day, it does not mean conflicts between them do not occur.

Whenever youth interact, they can cooperate and be friendly with each other and may be even have fun together. However, even though familiarity does not always breed contempt, it does provide a basis for people to disagree with each other.

Disagreements among youth group members can occur on issues like -
What is the best project that can be devised ?
Who should do what ?
When should the project start ?
What could be the strategies adopted to resolve some difficult problems in the project ?

Fortunately not all disagreements become serious conflicts. Either the conflict gets resolved amicably or is avoided.

Each participant will answer the following, given the above narration in the space provided.

(A) TWO CAUSES OF CONFLICT.

(1) _____

(2) _____

(b) ONE REASON WHY COLLABORATION BETWEEN MEMBERS CAN LEAD TO REDUCED CONFLICTS.

_____

_____

(c) WHY ARE DISAGREEMENTS HEALTHY ?

_____

_____

_____

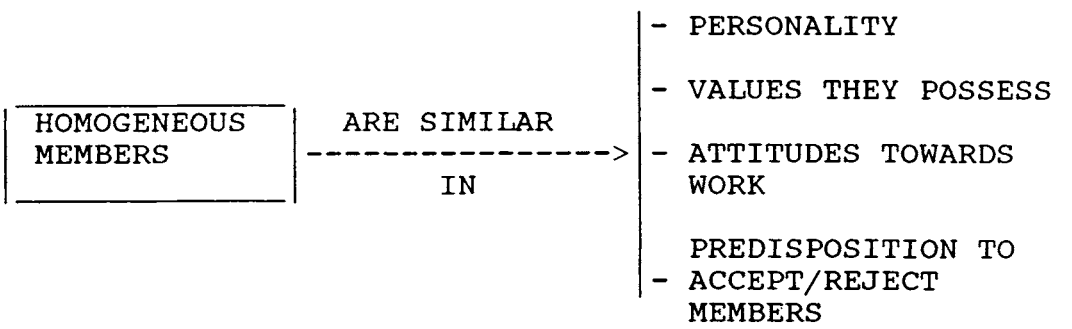
B. Given below are in Column I certain characteristics of a 'Helping Relationship' as identified by Carl Rogers. Column II contains the main factors which lead to Collaboration between people.

COLUMN I	COLUMN-II
1. Clear communication (without any ambiguity) with others	i) Extension Motivation
2. Feelings of warmth, care, liking, interest towards others	ii) Group Norms
3. Acceptability of the other person without losing respect for oneself	iii) Enhanced returns from Collaboration
4. Accepting the other person's freedom and identity	iv) Superordination
5. Ensuring that one's behaviour is not threatening to the other	v) Power and Trust

What is required is a relationship between the characteristics of Column I and the factors of Column II. Please remember a characteristic could match with more than one factor. Indicate the relationship in the table given below.

CHARACTERISTICS OF COLUMN I	1	2	3	4	5
FACTORS OF COLUMN II					

B. GROUP HOMOGENEITY



The conclusions one can draw from the characteristics of a homogeneous group are -

a) In a heterogeneous (non-homogeneous) group, it would be difficult to build interpersonal relations.

b) A heterogeneous group is likely to be better in problem solving. It could lead to a better understanding and appreciation of the problem, and generate a wide range of alternatives. Further it could place checks and counterchecks on ideas and dissuade quick agreement which results from 'little thinking'.

c) Both homogeneous and heterogeneous groups can successfully complete tasks. It depends on the nature and demands of the task. But 'social performance' of a group is dependent on homogeneity.

d) In times of crisis heterogeneity may become an impediment for action.

e) For creative thinking, heterogeneity may prove more advantageous.

In fact, it would be preferable if the group starts off with heterogeneous membership particularly as regards knowledge, skills and previous experience and then Collaboration is gradually introduced into the group.

C. GROUP STRUCTURE

This factor relates to the manner in which the project team or small group organises itself into infrastructures for various purposes and functions like Planning, Follow up, Problem Solving and Decision Making. An analysis of such infrastructures and the manner in which function allocations get done is described in the Chapter on 'Organising for Implementation' (Chapter-8).

The whole concept of role (which is obligationary) is significant to group structure. Since a youth worker is linked to a set of other people - colleagues, coordinator, beneficiaries, external agents/experts, etc., the role which he will adopt and perform will depend very much on his 'perceptions of their expectations from him'. The interlinking of functions becomes an interdependence of expectations. Clarity to this role concept can only arise from a detailed 'Analysis of Expectations'. The process involved is cumbersome and time consuming (but important). Under these circumstances, it would be beyond the scope of

both this chapter and package to elaborate more on the concept and its applications.

D. LEADERSHIP

Leadership of small groups and teams is a crucial factor affecting their performance. In youth service teams leadership is likely to emerge out of the circumstances and conditions that surround the formation of the group and the introduction of the project or programme.

Leadership as a social influencing process is very important to the working of groups (and teams) in projects, right from Planning to the very end which is Review and Evaluation.

Leadership is an area or discipline which has been researched considerably. It still remains an area which 'confounds'. There exists a multiplicity of models and theories today, each carrying some proof and scope for application. Choice between them is difficult. Yet choices have to be made.

Training youth for leadership has become a crucial programme in most countries in recent times. Such opportunities are increasingly available and a constant refinement of the 'content and delivery' of programmes is in evidence.

Given the profoundity of skills required, and the time needed to develop them, and the fact that independent training in leadership is also a crucial thrust, this Chapter (or for that matter the total package on Project Management) will not pursue Leadership further. It is anticipated that 'Training in Leadership Skills' would have already been or would be undertaken by the participant.

E. GROUP CREATIVITY

The overriding influence in introducing this topic is to indicate that groups can act creatively and that this creativity will enhance the effectiveness of their performance. Training teams or groups to become highly creative is a prolonged sequence of activities and hence cannot be accommodated within the scope of this topic or Chapter.

There is little doubt that many youth groups do act creatively, probably unconsciously and sometimes instinctively. Creativity is instrumental to the generation of new and original ideas related to projects, project strategies, generating alternatives , and obtaining solutions to problems. The need for creativity is high in good times when the team is operating well. But when youth teams encounter bad periods, when things go wrong, creativity and its use become imperative.

Creativity implies shifting away from the traditional habits of logical thinking (incidentally logical thinking has its own utility in different contexts). It has been referred to as thinking which is non-conformal, wild, lateral as opposed to vertical, child-like as opposed to mature, divergent instead of convergent.

Plenty of creativity techniques are available - some suit individual action, some others specifically are for group actions. In addition there are a few which combine both individual and group work.

Among the popular group techniques are 'Brain-storming', and 'Synectics'. The combined approaches include 'The Nominal Group Technique', and 'Lateral Thinking'.

What is important is that groups or individuals need to be trained to apply the creativity techniques purposefully to different situations. This would help replace accidental or instinctive creativity with a planned approach, and enhance the utility and productivity of the whole exercise.

Groups are potential forums for creative action provided the group has developed itself in the use of creativity techniques. Youth teams which struggle with the planning and implementation of projects can derive great help from their own creativity potential at moments of

difficulties. And youth can demonstrate high capabilities in creativity. Anyone and everyone in the team can be creative.

Youth teams or task forces demand practical creativity. Unless creativity has an applications orientation its success as a useful process will be limited. The need to train the team in ensuring practical creativity is hence important. Training for using simple techniques without much of 'flourish' can be accomplished through appropriate trainers, given the right 'instructional resources'.

ASSIGNMENT-FOUR

Participants will read the Case Description and give answers to the questions indicated at the end of the Case Description.

Case Description:

A group of young girls (students of a Medical Institute) decided to initiate an 'Inoculation Campaign' in a cluster of villages near their institute. They organised themselves into a group of 10 volunteers under a leader who was familiar with the language spoken in the cluster. During their first visit they discovered that there were at least 140 children who had not been inoculated earlier against the disease. They collected the mothers of the children in groups of 25 and talked to them for half an hour on the merits of getting their children inoculated. The mothers appeared to listen patiently and the medical - student group was very happy at this apparent positive attitude.

A week later the girls organised an inoculation camp for the cluster of villages on a Sunday and found that the response to the camp was disappointing. Only 4 mothers brought their children and others kept away from the camp. By the evening when the girls wound up their camp it had become a fiasco.

However, the young ladies did not give up. They sat down in a quiet place and decided to 'stretch their imagination'. But very few new ideas emerged from the group. The only acceptable idea appeared to be to use the village headmen to convince the womenfolk of the villages to agree to get their children inoculated on a suitable date.

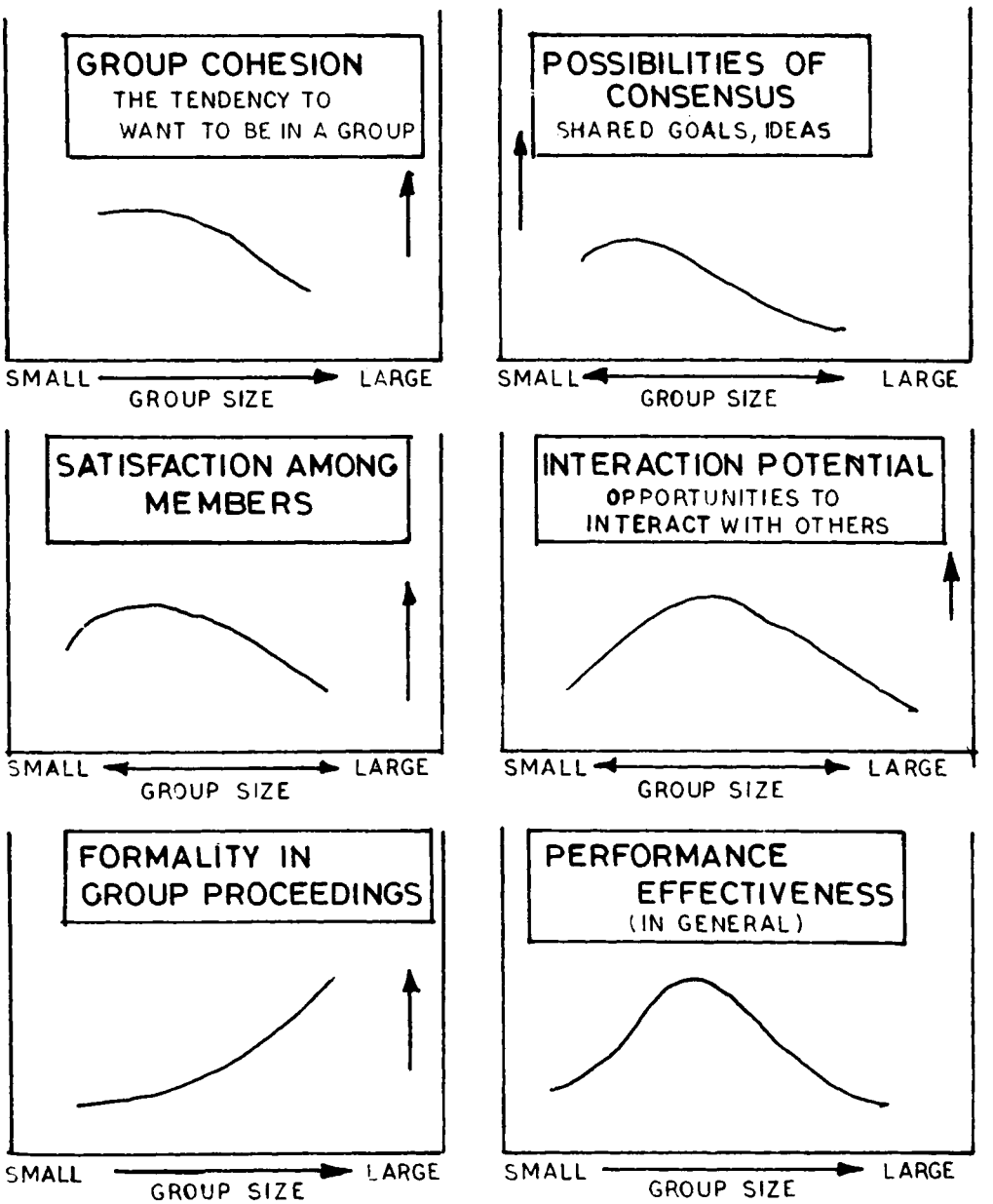
When the girls approached the village headmen they encountered stiff resistance from the headmen. It so happened that none of the headmen had been inoculated themselves. It also appeared that there was a general fear and distrust about the whole process of inoculation. At this point our case ends.

Questions:

WHAT CREATIVE STRATEGIES WOULD YOU SUGGEST TO RESOLVE THE IMPASSE ? SUGGEST THREE DIFFERENT STRATEGIES.

F. GROUP SIZE

The effects of group size are best explained through a set of diagrams which follow.



Ideal project team sizes vary between 5 and 10. Having an odd number is likely to reduce deadlocks. A group size of less than five reduces the chances of having comprehensive discussions and creative solutions. Groups comprising of more than 10 members make consensus decisions more difficult to arrive at and encourages formation of sub-groups.

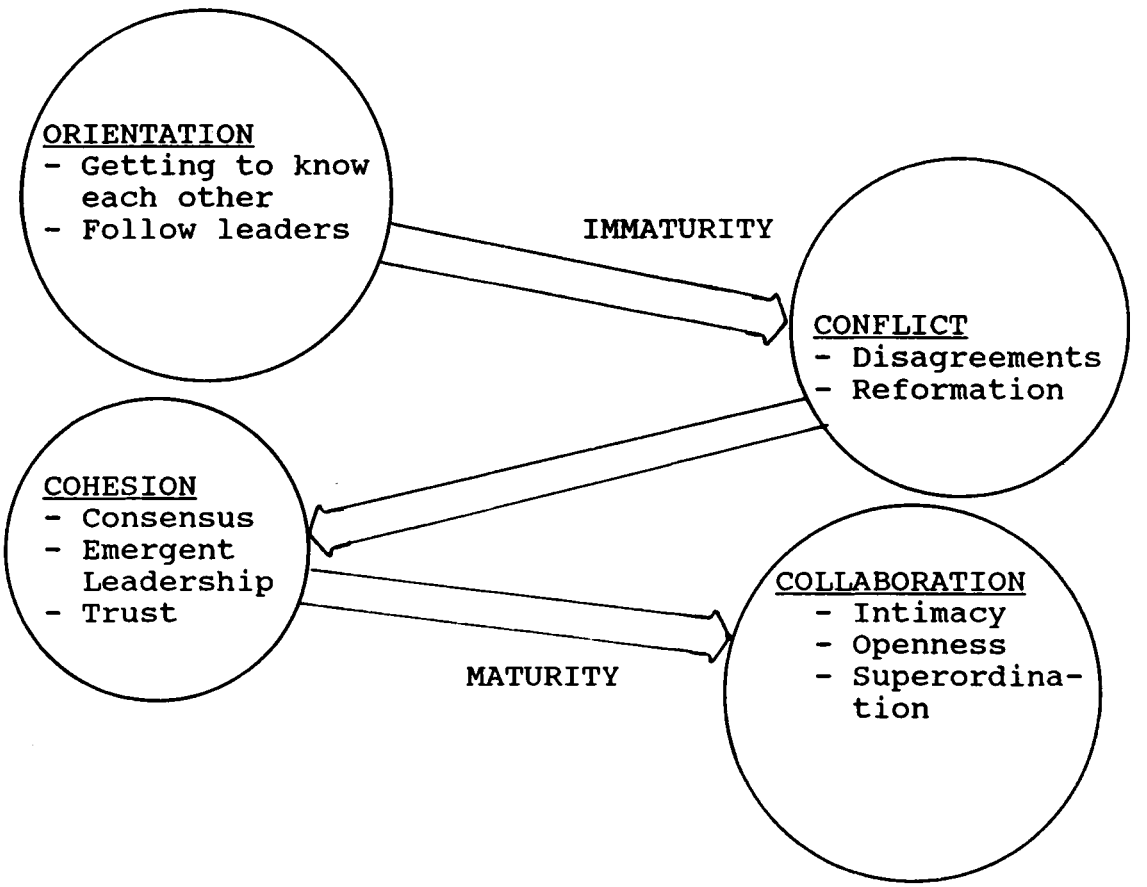
THE STAGES OF GROUP DEVELOPMENT

Groups get formed normally on a voluntary basis. For example a few youth may decide to form a club for youth in the expectation that many other youth will voluntarily join it. But then 'forced groups' or 'groups formed at a price' are also known.

The reasons why youth are willing to form or join groups could be summarized as -

* To interact with others who share their beliefs
* To cooperatively pursue common interests and goals
* To become an influencing force
* To mobilise a community for better living.

Once groups get formed they go through certain stages of development. Patterns of development are like those shown below.



The stages of development are indicative of the fact that the group may break up at intermediate stages and survival of the total group can only occur if the passage continues through the four stages.

Small youth teams also have to traverse a similar path. But their survival is more assured since they are smaller in membership and since their task is cut out for them (superordination is already created). But a team has to develop a very broad range of skills since the tasks or projects it would undertake independently or on behalf of large groups would demand a spectrum of management skills.

Effective work groups or teams exhibit a set of characteristics. These characteristics (measures) are normally related to end or performance results. A crude list is shown below. This can be developed into a detailed list.

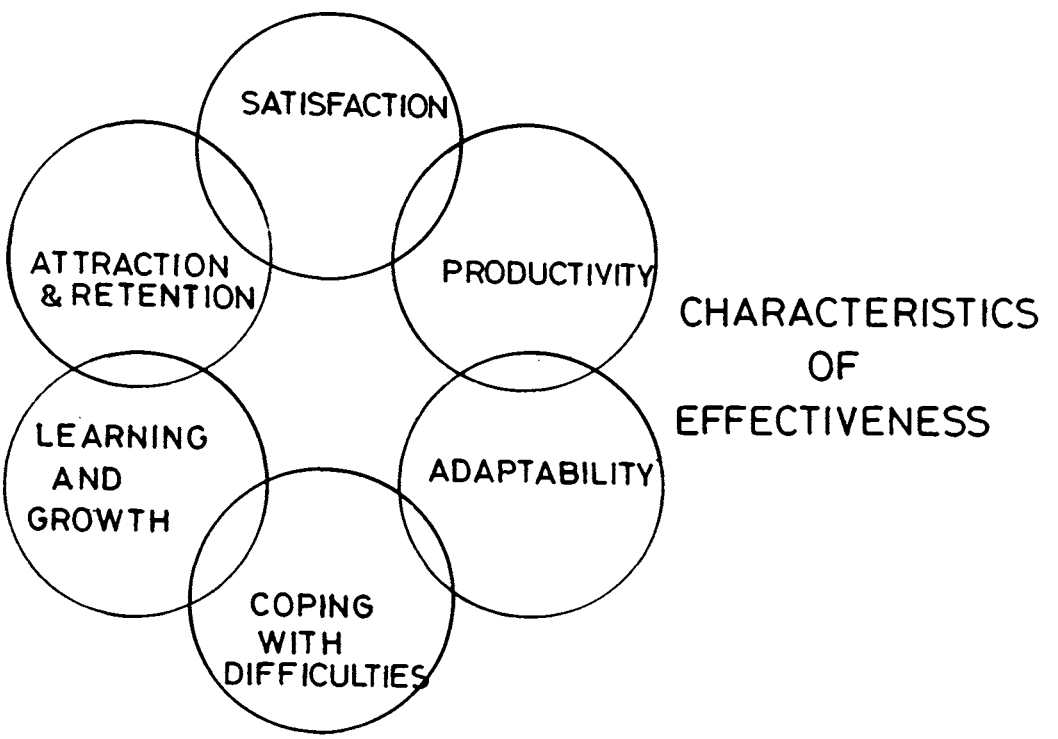


ILLUSTRATION-THREE

We five were sort of catapulted into the following situation. The youth club was tottering. Two years of almost total inactivity. No wonder members had fled. And the 'managing group' in its folly threw the whole club in our lap and withdrew saying they had 'grown out' of the club. It was grossly unfair. we thought. But one thing kept us together. We respected this club. If it closed down there was nothing for the youth except the movies, street corner gossip and some backyard games. We had to keep this club alive.

So the five of us sat down, thought it over. We concluded that club survival was synonymous to rebuilding it. We built up membership by attracting youth to join it. Attracting youth to join it means a balance between doing something which youth want and leading them to do something which they had never done before.

On a Saturday we went to the High school and requested the Principal to give us an hour each with the three senior classes. He was a kindly soul and he assented. The young pupils said 'give us games, music and adventure'. These were their choices, their interests. To balance it we also gave them a career guidance cell. It had taken

us two months, a ton of conflict and quarrel, a barrelful of concern and doubt, and bags of effort to reach this point. But we knew we had moved forward, ahead of where we were when it all began for us.

ASSIGNMENT-FIVE

This assignment has two situations. Please go through them and answer the questions given. Check your answers for both situations with the Tutor.

SITUATION-1

For organising a Nature Camp you have invited a few leaders from neighbouring youth clubs to decide a suitable venue for the camp. After initial discussion you notice two clearcut factions. Instead of attempting to decide the venue they are now trying their best to dominate each other.

Questions:

1. Why could this have happened ?

2. What would you like to do to bring back the discussion to tne objective of the meeting ?

SITUATION-2

As a youth volunteer you wish to promote a rural health programme. You have formed a youth team to manage this programme. The first meeting is scheduled to identify several possible health areas for contribution and finally to select one health area, which can be pursued in the initial period. There are seven members - A, B, C, D, X, Y, Z - apart from you.

The following interaction takes place amongst the members of the youth team during the meeting.

A: I feel healthy eating habits are to be encouraged.

B: No, the first priority should be given to living conditions.

A: Living conditions alone are not going to promote health. Moreover you can't see or measure its impact.

Y: Forget about both, let us select vaccination clinics as the top priority programme.

B: Oh! Don't fight. Can't we have all ?

A: Don't talk impossibly. Be practical !

X: Let us decide without wasting time. What are the needs of the community ?

A: We all know that. Don't we ?

At this juncture you as the initiator of the meeting feel like intervening.

Questions

1. Indicate, with respect to Situation-2 and with a brief justification, the probable presence or absence of the factors given in the following table.

FACTOR	PRESENCE OR ABSENCE	JUSTIFICATION
EXTENSION MOTIVATION AMONG MEMBERS		
TRUST BETWEEN MEMBERS		
SUPERORDINATION		
CREATIVE THINKING IN THE GROUP		
GROUP NORMS		

2. What steps would you suggest to streamline the discussion ?

* * * * *

CHAPTER-10

IMPLEMENTATION OF PROJECTS

* General and Specific Objectives
* Trainer's Notes and Guidelines
* Self-Learning Package for the Trainees and Assignments

GENERAL OBJECTIVE

The participant will devise appropriate follow-up measures given a project plan and certain likely problems that may arise during implementation.

SPECIFIC OBJECTIVES

The participant will :-

(a) Become aware of the manner in which implementation may deviate from a project plan.

(b) Using the technique of Problem Analysis, devise corrective measures for a specific deviation of implementation from plan.

(c) Describe the use of infrastructures for sensitive diagnosis and correction of such deviations.

(d) Apply these techniques to devise follow-up measures in certain case descriptions on problems arising during implementation.

TRAINER'S NOTES AND GUIDELINES

IMPLEMENTATION OF PROJECTS

THEME OF THE CHAPTER

As the title suggests this Chapter is fully devoted to the implementation of project plans. Managing implementation is referred to as FOLLOW-UP in the Chapter.

In the youth services and youth programmes FOLLOW-UP is normally undertaken by a team. The team closely watches progress and sets right problems that may impede progress. The technique used in locating problems and resolving them is known as 'Problem Analysis'. This technique is elaborated in fair detail in the Chapter. In short, performance of the Follow-up team depends on its abilities to locate problems early (sensitivity) and employ remedies for the problems so that progress is 'back on track'.

Implementation has always been the 'bane' of projects. Inspite of highly sophisticated planning, things have been known to go wrong during the implementation. The reasons probably lie in the fact that 'skills for the implementation' or for that matter 'skills of Follow-up' are of a totally different type than those needed in planning. Here alert use of information, appropriate resolution of problems, sensitivity towards problems and their symptoms, the use of trial and error are also desirable and difficult to develop in individuals.

The importance of implementation is beyond question since it produces the 'results' in the project. But introducing the learner to the skills of implementation and their employment is not an easy task. This Chapter precisely attempts to do so.

PREREQUISITES

For the Tutor:

- A clear understanding of previous Chapters, in particular Planning (Chapter - 2), Organising for Implementation (Chapter - 8) and Working in Groups (Chapter - 9).
- Experience of Follow-up a tions in project implementation, and a confidence in coping rationally with problems encountered during Follow-up.

For the participant :

- Some experience of implementing projects.
- Knowledge of 'Planning' and 'Working in Groups' (Chapters - 2 and 9).

PREPARATORY ACTIVITIES FOR TUTOR

- Detailed study of this Chapter and completion of assignments given in the Chapter.
- Study of 'Problem Solving' from Reference 3.
- Keeping some additional illustrations drawn from personal experience in mind for use in clarifying concepts if and when needed.

INSTRUCTIONAL GUIDELINES

(a) This Chapter has been presented in the self-learning mode. It contains two illustrations and two assignments.

Tutor's guidance is definitely desirable during self learning by participants since a number of fairly difficult concepts are involved. The Tutor may supplement the content with his own illustrations for clarifying concepts.

Two OHP transparencies accompany this Chapter.

10.1 - Concept of Problem Analysis

0.2 - Cause Tracing in Problem Analysis

Both have to be employed at appropriate stages in the Chapter during self-learning.

(b) The schedule of activities for an estimated time of 3 hours for this Chapter in given below.

Sl. No.	Activity	Time in hours
1.	Introduction by Tutor	1/4
2.	Self Learning by participants upto Assignment - Two. Tutor will guide and employ OHP transparencies 10.1 and 10.2 to clarify concepts in Problem Analysis.	1 3/4
3.	Assignment - Two , the completion of which shall be followed by a brief summary of Chapter by Tutor	1

(c) The Tutor will introduce the Chapter very briefly in 15 minutes. A suggested sequence for the introduction would be:

- Recalling that detailed planning has already been completed.
- Importance of studying implementation.
- Introductions to terms like FOLLOW UP, sensitivity
- Brief narration of Tutor's role during participant self learning. The Tutor may use OHP to facilitate introduction.

(d) While self learning is progressing the Tutor will have to move around assisting participants who need clarifications or who get impeded. It is anticipated that difficulties will arise in Problem Analysis and its applications. It is suggested that the Tutor provide one or two additional examples if necessary. The concept of sensitivity may also need some Tutor intervention through illustrations. Use of OHP transparencies 10.1 and 10.2 related to Problem Analysis could be done as suggested earlier.

Both assignments one and two are individual assignments. To save time the Tutor may discuss responses with a cluster of participants instead of dealing with individual participants.

Closing the Chapter through a summary after Assignment two is completed can be done by the Tutor through a discussion with all the participants in which emphasis may be laid on :

- Difference between Potential Problem Analysis and Problem Analysis
- Importance of Follow-up and the need for Follow-up teams.
- Factors necessary for effective Follow-up.

SUGGESTED RESPONSES TO ASSIGNMENTS

ASSIGNMENT - ONE

Deviations :

S.NO.	WHAT SHOULD HAPPEN	WHAT ACTUALLY HAPPENS
1.	Milk should have been available.	Dairy owners had sold out milk.
2.	Four doctors were to be available the whole day.	Two doctors leave the camp site by 10.00 AM.
3.	One lady doctor was to have assisted in the project.	The lady doctor had to go back to attend to her normal patients.
4.	A large number of people were expected to come into the tent, by 11.00 AM.	Only ten people had come into the tent.
5.	No donor would be afraid of looking at blood.	By 11.00 AM, two donors had withdrawn at the sight of blood.
6.	No rumours of any kind should have spread.	A rumour that blood donation was painful increased the with-drawals.
7.	The organisers were not expected to donate blood.	Some organisers donated blood.

Corrective Actions that did not work (Samples)

S.No.	Nature of Corrective Action	Evidence that corrective action did not work
1.	Chocolates were to be distributed instead of milk.	People were unhappy at this substitution.
2.	Husbands were permitted to escort the ladies inside the tent.	Number of ladies who donated blood were very few.

ASSIGNMENT - TWO

ANSWERS FOR THE ACTIVITY SET ARE GIVEN BELOW -

S.NO.	ACTIVITIES	TICK IF SENSITIVE FOLLOW-UP NEEDED	SYMPTOMS TO BE LOOKED FOR
1.	Youth Worker suggests project idea and builds a youth team.	-	
2.	Youth team contacts villagers through meetings and convinces them about project idea.	✓	* villagers not coming for meetings. * villagers are not getting convinced.
3.	Engineer in nearby town contacted to provide technical expertise for converting foot track to access road.	✓	* Engineer offers excuses for not cooperating.
4.	Engineer submits plans.	-	
5.	Voluntary donation of land by landowners.	✓	* landowners sceptical of project outcomes. * Landowners asking for compensation or special privileges.
6.	Organising community into work groups	✓	* expertise not adequate. * poor interpersonal relations in work groups. * members of groups not turning up.

7.	Allocation of tasks to work groups.	✓	* Mismatch between task allocation and interests/ abilities * Gaps/overlaps in task allocation
8.	Collection of road construction hand implements.	✓	* implements not available. * implements cannot be obtained on loan.
9.	Construction of road.	✓	* phasing of road construction not proper. * Road materials and implements not sufficient in quality/quantity. * required super- vision not occurring.
10.	Inauguration of road.	-	
11.	Funds raised for refreshments.	✓	* inadequate fund collection. * Supply of refre- shments not at the right time. * poor quality of refreshments.
12.	Refreshments arranged for.	-	

REFERENCES

1. "The Rational Manager", by C.H. Kepner and B.B. Tregoe, McGraw - Hill, 1965.

2. "Management Development and Training Handbook" Edited by Taylor and Lippitt, McGraw - Hill (U.K.), 1983.

3. "Management" by J. Stoner and C Wankel, Prentice - Hall of India, Delhi, 1988.

4. "Planned Change - a new Manual" - a document prepared by the Education Management Centre, TTTI, Bhopal, for the State Government of Gujarat, India, 1987.

5. "Solving Educational Problems" by Havelock and Huberman, Praeger Publications, 1978.

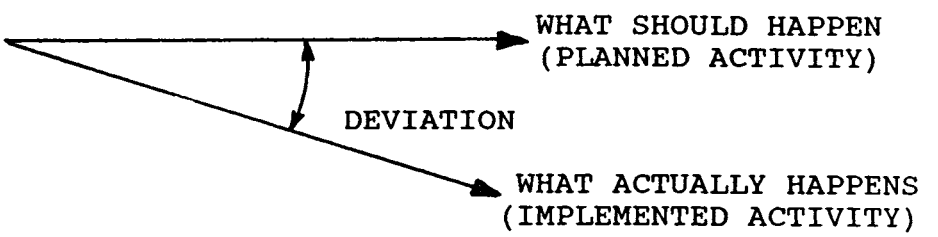
6. "Managerial Problem Solving", by C. Margerison, McGraw - Hill, London, 1974.

7. "Patterns of Problem Solving" by M.F. Rubenstein, Prentice - Hall, USA, 1975.

SELF-LEARNING PACKAGE
AND
TRAINEE'S ASSIGNMENTS

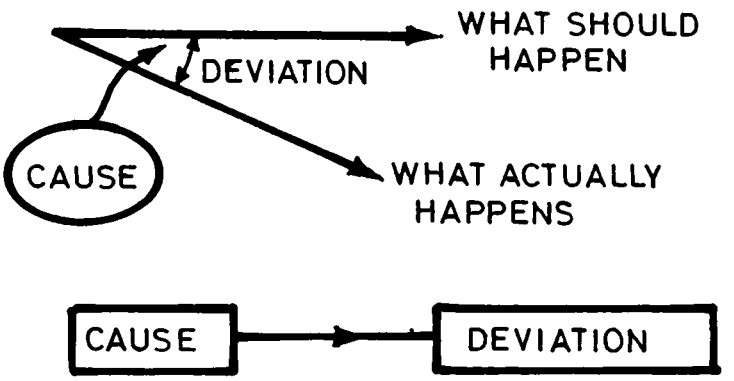
IMPLEMENTATION OF PROJECTS

What is actually implemented is the plan of the project. Just as planning requires care, concern and attention, so does implementation. The management of implementation is sometimes referred to as 'CONTROL' - The process by which managers ensure that actual activities conform to planned activities (what was called as the activity set in planning). Others refer to control as FOLLOW-UP or MONITORING.



The concept of Follow-up (or monitoring or control) can be understood by means of the diagram shown above. If implementation (what actually happens) coincides with plan (what should happen), there is no problem, no cause for concern. If, however, implementation (what actually happens)

deviates from plan (what should happen) then the presence of a problem is recognised. This problem needs to be attacked through remedial action.



The logic underlying the concept is relatively simple and is presented in the diagram shown above. Deviations between the 'should' and the 'actual' occur because of some cause. In other words, a cause creates a deviation between plan and implementation.

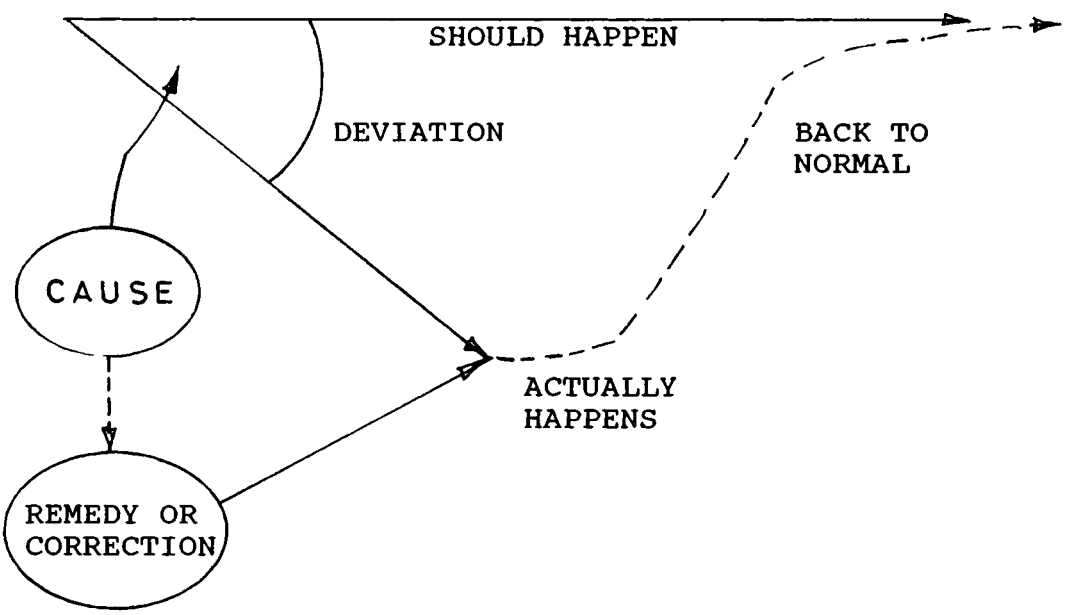
Since it is impossible to handle all deviations, minor deviations may be ignored.

Follow-up has three functions to perform in this context.

(1) Closely watch implementation processes for deviations from the plan. If there is no deviation everything is okay.

(2) If a deviation occurs and is observed by the FOLLOW UP team (or mechanism or infrastructure) then the team gets down to tracing the CAUSE which is the source of the deviations.

(3) Once the cause is traced (or understood or diagnosed) the FOLLOW-UP TEAM next devises remedies for the cause. Those remedies or corrections when implemented will remove the cause, which in turn will not cause the deviation anymore, and things will get back to normal.



The Follow-up Team has to perform all these functions effectively. However there are quite a few barriers to effective Follow-up.

BARRIERS TO EFFECTIVE FOLLOW-UP

(a) The Follow-up team may not notice the deviation at all. In other words even though what actually happens is different from what should happen, this is not observed and is probably overlooked.

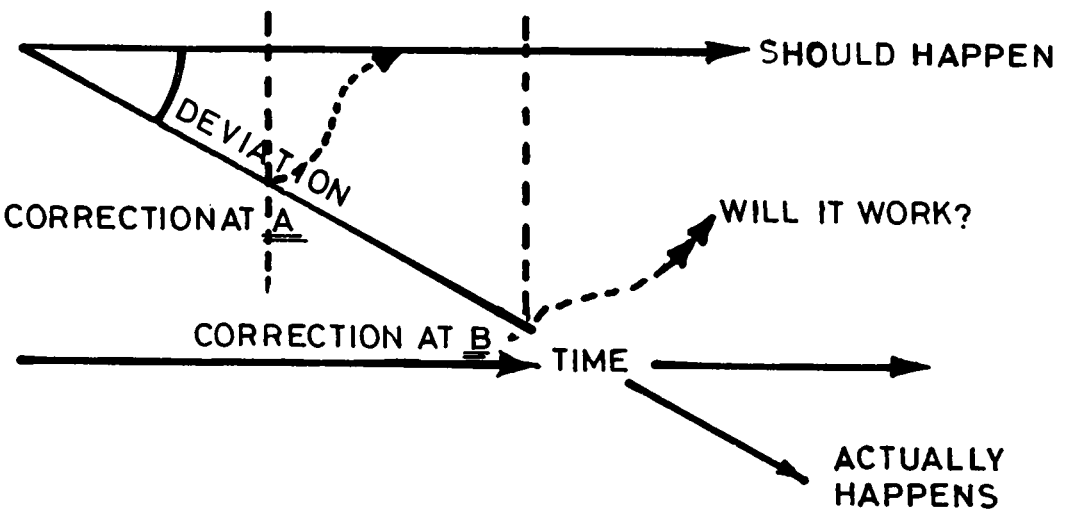
There could be many reasons for this.

- Things may appear to be going right while in reality the actual may be deviating from the should. But since no information is available or being collected on progress, the deviation is not noticed.
- Even if information on progress is being collected, may be it is not quickly correlated to provide a judgement about the presence (or lack of presence) of a deviation. The inertia of the set-up is very high and things move very slowly.

(b) Sometimes, deviations are observed. But, deliberate attempts may be made to suppress from others the fact that there are deviations. This may be done to project a better image or to hide inefficiency.

(c) The Follow-up Team may notice the deviation too late, when a minor deviation or problem has gradually developed into a disastrous situation.

The diagram given below clarifies this phenomenon. It is feasible to expect the deviation to be noticed and corrected at A (relatively early). On the contrary if the deviation is noticed and corrections attempted at B it may not work at all since by now the deviation has existed for a very long time and has assumed severe dimensions.



(d) The Follow-up team may not be able to trace the most likely cause/s for the deviation. As a consequence the correction or remedy may not work at all and the deviation may persist.

Tracing the most likely cause can become 'tricky' on occasions. It depends on the adequacy of information available, its reliability, and the capability of the team to use the information properly.

The skills involved in tracing the cause of deviations are known as 'PROBLEM SOLVING SKILLS' or PROBLEM ANALYSIS.

ILLUSTRATION-ONE:

A youth team working on a slum project was not creating any impact on the people. The strategies being employed, even though quite creative, were not acceptable to a majority of the community.

The deviation here was noticeable early. The youth team went about attempting to diagnose the most likely causes. They finally decided on three likely causes -

* Resistance by the community to change.
* Poor planning before implementation.
* Influence of other external agencies.

On a more detailed search to identify one most likely cause the team uncovered sufficient information to indicate that all three causes were not justifiable. 80% of the community wanted change. The plan was thoroughly prepared. And no other agency was interested in doing any work in this particular slum area. Further, the elders had been consulted at different stages by the members of the group.

Finally they changed their approach to seeking information and found that it was the leader of the team who was the problem. His forceful approach and his past record of delinquency was unfortunately resulting in many of the elders viewing him with suspicion.

The correction (remedy) adopted by the group was that they changed the leader and gave the previous leader a more passive role in the project.

ASSIGNMENT-ONE

The description of an incident is given below. There are plenty of deviations between plan and implementation noticeable in the incident. And in some events described the corrective action does not work. Identify six deviations and two ineffective corrective actions, enter them in the table given below, and then check with the Tutor.

A BLOOD DONATION CAMPAIGN - We,the youth club of Loca, decided we must organise a blood donation campaign in a nearby village. It was set up delightfully. Only the young and able were to donate blood. A team of four doctors agreed to help out. A couple of tents were lent by the local Rotarians. The blood was to be passed on to a blood bank in a nearby town. And it was all organized for a Sunday. Incidentally the villagers had agreed to all this.

On Sunday morning at precisely 9.00 AM it all took off. It was bright and sunny. The only snag was the dairy owners who were to donate a glass of milk to each donor had already sold their milk in the morning. So we said it would be chocolates instead of milk. But then chocolates were not very appropriate substitutes and some people were already unhappy on hearing this.

By 10.00 AM two of the doctors had to go back to attend to their normal patients. And by then only three people had lined up for donating blood. Unfortunately this left us with no lady doctor and this made most of the ladies in the village extremely reluctant to come into the tent, even when we requested their husbands to escort them.

At 11.00 AM only ten people had come into the tent, of whom two had withdrawn at the sight of blood. Someone spread a rumor that blood donation was painful and this increased the withdrawals.

By 12.00 noon we had folded up the tent with about 12 bottles of blood. Some of the blood was ours.

DEVIATIONS.

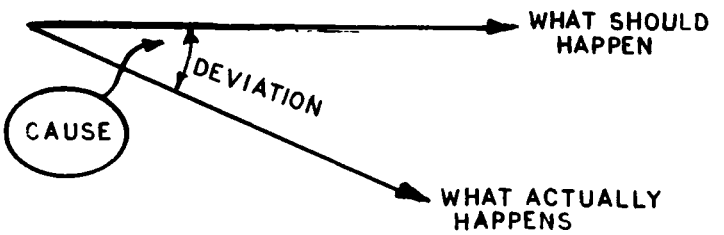
SERIAL NUMBER	WHAT SHOULD HAPPEN	WHAT ACTUALLY HAPPENS
1		
2		
3		
4		
5		
6		

CORRECTIVE ACTIONS THAT DID NOT WORK.

S.NO.	NATURE OF CORRECTIVE ACTION	EVIDENCE THAT CORRECTIVE ACTION DID NOT WORK
1		
2		

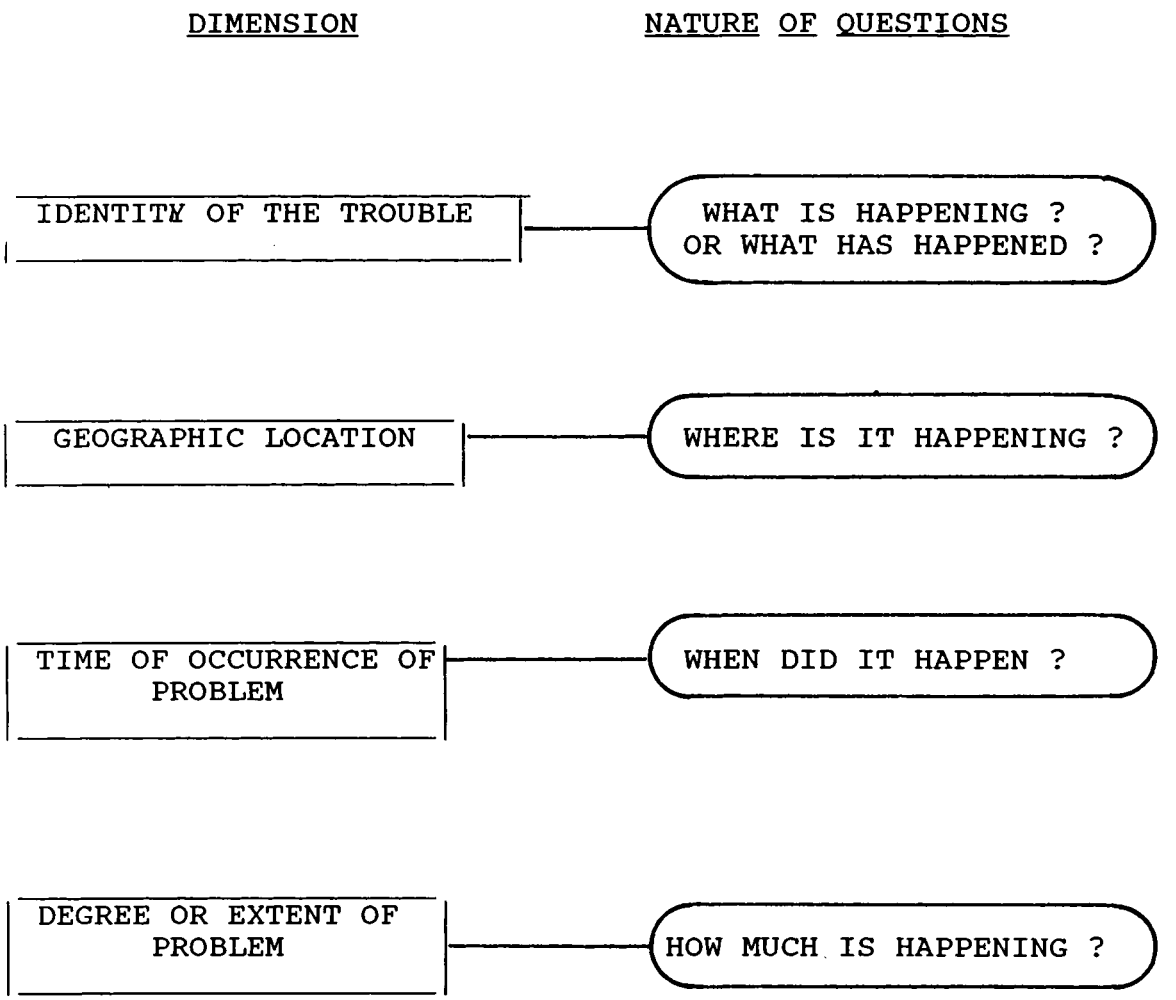
PROBLEM SOLVING APPROACHES

To refresh memories the diagrammatic representation given earlier is repeated below.

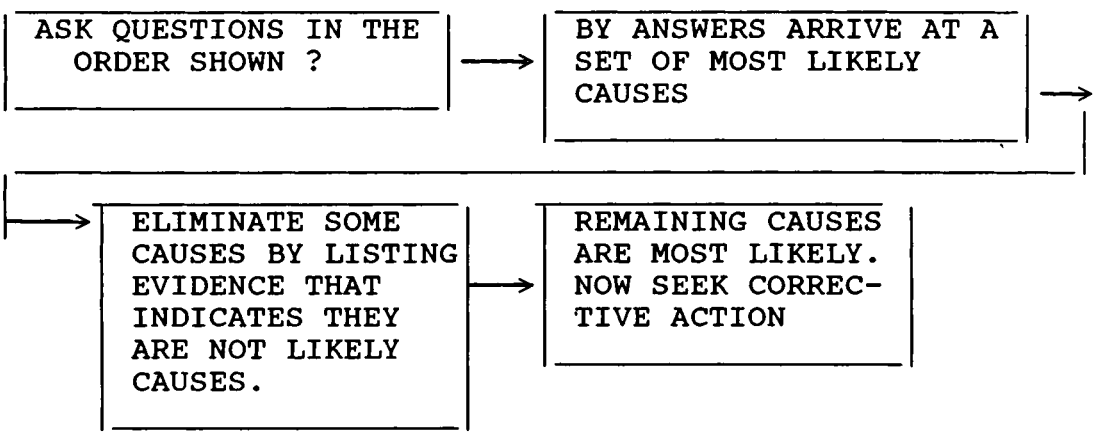


As mentioned earlier the presence of the problem becomes evident when a deviation between the SHOULD and the ACTUAL occurs. Something must be the CAUSE of this deviation. This CAUSE must be traced and remedied or corrected. Hence 'tracing the cause' is a crucial step in problem solving.

The key to 'tracing the cause' lies in QUESTIONING - INTELLIGENT, PERSISTENT QUESTIONING. If reliable answers to these questions are elicited from the information available, then there is no reason why the cause cannot be traced. Normally the questions will lie in certain dimensions, like-



Asking probing questions in each dimension should bring us closer to the most likely cause or causes. Final elimination of anticipated most likely causes that do not apply can be done by looking for evidence which indicates 'THIS IS NOT THE CAUSE'. What will be left will be 'THIS OR THESE APPEAR TO BE THE CAUSE/CAUSES'.



Sometimes QUESTIONING will prove futile or inadequate since relevant information to obtain answers may not be available. And attempts to generate relevant information may not succeed. In such cases there is no option but to generate cause or causes, try out remedies for each cause till the problem gets solved. This is a TRIAL and ERROR approach and may have to be resorted to when the normal approach fails. Especially when the problems are not very clear, the QUESTIONING approach may not help much, and a TRIAL and ERROR process may have to be employed. But TRIAL and ERROR is a cumbersome process and may fail too. It must be a sort of LAST RESORT.

Thus problem solving means finding corrective action i.e. solution to problems. As mentioned above, problems in some situations are clearly understood and in others not at

all clear. As far as solutions are concerned, they are available for some situations and for the others not available. Thus four combinations of problem clarity and solution availability can be identified. The follow-up team has to adopt different strategies for each of these combinations. These strategies are indicated in the diagram shown below.

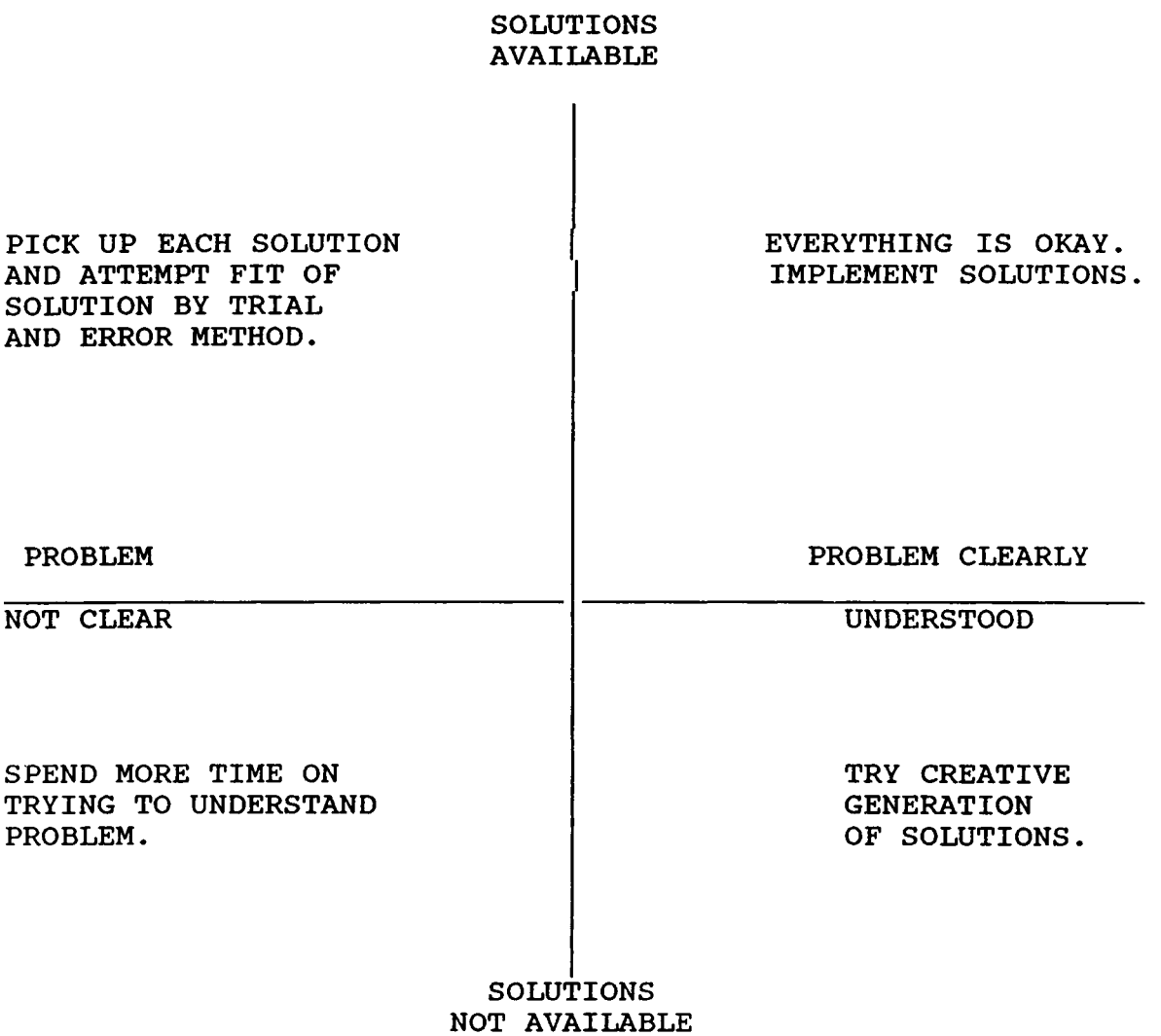


ILLUSTRATION-TWO

A youth club which was doing quite well on simple activities like youth excursions, cultural programmes, decided to enter into a more complex sphere of activity. When it initiated a carefully planned out vocational training programme for youth, the programme did not elicit good response from youth. Cause tracing led to no concrete results. Some thought the programme was ill-conceived. Some others considered the implementation poor. A few thought resources were inappropriate. There were many other causes traced. But there was no agreement on a few most likely causes. The option now was to list all causes, take them up one by one, and try out remedies for the selected cause till the remedy appeared to work.

Once the cause is traced devising a REMEDY is relatively simple. What is important is that the REMEDY should be relevant to the CAUSE (it should eradicate the CAUSE) . Thus if a youth Leader who is arrogant is the cause then the remedy could be selected from - 'Change Leadership' or 'Improve Leader Behaviour'. Obviously the second remedy will be time consuming and it is preferable to apply the first remedy or correction.

THE SENSITIVITY OF THE FOLLOW-UP TEAM

Follow-up occurs on each one of the activities in the set (or in the project). If the activities are not clearly defined (or planned), Follow-up will be impeded. It must be known when an activity starts and when an activity ends. Problems arise normally during the activity (in the course of the activity). The Follow-up team has to monitor activity progress and keep a watch for symptoms and signs about things going wrong like things don't happen as they should; delays occur; there are unanticipated outcomes. Once such signs are noticed the Follow-up team swings into action and identifies causes and then devises remedies. The nature of activity planning and linkages mentioned in the Chapter 3 on Network Analysis will help design effective Follow-up measures.

It has been mentioned earlier in this Chapter that the Follow-up Team may either overlook the presence of a problem (deviation) or the inertia in the infrastructure or team may delay corrective action.

Considering that early diagnosis of problems and quick action on them will result in much lesser and controllable deviations between plan and implementation , it becomes necessary to ensure sensitive, alert and 'quick acting' Follow-up teams.

The appropriate composition (selection of members) and training of the Follow-up Team is a key prerequisite to these characteristics. The chapter on Organising for Implementation (Chapter-8) discusses these issues in detail. What is important is that the idea of Follow-up cannot be overlooked and must be planned for (become a deliberately introduced consideration during planning). The importance of implementation and consequently Follow-up should not be underestimated. It is as crucial as 'proper planning'.

Sometimes many things may go wrong indicating that the plan or the project itself is not either properly designed or is not feasible. If it is not feasible it is preferable to postpone the project. If, on the other hand, it is poor planning that is indicated it is better to recast the plan.

In Youth Welfare or Community Development Programmes, Follow-up must be performed in an effective manner. One cannot afford to relax about Follow-up, and rest on the assumption that well-cast plans are sufficient for implementation. Without implementation there can be no results in the project.

ASSIGNMENT-TWO

A project with an activity set is given below. Identify those activities in which FOLLOW-UP has to be sensitive. Can you identify some symptoms which you would look out for ?

PROJECT :- ORGANISING THE COMMUNITY TO BUILD A 1/2 KM ACCESS ROAD, THROUGH VOLUNTARY SERVICE

PROJECT ACTIVITY SET:- The Activity Set for the above project is given in the following Table.

S.N.	ACTIVITIES	TICK IF SENSITIVE FOLLOW-UP NEEDED	SYMPTOMS TO BE LOOKED FOR
1.	Youth worker suggests project idea and builds a youth team		
2.	Youth team contacts villagers through meetings and convinces them		
3.	Engineer in nearby town contacted to provide technical expertise for converting foot track to access road		

4.	Engineer submits plans		
5.	Voluntary donation of land by landowners		
6.	Organising community into work groups		
7.	Allocation of tasks to work groups		
8.	Collection of road construction hand implements		
9.	Construction of road		
10.	Inauguration of road		
11.	Funds raised for refreshments		
12.	Refreshments arranged for		

* * * * *

CHAPTER-11

PROJECT EVALUATION

* General and Specific Objectives
* Trainer's Notes and Guidelines
* Self-Learning Package for the Trainees and Assignments

GENERAL OBJECTIVE

The participant will be able to evaluate the effectiveness of project implementation.

SPECIFIC OBJECTIVES

The participant will : -

(a) Appreciate the need for and concept of project evaluation.

(b) Suggest data collection methods and data analysis procedures required for evaluation.

(c) Adapt appropriate approaches for evaluating a specified project.

TRAINER'S NOTES AND GUIDELINES

PROJECT EVALUATION

THEME OF THE CHAPTER

One of the components of project management normally ignored is Project Evaluation. The advantages that result from scientifically-carried out Project Evaluation are :

- an idea of the impact of the project
- effective implementation of plans
- information for making improvements in planning, decision making and design of implementation strategies.
- feedback for the implementing agencies

The Chapter explains various approaches to Project Evaluation during the project and at the termination of the project and elaborates on the means which can be employed to perform it.

PREREQUISITES

i) The participant should have completed all the previous chapters of this package.

ii) The participant should have familiarity with the evaluation of at least some project components.

iii) The participant should be aware of the methods available for collecting data.

iv) The Tutor should have evaluated some projects or managed a few projects which were evaluated.

PREPARATORY ACTIVITIES FOR TUTOR

i) The Tutor should go through this Chapter intensively and complete all the assignments.

ii) To facilitate self - learning, the Tutor may draw upon his previous experiences and keep certain illustrations ready for appropriate use.

INSTRUCTIONAL GUIDELINES

(a) (i) The learning package has been presented in the form of answers to key questions in Project Evaluation.

(ii) It is totally in the self learning mode. However, it is suggested that the Tutor offer guidance as and when need arises. It is anticipated that some difficulties in self learning may arise for some participants in:

- matching evaluation scheme to the audience of evaluation,
- finalisation of evaluation criteria,
- selection of data collection method to a given project element.

(iii) The Chapter contains two major illustrations and four assignments. A special feature of the package is the inclusion of two criteria lists for evaluating certain project components.

(b) The schedule of activities (for 3 hours) for this Chapter is given below.

Sl. No.	Activity	Time in hours
1.	Introduction by Tutor, self learning upto Assignment - Four	1 1/2
2.	Summarisation of Chapter learnings by Tutor through using OHP Transparency 11.1 and discussing issues with the participants	1/2
3.	Assignment - Four including suggestions-seeking from other groups	1

(c) The Tutor will emphasise the need for Project Evaluation and impress upon the participants the advantages. The differences between Evaluation, Followup (Chapter-10) and Accountability (Chapter - 8) should be indicated briefly.

(d) The Tutor will provide guidelines and suggestions to the participants while they are attempting the assignments.

(e) One OHP Transparency is provided to enable the Tutor to summarise the learnings of the package (11.1 - Steps in Project Evaluation).

SUGGESTED RESPONSES TO ASSIGNMENTS

ASSIGNMENT - ONE

Sl. No.	Area of Process Evaluation	LEAVITT DIMENSIONS			
		TASK	PEOPLE	STRU-CTURE	TECH-NOLOGY
1.	Coordination with Project Team			✓	
2.	Coordination with other Agencies			✓	
3.	Assumptions made in Project Design	✓			
4.	Leadership Style of Team Leader		✓		
5.	Role Allocation			✓	
6.	Resources Deployment				✓
7.	Project Infrastructure			✓	
8.	Materials Procurement			✓	
9.	Inter-personal Relations within Team		✓		
10.	Appropriateness of Objectives	✓			

ASSIGNMENT - TWO

Sl. No.	Project element to be evaluated	Data collection method
1.	Appropriateness of role allocation	Interviews/ Opinionnaires
2.	Motivation of youth volunteers in implementation of project activities	Observations
3.	Leadership style of project leader	Questionnaire/ Observations
4.	Extent of participation of beneficiaries in project planning and implementation	Interviews
5.	Liaison with external agencies	Records/ Interviews
6.	Extent of achievement of objectives	Measurements/ Records
7.	Nature and extent of unintended outcomes	Interviews with beneficiaries and project team members
8.	Publicity for the project	Measurements
9.	Interference from interest groups	Observations/ Interviews
10.	Degree of cooperation from beneficiaries	Check lists

ASSIGNMENT - THREE

This is an open-ended assignment and hence no suggestions can be offered. However, the Tutor will examine the group suggestions and provide feedback based on Chapter learnings, specifically the criteria in the check list, audience of the findings and the related purposes, and constitution of the evaluation team.

ASSIGNMENT - FOUR

The Tutor will make his observations on the group presentations and emphasise the need to decompose the criteria so that specificity is introduced in the evaluation process and data collection and analysis facilitated.

Let us consider, for example, the project

"ORGANISING A NATURE CAMP"

* The objectives of the project would indicate in quantitative terms the expected outcomes of the project. Each one of quantities (Number of youth volunteers, the time - frame, etc) would produce indicators for Summative Evaluation.

* The activity set for the project will provide indicators for Formative and Process Evaluation.

The basic purpose of this assignment is to provide an opportunity for the learners to decompose criteria and to include new criteria, through 'stretching their imagination'.

REFERENCES

1. "Management Handbook for Public Administrators", Edited by J. Sutherland; Van Nostrand Reinhold Inc., New York, 1978.

2. "Guidelines for Project Evaluation", United Nations; Oxford and IBH, Delhi, 1972.

3. "Solving Educational Problems", Havelock and Huberman; Praeger Publications, U.S.A., 1978.

SELF-LEARNING PACKAGE
AND
TRAINEE'S ASSIGNMENTS

PROJECT EVALUATION

Programmes and projects are being planned by youth groups in increasing numbers. Considerable effort and resources are expended in their implementation. On certain occasions there are wide gaps between planned and actual accomplishments. Sometimes projects get abandoned midway during progress. On the other hand there are some success stories too in evidence, when identified objectives are achieved completely and well within the stipulated time period. When things could go right or wrong or when success and failure are both probable, it becomes necessary to include one more significant stage in the management of projects which is Project Evaluation and which could :

- provide measures of success or failure.
- generate information on why things went right or wrong.

In general Project Evaluation generates information which could be used for analysis of past experiences and for planning future events.

This stage is being increasingly considered essential by managers of projects. The youth services are no exception and the incorporation of Project Evaluation could lead to many benefits in this sphere (many of which are listed later in the Chapter).

Evaluation is defined in Webster's Comprehensive Dictionary (Encyclopedic Edition) as the act of evaluating or FINDING OR DETERMINING THE AMOUNT, WORTH of something.

When we apply this concept to evaluation of projects, the implications become far beyond the assessment of gains to beneficiaries. The planners, implementers and the sponsors of the projects are the the other parties who will be interested in the evaluation for wide- ranging reasons.

WHY PROJECT EVALUATION ?

Project Evaluation serves many purposes for many agencies. In brief, these purposes are:

- To appraise the degree of success of the project vis-a-vis project objectives-actual outcomes versus planned outcomes
- To test whether assumptions made, strategies selected and the decisions taken in the project formulation and planning stages have been validated
- To assess effectiveness of implementation, specifically the manner in which implementation problems were coped with
- To verify whether the cost-benefit analysis undertaken during project formulation was valid and matches actual costs and benefits
- To generate information about the project experience for use in future endeavours.

Thus these purposes could be looked upon as gains rather than checks. The motive of Project Evaluation is not to find faults but to make available useful information.

Another significant consequence of Project Evaluation could be the refinement of the process of planning and implementation. Probably there does not exist any other means to provide a basis for designing the refinement.

Finally Project Evaluation could be looked upon as a means of disseminating information on project progress at different stages to a number of support agencies and parties, who may not have well-established channels for communication with the project team. The implication here is about reporting on a continuing or periodic basis by the team to others who desire regular progress reports. Such others may be funding agencies, government and controlling agencies. Information derived from such sources could assist these agencies to improve their support policies towards projects.

WHAT IS PROJECT EVALUATION ?

Project Evaluation is normally performed on the basis of comparing actual events with corresponding criteria or standards. This could be done at various stages of the project-during the course of implementation (at periodic intervals), at the end of the project, and even beyond termination of project on some occasions. In each case, the motives of evaluation will be different.

One motive of evaluation is to compare, after the project has been implemented, the real outcomes with the planned outcomes. Here, the specification of the plan objectives in measurable terms would be required. In many youth development programmes and activities, the extent to which the benefits of the project accrue to the beneficiaries may be an indicator of the success of the project. This may require information about the beneficiary groups prior to the project implementation and information after the benefits are made available. This is called SUMMATIVE EVALUATION.

Another motive of evaluation is to compare actual outcomes with planned outcomes at crucial project stages for identifying deviations and for controlling the subsequent stages of implementation through modification of methods, procedures, objectives, etc. This is called FORMATIVE EVALUATION.

Though Formative Evaluation, Follow-up (Chapter-10) and Accountability (Chapter-8) have many similarities, there are some significant differences between them. The similarities in general are:

* All three are evident during project implementation
* Reporting is a feature for all the three
* All the three report about project progress
* Project team performance gets reflected in each of them.

On the other hand, the major differences are:

- Each may have its own purposes. Elaborating, Formative Evaluation generates information for improving broad strategies; Follow-up is for bringing things back to normal if necessary; and Accountability is for meeting certain obligations related to duties and responsibilities.
- While Accountability is for an individual or a team, Follow-up and Formative Evaluation are group activities.
- Formative Evaluation could be undertaken by the project team itself or by an external group.
- Nature of information collected and the analysis of information may vary between the three.

Summative Evaluation

When Summative Evaluation is the focus and a comparison of actual outcomes with planned outcomes is required, the starting point would be the current situation, ie. the position before the the project begins. This becomes necessary since in many projects benefits could start flowing during the project itself, before the terminal point is reached. The flow of benefits could be viewed as gains to a particular group of people over and above a datum (which would be the current situation).The flow of these benefits in actuality when compared to the flow envisaged in the plan would constitute the basis for Summative Evaluation.

ILLUSTRATIONS

(a) In an Adult Literacy project run by youth, the beneficiaries become literate in phases over the duration of the project.

(b) In a Traffic Safety Campaign of one week duration, there may be significant outcomes during the week and these outcomes may have been planned too.

(c) In 'Cleaning the Surroundings of a Community', the end point evaluation is crucial.

Hence, when Summative Evaluation is under consideration, it becomes necessary to locate 'mileposts' at intermediate stages in the project implementation. However, in a few projects there may not be any intermediate stage and only the terminal point of the project becomes the focus of evaluation.

Formative Evaluation

Formative Evaluation is of a continuous character. It is sometimes called Progressive Evaluation. The idea here is to assess progress periodically in the course of the project. The focus would be on activity clusters (related). The plan of the project, or its network would help decide the points of evaluation. The aim is to determine whether progress is deviating drastically from the plan and whether Follow up measures are being effected.

ILLUSTRATIONS

(a) In a primary school building, there are definite stages of construction like foundations, brick masonry, roof, each involving a number of activities. These stages are interdependent.

(b) In offering counselling to drug addicts, one can plan out the work in a number of interdependent stages.

FORMATIVE EVALUATION CAN BE CONSIDERED FOR BOTH ILLUSTRATIONS

A long-term project which could have a duration of six months or above would probably need both Summative and Formative Evaluation.

ILLUSTRATION-ONE :

A youth group took up a project on "beautifying the surroundings of a village" and selected the village pond as its focal area for beautification. They collected funds and the scheme was inaugurated by a state dignitary. The pond was cleaned thoroughly, provided with brick wall boundaries and nicely paved approaches to the pond. The new pond was also 'opened' for use to the villagers with much fanfare.

The villagers were mostly passive onlookers during the pond beautification. At the end of the project,which took eight months for completion, 90% of the villagers opined that they have lost a pond and only the organisers have gained a pond.

Considering this long-term project, one could easily conclude that it would need both Summative and Formative Evaluation.

Summative Evaluation stages could be end of pond cleaning, completion of boundary walls, completion of paved approaches, and end of 'opening' ceremony.

Formative Evaluation would occur during pond cleaning, boundary wall construction, and approach road paving.

The information for Formative Evaluation could be used for accelerating progress, say of boundary walls.

On the other hand Summative Evaluation information which is contained in the last sentence of the narration could prove useful for designing strategies for projects undertaken by the project team in future. In fact, the last sentence is clearly indicative that the project has not led to beneficiary advantage. Though nothing much can be done in the project specified in the narration, there is much to learn for future projects, where such factors as beneficiary involvement cannot be ignored.

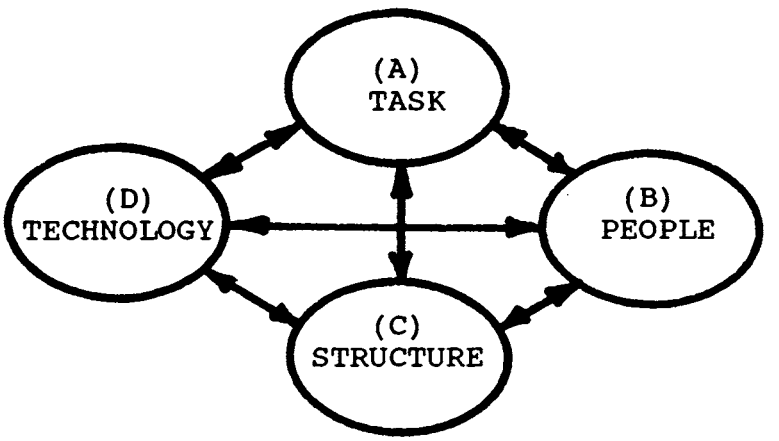
Process Evaluation

While the normal thinking on evaluation is that it tends to generate information on outcomes and progress that are observable and measurable, in reality it can have a wider applicability. Some of the information generated from the evaluation may be correlated to more abstract factors like :

- Response and involvement of the beneficiary group/local community.
- Effectiveness of leadership.
- Effectiveness of project team performance.
- Responsiveness of infrastructure to problem situations.
- Use of linkages with agencies.

Though there exist inadequate direct criteria or yardsticks for 'computing' these abstract factors some idea may be gained about them and their effects on outcomes in an indirect manner. However, there is no guarantee that judgements made in this regard are highly reliable.

One model which can provide guidelines for Process Evaluation follows:



LEAVITT DIAGRAM

The areas which affect significantly the successful planning and implementation of projects are given below.

1. Coordination within the project team
2. Coordination with other agencies
3. Assumptions made in project design
4. Leadership style of youth worker/youth leader
5. Role allocation
6. Resources deployment
7. Project infrastructure
8. Materials procurement
9. Interpersonal relations between youth worker on the one hand and youth leaders/volunteers, beneficiaries and people from external agencies on the other
10. Appropriateness of objectives.

ASSIGNMENT - ONE

Against each area of Process Evaluation, indicate the dimension of the Leavitt Diagram to which the area belongs with an appropriate tick.

Check your answer with the Tutor.

AREA OF PROCESS EVALUATION	LEAVITT DIMENSIONS			
	TASK	PEOPLE	STRUCTURE	TECHNOLOGY
1. Coordination within the project-Team				
2. Coordination with other agencies				
3. Assumptions made in project design				
4. Leadership style of team leader				
5. Role allocation				
6. Resources Deployment				
7. Project infrastructure				
8. Materials procurement				
9. Interpersonal Relations within team				
10. Appropriateness of objectives				

In effect Project Evaluation could generate a wide spectrum of information. It has a high potential. But information relevant to the purposes intended for the evaluation need to be generated. Accordingly, instruments and tools to selectively collect such needed information may be developed.

Evaluation Plan

Since it is important that evaluation generates useful information it is necessary for the Evaluation Team to prepare a plan. This plan should include audience and purposes, criteria, data collection methods and tools and a schedule. Specific roles have to be allocated to team members.

WHO SHOULD EVALUATE ?

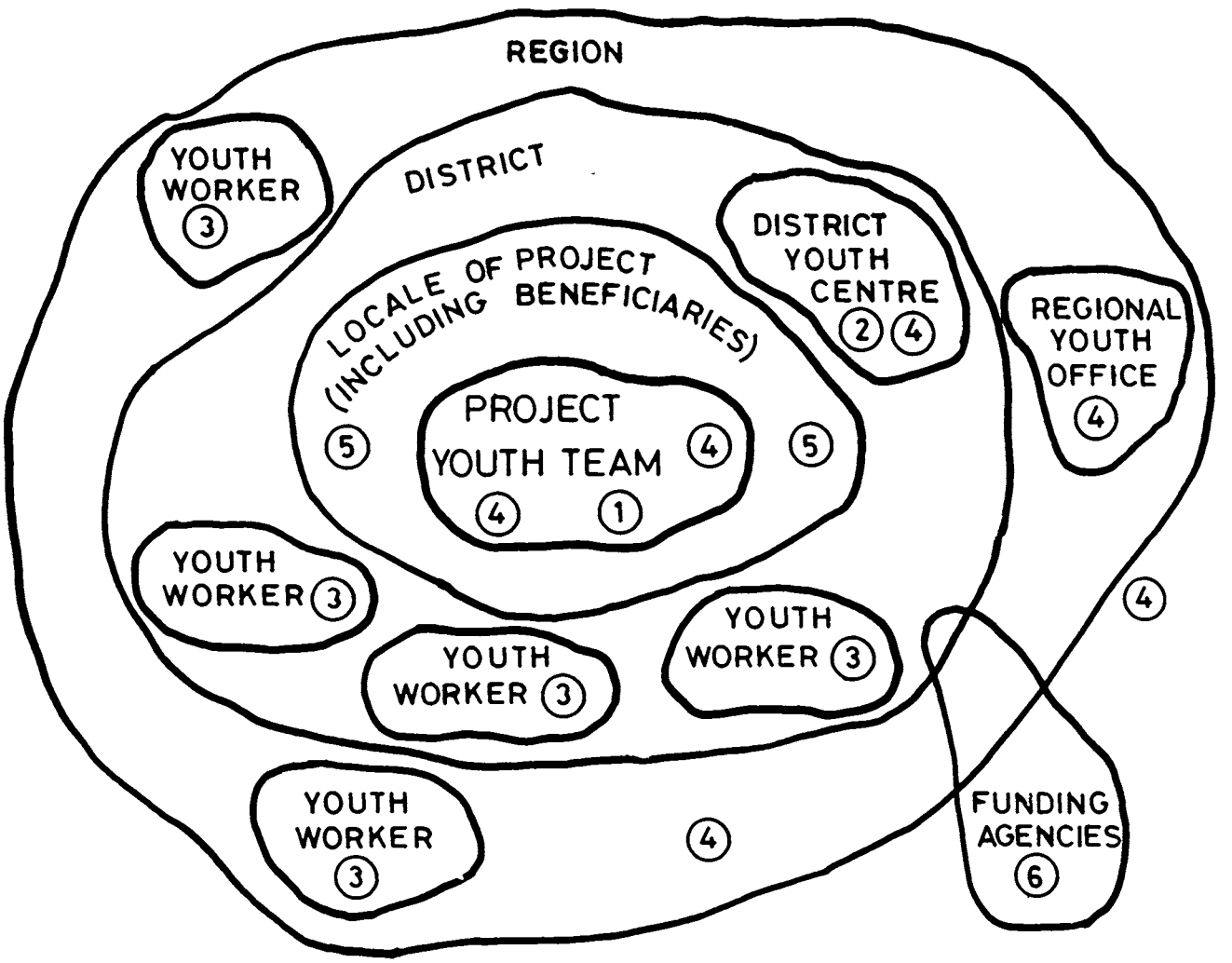
The identification of the evaluator (a single person within or without the youth group involved in the project or an Evaluation Team comprising of several persons) depends on the purposes of the evaluation and the audience of the evaluation report.

The options available are :

1. youth worker/youth leader/designated youth volunteer
2. senior-level youth functionary
3. a team comprising of other youth workers
4. a team comprising of youth volunteers and persons unrelated to the project
5. a team of beneficiaries
6. a team appointed by funding agencies

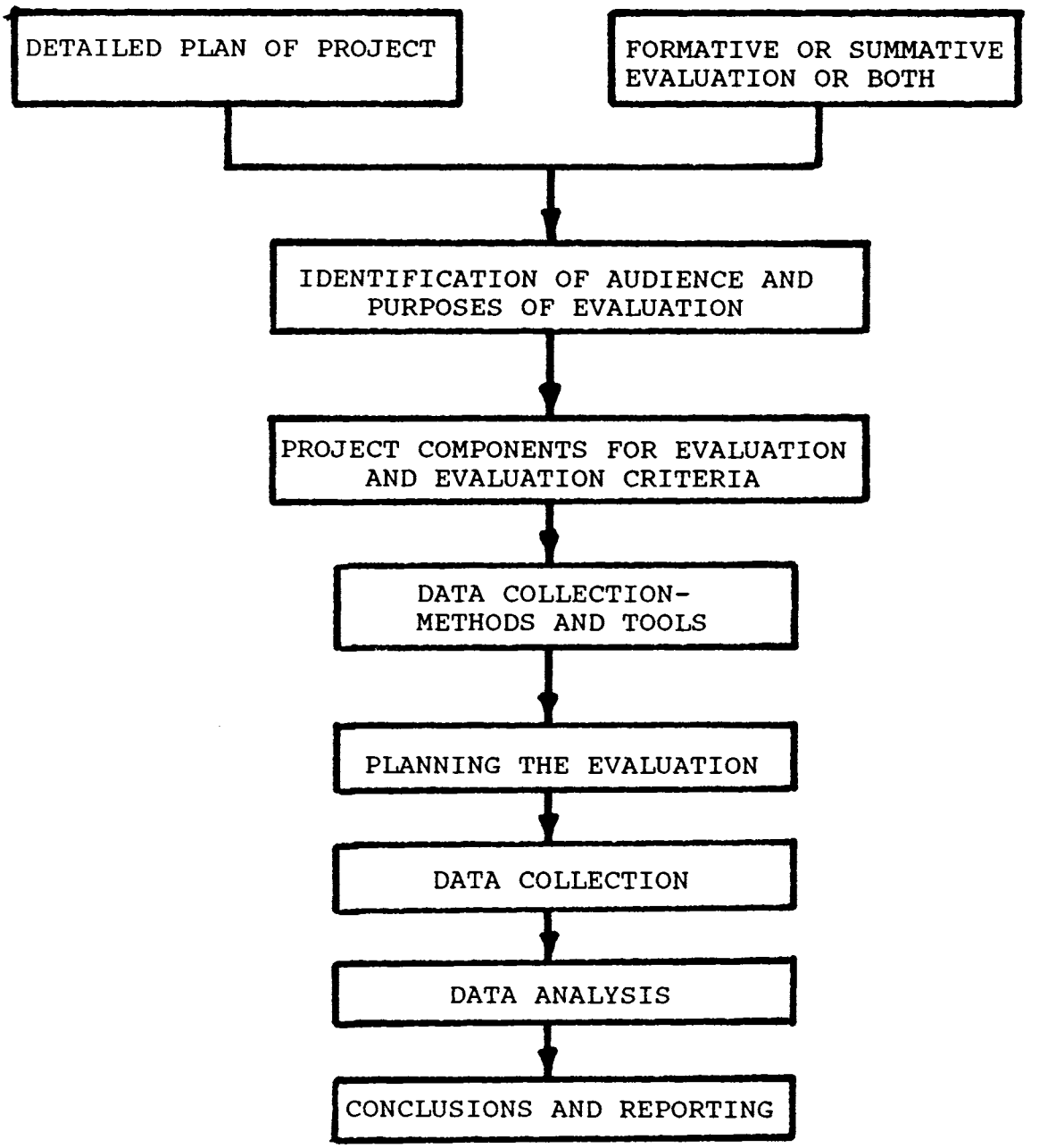
Formative Evaluation is preferably carried out by persons closely associated with the project. On the other hand, Summative Evaluation can be entrusted to persons who may or may not be connected with the project.

These options are shown in the diagram presented on the next page.


REGION
DISTRICT
YOUTH WORKER 3
DISTRICT YOUTH CENTRE 2 4
REGIONAL YOUTH OFFICE 4
LOCALE OF PROJECT (INCLUDING BENEFICIARIES)
5
PROJECT YOUTH TEAM 4 1 4
5
YOUTH WORKER 3
YOUTH WORKER 3
YOUTH WORKER 3
4
YOUTH WORKER 3
4
FUNDING AGENCIES 6

HOW TO EVALUATE A PROJECT ?

A model for evaluating a project is suggested below.



WHO IS THE AUDIENCE OF THE EVALUATION REPORT ?

One of the key issues involved in evaluation is the identification of the audience or the users for whom the findings are expected to be of meaning. The possible audience of the evaluation report of youth projects are :

* beneficiaries
* youth involved in planning and implementation
* funding agencies
* society surrounding the locale of project
* district or state or national government.

Primary agencies who would gain from or be interested in Formative Evaluation are youth involved in the implementation of the project and the funding agencies. Sometimes beneficiaries may also be interested in project progress.

All audiences listed above should be interested in Summative Evaluation and the information generated thereof.

WHAT ARE THE POSSIBLE EVALUATION CRITERIA ?

As already mentioned earlier 'planned outcomes' will be major yardsticks or criteria in Summative Evaluation. These may be related to the terminal point of the project or to intermediate stages of the project.

The plan and activity clusters in the plan, their intent and duration would provide a set of criteria for Formative Evaluation.

With respect to other criteria, it becomes necessary that they be generated, separately for Summative and Formative purposes. These criteria have to be derived to suit project components identified for evaluation. The two lists given below include samples of criteria which apply to Summative and Formative Evaluation schemes.

Summative Evaluation Criteria

1. The difference between planned and actual capital investment under different categories like building, equipment, furniture
2. The difference between planned and actual recurring expenses under different categories like instructional material salaries
3. Extent of utilisation of deployed resources, like manpower, space, machines
4. Wastage of physical resources
5. Mid-course modification in project objectives
6. Mid-course modifications in other plan components, like activities, resources deployment
7. Abandoning planned strategies and resorting to totally new strategies
8. Excessive delays and impediments during project implementation
9. Missing or ignoring factors vital to project success like beneficiary involvement, resources availability
10. Continuance of gains beyond project
11. Undesirable/desirable unintended outcomes.

Formative Evaluation Criteria

1. Responsiveness of project team to problems
2. Unanticipated barriers in activities
3. Lack of coordination between tasks/team members
4. Satisfaction of accountability requirements
5. Team-work and leadership (also related to process evaluation)
6. Communication with external agencies including beneficiaries
7. Making-up delays
8. Filling-in infrastructural gaps
9. Wastage in resources utilisation
10. Deviations from plans
11. Coping with unintended (undesirable) outcomes

It will be noticed that there are references to unintended outcomes in the two lists. Youth projects, particularly those which are shrouded in ambiguity and uncertainty will produce unintended outcomes. Some of these may be desirable and others detrimental. The whole point is whether the project team has taken note of and coped with such undesirable outcomes.

ILLUSTRATIONS :

a. A youth worker who is involved in an Adult Literacy campaign may find that the instructional material supplied to the beneficiaries is also being used by their children.

b. A youth club becomes a gambling den.

c. In a social forestry project, the intended beneficiaries are found selling the saplings.

d. In a major road construction project, participants are from different states. While working together, a spirit of national harmony emerges.

The criteria listed in the table may have to be decomposed further into specific indicators, depending on the largeness or the complexity of the project. Further, there are in some cases an 'apparent' similarity in the criteria. For specific projects, such criteria may be rephrased and rearranged to suit the characteristics of the project. Lastly, not all criteria will apply to a project and hence selection of relevant criteria will have to be made. If necessary, additional criteria may have to be developed.

WHAT ARE THE POSSIBLE DATA COLLECTION METHODS ?

Data collection may be effected through the use of a variety of methods. The following are the usually adopted methods and for each one of them sampling may have to be resorted to : -

* Study of records available with different agencies
* Interviews with identified key personnel involved in the project implicitly or explicitly. This may be with an individual or a group.
* Use of questionnaires, opinionnaires, check-lists
* Observations
* Measurements

Sometimes the evaluation team may resort to discussion with a group of persons to elicit data for evaluation of certain project components.

The choice of the data collection method depends on the component/element of a project. Usually the Summative Evaluation elements are determined on the basis of data collection from records, check lists and measurements. For the Formative and Process Evaluation elements, the most useful method is observation of the process itself as and when it is occurring. Wherever this is not possible or has not been done, interviews, questionnaires and opinionnaires may be useful.

ILLUSTRATION TWO:

Sl. No.	Element to be evaluated		Suggested Data Collection method
1.	Number of youth who have been counselled in a counselling project.	-	Counselling cell Records
2.	Comprehensiveness of Assessment of needs of a community by the project team	-	Interviews of representative samples of different categories, who provided the data to the project team
3.	Utilisation of a new facility provided to a village (well, road, pond, cattle sheds, etc)	-	Observations
4.	Number of saplings planted through a social forestry project	-	Measurements
5.	Effectiveness of planning a project	-	Check lists
6.	Decision-making processes within the project team	-	Observations
7.	Communications within the project team	-	Opinionnaire/ observations

8.	Delays in crucial stages of a long term project	-	Records of Follow-up
9.	Causes for delays in crucial stages of a long term project	-	Interviews with key persons involved in project implementation
10.	Effectiveness of a skills training programme	-	Observations of post programme performance

ASSIGNMENT - TWO

In the Table below are given 10 project elements that need to be evaluated by a project evaluation team constituted immediately after the first activity of the project has started.

Indicate in the space provided the data collection method you feel is most appropriate.

Check your response with the Tutor.

Sl. No.	Project element to be evaluated	Data collection method
1.	Appropriateness of role allocation	
2.	Motivation of youth volunteers in implementation of project activities	
3.	Leadership style of project leader	
4.	Extent of participation of beneficiaries in project planning and implementation	
5.	Liaison with external agencies	
6.	Extent of achievement of objectives	
7.	Nature and extent of unintended outcomes	
8.	Publicity for the project	
9.	Interference from interest groups	
10.	Degree of cooperation from beneficiaries	

DATA COLLECTION

Data collection is not as simple as it sounds. The reasons for this are many. Records may be incomplete or withheld from the Evaluation Team wholly or partially. Persons connected with the project including the beneficiary groups may not be forthright in sharing the information they possess. They may lay more emphasis on certain facets of implementation and less emphasis on certain others. At times,information supplied may not be reliable or unbiased.

Some of the more significant approaches likely to be of use in overcoming barriers and difficulties in data collection are:-

- establishing rapport with persons
- questioning
- establishing relevance of information received from various sources
- making persons talk
- crosschecking important pieces of information through different methods

The Evaluation Team has to identify the set of activities involved in the Evaluation and allocate roles to team members. Certain functions are best performed individually and certain others in groups.

HOW TO ANALYSE DATA ?

Once data on various evaluation criteria have been collected, it has to be screened and compiled to provide a clear picture of which components have got distorted or deviated. This could be called as converting data to useful information. The purposes of evaluation, the criteria generated for the purposes, the data collection methods and tools developed and utilised will all contribute towards channelising data on the various components of the project. However, some of these data may be superfluous and some not very reliable. The screening enables the evaluation team to isolate crucial data. Compiling helps in integrating data into relevant information units which suit the drawing of conclusions.

The nature of conclusions arrived at by the Evaluation Team would be on the performance in the components of the project. In Summative Evaluation, these components would be outcomes at different stages as compared to planned outcomes, while in Formative Evaluation they would relate to progress in activity clusters. Conclusions will clearly indicate whether 'things have gone right or wrong'.

Sometimes the extent of satisfaction of a criteria may not be clear and may defy the drawing of conclusions. For example, the extent to which learning has occurred in an Adult Literacy Project may not be precisely measurable on occasions. Or the advantages that have accrued from an Adventure Trek may not be

clear even in the minds of the beneficiaries. In such cases one may either depend on indirect measures if they are available or do the best with the available data.

Conclusions drawn by the Evaluation Team are to be transmitted to different agencies in the audience.

WHAT ARE THE MODES FOR REPORTING EVALUATION FINDINGS ?

The mode and content of findings reporting will depend on the evaluation purposes and the audience for whose benefit evaluation is being carried out. The following modes are available for selection by the evaluation team.

- Tables
- Bar charts
- Graphs, Diagrams
- Pie charts
- Written Reports
- Check-lists which are appropriately filled
- Photographs

HOW TO USE EVALUATION REPORTS ?

The findings reported by the Evaluation Team have to be made use of by different agencies (audience). It is not the responsibility of the Evaluation Team to set things right in case the evaluation has been Formative or to refine planning and implementation strategies when the evaluation has been Summative. This is normally undertaken by the project teams.

In fact, Evaluation is a form of assistance provided to project teams. Other agencies who are interested in the project gain from the evaluation in terms of using evaluation information for modifying their support to the project team on an on-going project or on a future project.

Finally, Evaluation fills a gap which normally no other project component can bridge. It provides comprehensive feedback on the processes of project management.

Like planning and implementation, evaluation also occupies a vital position in project management.

ASSIGNMENT - THREE

A CASE ON EVALUATING A SCHEME

For a Project - a Road Safety Week Campaign, the project team decided to have a project evaluation carried out.

The project objectives were:

(a) To distribute 10000 pamphlets on Road safety at 10 road intersections

(b) To show 5 films near 10 road intersections, each film twice a day

(c) To display 50 Billboards on road safety at prominent places in the city

(d) To arrange daily 10 minute radio talks for 5 days on road safety by distinguished persons

(e) To contact 1000 people at the 10 road intersections (50 persons at a time at a film projection time) for getting responses to a questionnaire to analyse public attitude towards road safety

(f) To demonstrate road safety devices at 10 road intersections.

Activity Set:

- Constitution of the project team
- Role allocation
- Printing of pamphlets

- Obtaining films on loan from Public Roads Department
- Obtaining on loan film projection equipment and road safety devices
- Designing Billboards
- Preparation of Billboards
- Identification of road cross-sections and film projection sites
- Identification of Billboard sites and installation of Billboards
- Preparing project plan
- Arranging for transport during the road safety week
- Arranging for 5 experts to give talks on road safety
- Arranging with local radio station for 10 minute slots
- Preparation of a questionnaire on road safety
- Administration of the questionnaire
- Arranging demonstration of road safety devices at the 10 road intersections
- Moving into project sites
- Moving out of project sites
- Distribution of pamphlets
- Collection of funds
- Projection of films
- Removal of Billboards and transshipment to office
- Analysis of questionnaire
- Publication of Analysis in local newspaper

- Return of equipment, films, devices, etc
- Obtaining permission from city authorities.

Summative Evaluation:

Since the project was a short term one, it was decided to carry out the Summative Evaluation after the project was over. The data to be collected would be directly obtainable from the project objectives. They are:

- Number of pamphlets distributed
- Number of times each film has been shown at each intersection
- Number of Billboards installed
- Number of radio talks actually occurred
- Number of questionnaire responses obtained
- At how many intersections the safety devices were demonstrated
- Time taken to complete the analysis of questionnaire responses.

Since the evaluation does not end at specifying actual occurrences to planned outcomes, the reasons for the deviations if any would also be identified by the evaluation team through interviews with project team members. A report on Summative Evaluation would be prepared for use in the planning and implementation of similar projects in future by the same youth club or other youth clubs.

Formative and Process Evaluation:

This component of the Evaluation scheme, however, would start with the very first activity, namely the constitution of the project team. The main purpose would be to assess the effectiveness of the processes adopted in the various activities. The project team felt that if the outcomes were satisfactory, the implication was that the processes adopted were satisfactory.

In fact, one important component in the present project would be the many decisions made before and during the implementation of the Project. The project evaluation team would study questions such as:

- Have the interests and abilities available in the youth club been adequately tapped in the constitution of the project team?
- Has the formation of the project team been satisfactory from the viewpoint of adequacy of representation to different categories of volunteers in the youth club?
- Is the role allocation acceptable to all the members of the project team?
- Does the project team think and act like a group?
- Has issue of leadership of the project team been tackled in a manner appropriate to the nature of the project and the constitution of the team?

- Has the leader carried the team with him through the planning and implementation of the project?
- Could the problems that surfaced during implementation be related to decision-making processes adopted?
- Could the deviations between actual and planned outcomes be attributed to processes adopted by one or more members of the project team in the activities?

The evaluation report was expected to provide valuable feedback to the project team members on the effectiveness of the processes adopted by them in the various activities. Interim reports would also be made available to the project team since certain processes were likely to be used repeatedly during the implementation.

BRIEF:

The participants will read the case of a Road Safety Week Campaign presented above. In particular they will pay heed to the proposed evaluation scheme for the campaign.

After reading the case, the participants will in groups of 5 to 10:

(a) Critically comment upon different aspects of the proposed campaign - the plan, the strategy and the evaluation

(b) Suggest improvements of the evaluation scheme with justifications wherever necessary.

ASSIGNMENT - FOUR

A list of projects is given below.

1. ARRANGING SKILLS TRAINING PROGRAMME FOR VILLAGE YOUTH
2. ORGANISING A NATURE CAMP FOR UNDERPRIVILEGED URBAN YOUTH
3. PROMOTING BETTER UTILISATION OF LOCAL RESOURCES
4. A YOUTH RALLY

In groups,

(a) Select evaluation criteria from the list given in this Chapter

(b) Modify the criteria to suit your conditions

(c) Add additional criteria relevant to the project chosen by you

(d) Decompose the selected criteria into indicators, wherever necessary.

The group spokesman will present the group consensus in a plenary session and seek suggestions from other groups for making the criteria set more relevant.

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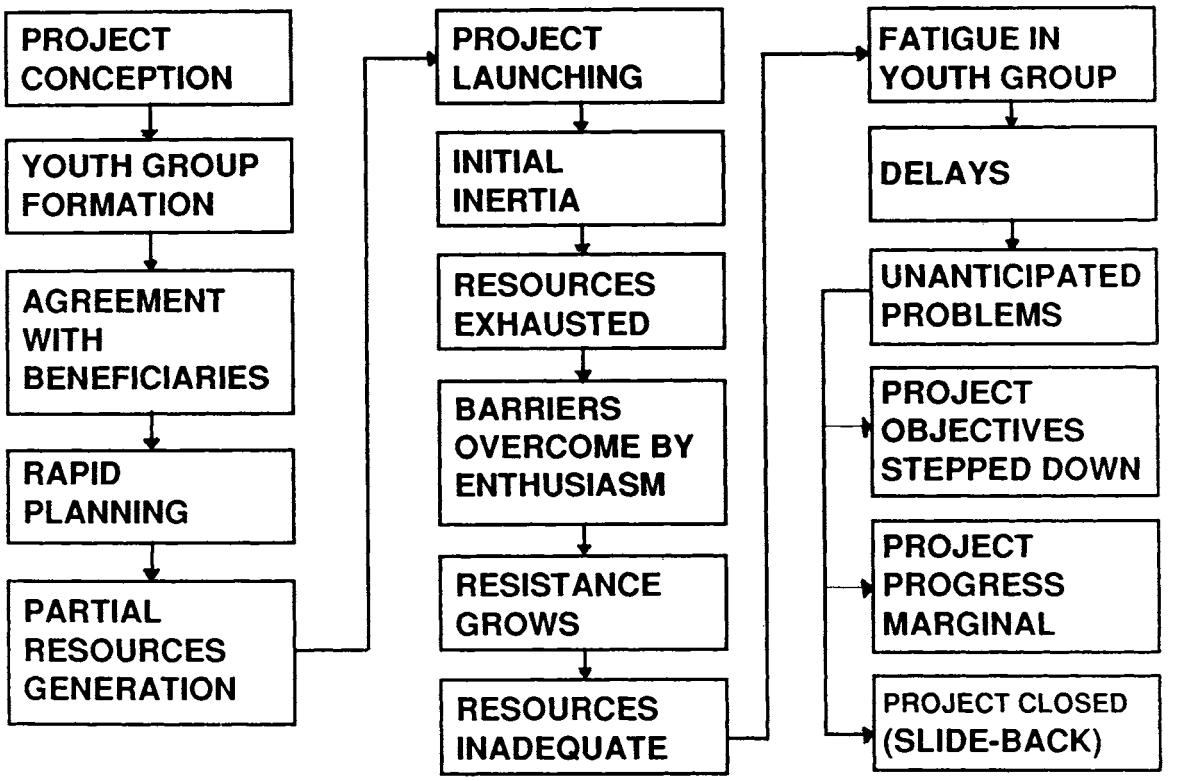
* * * * *

TRANSPARENCIES

1.1



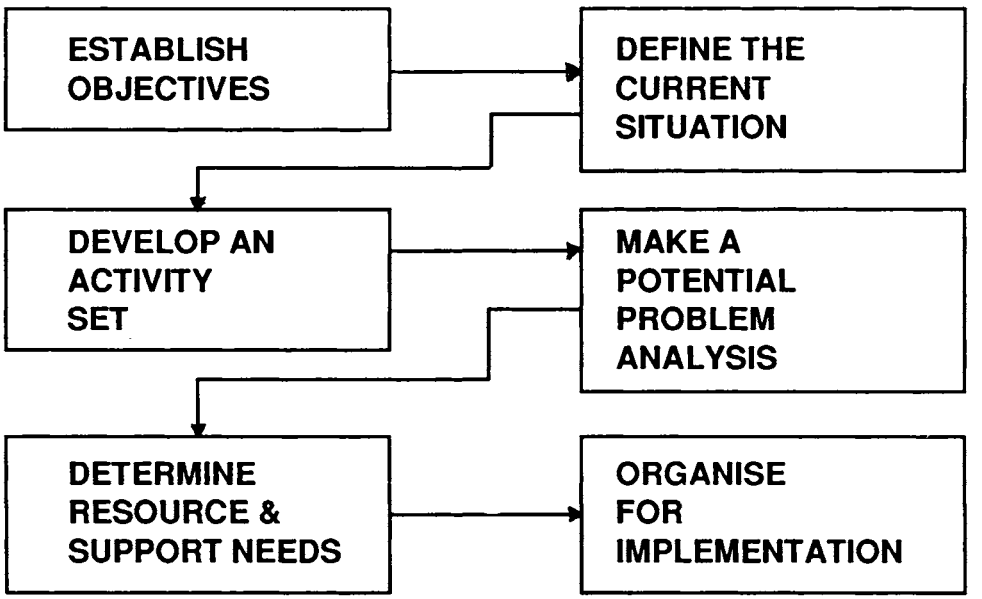
PROJECT PATTERNS IN REALITY

2.1

- WHAT NEEDS TO BE DONE?
- WHEN DOES IT NEED TO BE DONE?
- HOW IS IT TO BE DONE?
- WHO IS TO DO IT?

BASIC QUESTIONS IN PLANNING

2.2



A PLANNING MODEL

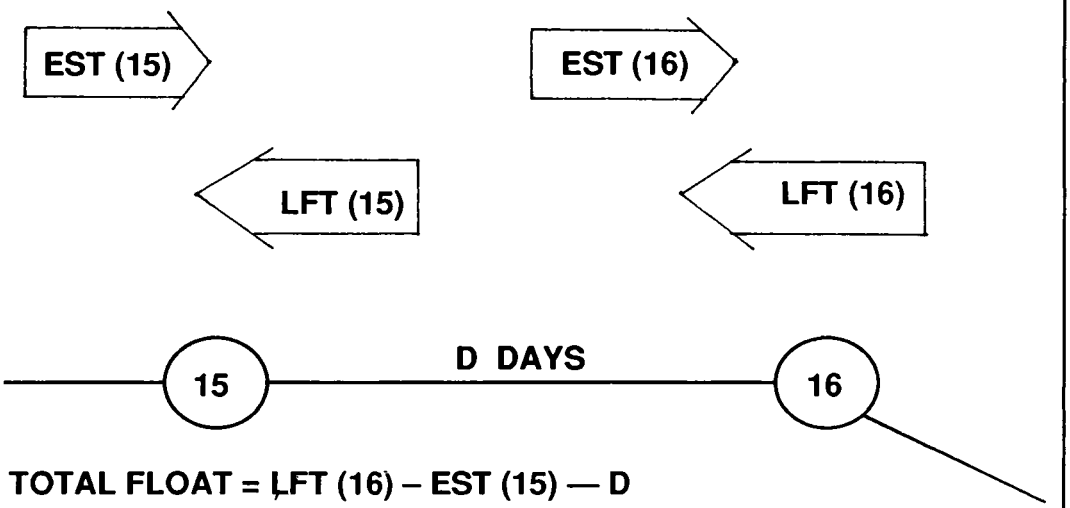
3.1

RULES IN DRAWING NETWORK

- DESIGNATING ACTIVITIES AND EVENTS
- START / FINISH WITH ONE EVENT
- CRISS-CROSSING TO BE AVOIDED
- DUMMY IS DOTTED / DASHED
- IN TUNE WITH DEPENDENCY RELATIONSHIPS

3.2

FLOAT CALCULATIONS



TOTAL FLOAT = LFT (16) – EST (15) — D

FREE FLOAT = EST (16) – EST (15) — D

4.1

WANTS ANALYSIS

WEIGHT ⇨ COMPARATIVE IMPORTANCE OF CRITERIA

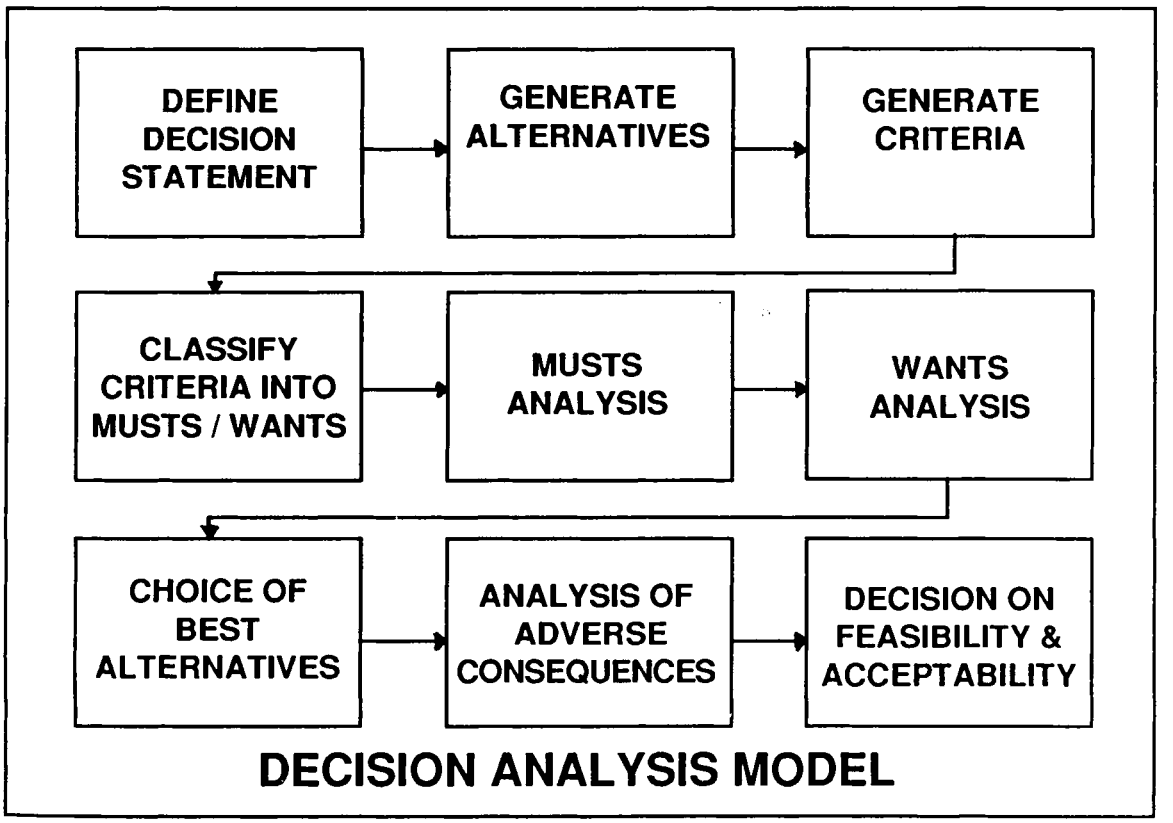
X

SCORE ⇨ EXTENT OF STATISFACTION OF CRITERIA BY AN ALTERNATIVE

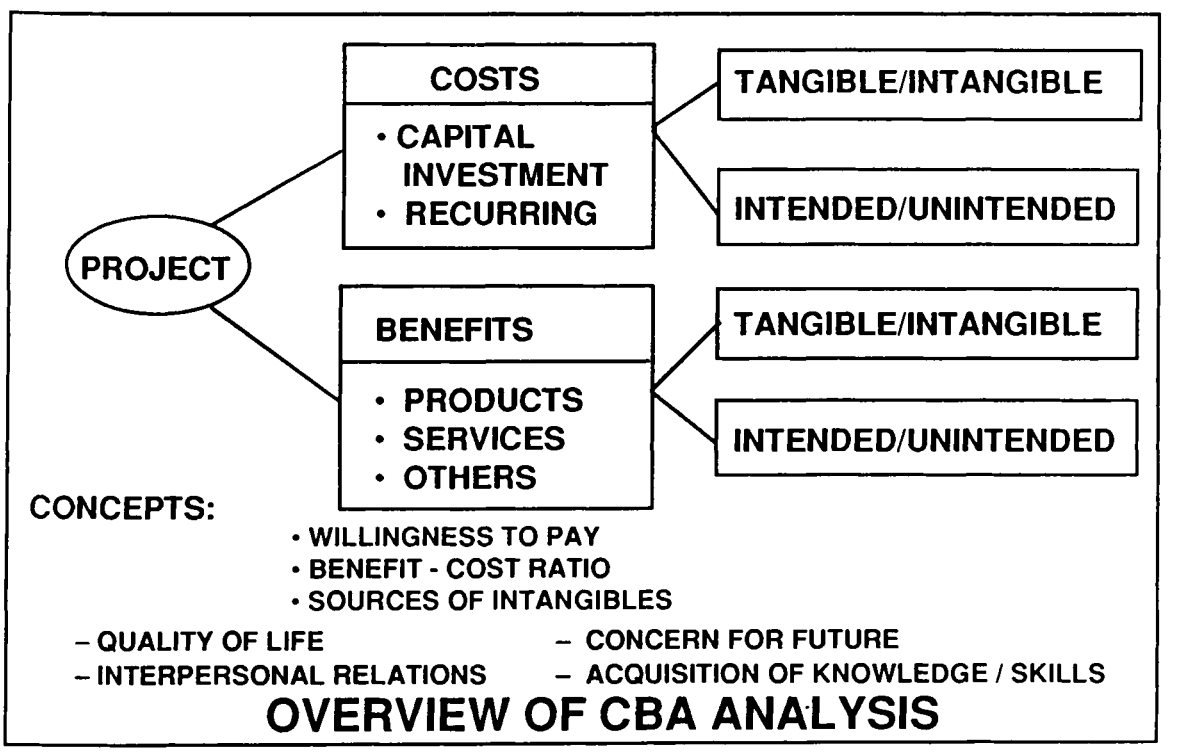
=

WEIGHTED SCORE ⇨ PRODUCT OF WEIGHT AND SCORE

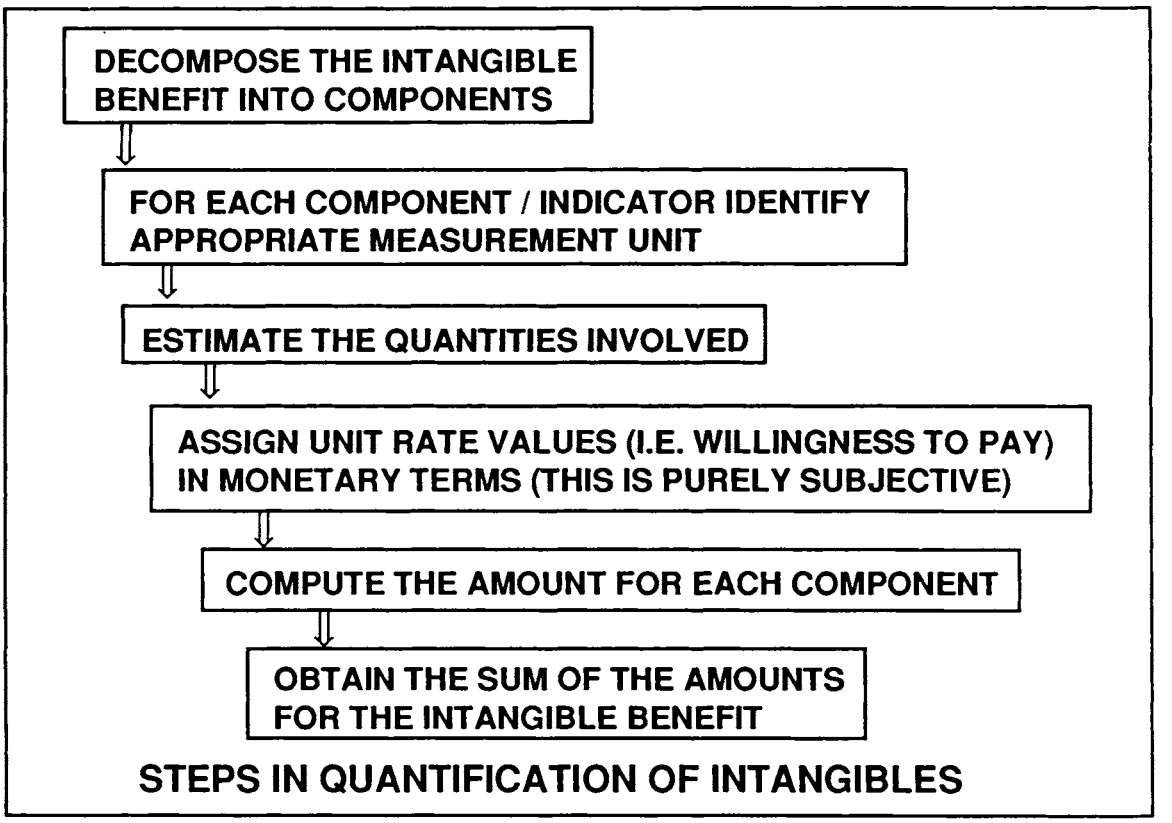
4.2


DEFINE DECISION STATEMENT
GENERATE ALTERNATIVES
GENERATE CRITERIA
CLASSIFY CRITERIA INTO MUSTS / WANTS
MUSTS ANALYSIS
WANTS ANALYSIS
CHOICE OF BEST ALTERNATIVES
ANALYSIS OF ADVERSE CONSEQUENCES
DECISION ON FEASIBILITY & ACCEPTABILITY
DECISION ANALYSIS MODEL

5.1

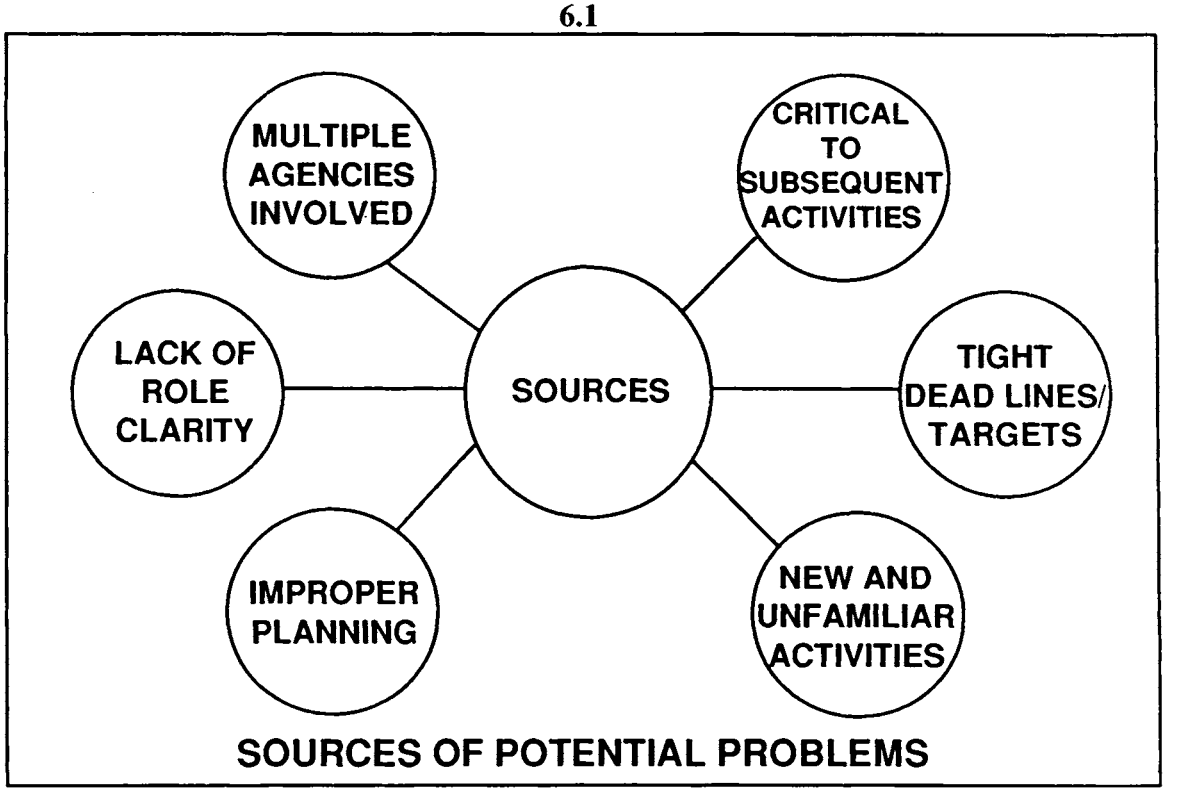

COSTS
• CAPITAL INVESTMENT
• RECURRING
TANGIBLE/INTANGIBLE
INTENDED/UNINTENDED
PROJECT
BENEFITS
• PRODUCTS
• SERVICES
• OTHERS
TANGIBLE/INTANGIBLE
INTENDED/UNINTENDED
CONCEPTS:
• WILLINGNESS TO PAY
• BENEFIT - COST RATIO
• SOURCES OF INTANGIBLES
– QUALITY OF LIFE
– INTERPERSONAL RELATIONS
– CONCERN FOR FUTURE
– ACQUISITION OF KNOWLEDGE / SKILLS
OVERVIEW OF CBA ANALYSIS

5.2



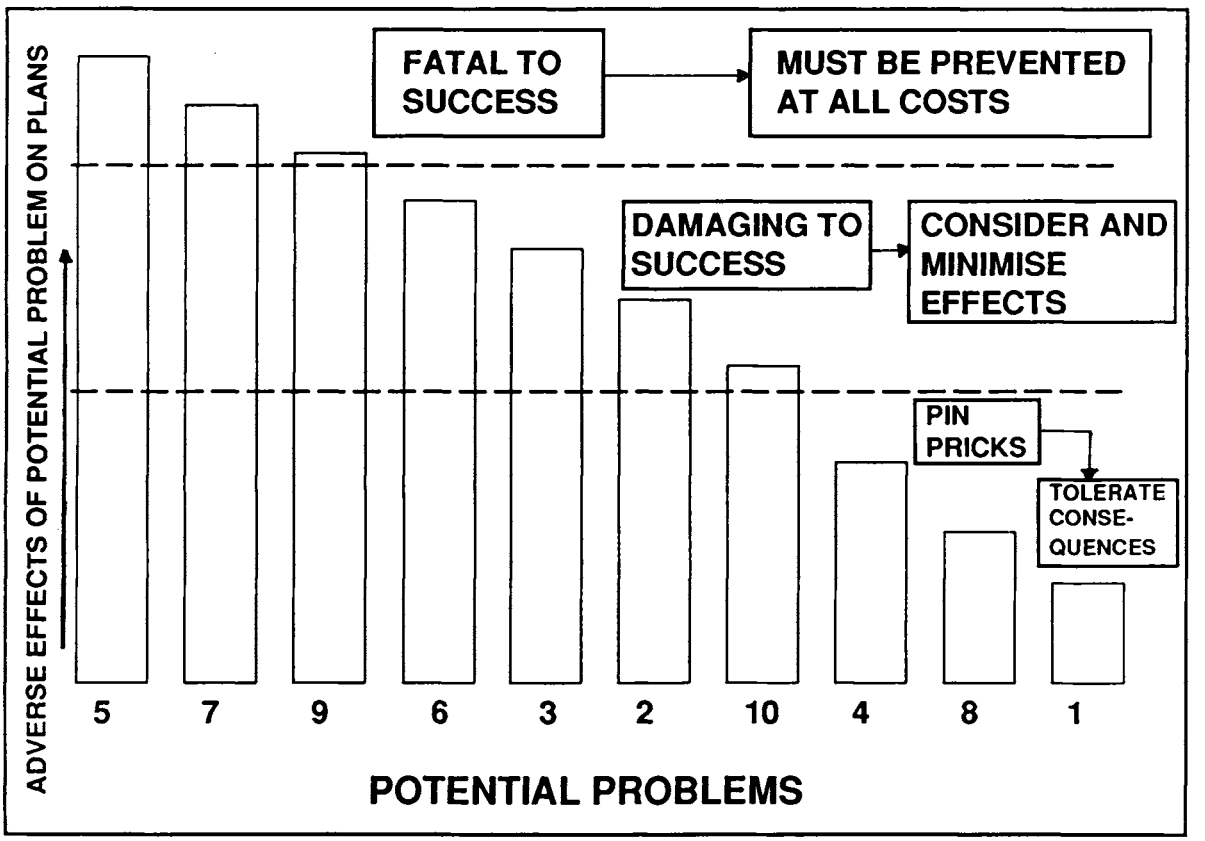
STEPS IN QUANTIFICATION OF INTANGIBLES

6.1

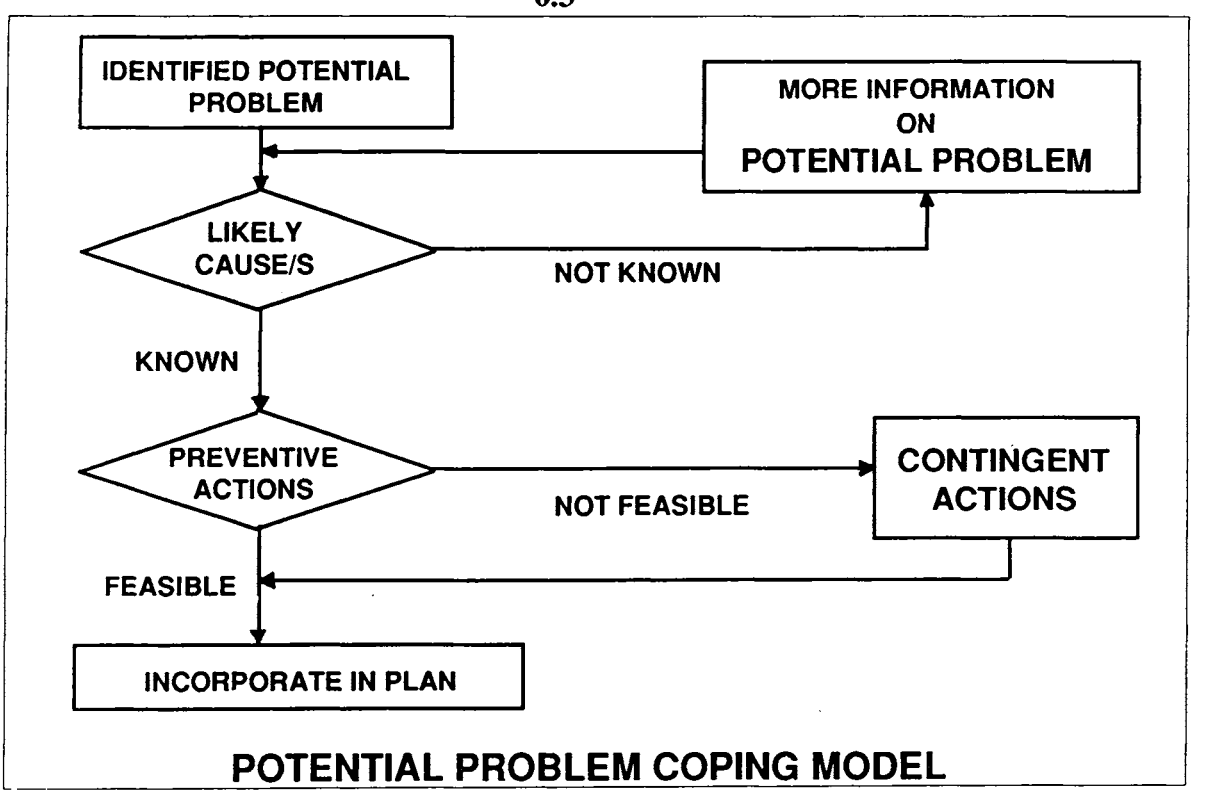


SOURCES OF POTENTIAL PROBLEMS

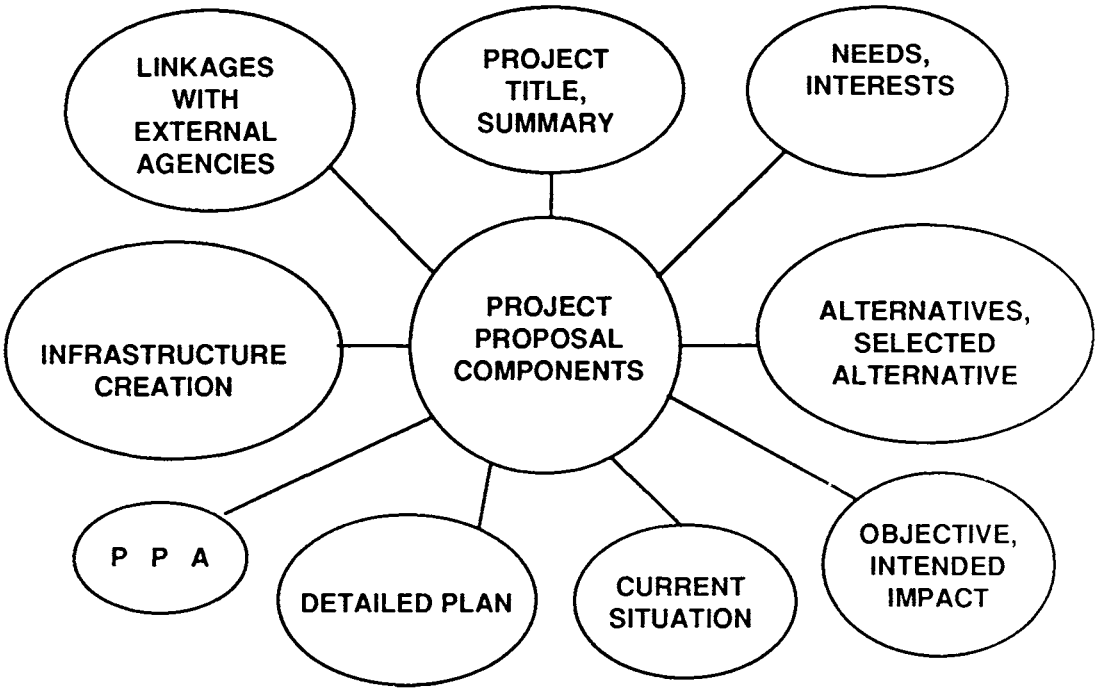
6.2


ADVERSE EFFECTS OF POTENTIAL PROBLEM ON PLANS
FATAL TO SUCCESS
MUST BE PREVENTED AT ALL COSTS
DAMAGING TO SUCCESS
CONSIDER AND MINIMISE EFFECTS
PIN PRICKS
TOLERATE CONSE-QUENCES
5
7
9
6
3
2
10
4
8
1
POTENTIAL PROBLEMS

6.3


IDENTIFIED POTENTIAL PROBLEM
MORE INFORMATION ON POTENTIAL PROBLEM
LIKELY CAUSE/S
NOT KNOWN
KNOWN
PREVENTIVE ACTIONS
NOT FEASIBLE
CONTINGENT ACTIONS
FEASIBLE
INCORPORATE IN PLAN
POTENTIAL PROBLEM COPING MODEL

7.1



PROJECT PROPOSAL COMPONENTS

8.1

BENEFITS FROM INFRASTRUCTURES

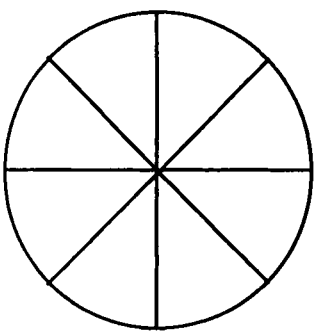
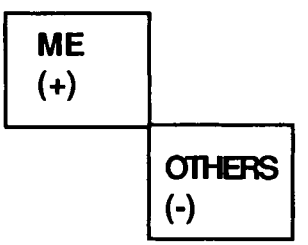
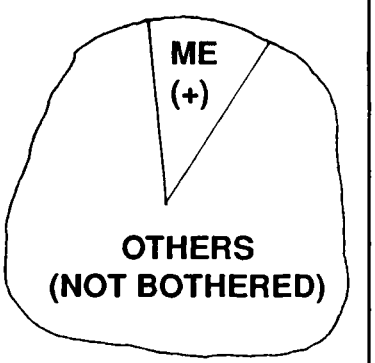
- BRINGING CLARITY TO THE INTER-DEPENDENCE OF FUNCTIONS
- AVOIDING WORKING AT CROSS-PURPOSES
- ENSURING THAT ALL ACTIVITIES GET COMPLETED AS PER PLAN
- IDENTIFYING, DIAGNOSING AND RESOLVING PROBLEMS
- PROMOTING TEAM-WORKING

8.2

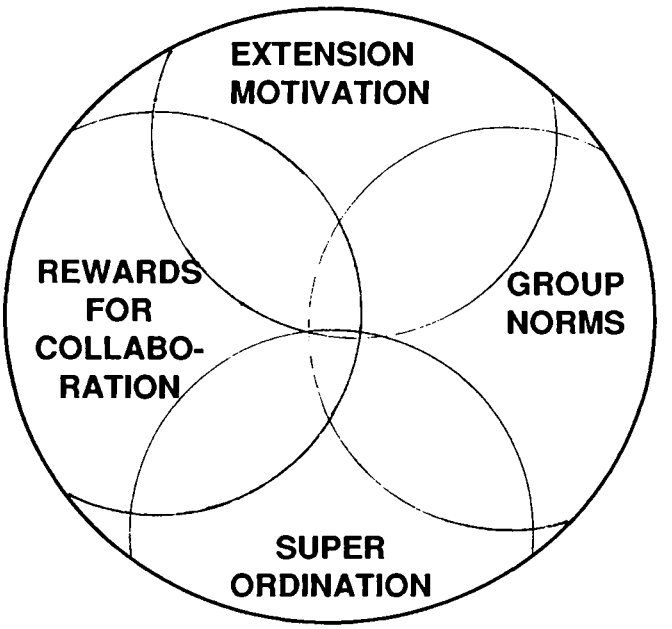
FACTORS INFLUENCING INFRASTRUCTURE DESIGN

- PROJECT OBJECTIVES AND PROJECT PLAN
- AMBIGUITIES AND UNCERTAINTIES DURING IMPLEMENTATION
- EXPECTATIONS OF DIFFERENT AGENCIES/YOUTH VOLUNTEERS/BENEFICIARIES/INTEREST GROUPS INVOLVED
- DIVISION OF RESPONSIBLITIES
- CAPABILITY AND EXPERTISE OF YOUTH VOLUNTEERS
- TIME FRAME OF PROJECT
- RESOURCE CONSTRAINTS

9.1

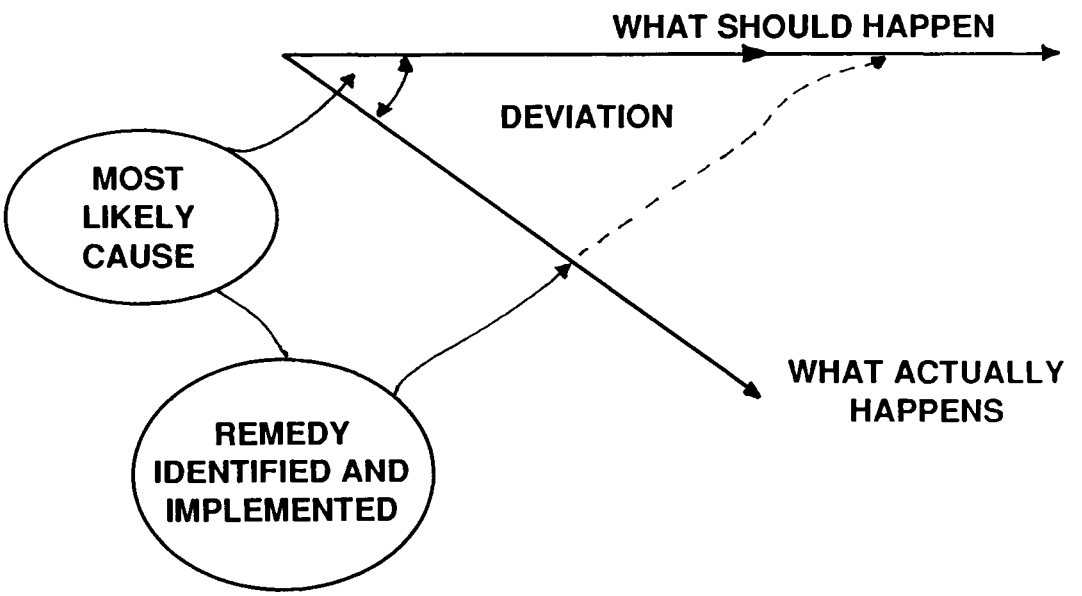
COLLABORATION MOTIVE	COMPETITION MOTIVE	INDIVIDUAL MOTIVE
		
• SHARING SUCCESS WITH OTHERS • SEEKING BENEFITS • REWARDS FOR ALL • ALL WIN	• WINNING AT THE COST OF OTHERS	• SEEKING AN OVERCOME THAT IS BEST FOR HIMSELF, REGARDLESS OF WHETHER OTHERS ACHIEVE OR NOT

9.2



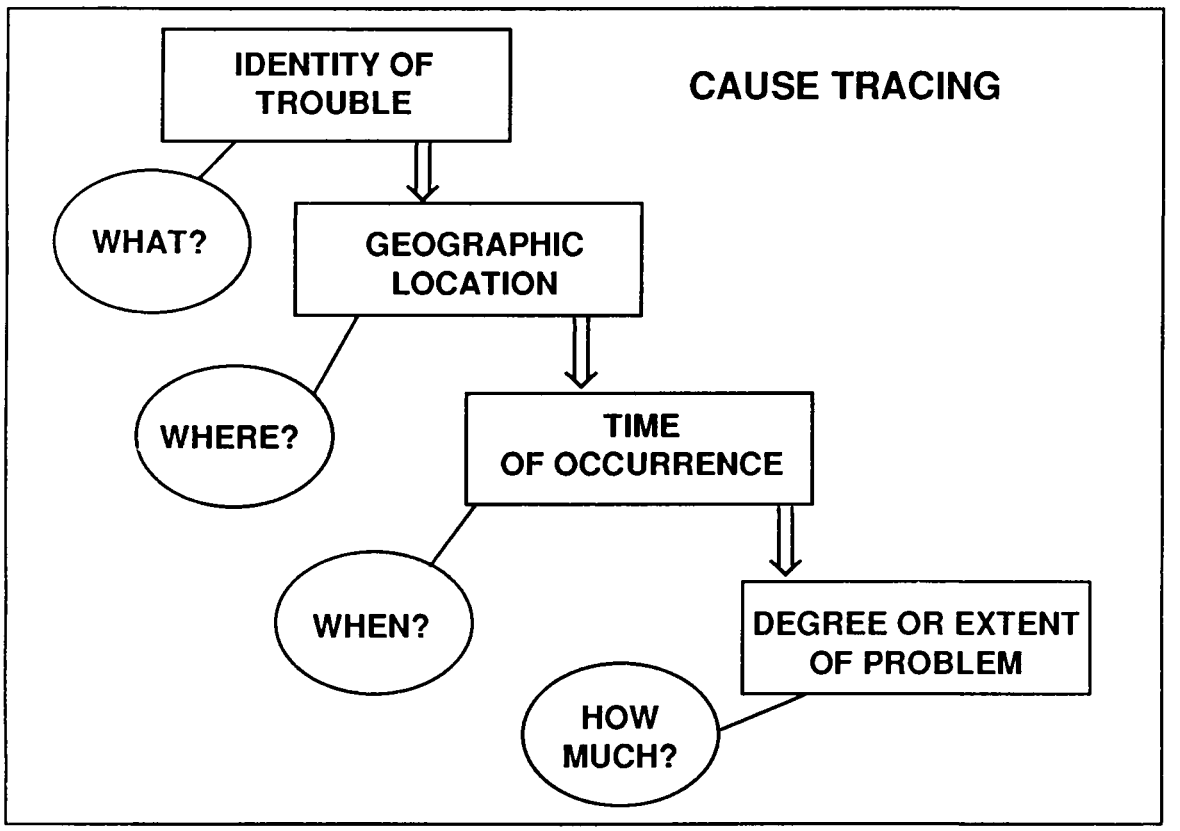
FACTORS INFLUENCING COLLABORATION

10.1

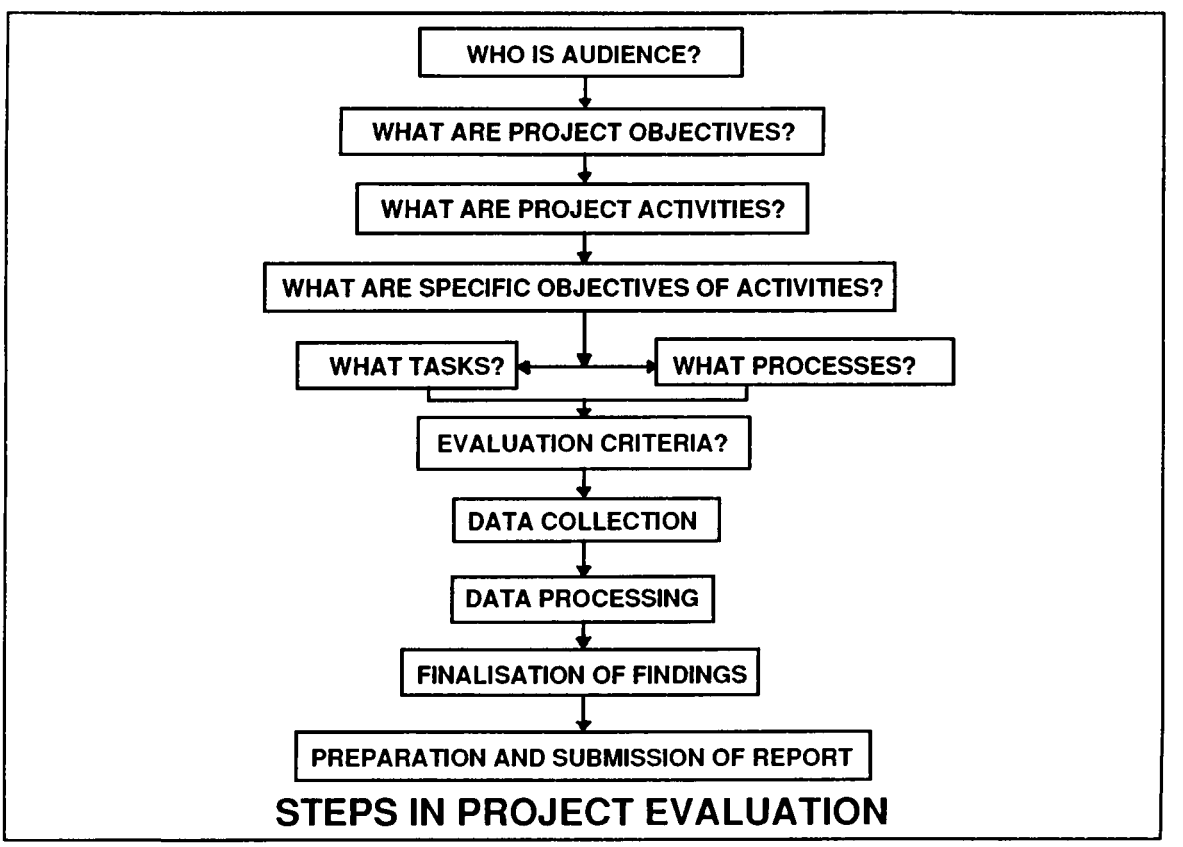


CONCEPT OF PROBLEM ANALYSIS

10.2


IDENTITY OF TROUBLE
CAUSE TRACING
WHAT?
GEOGRAPHIC LOCATION
WHERE?
TIME OF OCCURRENCE
WHEN?
DEGREE OR EXTENT OF PROBLEM
HOW MUCH?

11.1


WHO IS AUDIENCE?
WHAT ARE PROJECT OBJECTIVES?
WHAT ARE PROJECT ACTIVITIES?
WHAT ARE SPECIFIC OBJECTIVES OF ACTIVITIES?
WHAT TASKS?
WHAT PROCESSES?
EVALUATION CRITERIA?
DATA COLLECTION
DATA PROCESSING
FINALISATION OF FINDINGS
PREPARATION AND SUBMISSION OF REPORT
STEPS IN PROJECT EVALUATION

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