

■ WORK PLANNING

material for management training in agricultural co-operatives

*TRAINER'S MANUAL*

international labour office, geneva

© MATCOM 1978-2001



**MATCOM**  
**Material and techniques for cooperatives management**  
**training**

The MATCOM Project was launched in 1978 by the International Labour Office, with the financial support of Sweden. In its third phase (1984-1986) MATCOM is financed by Denmark, Finland and Norway.

In collaboration with cooperative organizations and training institutes in all regions of the world, MATCOM designs and produces material for the training of managers of cooperatives and assists in the preparation of adapted versions for use in various countries. MATCOM also provides support for improving the methodology of cooperative training and for the training of trainers.

Publications of the International Labour Office enjoy copyright under Protocol 2 of the Universal Copyright Convention. For reproduction, adaptation or translation, application should be made to ILO Publications, International Labour Office, CH-1211 Geneva 22, Switzerland. The International Labour Office welcomes such applications

Copyright © International Labour Organization

## Preface

This training package is one of a number of training packages designed by the ILO - MATCOM Project to assist people who plan or carry out training for the managerial staff of agricultural co-operatives in developing countries.

The training provided under this training package, as well as under the other packages in this series, is based on a thorough analysis of:

- the tasks and functions to be performed in agricultural co-operative societies in developing countries;
- (ii) the common problems and constraints facing the effective performance of these tasks and functions.

The result of this analysis is reflected in the MATCOM "Curriculum Guide for Agricultural Co-operative Management Training". The Guide contains syllabuses for 24 management subjects and MATCOM has produced training packages, similar to this manual, for the following subjects:

- Collecting and Receiving Agricultural Produce
- Transport Management
- Storage Management
- Marketing-of Agricultural Produce
- Supply Management
- Rural Savings and Credit Schemes
- Staff Management
- Financial Management
- Cost Accounting
- Project Preparation and Appraisal
- Risk Management
- Export Marketing
- Management of Larger Agricultural Co-operatives
- Cooperative Audit and Control
- Management of Multipurpose Cooperatives

For more information on the above training material, please write to:

The MATCOM Project  
 c/o CO-OP Branch  
 International Labour Office  
 CH 1211 Geneva 22  
 Switzerland

THE TRAINING PROGRAMME1. Target Group

Target groups for this training programme on "Work Planning" are managers and assistant managers of agricultural co-operative societies.

2. Aim

The aim of the programme is to enable trainees to prepare short- and long-term plans for the operations of the co-operatives, and to plan their own and their staff's activities.

In particular, the programme will enable trainees:

- to recognise the need for planning as well as its requirements and limitations;
- to recognise the critical importance of specific measurable objectives, to set such objectives and to identify the important relationship between planning and objectives;
- to implement the first basic steps in the planning process by identifying the activities necessary to the achievement of objectives, and to assess the required resources;
- to analyse the annual workload of their society, and to design an effective work plan accordingly;
- to determine the timing and sequence of activities required for the achievement of objectives;
- to prepare activity charts in order to facilitate the implementation of complicated operations;
- to draw a network plan, and to use the critical path method in the planning of typical society operations and special projects;
- to systematically examine the things they have to do, and to decide which should be given priority in particular circumstances;
- to plan their own daily workload;
- to identify and plan to overcome personal and institutional barriers which might hinder the achievement of their societies' objectives;
- to recognise reasons why plans are often not implemented;

- to apply simple planning techniques to their own careers;
- to apply the planning techniques they have learned to their own work situations.

### 3. Use

The programme as described in this manual can be used for a specialised course on Work Planning. The complete programme, or individual sessions or parts of sessions, can also be incorporated in the curriculum for a more comprehensive management training programme.

### 4. Duration

The complete programme, as described in this manual, consists of 15 learning sessions. Session times vary from 1 to 3 1/2 hours. The total programme will take approximately 37 hours, or between 5 and 7 days, depending on the qualifications and experience of the trainees and the hours worked each day. The time may well be exceeded, and each instructor must decide on the likely duration in view of local conditions. A timetable should be prepared accordingly.

### 5. Training Approach and Methods

The programme is based on the assumption that training is expensive and that money for co-operative management training is scarce. Therefore, it looks upon training as an investment, and unless the training yields results, the return on the money invested in it will be nil.

On their return home from the training programme, the trainees should be able to show concrete results of improved management. In order to prepare and equip the trainee to achieve this, the programme has adopted a highly active learning approach through the use of "participative" learning methods and a built-in action commitment.

Trainees will not learn about Work Planning in a general and passive way. Their day-to-day management problems have, as much as possible, been translated into realistic case studies, role plays and other problem-solving exercises. Trainees (working in groups

and on their own) will learn by solving these problems as in real life, with the necessary assistance and guidance from the trainer, who will act more as a "facilitator" of learning than as a lecturer.

Every trainee, even if he or she has never actually managed a co-operative society, has some ideas and suggestions from which the others can learn; if any or all of the trainees have management experience they can contribute a great deal to the learning of the others. This material is intended to allow and encourage every trainee to contribute as much as possible from his own insights and experience, so that all will go away with the accumulated knowledge that each brought to the programme.

This sort of shared learning is in fact almost always more important than the knowledge that you, the instructor, or the material in itself, can contribute. If you do no more than allow every individual to put in what he knows, and to learn from what the others know, you will have achieved a great deal.

The built-in action commitment at the end of the programme will give each trainee the opportunity of using the knowledge and expertise of his colleagues in the training programme to find a concrete and acceptable solution to a specific management problem he is faced with - a solution to which the trainee will commit himself for implementation.

## 6. Structure

The programme is divided into eight TOPICS and each topic is covered by a number of SESSIONS (see the table of contents on page X). The following material is provided for each session:

- a session guide for the trainer (yellow pages), giving the objective of the session, an estimate of the time needed and a comprehensive "plan" for the session, including instructions on how to conduct the session;
- handouts (white pages) of all case studies, role play briefs, etc., to be reproduced for distribution to the trainees.

## 7. Adapting the Material

Before "using" the programme in a real training situation, it will probably be necessary to adapt it. This can be done as follows:

Read through the material and decide whether:

- the programme can be run as it is;
- only certain topics or sessions should be used;
- new topics and sessions should be added.

Your decision will depend on the training needs of your trainees and the means you have at your disposal.

Carefully read through the sessions you have decided to use. Check the subject matter in both the session guides and the handouts. Modify them to include local currencies, names, crops and so on. Such adaptation will help trainees identify themselves more easily with the people and the situations described in the handouts and will increase impact and effectiveness of the training programme.

Do not feel that this manual is like a book which contains the only answers. It is merely a collection of suggestions and ideas, which you must adapt, modify, use or reject as you think fit. The best evidence that you are using the material properly will be the amount of changes, additions and amendments you have yourself written into this copy.

## 8. Preparing the Training Material

Handouts constitute an important part of the training material used in the programme. They can be reproduced from the original handouts supplied in the ringbinder, after the necessary adaptation has been made. Reproduction may be done using whatever method is available: stencil, offset printing, photocopy, or other.

The only item of training equipment which is absolutely essential is the chalkboard.

Some suggestions for visual aids are given in the session guides. If flipcharts or overhead projectors are available, you should pre-

pare these aids in advance. If they are not available you can still use the chalkboard.

The Pre-course Questionnaire should be sent to the trainees in advance. Trainees should be asked to complete it and hand it in at the beginning of the training programme.

#### 9. Preparing Yourself

Some trainers may feel that material of this sort means that they need only spend a few minutes preparing for each session. This is not the case. You should go through the following steps before conducting any course which is based wholly or in part on this material:

- a. Read carefully; be sure you understand the content, and that you envisage what is intended to happen in the classroom.
- b. Work through all the calculations; be sure that you understand them completely and try to predict the errors that trainees are likely to make, and the different answers which may not be wrong, but which will be worth following up.
- c. Work through the case studies yourself, and try to predict all the possible analyses and answers which trainees may come up with.
- d. Look up and write down on the material itself, as many local examples as you can to illustrate the points that are raised.
- e. Plan the whole session very carefully; try to predict approximately how many minutes, each section of the session is likely to take, and make the appropriate modifications to fit into the time that you have available. Do not take the suggested time at the beginning of the session too seriously.

#### 10. Conducting the Programme

While using the material, you should try to observe the following guidelines:

- a. Arrange the seating so that every trainee can see the faces of as many as possible of the others; do not put them in rows so that the only face they can see is your own.



- b. Be sure that the session is clearly structured in the trainees' minds; outline the structure at the beginning, follow it or say that you are diverging from it, and summarise what has happened at the end.
- c. Bear all the learning points in mind, and do not forget the job-oriented objectives of the session.
- d. Be flexible, do not follow the material slavishly and be prepared to change the approach, depending on what trainees, themselves, suggest.
- e. Avoid, whenever possible, telling the trainees anything; in a successful session all the points will have been elicited from them by skillful questioning.
- f. If you fail to elicit a particular answer from the trainees, it is your fault not theirs. Persist, by asking the same question in different ways by hinting and so on, and only make the point yourself if all else has failed.
- g. Use silence as a weapon; if nobody answers a question, be prepared to wait for 20 or 30 seconds in order to embarrass somebody into making an attempt.
- h. Avoid talking yourself. Trainees' discussion and suggestions should occupy around three quarters of the total time; ask, listen and guide rather than talk. (The more you yourself talk, the more you are revealing your own insecurity and ignorance of the subject, in that you are not willing to risk questions or comments with which you cannot deal.)
- i. Never ridicule a trainee's answer or suggestion; there is bound to be some merit in it somewhere, and the very fact that he or she has put forward a suggestion is commendable.
- j. If you cannot answer a trainee's question, or comment on a suggestion, (or even if you can) ask another trainee to answer or make a comment. You are the facilitator, not the source of knowledge.
- k. Write trainees' own words on the chalkboard whenever possible; do not follow the words in the material, even if they are more precise.
- l. Be prepared to act as "Devil's Advocate"; there are usually no right or wrong answers to management questions, and trainees must see and understand both sides of every issue.

- m. If trainees appear to be following a quite different track from that suggested in the material, do not dismiss this out of hand; it may be as useful or more so.
- n. Call on the silent and, if necessary, silence those who talk too much.
- o. Be sure that everybody understands what is going on; do not allow the discussion to be taken over by the few who understand.
- p. Be dynamic, lively and active. Move around, walk up and down the classroom, and generally keep everyone alert to your physical activity.

11. After the Course

Note down each trainee's action commitment, and be sure to contact every trainee, in person or at least by letter, about six months after the end of the course to find out how they have managed to apply what they have learned and how well they are implementing their action commitments. If they have failed, it is not they who were at fault, but the course. Either the training was ineffective, the trainees were poorly selected or you failed to recognise problems which might prevent them from applying what they learned.

Pre-Course Questionnaire

Name: .....

Society: .....

Job Title: .....

Brief description of your responsibilities:

.....  
.....  
.....

What parts of your job do you enjoy the most?

.....  
.....  
.....

What parts of your job do you find the most difficult?

.....  
.....  
.....

Please complete the following sentence:

As a result of attending the course on Work Planning, I shall be able to:

.....  
.....  
.....

TABLE OF CONTENTS

TOPICS	SESSIONS
1 WHY PLAN?	1.1 Introduction 1.2 The Need for Planning
2 THE BASIS FOR PLANNING	2.1 Aims and Objectives
3 BASIC PLANNING TECHNIQUES	3.1 Activities and Resources 3.2 Staff Workload Scheduling 3.3 Timing and Sequence 3.4 Activity Scheduling
4 NETWORK PLANNING TECHNIQUES	4.1 Basic Network Scheduling 4.2 Using the Critical Path Method 4.3 Network Planning of Projects
5 PLANNING YOUR OWN TIME	5.1 Setting Priorities 5.2 Planning Your Own Workload
6 OVERCOMING BARRIERS	6.1 Persuasion and Influence
7 PLANNING AND CAREERS	7.1 Personal Long-term Planning
8 ACTION COMMITMENT	8.1 Action Commitment

topic

1

why plan ?

Session 1.1 Introduction

Session 1.2 The Need for Planning

SESSION 1.1

INTRODUCTION

Objective : To demonstrate the importance of careful planning of a co-operative society's operations, and to identify sources of expertise within the groups of participants.

Time : 1 - 2 hours.

Material : Completed Pre-course Questionnaire.  
Timetable.  
List of participants.

Session Guide :

- 1) If a prominent visitor is to open the programme, he or she should be asked to give examples of problems or wastage that have arisen because the managers failed to plan. He or she should stress that for people in the trainees' position it is essential to master a practical and efficient planning technique.
- 2) See that Any administrative problems are dealt with now, such as matters of accommodation, payment of expenses, transport, room for private study, etc.
- 3) Point out that a training course such as this is an investment. Attempt to estimate its total cost (including trainees' salaries while in training). Point out that unless the value of the benefit to the co-operative from this course exceeds the cost of the course, the money would be better spent elsewhere. Hence, trainees should continually relate what they are learning to their own jobs. If the material appears irrelevant or mistaken, or if they do not understand how to use it, they must say so. The course will be changed accordingly.
- 4) Go briefly through the timetable. Stress that the trainees will be required to contribute and not merely to listen. People learn not by passively listening but by actively participating.

- 5) Ask each trainee to summarise his prior training and experience and to state what he hopes to gain from the course. Refer to the Pre-course Questionnaire if necessary. Stress that everyone brings something to the course and that the total experience in the group as a whole is substantial. While the trainers and material will provide ideas about techniques and a structure for the course, a major input must come from the trainees themselves.
  
- 6) Tell trainees that at the end of the course each of them will be expected to demonstrate what he has learned by preparing a detailed plan for some project or operation to be implemented upon his return to his society. The plan will include a list of all activities required to complete the total task, a chart to show the sequencing and the relationship between the activities, and a time plan. All this will be based upon the special planning techniques which trainees will learn during the course.
  
- 7) Tell trainees that the instructor intends to contact them after the course to assess how successful they have been in implementing their plans. The course, rather than they themselves, will be evaluated by their success.

SESSION 1.2

THE NEED FOR PLANNING

Objective : To enable trainees to recognise the need for planning as well as its requirements and limitations.

Time : 1 1/2 - 2 hours.

Material : Micro-Case Studies "Co-operatives with Problems" and "Two Different Managers".

Session Guide :

- 1) Distribute copies of the micro-cases to all trainees. Allow trainees up to 15 minutes to read the cases and to complete the assignment.
  
- 2) Ask trainees whether they themselves ever experienced such problems, or have heard of them in other societies. Ask individual trainees for their answers to the assignment as related to the first story.

Alpha Society :

The answers in this case seem simple enough:

- Transport was lacking.
- Somebody forgot to order it or it did not come as ordered.
- Whoever was responsible should have remembered to order the transport and should have made sure that it did, in fact, arrive.

Elicit similar answers from other trainees for the other situations.

Beta Society :

- Finance was lacking.
- The bank never issued a loan.



- The society should have requested the loan earlier, or the bank should have dealt with the application more quickly.

#### Gamma Society

- The necessary skills were lacking.
- The society failed either to appoint an experienced drier operator or to train one of its existing staff.
- The responsible manager should have appointed someone qualified or sent someone for training.

#### Delta Society

- Most of the necessary resources were lacking.
- The Co-operative Department and the members whose real responsibility it was had failed to consider what resources were needed and, in particular, to appoint a manager who might overcome at least some of the problems.
- The manager should have seen to it that any expectations roused were reasonable and based on a realistic assessment of what could be done in the time and with the money available.

- 3) Ask trainees why it is that problems of this type are still common in co-operatives and elsewhere when it is perfectly obvious why the problems occur and what should have been done to prevent them.

Trainees may refer to the basic shortage of three fundamental resources:

- physical: materials or equipment such as vehicles, chemicals or spare parts;
- financial: loans, cash or foreign exchange;
- human: manpower (numbers), or, more importantly, particular attitudes and skills (quality).

If fundamental resources such as these are not available, how can planning remedy the situation? Explain that the remainder of this session will be used to show that proper planning is, in fact, the best way to overcome difficulties of this type.

- 4) Refer back to the case studies. Given that the necessary resources in each case were scarce, what could the manager of the society have done to minimise, if not altogether eliminate, the kind of problem described? Elicit suggestions such as the following:
- Assessing the society's needs well in advance, he could increase the chances of obtaining the resource by arranging for it as early as possible.
  - Anticipating the difficulty of supply, he could make individual staff members responsible for obtaining the necessary resource.
  - Realising that the supplier might not deliver on time, he could order supplies from two or more suppliers with the intent to cancel one order when it became clear which would deliver first.
  - Determining the resources needed and the time available, the manager could select and pursue those objectives most likely to be achieved.
  - He could make alternative arrangements in case a resource might not be available.

Ask trainees to suggest what alternatives might have been made in each of the four case studies. For example:

- a) Animal transport or bullock carts might have been able to move the maize.
  - b) Customers might have been willing to make advances or immediate payment, if necessary, in return for a discount.
  - c) The supplier of the drier might be persuaded to send a technician even at some cost to operate the drier the first time it was used.
  - d) The co-operative officer should have been more realistic in his raising of members' expectations.
- 5) Ask trainees what the manager might have done in each case, if he were fairly certain that the necessary resource could not be available at all. Answers might include the following:
- a) The eventual customers might have been paid to collect the maize.
  - b) The society could have managed its cash so that at least part payment could have been given to members on delivery. The

situation could have been explained so that they would accept some delay between delivery and final payment.

- c) The drier might never have been bought, since one essential component - a trained operator - was not available. A skilled operator is as necessary as the engine or the fuel. Equipment purchase should be delayed in the absence of any of these.
  - d) The members should have been involved in the planning. Problems and pre-requisites for their solution should have been anticipated. Solutions might have been forthcoming and disappointment minimized through properly guided member participation.
- 6) Stress that all these possibilities require certain management activities:
- identification of the task to be performed;
  - identification of activities needed to perform the task;
  - identification of resources necessary to carry out the activities;
  - anticipation of the time required to obtain these resources and of any problems likely to be experienced in their supply;
  - identification of ways in which the resources are most likely to be obtained, or of alternative resources if the most desirable ones are unlikely to be available in spite of management effort.

This is fundamentally what planning involves. The best planners can never ensure that everything will happen as planned, but they can minimise the chances of failure.

- 7) Many people feel that planning is only appropriate in an economy where the supply of physical, financial and human resources is adequate, or at least predictable. What is the point of planning, they ask, if shortages or total breakdown of supply are unpredictable because of weather, political factors, poor communications, etc.?

To promote discussion on this point, distribute copies of the case study "Two Different Managers". Allow trainees up to 15 minutes to complete the assignment.

Ask individual trainees to give their answers. They should appreciate that good planning identifies exactly how much of each critical resource will be required for what purpose and at what time. Manager Scott can study his plan and quite quickly decide how he should modify it because of the reduced transport, but manager Wilson will be forced to start planning from the very beginning. He may use the transport facilities unwisely because he has taken no time to plan.

Planning is just as necessary where resources are unreliable as where they are predictable. Planning for uncertainty is even more likely to be useful than planning for a predictable future.

- 8) Ask trainees if they have any experience with projects which have been carefully and expertly planned, but which have nevertheless not been successfully implemented. Ask them to describe examples which occur to them.

Stress that planning alone achieves nothing. The implementation of a plan requires adequate administration. Managers must not make the mistake of believing that plans, no matter how elegant, are a substitute for effective management.

Ask trainees to attempt to recall projects of two different types:

- those that were well-planned but poorly implemented; and
- those that were poorly planned, or perhaps not planned at all, but effectively managed.

Ask trainees which type is more likely to succeed. Stress that good field management can often compensate for the lack of planning, but that even the best plans cannot succeed without well-managed implementation. Planning is important, but it tends to be done in the office and on paper rather than in the field and "in reality". Co-operative managers must not lose sight of the real world, producing beautiful plans impossible to implement.

Co-operatives with Problemsa) The Alpha Society :

The members of the Alpha Society were angry and disappointed. Their crop was harvested and bagged, ready for collection. They themselves had helped in the construction and preparation of a go-down in which to store the crop before sale. The necessary labour had been assembled to handle the collection and receiving of the crop. There was no transport, however; the society did not have its own vehicle. Hired transport was usually arranged. For some reason, this season it never arrived and the maize rotted in the rain.

b) The Beta Society :

The Beta Banana Growers were satisfied with their crop. The quality had fully attained international standards. The fruit had been carefully harvested and transported to the society's store. There it was finally prepared and sent to foreign markets. Payment was meant to be within one week of delivery; yet after one month no cash had appeared. The secretary said he had applied for a short-term loan from the Co-operative Bank, but, for some reason, the money had not been issued. Meanwhile the members were forced to take expensive loans from money-lenders to pay for their daily requirements. They wished they had never tried cash crop farming.

c) The Gamma Society :

The members of the Gamma Corn Growers' Society were very disappointed with the expensive new grain drier installed just before the wheat harvest. Their objective had been to make it possible to store the grain for three to four months longer than usual; then to sell it for higher prices which would far more than cover the cost of the drier. Unfortunately, it proved very hard to operate. On several occasions the grain was scorched. When they tried to remedy the problem, the moisture content was virtually unchanged. However, the equipment had been delivered as ordered, and the loan which they had used to pay for it had to be repaid. It appeared that the new drier might well drive the society to bankruptcy.

d) The Delta Society:

The members of the Delta Society had had high hopes when they started their society a year ago. They needed a reliable source of fertiliser and other materials, tractor-hire services and a better market for their crops. The officer from the Co-operative Department had promised them that the new society he had persuaded them to form would provide all their needs.

Now they were disappointed; the new store for farm inputs was only half-finished, the tractor had not arrived, and the State Marketing Board was unable to take delivery of their crops. Furthermore, there did not seem to be any proper system to record the initial subscriptions and deposits of members and the manager appeared unable to answer their questions.

Assignment:

For each of the above stories, write brief answers to the following questions:

- What resource was lacking?
- Why do you suppose it was lacking?
- How might the problem have been prevented?

Two Different Managers

The buying season was coming to a close for the marketing co-operative. Manager Scott had to organise the collection of produce from four "buying points" within the area of his society. The Co-operative Union offered transport services as usual. It had promised to allocate eight trucks to Scott's society during the first week of February. Scott had drawn up a detailed plan, showing how many truck loads were to be evacuated from each buying point day-by-day, informing members as to collection dates and times, etc. Everything was well planned.

Manager Wilson was laughing at his colleague's efforts. Wilson had exactly the same situation: a society with four buying points and lots of produce to collect. Wilson said it was absurd to spend so much time deciding how he would use the eight trucks, since it was almost certain that he would not get them anyway. There could be fewer, none at all, or even more than eight. What was the point of working out exactly how to use a number of trucks almost certainly not available? Manager Wilson preferred to wait and see. He would use whatever transport facilities he was offered in the best way he could but would not risk being disappointed by planning everything in advance.

Assignment :

If Scott and Wilson were allocated four trucks each, instead of eight, would Scott gain anything from the time he spent planning how to use eight trucks? If you believe he would, explain how this might be.

topic

2

## the basis for planning

Session 2.1 Aims and Objectives



SESSION 2.1

AIMS AND OBJECTIVES

Objective : To enable trainees to recognise the critical importance of specific measurable objectives, to set such objectives, and to identify the important relationships between planning, aims and objectives.

Time : 2 - 3 hours.

Material : Case study "The Cotton Growers' Society".

Session Guide :

- 1) Stress that the fundamental aims of a society must be clearly defined, with every situation carefully analysed and related to the aims, prior to planning. This is not easy, but planning to do the wrong things is dangerous and a waste of resources. This can be avoided if the manager is fully aware of his society's aims and if he can convert those aims into practical objectives for the short-term activities.
- 2) Most co-operative societies begin their by-laws with a statement of the aims, goal or purpose of the society. Quote from by-laws of this kind for local societies and ask trainees to recall their own.

Typical aims might be:

- to market members' crops effectively;
- to promote economic and social well-being in the agricultural community in a certain area;
- to provide marketing, supply, credit and educational services, and such other facilities as might from time-to-time be appropriate.

It is likely that few, if any, trainees will be able to quote their society's aims word-for-word. Ask any who do recall them if knowledge of the aims as expressed in the by-laws makes any difference

in the way they manage their societies. How can they use these aims as a guide to better management?

If long-term aims written into the by-laws are of little practical value for planning, what is the purpose of stating them in this form at all?

- Aims of this sort are necessary as a general description of the functions of a co-operative society, offering guidelines as to the kind of tasks to be done. Why are they, however, virtually useless for day-to-day or longer-term management?
- They do not specify exactly what should be achieved.
- They cannot be related to the current situation of a co-operative society.

3) If the aims are to be useful for planning and effective management, we have to make them more specific. Aims for management:

- must offer a time frame, stating by what time they are to be achieved;
- must be unambiguous, specific, not open to differing and perhaps conflicting interpretation;
- must be measurable, it must be possible to determine whether or not the aims have been achieved by looking at the situation.

Point out that aims which have been converted into exact statements of this type are usually called objectives.

4) Write the following "objectives" on the chalkboard or show them on the OHP\*. Allow trainees up to 20 minutes to write down whether or not they satisfy these criteria, and if not, why not.

- a) "To extend credit to as many members as possible during the year."
- b) "To process and market efficiently members' cotton."
- c) "To introduce hybrid maize to at least 50% of members by the end of next year."

\* OHP = overhead projector

- d) "To recruit new members during the next season."
- e) "To improve significantly members' well-being during the following year."
- f) "To set up a new credit system during the year."

Ask trainees for their suggestions. Their comments should include:

- a) This does not state how much credit. "As many as possible" can mean whatever number the manager finds convenient.
  - b) "Efficiently" does not specify at what rate of surplus. The amount of crop is not specified.
  - c) This is specific, measurable and potentially achievable.
  - d) This does not state by how much membership is to be increased. An increase of one might be sufficient, but it is unlikely that this is really what lies behind such a statement. The number of lapsed members might be higher than the number of new members. The figure must be a net increase.
  - e) "Significantly" is not specific. "Well-being" is too vague, it might apply to health, satisfaction, income, education, or any of several different aspects of their condition.
  - f) This does not state what the system will have achieved or will be capable of achieving.
- 5) Allow trainees up to a further 30 minutes to reword the objectives "a", "b", "d", "e" and "f" to make them specific, measurable and achievable. Encourage them to use their imagination to supply necessary details.

Their answers might include:

- a) "To extend a minimum of \$50 seasonal credit to at least 100 members at planting time during next year."
- b) "To process and market at least 100 tons of members' cotton during the harvest season, and to earn a surplus of at least \$10 per ton on the operation."
- d) "To increase net membership by at least 50 during the coming year."

- e) "To increase members' income from crops sold through the society by at least \$100 during the coming year."
  - f) "To set up a new credit system and to have extended at least 50 loans to members by the end of next year."
- 6) Ask trainees whether they have objectives like this as a guide for activities and as a basis for planning. It is likely that many do not.

Discuss the ways in which trainees themselves and their committees and members are able to decide at the end of the year how well or how badly their societies have done. Would they, and those responsible for hiring, paying and evaluating them, prefer to have specific measurable objectives of this sort or to carry on as they are with perhaps occasional reference to the by-laws?

- 7) Divide trainees into groups of up to four members each. Distribute copies of the case study to each trainee. Allow them up to 45 minutes to complete the assignment. Reconvene the groups and ask for their suggestions.

Summarise these on the chalkboard or OHP and discuss any major differences. Their suggestions might include the following:

The Cotton Growers' Society shall have the following objectives, to be achieved within one year:

- a) A minimum of 80% of all members shall be using at least 10 bags of Fertilizer per hectare.
- b) Agreement shall have been reached with the Ministry of Agriculture to provide an improved extension service so that each member will be visited at least twice during the planting season.
- c) The society shall have appraised the different types of processing machinery available and a case for purchase of an appropriate machine shall have been presented to the Co-operative Bank.
- d) Two satellite fertilizer storage depots shall have been built, to hold at least 20 tons of fertilizer each.
- e) At least 90% of all cotton growers in the region shall be members of the society and shall market their cotton through it.

- f) The society shall hold at least three open meetings during the year in order to acquaint members, non-members and their families with the services it provides and aims to provide in the future.

It is not important that groups cover every aspect of the society's activities and the improvement. The purpose of the exercise is to ensure that trainees draft objectives which are specific and measurable.

Test all trainees' suggestions by asking:

- Could the manager or anyone else be able to say without any doubt whether or not the objective had been achieved by the end of the year?

If this question cannot be answered clearly in the affirmative, the objective should be rephrased.

- 8) Stress that planning is impossible without objectives and a clear understanding of the existing situation. Trainees who do not have either or both of these for their own societies should be encouraged to draft possible objectives, based on their actual circumstances, before proceeding to the rest of the course. They should if necessary, be assisted by the training advisers.

The Cotton Growers' Society  
Summary of the Present Situation

Deliveries of cotton from members to the Cotton Growers' Society during the last year have not been very satisfactory. In fact, deliveries were 10% less than in the previous season. Conditions for growing cotton in the country have, if anything, improved over previous years, but the Cotton Growers' Society has suffered from falling membership and from some members delivering their cotton elsewhere. Productivity has also fallen through member failure to use sufficient fertilizer.

This occurred partly because not all members were aware of how much fertilizer was necessary and partly because it was difficult to obtain it. Sufficient fertilizer was available to the society during the year but the distribution system did not work well. It is suggested that some form of sub-depot system be adopted in the coming year.

The Cotton Growers' Society does not provide its own extension advisers to members. This is a function of the Ministry of Agriculture. Problems have arisen because of misunderstanding between the local office of the Ministry of Agriculture and the chairman of the society. It is apparent that something must be done about this to ensure advisory services for members.

Further problems have arisen because the co-operative's processing equipment is becoming worn-out and old-fashioned. It will be difficult to decide what sort of new equipment should be purchased, if indeed funds can be obtained from the bank for this purpose.

Assignment :

Draft five objectives for the Cotton Growers' Society for the next 12 months.

## basic planning techniques

Session 3.1 Activities and Resources

Session 3.2 Staff Workload Scheduling

Session 3.3 Timing and Sequence

Session 3.4 Activity Scheduling

SESSION 3.1ACTIVITIES AND RESOURCES

Objective : To enable trainees to implement the first basic steps in the planning process by identifying the activities necessary to the achievement of objectives, and by assessing the required resources.

Time : 1 1/2 - 2 hours.

Material : Handout "Special Objectives of the Cotton Growers' Society".

Session Guide :

- 1) Distribute the handout or display a list of the objectives agreed on for the Cotton Growers' Society in the previous session.

Ask the trainees whether or not the list of objectives is a sufficient guide for the manager of the society to be used as a working document during the year.

Clearly, the objectives do not say what should be done; they only state the intended results. These can be measured at the end of the year to see what has actually been achieved.

Ask the trainees to suggest what the manager must do next in order to prepare something to help him and his staff achieve these objectives. What is the first question he must ask about each objective?

- 2) Elicit the suggestion that the manager must decide what activities are required to achieve each objective. His job is to direct the actual work of his staff. He must therefore decide what tasks have to be done.
- 3) Divide trainees into six groups and allocate to each group one of the objectives. Allow up to ten minutes to list on large sheets of



paper all activities necessary for the achievement of "their" objective.

- 4) Display the lists of activities. Avoid going into too much detail at this stage. Discuss the suggestions briefly and attempt to confine trainees to activities such as the following:

a) 80% Fertilizer Usage

- Find out how many members are using fertilizer now, and how much.
- Conduct local meeting and demonstrations to persuade members to use fertilizer.
- Visit each member in an effort to convince him to use fertilizer; show him how.
- Find out how much fertilizer will be needed.
- Arrange to finance the fertilizer purchase between the time the society has to pay for it and the time members can pay.
- Order the fertilizer.
- Collect and store the fertilizer.
- Deliver the fertilizer or make sure that members collect it.
- Continue contact with farmers in the field to see that they are using fertilizer correctly.
- Find out how many farmers have used fertilizer and with what success.

b) Extension Service

- Make necessary contact with the Ministry of Agriculture.
- Discuss the problem with the ministry; agree on what each side should contribute to improve services, and when.
- Select, recruit and train any extension staff to be hired by the society.
- Design a system for regular extension calling.
- Keep extension staff fully informed of all relevant society activities.
- Monitor the success of the extension service.

c) Processing Machinery Appraisal

- Identify suppliers of all possible types of machinery.
- Meet representatives of suppliers and brief them on the society's requirements.
- Visit neighbouring installations using the various types of machines.
- Select the most suitable equipment from suppliers' submissions.
- Prepare a proposal for the purchase of the chosen machinery.
- Submit the proposal to the bank to obtain the necessary finance.

d) Storage Depots

- Prepare specifications covering location and capacity of depots.
- Identify suitable contractors.
- Obtain tenders from contractors.
- Select the best bid and place the contract.
- Supervise the construction of the depots.
- Take over and occupy the depots.
- Arrange for payment for the depots.

e) 90% Membership

- Find out how many people in the area do grow cotton; estimate how many members are needed to achieve the objective.
- Decide on an appropriate recruitment campaign, using special visits, meetings, posters, etc., as appropriate.
- Carry out the campaign.
- Monitor the results.

f) Open Meetings

- Determine the specific objectives of the meetings.
- Design the content of the meetings.
- Decide on dates and places for the meetings.

- Arrange for any special speeches, films, etc.
- Hold the meetings.
- Appraise the results.

5) Ask trainees to suggest what the manager should do next, having identified the necessary activities. How would they respond if asked to carry out one of the activities?

Clearly, they would ask for the necessary resources, including their own time, to be made available.

Elicit the suggestion that the manager must now decide what:

- men (or women)
- materials
- money

are needed for each activity.

6) Ask trainees to suggest appropriate categories for listing these resources. As a basis for the next exercise, elicit the following very simple categories:

- |           |                            |
|-----------|----------------------------|
| Staff     | - Managers                 |
|           | - Clerical and supervisory |
|           | - Labourers                |
| Materials | - Passenger vehicles       |
|           | - Freight vehicles         |
| Money     | - Fixed capital            |
|           | - Working capital          |

7) Ask trainees, working in the same groups as before, to produce a suggested list of the resources required for each of the activities listed for "their" objectives. (They should exclude money for the purposes of this exercise. Planning for adequate finance is part of Financial Management and is dealt with in the MATCOM course on that subject.) They should all work from the common list of activities summarised earlier in the session. Allow up to 30 minutes for this.

Trainees should use their imagination and should list the resources in terms of men/women and vehicle-days.

- 8) Prepare a schedule on the chalkboard/OHP, in the form below, to summarise the resources required.

Reconvene the groups and ask them to read out their resource requirements. These should be clarified if necessary and then summarised as below.

Modify the figures if they appear totally unrealistic and add up the totals. The figures given below are provided purely as an example.

Activities	Management	Clerical Supervisory Time	Labour	Passenger Vehicles	Freight Vehicles
For Objective A	15 days	10 days	50 days	10 days	15 days
For Objective B	12 days	10 days	-	15 days	-
For Objective C	10 days	10 days	-	5 days	-
For Objective D	15 days	5 days	-	5 days	-
For Objective E	18 days	10 days	-	5 days	5 days
For Objective F	10 days	5 days	-	5 days	-
Total Time for Objective A-F	(80 days) 16 weeks	(50 days) 10 weeks	(50 days) 10 weeks	(45 days) 9 weeks	(20 days) 4 weeks

- 9) Remind trainees that the six objectives do not cover the routine tasks of the society; they are outside the normal tasks of collecting and receiving crops, supplying inputs, making loans, receiving deposits, etc.

Ask trainees to assume that the "normal activities" require resources as indicated on the next page. Complete the summary of the resources by adding these lines at the bottom of the table.

Total Time for Objectives A-F	16 weeks	10 weeks	10 weeks	9 weeks	4 weeks
Time Needed for Normal Activities	38 weeks	120 weeks	360 weeks	40 weeks	40 weeks
Total Time Needed	54 weeks	130 weeks	370 weeks	49 weeks	44 weeks
Total Time Available	45 weeks	135 weeks	360 weeks	45 weeks	45 weeks
Surplus/Deficit	- 9 weeks	+ 5 weeks	- 10 weeks	- 4 weeks	+ 1 week

- 10) Point out the almost inevitable deficit for some resources in situations like this one. A manager merely satisfied with implementation of routine tasks will usually not see any problem regarding resources, but a progressive manager will often anticipate deficits.

Ask trainees what the manager in our example should do next in order to achieve as many as possible of the objectives assigned to him.

Trainees may suggest hiring an assistant, obtaining a new vehicle, and/or other additional resources. Ask them to recall how difficult it is to obtain new staff and vehicles. Remind them that a good definition of management is:

"Making the best use of existing resources".

Therefore, the first question to be discussed is: how can the manager achieve the agreed objectives within available resources? Elicit through discussion suggestions such as:

- Examine the "normal" activities and the estimates of resources required for new ones to see if the same activities can be completed with fewer resources.
- Examine the overall objectives and see whether all activities are necessary or if they can be modified.
- Decide whether it is possible to use a less scarce resource instead of the one proposed. Could supervisors or clerks do some of the management work? Could trucks do some of the work allocated to the passenger vehicle?

- 11) Discuss the "substitutability" of management time in particular. Are all the clerical staff in trainees' societies fully occupied at all times? Why are they not able to perform more of the things that managers do? How can a manager safely delegate some of his work to more junior staff? Elicit suggestions such as:

- by training them to a higher level of skills;
- by simplifying and systematising the jobs so that junior staff can perform them;
- by recognising that people are often incapable because they are believed to be; most staff will respond remarkably well if given greater responsibility.

- 12) Ask trainees to examine the list of new activities and review the normal activities of collecting and selling produce, supplying farm inputs, and issuing loans. Which have to be done at particular seasons, and which can be done when management finds it convenient? Elicit the following suggestions:

Fixed TimingVariable Timing

Organise supply of inputs

Organise extension service

Build depots

Appraise machinery

Collect produce

Recruit members

Sell produce

Hold meetings

Manage credit services

How can a manager use this information to make better use of resources?

- He can schedule the "variable timing" activities to avoid conflict with those using the same resources as "fixed timing" activities. This will avoid overloading and prevent resources being unused at some times and overused at others. (The next session will deal with this problem).

- 13) Refer trainees to the table. Suggest that it has been possible by economy, substitution, and careful scheduling to reduce the "deficit" to:

Management time	-	4 weeks
Labour time	-	10 weeks
Passenger vehicle	-	2 weeks

How can the deficits now be dealt with?

- Full-time resources should not be obtained for less than full-time employment. Consider using consultants, casual labour, and vehicle rentals.
- It might be necessary to ask the committee to reconsider or reduce the scale of some of the objectives. It is better to discuss possible difficulties at this stage than to experience unexpected failure at the end of the year.

14) Remind trainees of the various planning steps covered in this example:

- Define objectives.
- Identify activities required to achieve objectives.
- Identify resources required to achieve each objective.
- Calculate any resource imbalance.
- Reduce imbalance by training, rescheduling, etc.
- Arrange for short-term resources.
- Modify objectives if necessary.

Ask trainees what all this implies for a manager. When should he start to think about what his society will be doing in the future?

Clearly, it is useless to try to obtain resources just a few days before they are needed. Stress that planning must be started many months before the activities are to be implemented. Training, rescheduling, recruitment, raising funds, and other preparations take time. The reason why "new activities" very often come to nothing is simply that advance planning is neglected.

Stress that lack of resources and other emergencies can be far more effectively dealt with if they are looked upon as divergencies from a plan. If no plan exists at all, it is likely that available time and resources will be badly utilised.

Special Objectives of the Cotton Growers' Society

The Cotton Growers' Society shall have the following objectives to be achieved within one year:

- a) A minimum of 80% of all members shall be using at least 10 bags of fertilizer per hectare.
- b) Agreement shall have been reached with the Ministry of Agriculture to provide improved extension service so that each member will be visited at least twice during the planting season.
- c) The society shall have appraised the different types of processing machinery available and a case for purchase of an appropriate machine shall have been presented to the Co-operative Bank.
- d) Two satellite fertilizer storage depots shall have been built, to hold at least 20 tons of fertilizer each.
- e) At least 90% of all cotton growers in the region shall be members of the society and shall market their cotton through it.
- f) The society shall hold at least three open meetings during the year in order to acquaint members, non-members, and their families with the services it provides and aims to provide in the future.



SESSION 3.2

STAFF WORKLOAD SCHEDULING

Objective : To enable trainees to analyse the annual workload of their society and to design an effective work plan accordingly.

Time : 2 hours.

Material : Handout "Activity Chart - An Example".  
Blank Forms "Activity Chart".  
Exercise "The Overloaded Manager".

Session Guide :

1) Remind trainees about some of the conclusions from the previous session:

- Certain activities must be done at fixed times, others when convenient.
- A manager must make the best possible use of available resources. Therefore, he should try to "even out" the workload over the whole year.
- He can do this only if he makes an analysis of the total workload and starts planning well in advance.

Tell trainees that the purpose of this session is to give some examples of how such analysis and planning can be done.

2) Give each trainee a copy of the "Activity Chart - An Example". Ask trainees if they normally prepare such schedules for their own societies, and for what purpose. Elicit in a discussion the following points:

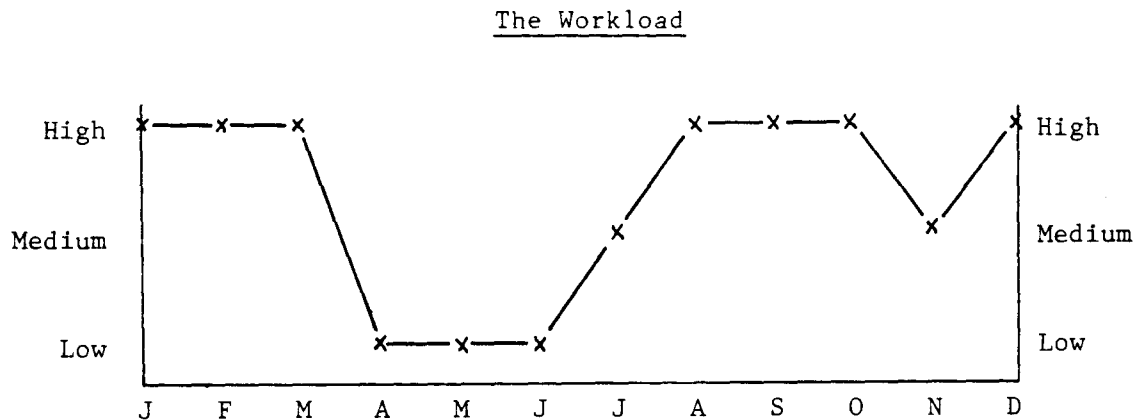
- a) The chart itself can be used as a "calendar", a reminder to the manager about the dates to begin various activities.
- b) It is useful to "break down" an activity into details. (E.g., the activity "Preparation for the trading season" can be divided into Preparation of buying stations/Setting up new buying stations /Checking equipment /Deciding opening hours /Announcing

opening hours/Organising transport/etc.) The timing for such detailed activities should be indicated on the chart.

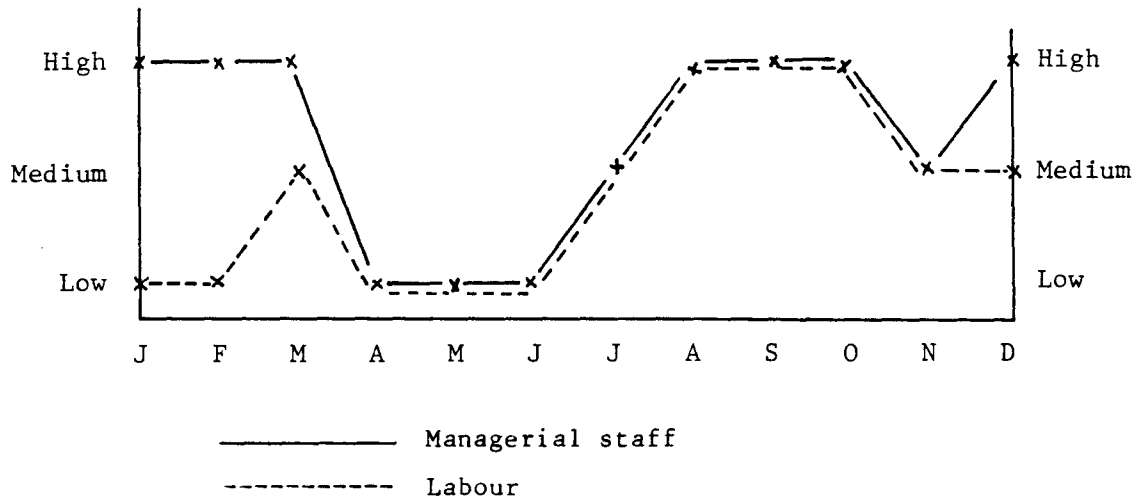
- c) The chart helps to identify the periods of high and low workload in the society.

Explain that the detailed activity planning as in b) above will be dealt with in following sessions. In this session we will concentrate on c), the common problems of the uneven workload in a co-operative society.

- 3) Draw a simple graph of the following form on the chalkboard/OHP, without including the curve line at this stage. Ask trainees to copy the graph.



- 4) Refer again to the "Activity Chart - An Example". Ask trainees in which months the workload is low for the manager. Place an "X" opposite the months of April, May and June, on level "low". Discuss the workloads for the other months and mark the graph accordingly. Then connect the X's with a line, showing how the workload varies through the year, as above.
- 5) Ask trainees whether the workload profile applies equally to all staff in the society. This is obviously not the case. Draw another curve on the graph to indicate, for example, the workload for the labourers, as shown on the next page.

The Workload

- 5) Ask trainees individually to:
- produce an "Activity Chart" for their own societies; (They should not go into more detail than in the given example. Use the blank forms for "Activity Charts" for this exercise.)
  - draw a graph showing the annual workload profile of their societies, as in the previous example.

Allow about 30 minutes for this exercise.

- 7) Ask selected trainees to put their profiles on the chalkboard/OHP and to explain the workload peaks and troughs in their societies.
- 8) Ask trainees what "scale" they had in mind when placing some crosses in "low", some "medium" and some "high". How much more work is there to be done in the "high" seasons than in the "low"?

Responses will differ, but trainees might suggest that the workload during the high periods is between one and a half and twice as heavy as during the low ones.

Ask those trainees who suggest the greatest degree of difference between high and low workload periods whether the number of staff employed in their co-operatives varies in proportion to the workload. For instance, if the workload at the high point is double that of the low point, is the work force reduced to one-half at the low period?

- 9) It may be possible to hire casual labour and thus to vary the labour force in proportion to the workload. Ask trainees what are the disadvantages of relying extensively on casual labour.
- People who can be hired at short notice, for brief periods, may be those who cannot find work elsewhere; they tend to be the least qualified people.
  - Even unskilled labour requires some introduction and training; this may not be formalised, but some days will go by before casual labour is fully productive.
  - It is difficult to manage casual labour, since the people have no long-term interest in the society employing them.
  - It is socially disruptive to hire people and to dispose of them after a short period; this is inconsistent with co-operative thinking.
  - Peak workloads for the society are likely to be the same as the peak loads for the farmer members. They may depend on casual labour themselves. If the society does the same, it is likely to make such labour more expensive and more difficult to obtain.

Casual labour may be employed in spite of these difficulties to deal with peak requirements for unskilled labour. However, the workload of the administration and management staff is also usually in proportion to that of the labour force.

- If administrative and management staff are sufficient for peak periods, can their numbers be halved during slack periods?
  - If there are only enough such staff for slack periods, can their numbers be doubled during peak periods?
- 10) Since the number of administrative and management staff cannot be as easily varied as casual labour, what is usually the effect of a variable workload?

- During peak periods, staff are overloaded.
- During slack periods, staff are not fully occupied.

Ask trainees what may be the effect of excessive workloads:

- Work may not be done properly.

- Staff may be discontented and may resign.
- Dishonesty or inefficiency may be more easily concealed.

What ill effects can arise from insufficient work?

- Staff may become accustomed to a light workload and be unable or unwilling to cope with more work when it occurs.
- Unnecessary costs may be incurred.

- 11) Allow trainees individually up to ten minutes to write down a random list of tasks which they themselves as managers of agricultural co-operative societies have to perform. Do not yet explain the purpose of the list.

Ask a trainee to read out his or her list, and write it up on the chalkboard/OHP, together with additions from other trainees. Items such as the following should be included, coded with letters as below. (The numbers should not be included at this stage.)

- |  |   |
|--|---|
| a) Prepare minutes for meetings                      | 3 |
| b) Submit returns to the headquarter authorities     | 3 |
| c) Organise the collection of members' crops         | 2 |
| d) Supervise crop collection                         | 2 |
| e) Negotiate the sale of crops                       | 3 |
| f) Determine staff grades and salaries               | 1 |
| g) Prepare agenda and papers for meetings            | 3 |
| h) Obtain leaders for member education programmes    | 1 |
| i) Give talks to local groups                        | 3 |
| j) Attend courses                                    | 1 |
| k) Interview and select staff                        | 3 |
| l) Hold staff appraisal interviews                   | 1 |
| m) Negotiate supplies of fertilizer and other inputs | 1 |
| n) Prepare applications for credit                   | 3 |
| o) Supervise preparation of annual accounts          | 3 |
| p) Deal with member complaints                       | 2 |

q)	Receive visits from Government and other officials	3
r)	Carry out routine visits to members in the field	1
s)	Inspect stores	3
t)	Control petty cash account	2
u)	Monitor and sign cheques	2
v)	Monitor and sign local orders	2
w)	Draft the annual report	3
x)	Deal with unexpected crises, breakdowns or accidents	2
y)	Receive visits from sales representatives	1
z)	Inspect vehicles	3

12) Describe the three following types of activities to trainees:

- 1) Those which can be done any time within two or three months, at the manager's discretion (flexible).
- 2) Those which must be done on a particular day, over which the manager has no control whatsoever (inflexible).
- 3) Those which the manager, to some extent, can do when he wishes, within a week or so (semi-flexible).

Allow trainees up to 20 minutes to classify each of the management tasks listed on the chalkboard/OHP, as to category "1", "2" or "3". Stress that they should classify the activities not according to actual treatment but potential; as managers might prefer to handle them if they planned far enough ahead.

Opinions will differ, but a possible answer to the above might be:

- 1 (Flexible): f, h, j, l, m, r and y.
- 2 (Inflexible): c, d, p, t, u, v and x.
- 3 (Semi-flexible): a, b, e, g, i, k, n, o, q, s, w and z.

Trainees may classify more items in "2" (inflexible) than have been suggested above. Ask why it is that tasks such as drafting the annual report or preparing a credit application often appear to be in category "2":

- Did the responsible manager really have no advance notice as to completion dates for the tasks?
- Did data essential for completing the task, which may only have arrived just before the deadline, arrive so late because the events causing the delay had only just occurred? Or was it that whoever was responsible for providing the data was not asked to do so in time?

Stress that visits from salesmen, and even from officials, are not wholly outside the control of management; some people can be asked to come on a specific date or requested to submit their proposals in writing rather than in person.

- 13) Distribute the workload planning exercise "The Overloaded Manager". Allow trainees individually up to 30 minutes to complete the assignment.

Ask one trainee to present his or her solution. Answers will vary according to individual perceptions as to how practical it is for various tasks to be done earlier than scheduled, but a reasonable solution would be as follows:

Manager

June	Existing workload	14 days
	Extra field visits	3 days
	Extra stores inspection	2 days
	Prepare for crop collection (1/2)	2 days
	Prepare bank loan application	<u>3 days</u>
	Total	<u>24 days</u>

July	Field visits	3 days
	Stores inspection	1 day
	Prepare monthly returns	3 days
	Committee meetings and preparations	8 days
	Contingencies	2 days
	Prepare crop collection centres (1/2)	2 days
	Negotiate bank loan	2 days
	Vehicle inspections	2 days
	Draft quarterly reports	1 day
	Staff appointments	<u>2 days</u>
	Total	<u>26 days</u>

August	Field visits	1 day
	Stores inspection	1 day
	Prepare returns	3 days
	Contingencies	6 days
	Supervise crop collection	10 days
	Negotiate crop sale	3 days
	Summarise quarterly returns	<u>1 day</u>
	Total	<u>25 days</u>

Accountant

June	Existing workload	18 days
	Prepare payment vouchers	2 days
	Prepare credit records	2 days
	Prepare and submit credit application	<u>3 days</u>
	Total	<u>25 days</u>

July	Existing workload less preparation	18 days
	Prepare quarterly accounts	3 days
	Advance preparation of monthly accounts	<u>3 days</u>
	Total	<u>24 days</u>

August	As existing workload less the 6 days carried out in previous month	<u>25 days</u>
--------	---	----------------



Summarise the results in order to show the extent to which the workload has been balanced:

	Manager		Accountant	
	Old	New	Old	New
June	14 days	24 days	18 days	25 days
July	24 days	26 days	25 days	24 days
August	35 days	25 days	31 days	25 days
Total	73 days	75 days	74 days	74 days

- 14) Ask trainees whether a manager himself could or should plan the workload of his staff in this way. Remind them that most co-operative societies have a number of staff, and it would take a great deal of time to plan all their activities in this detail. Why else should the manager not attempt to do it all himself?

- The staff themselves, at all levels, know better than anyone else how long it takes them to do things. Their knowledge and ideas are a vital input to the planning task.

Ask trainees if people are more likely to accept and work to a plan if they are given it or if they themselves play a major part in producing the plan.

- People will try to make a plan work if they have contributed to it - if not, they may be determined to prove that it will not work.

This exercise was thus artificial; managers should delegate the planning task to various levels of staff. They should themselves only co-ordinate the whole process to avoid duplication, overlaps and confusion.

- 15) Ask trainees whether they ever feel that they or their subordinates have too much to do; are financial returns, annual accounts or other items of this sort always produced on time?

Very few co-operative societies always succeed in doing everything when it should be done. To what extent do trainees believe it to be possible to bring forward flexible activities, as in this exer-

cise, while allowing for satisfactory completion of fixed-time tasks?

Trainees may say that they always have too many immediate tasks to do, so that they can never work ahead on less urgent problems. Point out that their workload was uneven. If they can even attempt to complete their peak workload, they must be able to work harder than they do at the slack time. If they can impose upon themselves the discipline of their own deadlines, through effective planning, they will find that they are able to manage their societies more effectively and enjoy a more comfortable work situation.

Activity Chart - An Example

Activities	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1. Ordering farm supplies		█										
2. Receipt of supplies			█									
3. Issue of supplies			█									
4. Preparation for the trade season						█						
5. Collecting/receiving/buying produce							█	█				
6. Sale of produce										█		
7. Issue of seasonal credits												
8. Recovery of seasonal credits									█			
9. Budgeting										█		
10. Stock-taking											█	
11. Annual accounts												█
12. Preparations for the Annual General Meeting												

Month ▶

1. Ordering farm supplies
2. Receipt of supplies
3. Issue of supplies
4. Preparation for the trade season
5. Collecting/receiving/buying produce
6. Sale of produce
7. Issue of seasonal credits
8. Recovery of seasonal credits
9. Budgeting
10. Stock-taking
11. Annual accounts
12. Preparations for the Annual General Meeting



The Overloaded Manager

It is the beginning of June. Saleam, the manager of the Beta Farmers' Society, can hardly bear the thought of the next few months. While he will not be too heavily occupied in June, he knows the pace will quicken in July. During August, he will have to work night and day, he feels, and even then will be unable to get everything done. Although he knows he will suffer the most, as in past years, he realises that his accountant will be in a similar position. He thought it might make things clearer, and perhaps justify his claim for more staff, if he wrote down all the various tasks that they had to do in June, July and August. Now as he looks at the list, he only feels more despondent. He knows he is unlikely to get more staff for months or even years. When he looks at this workload, he realises it is even worse than he had imagined.

June - 20 Working Days

Manager	Routine field visits	4 days
	Stores inspection	2 days
	Monthly returns	3 days
	Committee meetings	2 days
	Meet Government delegation	1 day
	Contingencies	<u>2 days</u>
	Total	<u>14 days</u>
Accountant	Prepare monthly cash reconciliation	3 days
	Prepare monthly expense summary	1 day
	Prepare and enter cheques	2 days
	Prepare and enter invoices	1 day
	Draft monthly income statement for May	3 days
	Calculate wages and prepare wages and salaries	<u>8 days</u>
Total	<u>18 days</u>	

July - 25 Working Days

Manager	Field visits	4 days
	Stores inspection	2 days
	Monthly returns	3 days
	Committee meetings	4 days
	Prepare crop collection centres	4 days
	Prepare loan application for bank	3 days
	Negotiate bank loan	2 days
	Contingencies	<u>2 days</u>
	Total	<u>24 days</u>

Accountant	Cash reconciliation	3 days
	Expense summary	1 day
	Prepare cheques	2 days
	Prepare invoices	1 day
	Prepare monthly accounts for June	3 days
	Calculate and prepare wages and salaries	8 days
	Prepare payment vouchers for members	2 days
	Prepare credit records	2 days
	Prepare and submit credit application	<u>3 days</u>
	Total	<u>25 days</u>

August - 24 Working Days

Manager	Field visits	4 days
	Stores inspection	2 days
	Monthly returns	3 days
	Committee meetings	4 days
	Supervise crop collection	10 days
	Initiate crop sale negotiations	3 days
	Quarterly vehicle inspections	2 days
	Draft quarterly report for previous quarter	1 day
	Summarise quarterly report	1 day
	Quarterly staff appraisal meetings	2 days
	Contingencies	<u>3 days</u>
	Total	<u>35 days</u>

Accountant	Cash reconciliation	3 days
	Expense summary	1 day
	Prepare initial cheques	2 days
	Prepare invoices	1 day
	Prepare monthly summary for July	3 days
	Wages and salaries	8 days
	Record crop deliveries	10 days
	Draft quarterly accounts for previous quarter	<u>3 days</u>
	Total	<u>31 days</u>

Assignment :

Prepare a schedule of work for the manager Saleam and for his accountant which evens out the unbalanced workload of June, July and August as much as possible.

SESSION 3.3TIMING AND SEQUENCE

Objective: To enable trainees to determine the timing and sequence of activities required for the achievement of objectives.

Time: 1 - 1 1/2 hours.

Material: Case study "The AGM".  
Blank forms "Activity Chart".

Session Guide:

- 1) Remind trainees that the scheduling and re-scheduling of the workload (the topic of the previous session) is one important step towards the implementation of a society's activities. However, nothing will be gained from such efforts if the manager still fails to identify and to implement in proper order all the activities involved in each task.

This session, and the following, will deal with these practical problems.

- 2) Divide trainees into groups of five members or less. Distribute a copy of the case study "The AGM" to each trainee. Allow the groups up to 30 minutes to complete the exercise.
- 3) Reconvene the groups and ask a representative from each group to read out their schedules. This stage requires no more than an accurate reading of the case study, but some tasks may nevertheless have been omitted.

Stress that a plan is no better than the information on which it is based. Hence, it is always necessary to make a careful analysis of what is required.

Present the complete list on the chalkboard/OHP. While the case may admit different interpretations, make sure every trainee has a



note of the following list. Differences will lead to confusion during the next stage of the exercise. (The right hand column should not be included at this stage.)

Activity	Time Needed	Preceding Activity
A Send invitation to MP and Ministry and await reply	3 weeks	District Officer's availability must be known (Activity H)
B Arrange to borrow projector, if needed	2 weeks	Must be notified by Ministry as to type of proj. (Activity A)
C Determine agenda	1 week	Date and location must be known before completion of agenda
D Distribution and display of agenda	2 weeks before meeting	- " - (Activities A, E and G)
E Prepare papers for despatch with agenda	2 weeks	Nil
F Prepare papers for tabling of meeting	4 weeks	Nil
G Arrange meeting room	1 week	Date must be agreed by MP and Ministry (Activity A)
H Ascertain availability of District Officer	1 week	Nil
I Inform staff members	2 weeks before meeting	Date must be known (Activity A)
J Book hotel accommodation	3 weeks before meeting	Date must be known (Activity A)

- 4) Ask trainees to add up the total number of weeks required for preparations. This comes to 14 weeks. Does this mean that the manager must start to make arrangements 14 weeks before the meeting can be held? Clearly not, because some of the activities can take place at the same time, while others must be completed before the next can start.

Ask trainees how they can calculate the minimum time before the actual date of the meeting at which each activity must start.

Elicit the answer that it is first necessary to determine which activities must be preceded by which others, before starting to calculate the time.

Discuss Activity A as an example. Make sure that trainees appreciate that the invitation to the MP and the Ministry Representatives must be preceded by Activity H - the agreement with the District Officer on a suitable date for the meeting.

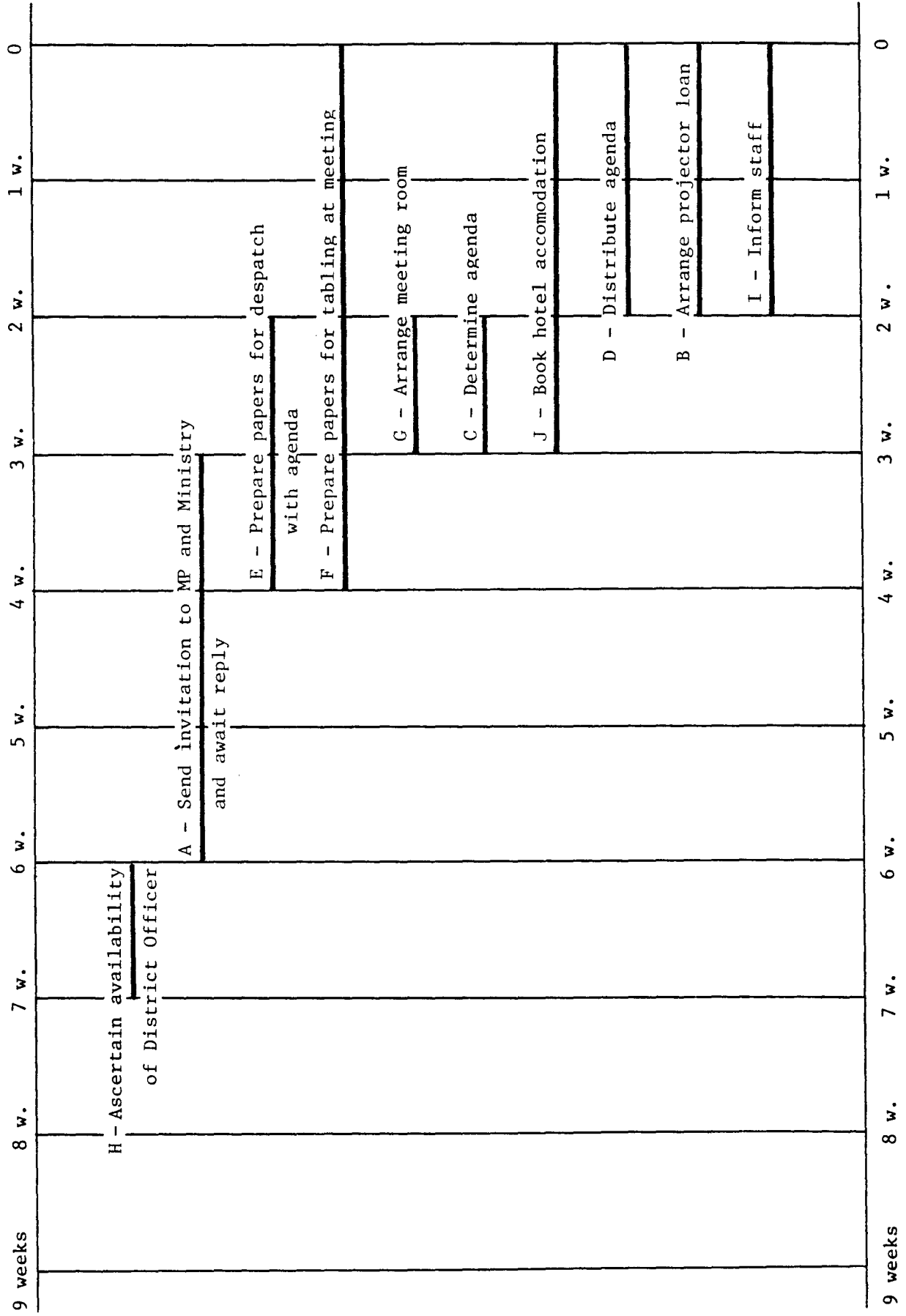
Discuss the other activities in the same way and complete the table with the right hand column as above on the chalkboard/OHP. If trainees have difficulties, point out that the task will be easier if they work backwards from the date of the meeting.

- 5) Ask trainees to state the first thing that the manager must do and the minimum length of time before the meeting at which he must do it. Allow some time for individual calculations. The answer:
- ascertain availability of the District Officer
  - seven weeks before the meeting.

It is probable that not all will have the same answer. Ask a trainee with the correct answer to describe how he reached it.

- 6) Give each trainee a blank "Activity Chart". Draw a similar schedule on the chalkboard. Go through the activities once again and indicate them in the schedule on the chalkboard. Ask trainees to do the same on their schedules. Begin at the lower right hand corner with the activities that will come immediately before the meeting and then work backwards to Activity H, as shown on the following page. Make certain that all trainees understand the timing of the various activities and the links between them.
- 7) Remind trainees, who may be impressed by the apparent elegance and neatness of this exercise, that the preparation of such a chart does not in itself guarantee that the AGM will be held according to plan, or indeed that it will happen at all. The plan must still be effectively implemented. Possible problems might arise with regard to the estimated time. Still other constraints might become evident. The purpose of the schedule is to enable an effective manager to perform better, not to provide a substitute for management.

Activity Chart : The AGM



Other trainees may suggest that it is not necessary to prepare an "Activity Chart" for such a simple task as organising a meeting. Point out that this was just an example and that this technique should, of course, be used only when its benefits are obvious. Remind trainees, however, that many simple activities (like meetings) have ended in failure just because the necessary preparations have not been done in time.

- 8) Point out that even in a simple case like this one, the "Activity Chart" may be a useful tool which can help the manager to perform his duties better. It is easier to "see" the timing and relationship between activities when they are "visualised" in a chart. Ask trainees to give examples of this from the actual schedule of the AGM preparations. Elicit examples like the following:
- Activities B and I can begin as soon as Activity A is accomplished, so three weeks may be available for Activities B and I instead of the two weeks which were considered minimum.
  - Activity E may start earlier than indicated. It must be completed before D begins. Activity F can of course also begin immediately.
  - If Activity A is delayed, the AGM cannot take place when planned, because there may not be enough time for Activities G and D.

The AGM

The committee and the manager of Greenland Co-operative Society decided to organise this year's Annual General Meeting well ahead of time to avoid any of the problems that had plagued previous meetings. They wanted to ensure that everyone knew all about the meeting well before it took place. They planned to invite the local MP and representatives from the Ministry of Co-operatives, in order to bring the society to the attention of people in authority. (This would also attract members.) The actual meeting date would depend largely on the availability of the authorities.

The manager had been charged with planning and making all practical arrangements for the meeting. He knew that he would have to write to the MP and Ministry representatives in the capital city, 300 kilometers away. (Invitations of this sort ought to be in writing.) Letters took a week to reach the city, and it would probably take a further two weeks before he had a reply.

The manager intended to invite the MP to present a film or slides about national co-operative development. He needed to ask the Ministry of Co-operatives if the film would be available at the same time as the representatives he had invited. He also had to arrange for the loan of a projector, but he could not do this until he received the reply from the Ministry, because he needed information about what type of projector was needed. It would then probably take him two weeks to find a suitable projector.

A number of other important things also had to be considered. The committee had to meet and agree on the full agenda. This would take a week to arrange. The agenda would have to be officially made available to members and prominently displayed around the area at least two weeks before the actual meeting. Some papers would also have to be presented at the Annual General Meeting. Some, to be presented at the meeting itself, would take about four weeks to prepare; others, which had to be ready at the same time as the agenda, would take about two weeks to prepare.

Greenland Co-operative did not have a large enough meeting hall to accommodate all the members expected. It would take about a week to ar-

range to rent a suitable room in the town. Information about the place for the meeting would, of course., have to be included with the agenda.

The manager was rather embarrassed to admit that he really did not want to have the meeting on a date when the Co-operative District Officer could not be present. The officer had on occasion praised the work of the manager. Furthermore, he was a master in public speaking and in the presentation of a balance sheet in a way members understood. The District Officer was a very busy man but his presence would be invaluable. Before fixing the date for the meeting, the manager wanted to find out when he was available and to convince him to come. The manager thought it might take him a week to get a firm reply.

The staff of the society itself would need to have at least two weeks notice of the meeting to avoid conflict with leave or field trip arrangements.

People coming from the capital city would have to spend one or two nights in the town where the society was situated. Hotel accommodation was limited; and it would be necessary to reserve rooms at least three weeks in advance. This could not be done, of course, before it was known how many such people would be attending.

Assignment :

List all the tasks which the manager of the Greenland Co-operative must perform in order for the Annual General Meeting to take place. Indicate how long a time each task will take.

Activity Chart

9 weeks	8 w.	7 w.	6 w.	5 w.	4 w.	3 w.	2 w.	1 w.	0
9 weeks	8 w.	7 w.	6 w.	5 w.	4 w.	3 w.	2 w.	1 w.	0

SESSION 3.4

ACTIVITY SCHEDULING

Objective : To enable trainees to prepare "activity charts" in order to facilitate the implementation of complicated operations.

Time : 1 1/2 - 2 1/2 hours.

Material : Case study "Preparation for the Trade Season".  
Blank forms "Activity Chart".

Session Guide :

- 1) Divide trainees into the same groups as in the previous session. Distribute the case study and blank Activity Charts to all trainees and a large sheet of paper to each group.

Remind trainees about the technique used in the previous session for timing and sequencing of activities. Tell them to apply the same technique for this exercise, i.e.:

- identify which activities precede which,
- prepare an activity schedule showing when the various activities must be completed.

Allow up to one hour for the groups to complete the assignment.

- 2) Reconvene trainees. Ask each group to state which activity must be done first:

- preparation of the loan application

and how long before the beginning of the trading season this activity must start:

- 9 weeks.

Ask each group to present its schedules. Compare, discuss and explain differences. A correct chart is shown on the next page.



Activity Chart

9 weeks	8 w.	7 w.	6 w.	5 w.	4 w.	3 w.	2 w.	1 w.	0														
L - Prepare loan application	0 - Committee meeting	A - Check equipment	N - Membership campaign	B - Buy new scales	M - Obtain loan	H - Approval for new receiving system	I - Print new forms	D - Check bags	C - Issue bags	K - Trade in truck	J - Prepare and post information	G - Prepare buying stations	E - Hire staff	F - Train staff									

9 weeks

8 w.

7 w.

6 w.

5 w.

4 w.

3 w.

2 w.

1 w.

0

If the groups seem to have largely different opinions, go through the list of activities and ask a spokesman for each group to mention which "preceding activities" they have identified. The answers should be as follows:

Activity	Time Needed	Preceding Activity
A Check equipment	2 weeks	-
B Buy new scales	5 weeks	O Committee must place order
C Issue bags	1 week	D Stock of bags must be checked (Issue of bags must be completed 2 weeks before opening)
D Check and repair bags	2 weeks	A Check equipment
E Hire buying station staff	1 week	-
F Train buying station staff	1 week	E Staff must be recruited I New forms must be available
G Prepare the buying stations	2 weeks	A Equipment must be checked B New scales must be delivered K New truck must be available
H Approval for new receiving system	1 week	-
I Print forms	4 weeks	H Approval for the new system must be obtained
J Prepare and post information	3 weeks	N Membership campaign
K Trade in truck	1 week	O Committee must decide
L Prepare loan application	1 week	-
M Obtain loan	7 weeks	L Application must be prepared O Committee must sign application
N Membership campaign	4 weeks	(To be completed 3 weeks before opening)
O Committee meeting	1 week (incl. notice)	L Loan application must be ready before meeting (members to be given 1 week's notice of meeting)

The following matter may also be further explained:

- Activities A, C, D and G cannot be carried out at the same time, if all the storehouse staff are utilised for each activity. Activities A and D could, of course, start at the same time with half the staff on each activity, using four weeks instead of two for each activity.
- 3) Ask trainees what is the most useful information that can be drawn from the Activity Chart. Elicit the answer that it is most important to know the "deadlines" for each activity, i.e., the latest day for each activity to be completed. Emphasise that the deadlines for all activities are definite and cannot be moved to a later date without upsetting the whole programme and causing serious problems in the forthcoming trade operations.

Point out that the beginning of each activity is also indicated on the schedule. Suggest that starting dates can also be considered as deadlines. If the work has not begun on the indicated day, it is likely that it will not be completed on time.

Ask trainees the main advantage of having a plan like this showing the deadline. Elicit the point that deadlines must be known, not in order to aim at completion of the work on the deadline, but to be able to plan the work so that it will definitely be completed at the latest on the deadline. Clearly, good management is having some "safety margin" so that the work can be completed even if unexpected problems occur. Ask trainees how this can be achieved. Obviously, it can be by beginning activities earlier than indicated on the schedule whenever possible.

- 4) Ask trainees to identify some activities *which* can begin earlier than indicated on the schedule:
- Activity A/Check equipment and D/Check bags can begin immediately; also E/Hire staff if this is practical.
  - Activity K/Trade in truck can follow immediately after O/The committee meeting.
  - If the loan application is prepared earlier than indicated, the committee meeting can follow immediately, and B and K can also be done earlier.

- 5) Ask trainees to identify those activities which are most difficult for a manager to control. Elicit the answer that Activity B/Buying scales, H/Approval for the new receiving system and I/Printing forms can give the manager "cause for worries" because the completion of these activities depends on others. The time needed has not been estimated by the manager himself. It is based on promises from outsiders. For instance, if the new scales are not delivered as promised, the whole plan will be upset.

Ask trainees what can be done to make sure that the whole plan is not upset by broken promises. Again, the best guarantee is to include a safety margin, having activities begin earlier. Emphasise that one of the manager's most important tasks is to identify both "critical activities", which must be started and completed on fixed days, and the "flexibility" in the total work plan in order to create the best possible working conditions and to ascertain that the whole job is completed on time.

- 6) Sum up by pointing out that an Activity Chart like that prepared by trainees in this session is a very useful "tool" for a manager. It helps him to see the latest starting times for each activity, how long each activity will take, and the deadlines. However, the schedule may not give direct information about "flexibility" and about which tasks are "critical". The following sessions will deal with a planning technique which takes care of these problems.

Preparations for the Trade Season

The "trade season" for the Greenland Co-operative Society was short but intensive. Everything happened during a few weeks: the buying stations were opened and staffed, farmers delivered their groundnuts and got their money, the heavy trucks from the Marketing Board appeared again to collect the nuts from the buying stations, everybody was busy...

Mr. Dibba, the society manager, realised that the trade season was the most important period during the whole year - for the farmers, for the society and for himself. Dibba knew that everything depended on him; he was the one to manage the operations and he must do it well...

Dibba had learnt at least one thing during his previous years with the society: He had to start preparations in time. It was not a day too early to begin planning now.

To be sure not to forget anything, Dibba had made up a list of all the necessary preparations. Here is the list, in random order (some notes and comments have been added in order to explain the situation fully):

A Check equipment

All scales and other equipment to be used at the buying stations had to be checked, tested and repaired, if necessary. This meant two weeks full-time work for the storehouse staff.

B Buy new scales

Two new scales had to be bought. The committee had to decide to order them at the next meeting. The delivery time for the scales was five weeks.

C Issue bags

A large number of empty bags had to be issued to farmers, directly by the co-operative. This had to begin three weeks before the beginning of the trade period. It would take a week of full-time work for the storehouse staff to issue all the bags.

D Check and repair bags

The old stock of bags had to be counted and checked. That would take one week, and the necessary repairs of bags another week of full-time work for the stores staff. Supplementary purchase of new bags, if needed, could be done during the same week.

E Hire buying station staff

Extra staff had to be hired temporarily to help at the buying stations during the trade season. It would take a week to contact the people who had helped previous years, or to recruit new ones.

F Train buying station staff

Some of the temporary staff at the buying stations (weighmen and clerks) had to be given one day's training on the new receiving system. They would need at least one week's notice about the date and place for the training.

G Prepare buying stations

Both trucks and all the storehouse staff would be needed to go round to all buying stations with the equipment, getting them ready for the trading. This would take two weeks.

H Approval for the new receiving system

This year Dibba wanted to improve the system for receipt of produce and payment to the farmers. The old system had proved to be very slow with too much paperwork and not enough security. Dibba had already designed new, simpler forms for the weigh-in and payments. All he needed now was the approval for the new system from the auditor, due within a week.

I Print forms

It would take four weeks to have the new delivery and payment slips printed.

J Prepare and post information

Information about opening hours of the buying stations, etc., had to be available in all villages during the full two-week period preceding the opening. It would take Dibba one week to prepare information posters and have them distributed to all villages.

K Trade in truck

The society owned two trucks but one was now unserviceable. The committee had received some offers for trading it in for a new one, and they had to make a decision at the next meeting. Then it would take just one week to receive delivery of the new truck.

L Prepare loan application

To be able to pay the farmers an "advance" upon delivery of their groundnuts, the society has to obtain a bank loan. It would take Dibba a week to compile all the necessary documents and have the loan application ready for the committee members to sign at the next meeting.

M Obtain loan

Dibba had to submit the loan application to the bank seven weeks before trading began, to be sure to have the money in time.

N Membership campaign

Dibba had agreed with the committee to carry out a two-week campaign for enrolment of new members. The campaign needed to be completed three weeks before trading began and before the posters about the trading appeared in the villages. It would take Dibba two weeks to plan the campaign.

O Committee meeting

The next committee meeting could not be delayed, because some of the items on the agenda had to do with the preparations for the trade season. The committee members needed one week's notice of the meeting. Dibba decided to call a meeting as soon as he had the bank loan application ready.

Assignment :

Prepare on a large sheet of paper an "Activity Schedule" including all the preparations for the trade season mentioned above.

The schedule should show the latest date for beginning and completion of each activity.



Activity Chart

9 weeks	8 w.	7 w.	6 w.	5 w.	4 w.	3 w.	2 w.	1 w.	0
9 weeks	8 w.	7 w.	6 w.	5 w.	4 w.	3 w.	2 w.	1 w.	0

topic

4

## network planning techniques

Session 4.1 Basic Network Scheduling

Session 4.2 Using the Critical Path Method

Session 4.3 Network Planning of Projects

SESSION 4.1

BASIC NETWORK SCHEDULING

Objective : To enable trainees to draw a network plan and to identify those activities which will determine how long the whole task takes.

Time : 2 1/2 - 3 1/2 hours.

Session Guide :

1) Refer to the planning exercise which trainees completed in the previous session. Ask trainees what information the "Activity Chart" provided for the manager:

- how long the whole task would take,
- the latest time by which each activity would have to be started.

Ask what additional information a manager might need if he or she wanted to retain maximum flexibility and still complete the task in the shortest possible time:

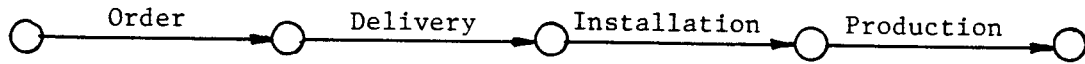
- Which activities are "critical" to the overall task, and must be started and finished on schedule?
- Which activities are "flexible", i.e., can be carried out when convenient within a certain period of time?

Tell trainees that they will be introduced to a technique called "network planning" which will provide this information and help them to plan for more complicated tasks.

2) Some very simple examples will be used to demonstrate the basics of network planning. Ask trainees to imagine that they have to plan the purchase and installation of a new machine. Suggest that the whole task involves the following activities only:

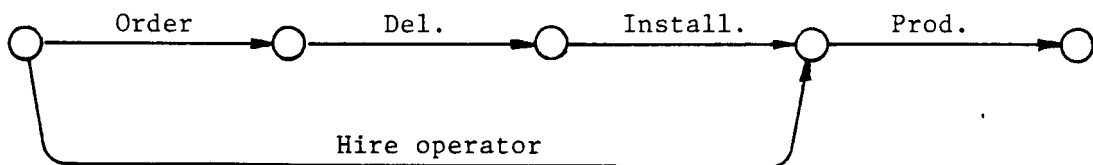
- placing an order for the machine,
- delivery of the machine,
- installation of the machine,
- production.

Clearly, these activities are all dependent on each other, and must be carried out in the above-mentioned order. Show on the chalk-board/OHP how this can be graphically illustrated:



Make sure that trainees understand that each arrow represents an activity for which time is needed, and that the circles just indicate events, which take no time. They are just transition points between activities. An activity cannot begin until the preceding activity has been completed. Stress that the length of an arrow has no relation to the actual duration of the activity. For instance, to place the order may take four days, the delivery time 20 days.

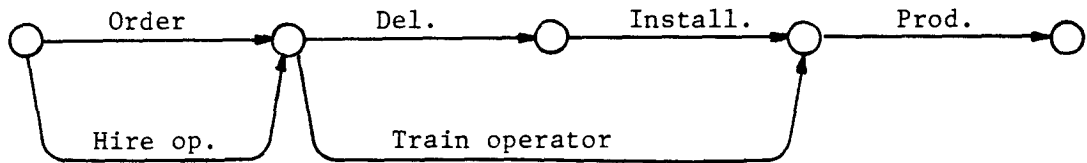
- 3) Suggest that it will be necessary to hire a man to operate the new machine. Ask trainees how this new activity can be added to the chart. Ask someone to modify the chart on the board accordingly:



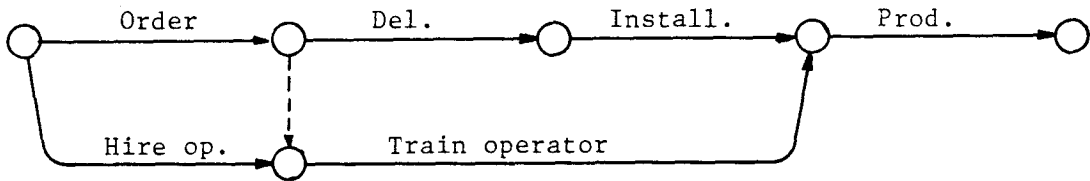
Point out that the chart clearly shows that the employment of an operator is independent of the other activities and can be done simultaneously as a "parallel" activity. Again, point out that the length of the arrow has nothing to do with the duration of the activity. The employment of an operator may require more or less time than the parallel activities ordering, delivery and installation of the machine.

- 4) Tell trainees to assume that the new operator must be trained, and that the supplier of the machine has promised to take on the operator for a training period as soon as he receives the order for a machine. Ask trainees to include this activity in the chart. Note

that the following solution is not logically correct, because it implies that the delivery of the machine cannot be done until an operator has been hired. This would be an unrequired restriction.

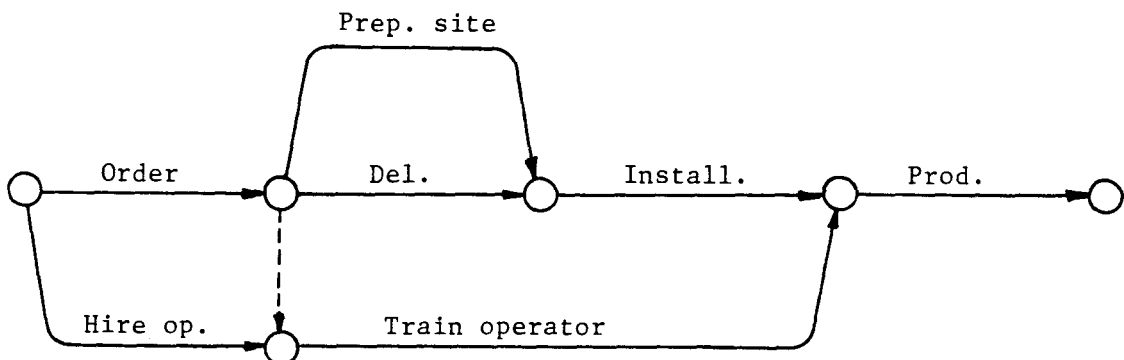


The correct way to show that the training activity depends on placing of an order is to insert a dashed-line arrow, like this:

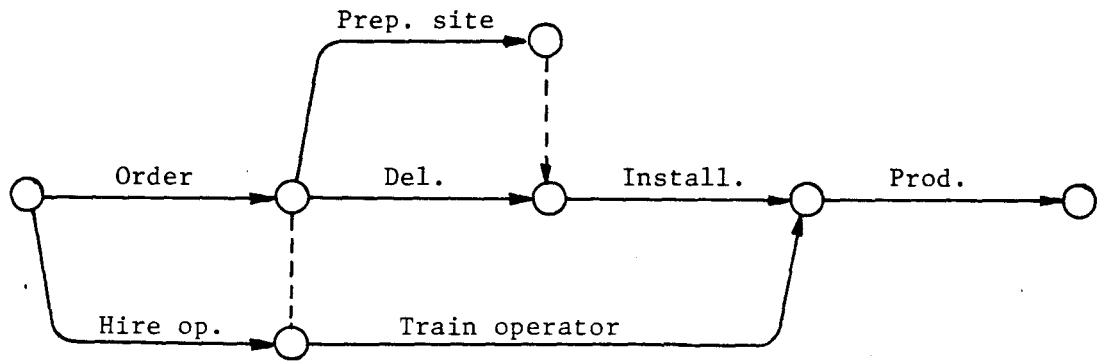


The dashed-line arrow is called a "dummy activity". It takes no time, and is used to illustrate relationships. In our example it shows that the training cannot begin until the order has been placed.

- 5) Ask trainees to add the following activity to the chart: preparation of the site for the machine. This can begin as soon as the machine has been ordered, and it must be ready before the machine arrives. Trainees may suggest the following, which is logically correct:



However, the two activities, preparation of the site and delivery of the machine now begin in the same event and end in the same event. This may cause some confusion later, when we calculate the time for the activities. We can avoid this problem by using another dummy activity, like this:



Point out that dummy activities thus are used for two purposes in a network:

- to show relations, as in point 4) above;
- to avoid confusion when there are several activities between two adjacent events.

Point out that we now have on the chalkboard/OHP a simple "network". Sum up the basic concepts: activities, events, and dummy activities, how these are used and drawn in a chart.

- 6) Ask trainees to imagine that they have to plan the construction of a small extension to their society's headquarters. Ask them to suggest a short list of activities which might be involved in this simple building job. Their suggestions will obviously vary but elicit the following list:

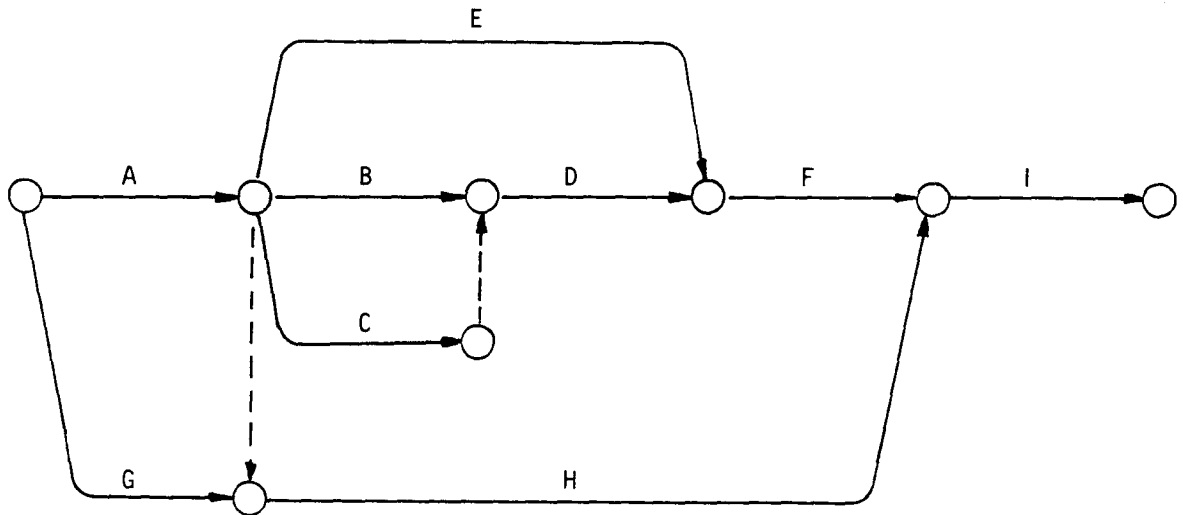
- |                    |                              |
|--------------------|------------------------------|
| A Prepare drawings | F Construct walls and roof   |
| B Prepare site     | G Obtain plumbing contractor |
| C Obtain cement    | H Obtain pipes               |
| D Lay foundation   | I Connect pipework           |
| E Obtain blocks    |                              |

- 7) Ask trainees to suggest the necessary relationship between the identified activities. Their opinions will differ but elicit and agree on the following:

Preceding Activity	Activity	Following Activity
-	A Prepare Drawings	B & C & E & H
A	B Prepare Site	D
A	C Obtain Cement	D
B & C	D Lay Foundations	F
A	E Obtain Blocks	F
D & E	F Construct Walls and Roof	I
-	G Obtain Plumbing Contractor	H
A & G	H Obtain Pipes	I
F & H	I Connect Pipework	-

- 8) Ask trainees to use the information in the table above, and to draw a network for the total building job. Explain that the table provides the following information:
- The network has to start with Activities A and G, because they have no preceding activities.
  - The network ends with Activity I; it has no following activity.
  - Activities B, C, E and H can all start immediately after Activity A has been completed.
  - It is also clear from the table that Activities A-B-D-F-I go from "start to finish". Similarly, Activities G-H-I go from start to finish. These two paths could be drawn first.
  - The table also shows that Activity E is placed between A and F, and Activity C between A and D.

These hints should facilitate the drawing of a correct network. When all trainees have completed their charts, ask one to present his suggestion on the chalkboard. Ask for alternative suggestions, and evolve a chart as follows:



Ask trainees to explain what such a network really tells them.  
Which activities depend on which preceding ones?

- |                      |                      |
|----------------------|----------------------|
| B depends on A       | F depends on E and D |
| C depends on A       | H depends on A and G |
| D depends on B and C | I depends on F and H |
| E depends on A       |                      |

Point out that it is unimportant how the lines in the network are actually located; it does not matter, for instance, whether the line G - H is under or over the line A-B-D-F-I. The relationship is what matters.

Make sure that trainees understand the meaning of the dummy activities. The dummy between A and H indicates a relation - the plumber must see the drawings before he can order the right amount of pipes. The other dummy is inserted to avoid having activities B and C beginning and ending in the same event-circles.

- 9) Point out that the chart does not yet contain any information about dates, duration of activities, etc. Still, the planning approach itself, systematic and logical, helps a manager to get an overview of a whole task and to realise important relations between activities. Ask trainees to recall examples of building or similar tasks which have not been completed in time. Problems such as bad weather or material shortage may have been blamed. How often do



delays occur just because somebody has forgotten to start a specific activity in time (e.g. order some material) so that the whole task is held up?

Refer back to the network on the chalkboard/OHP for the building extension. Ask trainees to explain how this network, although not completed, can function as a management tool and reminder. They should mention at least the following:

The network shows that:

- Four things can be done as soon as the drawings are ready:
  - prepare the site (B)
  - buy cement (C)
  - buy blocks (E)
  - buy pipes (H)
- The cement will be needed when the site has been cleared, the blocks will be needed when the foundation has been laid and the pipes will be needed when the building has been erected.
- The search for a plumbing contractor can begin immediately (G).

Point out that delays of a project show that the manager did not know when the various activities must be started. A network plan can provide this information. In addition, it will show what activities must be done according to a fixed time schedule and which can be done when convenient to fit them in without delaying the total project.

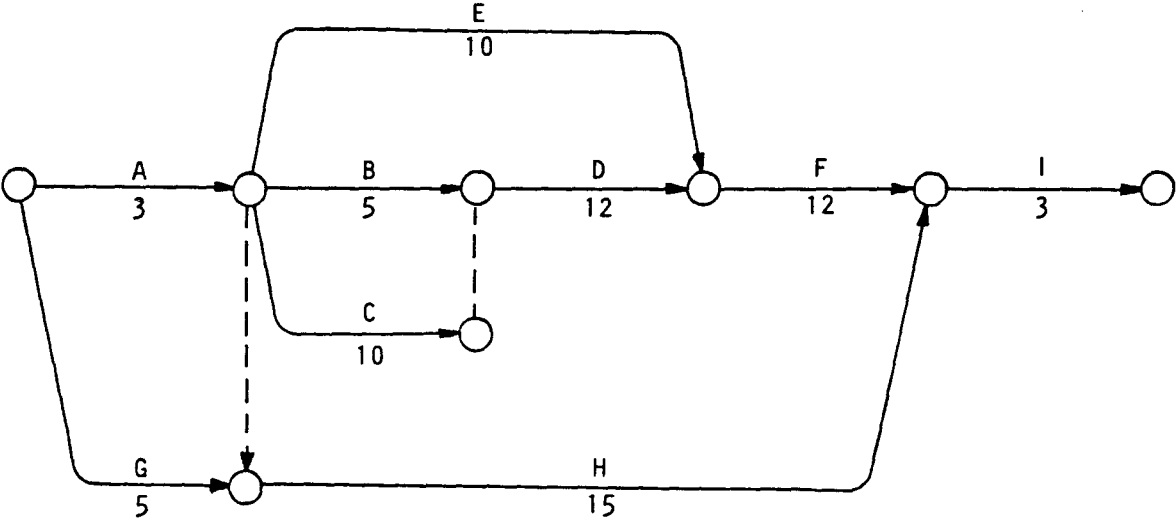
- 10) Ask trainees what they need to know about each activity before they can complete and make full use of the network. Elicit the answer: the duration of each activity. Ask them to suggest figures for the duration of the building activities. Their opinions will differ, but elicit and obtain general agreement that the following figures are reasonable:

Activity	Time in Days
A Prepare Drawings	3
B Prepare Site	5
C Obtain Cement	10
D Lay Foundations	12
E Obtain Blocks	10
F Construct Walls and Roof	12
G Obtain Plumbing Contractor	5
H Obtain Pipes	15
I Connect Pipework	3

Point out that we now have the duration of each activity, still it is not so easy to see from the table how long the total task will take.

- 11) If necessary, re-draw the diagram for the building on the chalkboard or OHP. The design should allow for space to write some information above and below each line. Ask trainees to do the same on a sheet of paper.

Ask trainees to note below each activity the number of days it will take to complete it. The figures should appear as in the diagram below and should also be written on the chalkboard/OHP.



- 12) Ensure that trainees do not become so involved in the technique that they forget the objective. Ask how they might use the diagram as it now is, to calculate the minimum time that will be taken to complete the whole task. To do so we must find the longest path (sequence of connected activities) through the network.

Ask trainees to point out the possible "paths" through the network, from left to right: A-B-D-F-I or A-E-F-I or G-H-I or A-C-dummy-D-F-I or A-dummy-H-I. Ask trainees to identify the longest path, measured in days. The right answer is A-C-dummy-D-F-I. This path takes 40 days (3+10+0+12+12+3, the dummy activity takes no time).

This longest path through the network is called the critical path, and the activities involved in this path are called the critical activities. Ask trainees to mark the critical path by double lines through the network (as in point 16 below).

Ask trainees to explain the practical implications of the critical path, and why the activities are actually called "critical". They should be able to see that:

- The critical path decides the total time needed for the total project, we just have to add the times for all the activities along this path.
- If there is a delay in one of the critical activities, the total project will be delayed.
- If the time for one of the critical activities can be shortened, the whole project can be completed in shorter time.
- While there is "no time to spare" along the critical path, there is some "slack time" for the activities which are not on the critical path. Example: Five days are required for Activity B, but 10 days are in fact available, because Activity G must be completed simultaneously, and that will take 10 days. Thus, there are five "reserve days" available for Activity B, and if B is delayed five days it will not affect the final project completion date. Ask trainees what is the "slack time"

for Activity E. Right answer: 12 days, because C + D along the critical path will require 22 days, and E needs only ten days.

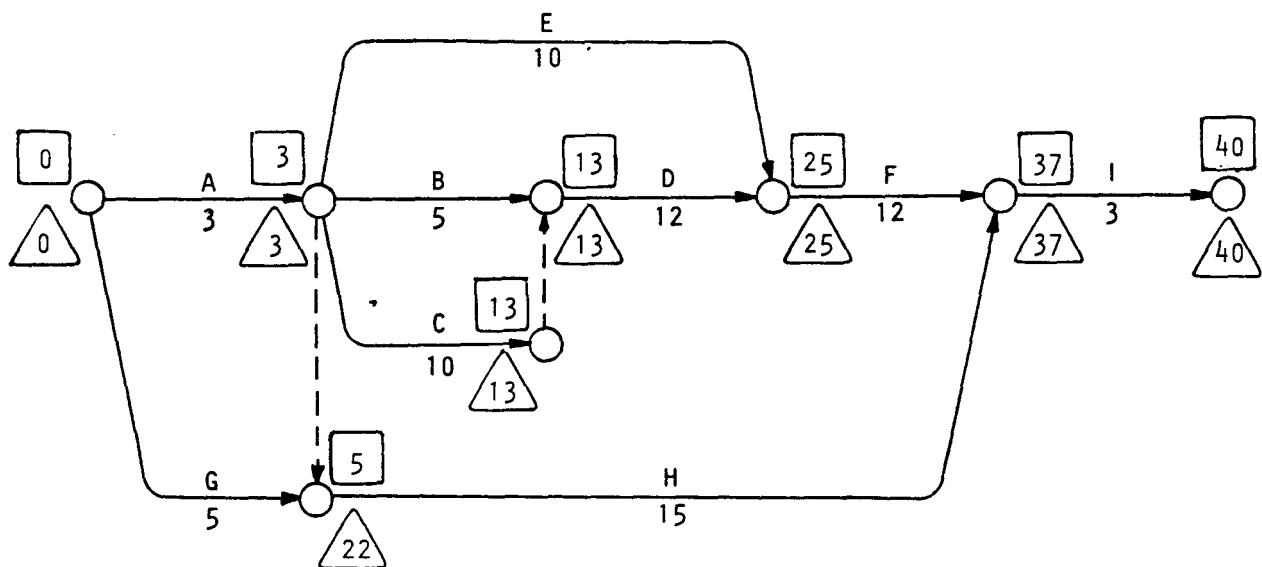
13) Ensure that all trainees appreciate the value of knowing the critical path and the slack times:

- The work schedule can be designed so that the critical activities receive top priority, and others whose timing is more flexible can be fitted in when convenient in order to even out the workload on staff and equipment.

Trainees may now conclude that the exercises are finished. They have calculated that the whole project can be completed in 40 days at the earliest. They know which activities are critical and must not be delayed. What else need they know?

Explain that the network can actually help us to find exactly the dates when each activity has to fit into the plan. A manager may want to know the earliest and latest date for the start and completion of each activity.

14) Ask trainees to draw a square above each event-circle in the network, as shown on the next page. (The triangles, and the figures in the squares and triangles will be filled in later.)



Ask trainees to write a zero in the first square at the left of Activity A, indicating that the project starts on day zero. Then work through the diagram from left to right and fill in all

squares with the earliest day at which the following activities can start. Example: the square before Activity B should have the figure 3, because Activity A takes 3 days and the following activities can start earliest after 3 days. Let trainees suggest the figures to be written. Discuss and make sure that all understand the principle. Some trainees may, for instance, calculate that Activity I can start after 20 days, because Activities G and H take that long. Show that all the previous activities must be completed before Activity I can begin. Activity F must also precede Activity I; Activity F can only start after 25 days, and itself lasts 12 days. This makes a total of 37 days before Activity I can begin.

- 15) Point out that we have now indicated the earliest day at which each activity can start. Remind trainees that some of the activities have some "slack" time. They may start a bit later without delaying the total project. Therefore, we need to find these latest days at which each activity must start in order not to delay the total project.

Ask trainees to draw triangles beneath each event-circle (see diagram in point 14 above). Explain that they are going to write in these triangles the latest day for the events in order not to delay the completion date for the total project.

Ask trainees how they can calculate the latest days. Point out that the earliest days were calculated by working through the activities from zero to the end. The latest dates can be calculated by working in the reverse direction, from the right to the left across the page.

Stress that since the objective is still to complete the building as soon as possible, the latest possible completion date is therefore the same as the earliest, namely, 40 days. Trainees should therefore write 40 in the triangle at the final point.

Trainees should then work backwards, calculating the latest times for each event day subtracting the number of days each activity takes. Demonstrate how Activity I must therefore be started at the latest on day 37, because it takes three days. In the same

way, show that the latest day for the event between G and H is 22, because Activity H needs 15 days, and  $37 - 15 = 22$ .

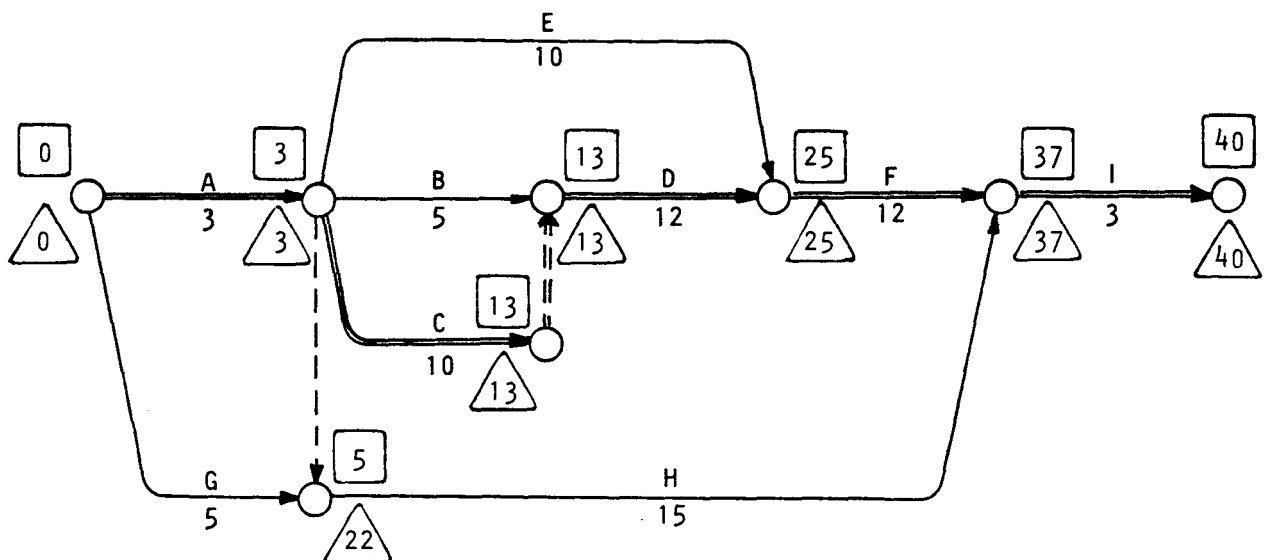
Ask trainees for the latest days for the event before Activity F and D, and fill in the triangles with the correct figures, 25 and 13, respectively.

Demonstrate how to calculate the latest day for an event in which two or more activities start. Example: when is the latest day for the event after Activity A? Three calculations can be done:

- Subtracting 10 days, for Activity E, from 25 which is the following "latest day", gives 15.
- Subtracting 5 days, for Activity B, from 13, gives 8.
- Subtracting 10 days, for Activity C, from 13, gives 3.

Explain that we must choose the smallest of these possibilities, because we must have time enough for all the following activities. Therefore the event must occur not later than day 3.

- 16) Remind trainees that they could at an early stage identify "the critical path" through this simple network. Show that the calculations confirm their observation. We can see that all the events along the critical path have no "slack time": the earliest and the latest dates are the same.



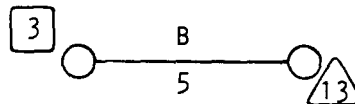
Again, ask trainees to explain the implications of the critical activities (compare p. 12 above).

- 17) Remind trainees that activities not along the critical path are flexible, which means that they have a certain "slack time". What slack time is there for each of the flexible activities?

Elicit through discussion that this can be found as follows:

- Take the earliest starting time of each activity from its latest finishing time; this shows the number of days available for the activity.
- Compare this figure with the duration of the activity itself. The difference is the slack time by which the start of the activity can be delayed, or the duration extended, without delaying the final completion of the project.

An example: Activity B is here lifted out of the network.



The earliest starting time is in the square to the left: day 3. The latest finishing time is in the triangle to the right: day 13.

We subtract  $13 - 3 = 10$ . This is the time available for Activity B. Below the activity line we read the duration of the activity: 5 days. Consequently there is a slack time of 5 days for this activity.

Allow trainees 10 minutes to list which other activities are flexible and by how many days:

$$E = (25 - 3) - 10 = 12 \text{ days}$$

$$G = (22 - 0) - 5 = 17 \text{ days}$$

$$H = (37 - 5) - 15 = 17 \text{ days}$$

- 18) Ask trainees how management might use the knowledge that activities B, E, G and H are flexible in their timing.
- (B) The site preparation could be undertaken as convenient within the ten-day period, or could be carried out by a smaller work force in ten days rather than five.

- (E) Although the delivery time for the blocks is ten days, it is good to know that there is a "safety margin" of 12 days. The ordering of the blocks should of course not be postponed 12 days.
- (G) and (H) The total slack time along this line is 17 days. If the search for a plumber were delayed by 17 days, there would be no slack time for the delivery of the pipes. It is safest to find a plumber quickly so that there is some reserve time for the delivery of the pipes.

19) Stress that this is, of course, a very simple example but, even so, the information was not immediately obvious from the list of activities and their relationships.

Stress that this and similar planning techniques cannot replace effective on-the-spot management and basic technical knowledge. Ask trainees what kinds of common management error will in no way be avoided by this type of planning technique. For instance:

- Ignorance of how long each activity is likely to take; this can only be determined by those who are actually doing the work.
- Failure to take decisions as to what tasks should be undertaken at all.
- Inability to manage the implementation so that activities are completed in the time they should be.

A network diagram and correct calculations can help an effective manager to be more effective, but are no substitute for energetic common sense in the field.



SESSION 4.2

USING THE CRITICAL PATH METHOD

Objective : To enable trainees to use the critical path method in the planning of typical society operations.

Time : 3 - 3 1/2 hours.

Material : Case study "Preparation for the trade season" from Session 3.4.  
List of Activities.  
Activity Chart.

Session Guide :

- 1) Explain to trainees that the purpose of this session is to make them more accustomed to the technique of drawing network plans.

Ask trainees to refer to the case study used in Session 3.4 concerning the preparations for the "trade season". Remind them of the List of Activities and the Activity Chart which they produced in that session. To facilitate their work in this session, distribute new copies of the list and the chart.

Explain to trainees that they will now draw up a network plan for the same task: preparations for the trade season. List all the activities on the chalkboard, as shown on next page (middle column). Then ask trainees to identify, for each activity, the preceding and following activities, and write them on the chalkboard, as shown.

Ask trainees how the information in the table can help them to draw a correct network, and elicit the following points:

- The table shows that the network has to start with Activities A, E, H, L and N, as these activities have no preceding activities.
- It also shows that the network has to end with Activities F, G, J and M, as they are not followed by any activities.

- It is clear from the table that the following activity-chains go from start to finish.

- i) E - F
- ii) H - I - F
- iii) L-O-B-G
- iv) L-O-M
- v) L-O-K-G
- vi) A-D-C-G
- vii) N -J

Preceding Activity	Activity	Following Activity
-	A Check equipment	D
O	B Buy new scales	G
D	C Issue bags	G
A	D Check and repair bags	C
-	E Hire buying station staff	F
I & E	F Train buying station staff	-
C B K	G Prepare buying stations	-
-	H Approval of new receiving system	I
H	I Print forms	F
N	J Prepare and post information	-
O	K Trade-in truck	G
-	L Prepare loan application	O
O	M Obtain loan	-
-	N Membership campaign	J
L	O Committee meeting	M & B & K

- 2) Divide trainees into groups of 5 to 8 members. Allow them up to 30 minutes to produce a basic network plan. To start with they should not include times or make any calculations, only illustrate the basic relationships between activities. They should draw the network on a large sheet of paper.

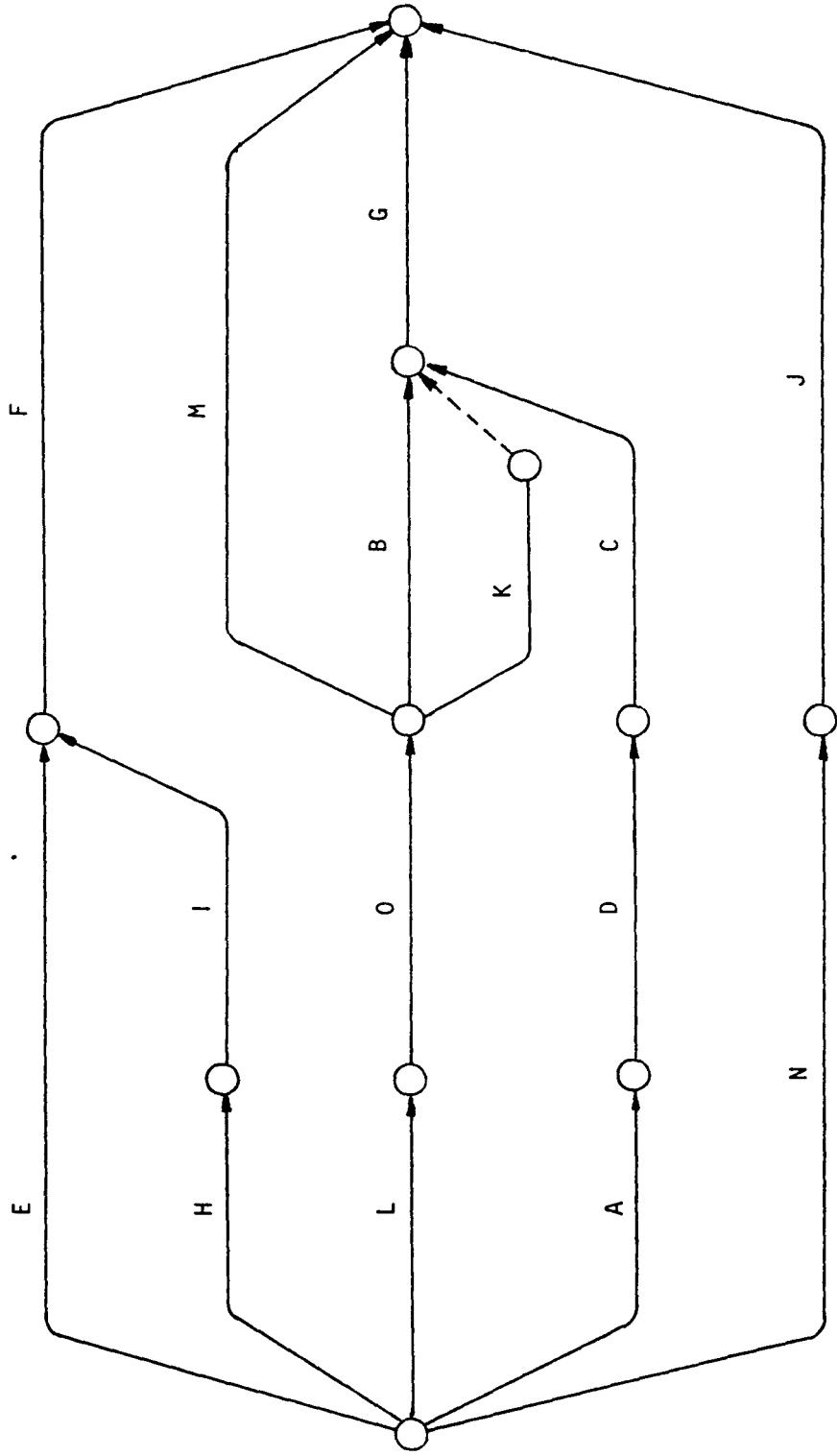
Reconvene the groups. Their arrangements and layout of the diagrams will vary, of course. Ask a representative for each group to explain briefly their suggestions. Invite other groups to comment and criticise. Then present on the chalkboard/OHP the network which is shown overleaf.

- Note that only one "dummy" is needed in this net (after Activity K, to avoid B and K having common event-circles for beginning and end).
- It is possible to design the net so that dummies are needed to show that Activities M, B and K are dependent on Activity 0. However, "unnecessary" dummies should be avoided. It is better to connect these activities directly to Activity 0, as shown in this example.
- Point out that dummies cannot be inserted until the first attempt at a network has shown where they are needed.

Ask trainees to copy this network in order to have a common base for the following exercise. (Or distribute a handout with the network prepared in advance.)

- 3) Insert, in the network on the chalkboard/OHP, the times needed for each activity, and ask trainees to do the same in their networks. The times expressed in weeks should be written beneath the letter-code for each activity. (See the network on back of Sheet 3.)
- 4) Ask trainees to draw a little square above each event-circle. Ask them to assume that the whole task of preparing the trade season starts on Week 0 and to write "0" in the square to the left. Then ask them to suggest the earliest week for each activity to start, writing the appropriate figures accordingly in the squares, working from left to right in the same way as in Session 4.1. Discuss and explain as necessary. Agree that it seems to be possible to complete the whole task in nine weeks.

PREPARATIONS FOR THE TRADE SEASON



Suggest that nine weeks should also be the shortest time for completing the whole task. Ask trainees to draw small triangles beneath each square. In the square to the right (at the end of the last activity) they should therefore write a "9". Then ask trainees to suggest the latest date for each event. Example: In the event before Activity G they should write "7" in the triangle, because 2 weeks are needed for Activity G ( $9 - 2 = 7$ ). Working backwards through the net, from right to left, discuss and agree on the latest times. Remember to choose the smallest possibility when there are several activities starting in the same event-circles. For instance, the event before Activity B should have a "2" in the triangle, because Activities B and G need 7 weeks to be completed, as does Activity M ( $9 - 7 = 2$ ). Therefore, this event must occur at the latest at the end of Week 2.

The chart, with the times in the squares and the triangles, should evolve on the chalkboard/OHP following trainees' suggestions. Trainees should also fill in their own diagrams.

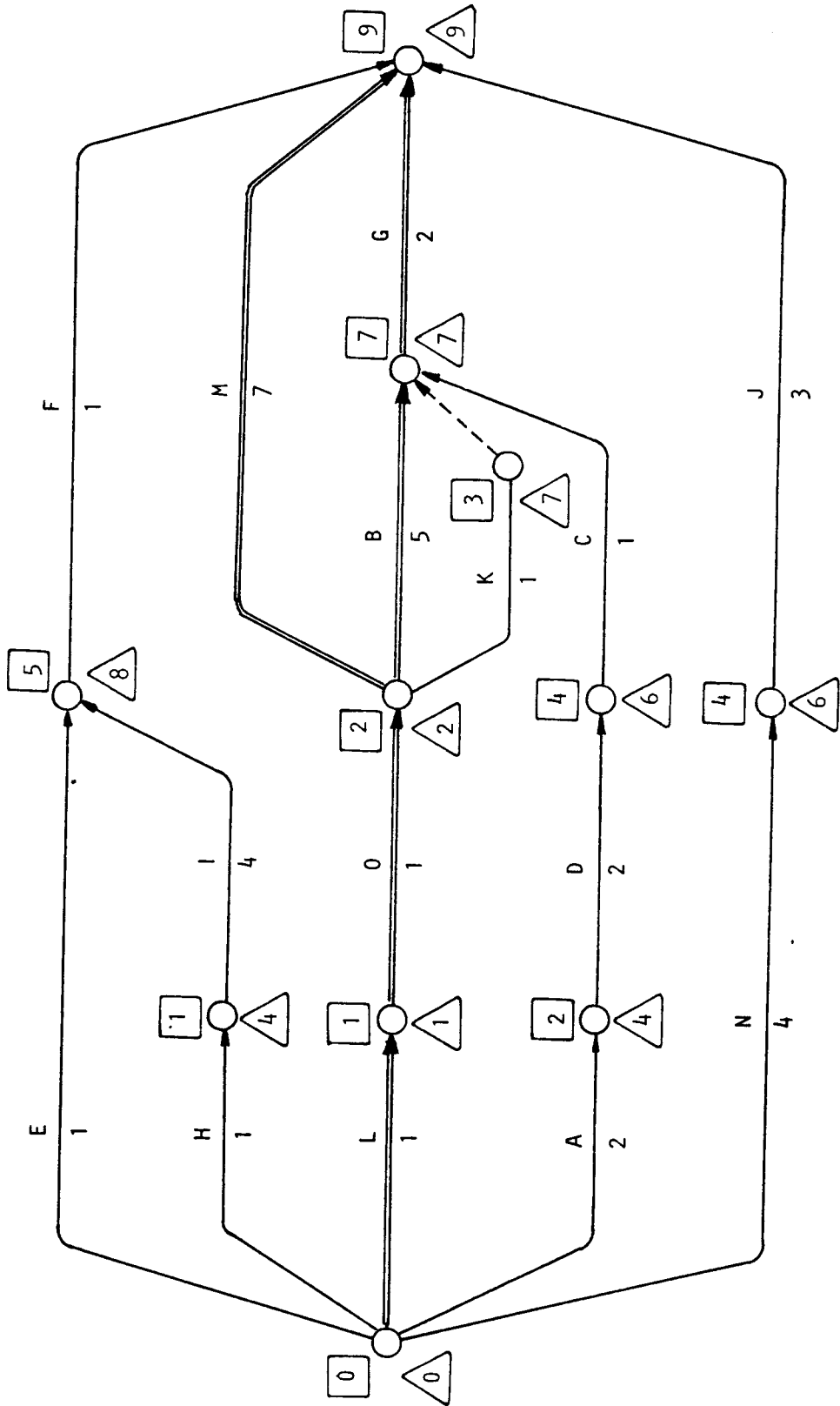
- 5) Remind trainees of the technique used in the previous exercise in Session 4.1 in order to calculate if there is a "slack" or if an activity is critical: subtract the latest time for completion of the activity from the earliest time for starting, compare this with the time required for the activity. Example: Activity C must be completed at the latest Week 7. It can begin at the earliest after Week 4; so 3 weeks are available. But the activity requires only one week; so there is a slack time of two weeks.

Ask trainees to complete the exercise by identifying which activities are critical, and which have some flexibility (slack) in their timing and how much. Allow up to 20 minutes for the trainee to prepare their answers.

Then ask trainees to identify the critical path through the net:

- Along the path L-O-B-G the figures in the squares and triangles are the same. This means that the earliest and latest times for the activities are the same, there is no slack, so this is the critical path. The same goes for L-O-M. This path is also critical. All the other activities have some flexibility.

PREPARATIONS FOR THE TRADE SEASON



Go through the other paths, one by one, and check trainees' calculations:

$F = (9 - 5) - 1 = 3$ . Make sure that trainees do not just make a mechanical calculation, but understand the logic. Explain if necessary: F must be completed in Week 9 and can start at the earliest after Week 5, so 4 weeks are available. Only 1 week is needed; there is, consequently, a slack time of 3 weeks.

Discuss the following calculations in the same way, if necessary.

$$E = (8 - 0) - 1 = 7$$

$$I = (8 - 1) - 4 = 3$$

$$H = (4 - 0) - 1 = 3$$

Ask trainees what happens if Activity H takes 4 weeks instead of 1.

- As there is a slack time of 3 weeks, the whole task can still be completed as planned, but note that we have then no slack left for the following activities I and F.

Check that trainees have calculated a slack time of 2 weeks each for Activities A, D and C:

$$A = (4 - 0) - 2 = 2$$

$$D = (6 - 2) - 2 = 2$$

$$C = (7 - 4) - 1 = 2$$

Ask trainees what happens if all the three activities are delayed by one week each:

- Activity G could not start after Week 7, as needed. The whole task would be delayed by 1 week (not by 3 weeks, because there was a slack time of 2 weeks).

Check trainees' calculations for Activities N and J:

$$N = (6 - 0) - 4 = 2$$

$$J = (9 - 4) - 3 = 2$$

- 6) Stress that techniques of this sort are only valuable if they help managers to decide what to do in specific situations. Ask trainees

to translate their calculations into recommendations for the manager responsible for the preparations for the trade season:

- If Dibba, the manager, has only 9 weeks left until the opening of the buying stations, he must start preparations immediately, because this is the minimum time needed.
- The loan application (L) must be ready and signed within 2 weeks to be sure that the money is available when trading begins.
- The order for the new scales (B) must be placed immediately after the committee meeting.
- Dibba cannot wait more than 4 weeks for the approval for the new receiving system (H). However, the subsequent printing of the new forms (I) is also an important activity. It would be good to have some slack time for this too. Therefore, Dibba should press for an early completion of H.
- The society's labour staff would need 7 weeks for their activities along path A-D-C-G, so there is 2 weeks' slack time. Still, Dibba would have to monitor their progress carefully to avoid longer delays.
- Dibba can postpone preparations for the membership campaign for two weeks and still be able to complete the campaign before the actual information about the trading is to be posted in villages.

Ask trainees to compare these suggestions with the results of the exercise carried out in Session 3.4. This should demonstrate the value of the network technique even for simple tasks.

Discuss more complex tasks which trainees may have to perform, and show how these, too, might be more effectively planned using this procedure.

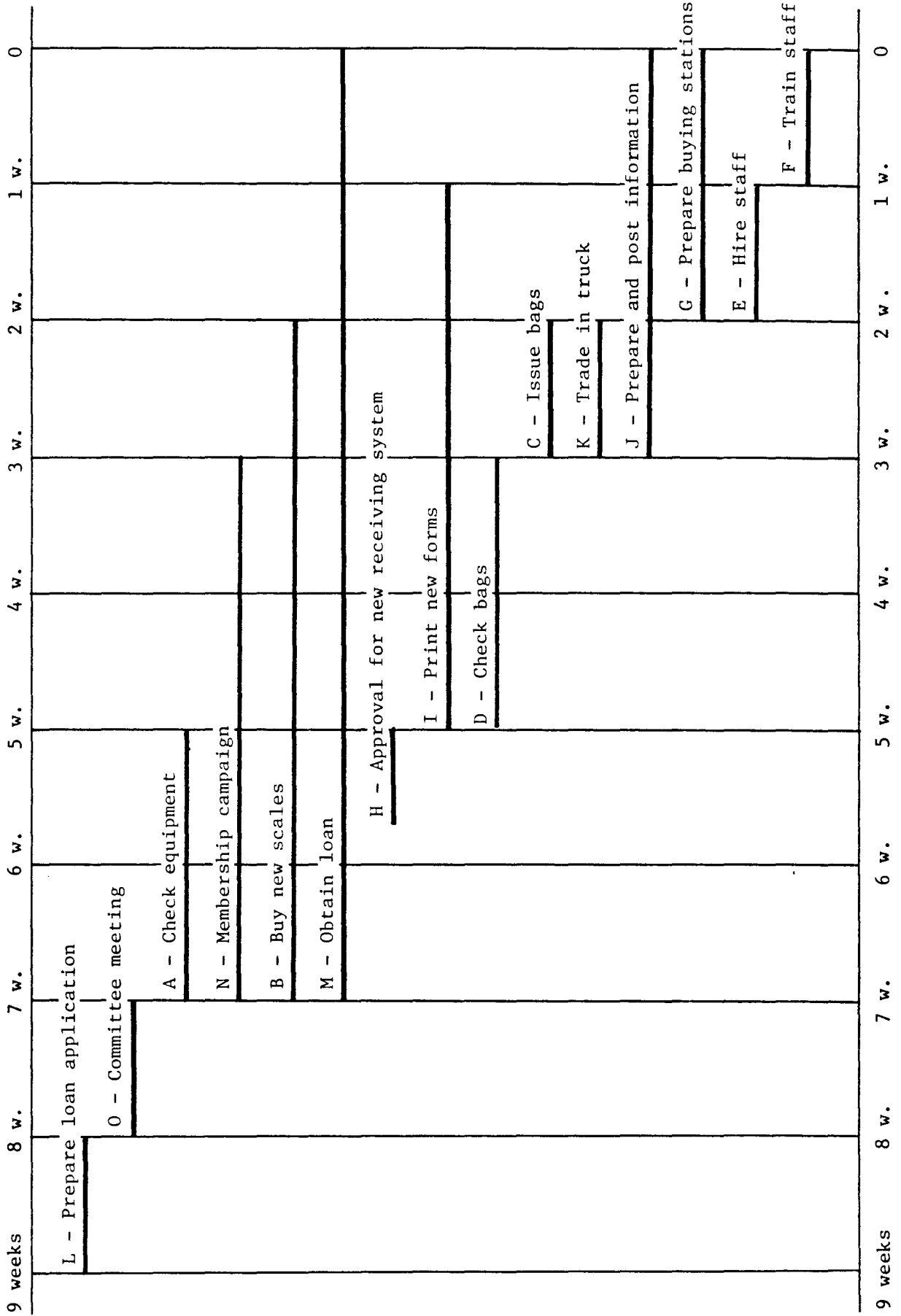


Preparations for the Trade SeasonList of Activities

Activity	Time Needed	Preceding Activity
A Check equipment	2 weeks	-
B Buy new scales	5 weeks	O Committee must place order
C Issue bags	1 week	D Stock of bags must be checked (Issue of bags must be completed 2 weeks before opening)
D Check and repair bags	2 weeks	A Check equipment *)
E Hire buying station staff	1 week	-
F Train buying station staff	1 week	E Staff must be recruited I New forms must be available
G Prepare buying stations	2 weeks	A Equipment must be checked B New scales must be delivered K New truck must be available
H Approval of new receiving system	1 week	-
I Print forms	4 weeks	H Approval for the new system must be obtained
J Prepare and post information	3 weeks	N Membership campaign
K Trade-in truck	1 week	O Committee must decide
L Prepare loan application	1 week	-
M Obtain loan	7 weeks	L Application must be prepared O Committee must sign application
N Membership campaign	4 weeks	(to be completed 3 weeks before opening)
O Committee meeting	1 week (incl. notice)	L Loan application must be ready before meeting (members to be given 1 week's notice of meeting)

\*) Note that all labourers are engaged in Activities A, D and C. These activities must therefore be performed after each other, in the mentioned order.

Activity Chart



SESSION 4.3NETWORK PLANNING OF PROJECTS

Objective : To enable trainees to improve and confirm their ability to apply simple network techniques to project planning.

Time : 2 1/2 - 3 hours.

Material : Case study "The Grain Drying Scheme".

Session Guide :

- 1) This session provides a third and final opportunity for trainees to learn the critical path or network method of planning. Some may not be totally confident of their ability to actually apply the technique but after this session they should be at least reasonably familiar with it. The two previous sessions have stressed the fact that techniques of this sort cannot alone enable anyone to plan or to carry out anything. Trainees should beware of the danger of thinking that because they have mastered an ingenious technique they are automatically guaranteed to plan and implement everything correctly-thereafter.

The systematic step-by-step approach involved in this technique is in itself a valuable lesson in management, even if trainees do not apply the technique afterwards in its entirety. Ask trainees how often they or other managers go through the following initial stages in any task:

- Divide the task into its activities.
- Decide what activities can only be started after what others have been completed.
- Estimate the time taken for each activity.

Stress that even if they do no more than this as a result of their exposure to network planning, their time will not have been wasted.

- 2) Divide trainees into groups. Include at least one trainee in each who appears to have fully grasped the technique, either from pre-

vious sessions or prior knowledge, since the instructor may not be able to provide individual guidance to all trainees who need it.

Distribute the case study. Allow groups up to one hour to complete the assignment. They should, if possible, be given OHP transparencies or large sheets of paper on which to present their networks and timetables. Circulate amongst groups throughout the exercise. Make certain that they all follow the correct sequence:

- Identify the separate activities and their timing.
  - Identify necessary relationships between activities.
  - Draw up a network illustrating the above.
  - Calculate the earliest time each activity can be completed.
  - Calculate the latest time each activity can be started.
  - Identify those activities which must be started and finished exactly on schedule, and those which can be treated more flexibly.
  - Draw up a timetable for the whole task.
- 3) Reconvene the groups. Ask one group to read out its list of activities and times. This should include the following: (Order at this stage is not important.)

A Committee Approval	Already Achieved
B Design Building	3 weeks
C Recruit Operator	4 weeks
D Request Tenders for Building	2 weeks
E Finalise Building Order	4 weeks
F Order Drier	2 weeks
G Deliver Drier	12 weeks
H Construct Foundations	4 weeks
I Complete Building	9 weeks
J Order Fixing Bolts	1 week
K Delivery of Fixing Bolts	7 weeks
L Introduce New Operator	2 weeks
M Operator's Secondment	10 weeks

N	Install Equipment	1 week
O	Bring into Operation	2 weeks

Remind trainees that these times do not always mean that the co-operative staff are fully employed for the whole period. Some activities, such as equipment delivery, involve no co-operative workload at all, while others, such as inviting tenders or installing equipment, may involve substantial work for the staff.

- 4) Ascertain that all groups have the same list, even though wording and sequence may differ. Ask a second group to state which activities depend on which others.

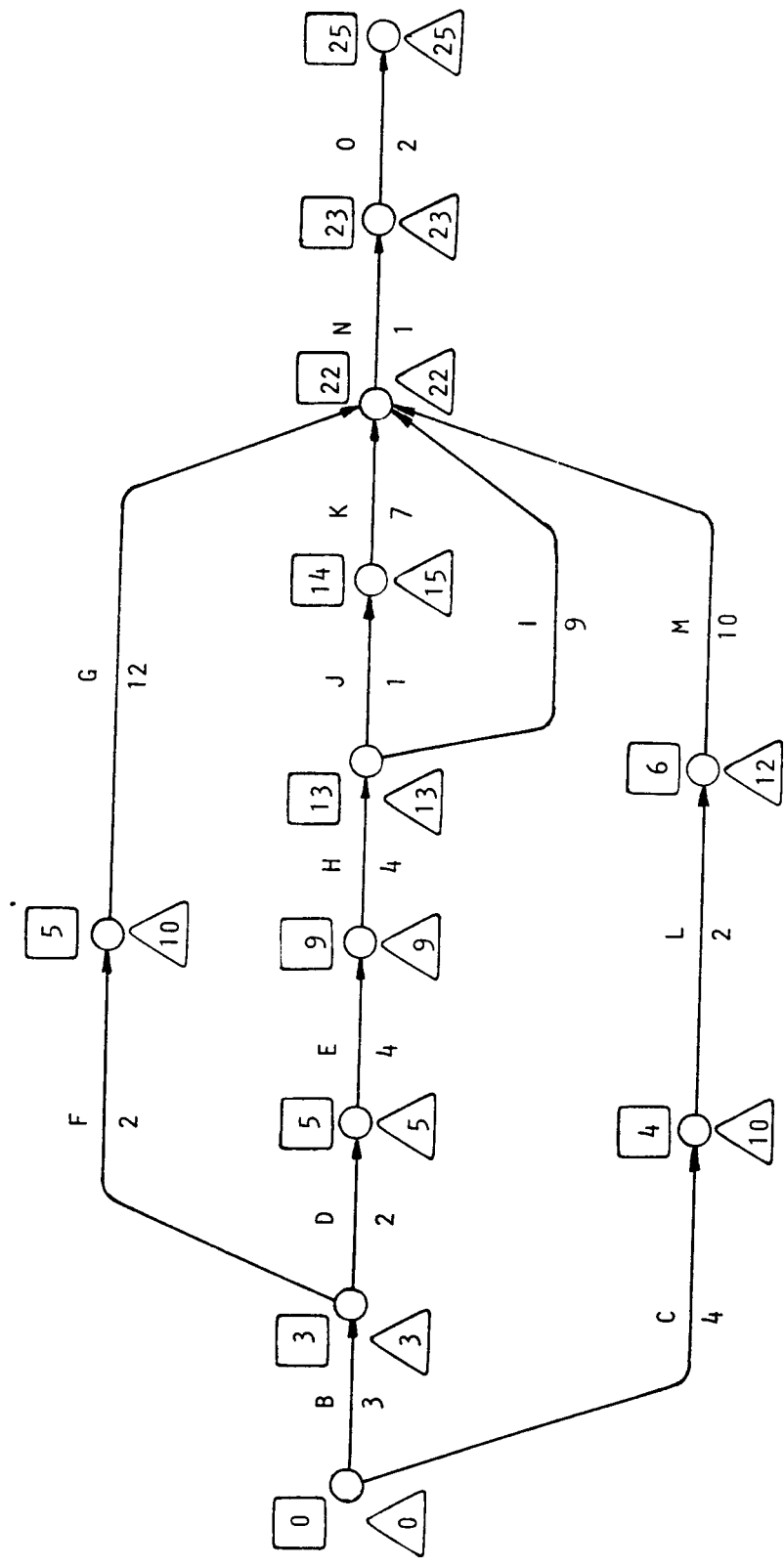
Record the relationships by use of a code such as suggested above. The actual relationships are as follows:

B must follow A	I must follow H
C must follow A	J must follow H
D must follow B	K must follow J
E must follow D	L must follow C
F must follow B	M must follow L
G must follow F	N must follow G, I, K and M
H must follow E	O must follow N

- 5) Ensure that all groups understand and agree with this list. Establish that it is necessary to state the four precedents for N, since they do not themselves depend on one another.

Ask another group to present its network, together with the times written on each line. This should be in the form shown overleaf, and should not yet include the squares and triangles with earliest and latest times calculated.

THE GRAIN DRYING SCHEME



- 6) Ask another group to present its calculations as to the earliest possible times by which each activity can be completed. These should be drawn up on the network in the sequence suggested in the previous session. When the calculations have been presented, discussed, understood and agreed upon by all trainees, another group should present its calculations of the latest times. These should be written in triangles under the activity points as is shown in the now completed network in 5) above.
- 7) If most groups have made major errors, allow sufficient time for correction. When this has been done, ask a group to present its suggestions to Mr. Gurung. These might be in the following form:
- The drier could be completed and in operation by September 25th provided the operation starts at once. The following activities are critical; if any of them cannot be completed within the estimated time and by the date specified, the drier will not be in operation on time. Special management attention must therefore be devoted to these activities.
    - The building drawings must be completed by April 24th.
    - The building tenders must be sent out by May 8th.
    - The building orders must have been placed by June 5th.
    - The foundations must have been completed by July 3rd.
    - The structure must be completed by September 4th.
    - The installation must be completed by September 11th.
    - The running-in period must not exceed two weeks.
  - The remaining activities are not critical. They can be allowed to take rather longer than the estimated times or delayed to allow for other work. The amount of slack time is as follows:
    - Ordering for fixing bolts and their delivery can take one week longer than estimated.
    - Ordering the drier, and its delivery, can take five weeks longer than estimated.
    - Recruiting, introducing and training the operator can take six weeks longer than estimated.

Trainees may of course present their conclusions in another form. It is vital that they should identify the "critical items" and state the extent of slack for other activities.

- 8) Stress that the technique is of no value in itself; it must be used to help the manager to plan his own and his staff's workload more effectively in order to achieve the objective of starting a drier in time for the season.

Ask trainees what they would specifically suggest to Mr. Gurung that he should do in order to make use of the information. Their answers may include:

- Inform all staff involved of the critical activities.
- Give individual supervisory staff specific responsibility for the completion of critical activities.
- Produce a chart of the critical and other activities to be permanently displayed and kept up-to-date.
- Offer some form of staff bonus for achievement of the target, inviting all those involved to do what they can to ensure that it is achieved.
- Select the building contractor particularly carefully, taking into account not only price but reliability of timing estimates.
- Offer some incentive to the contractor for completion on or ahead of time, and/or impose penalty clauses for late completion.
- Ask the drier supplier whether he can offer any better price (or other advantage) if permitted, say, three or four weeks longer delivery time.
- Consider alternative employment or further attachment for the new operator.

- 9) Remind trainees that they must use the technique in their work. Discuss future plans in their societies where it might be useful.



The Grain Drying Scheme

Gurung was manager of the Grain Growers' Co-operative Society. He was delighted to be given the go-ahead by the committee to set up a grain drier long needed. The Co-operative Bank had approved a necessary loan. All that was necessary was to organise the requisite construction and installation work, to obtain the equipment and to make sure that there was someone available to operate it.

It was now April 5th. The engineers had prepared the specifications for the machinery. Gurung had just heard that these had been approved. The members were naturally anxious to know when their long-awaited drier would be ready. In particular, they needed to know whether it would be operating by the end of September, when the harvest would be ready. If not, Gurung would have to make arrangements for members' crops to be sold by the end of October, as always, since the high moisture content at harvest time meant that they could not be stored longer. If the drier would be ready, however, the grain could be stored well into the next year and sold at a higher price.

Gurung's calculations had shown that the higher price they would receive would easily cover the total cost of owning and operating the drier. But unless he was able now to tell the Marketing Board whether the Grain Growers' Society would be selling in October or early next year, the co-operative would be forced by the board to sell in October in any case. The benefit of the first year's operation of the drier, if in fact it could be operating by the end of September, would be entirely lost.

The whole venture was a fairly ambitious one for the society. Gurung knew that the various activities involved would mean substantial extra work for himself and his staff. He was, therefore, anxious to identify exactly what had to be done, and when, so that he could plan the staff workload accordingly. He wanted to minimise interference with other work as well as to ensure that the drier be in operation as soon as possible.

Now that the specification had been approved, the building to house the equipment had to be designed. This was a simple job, taking only three weeks. In the meantime, Gurung realised that the staffing side of the

operation must not be neglected. He would have to find and recruit an operator which he thought would take four weeks.

Once the building was designed, it would be possible to request tenders from local builders. Gurung knew that it would take two weeks to do this, and a further four weeks before the society had received the bids, compared them and placed an order for the building work.

Actual drying equipment needed to be adapted specially for the building in which it was to be installed. The order could only be prepared after the building was designed. It would take two weeks to prepare and despatch the order to the manufacturer of the equipment. This firm had previously quoted a period of 12 weeks for delivery of the equipment, after receipt of the order. It was a reliable company not expected to break its promise.

The builders would take a total of 13 weeks to finish the building, four weeks for the foundations and nine for the structure itself. Once the foundations were finished, it would be possible to order the required fixing bolts and supports. It would take one week to prepare and despatch the order for these and another seven weeks for delivery.

Gurung decided that a formal training course would not be appropriate for the operator, since what he needed was practical on-the-job experience. The manufacturers of the equipment had given him a list of other societies which had installed similar driers. Gurung thought that it would be appropriate for the new operator to work with the Grain Growers' Co-operative for his first two weeks on the job to familiarise himself with its staff and operations. He would then have a ten-week period of secondment with another society utilising a similar drying installation. The manufacturer suggested that the operator return from this secondment to supervise the installation of the equipment, which would take one week.

It would also be necessary, of course, for the equipment to be delivered to the Co-operative and for the building to be ready, before the equipment could be installed.

Gurung had heard about lengthy periods of "running-in" and "teething problems", but the manufacturer and experienced managers in other so-

cieties assured him that it would definitely be in operation two weeks after installation.

Assignment

- 1) Advise Gurung whether the drier could be in operation by the end of September.
- 2) Draw up and be prepared to present a finished network diagram of the whole task.
- 3) Draw up and be ready to present a detailed set of suggestions for the whole task, clearly identifying flexible activities and their limits. Give specific details for completion of the critical activities around which Gurung can plan his staff workload.

	January	February	March	April	May	June
Sunday	31 3 10 17 24	7 14 21 28	7 14 21 28	4 11 18 25	30 2 9 16 23	6 13 20 27
Monday	4 11 18 25	1 8 15 22	1 8 15 22 29	5 12 19 26	31 3 10 17 24	7 14 21 28
Tuesday	5 12 19 26	2 9 16 23	2 9 16 23 30	6 13 20 27	4 11 18 25	1 8 15 22 29
Wednesday	6 13 20 27	3 10 17 24	3 10 17 24 31	7 14 21 28	5 12 19 26	2 9 16 23 30
Thursday	7 14 21 28	4 11 18 25	4 11 18 25	1 8 15 22 29	6 13 20 27	3 10 17 24
Friday	1 8 15 22 29	5 12 19 26	5 12 19 26	2 9 16 23 30	7 14 21 28	4 11 18 25
Saturday	2 9 16 23 30	6 13 20 27	6 13 20 27	3 10 17 24	1 8 15 22 29	5 12 19 26
	July	August	September	October	November	December
Sunday	4 11 18 25	1 8 15 22 29	5 12 19 26	31 3 10 17 24	7 14 21 28	5 12 19 26
Monday	5 12 19 26	2 9 16 23 30	6 13 20 27	4 11 18 25	1 8 15 22 29	6 13 20 27
Tuesday	6 13 20 27	3 10 17 24 31	7 14 21 28	5 12 19 26	2 9 16 23 30	7 14 21 28
Wednesday	7 14 21 28	4 11 18 25	1 8 15 22 29	6 13 20 27	3 10 17 24	1 8 15 22 29
Thursday	1 8 15 22 29	5 12 19 26	2 9 16 23 30	7 14 21 28	4 11 18 25	2 9 16 23 30
Friday	2 9 16 23 30	6 13 20 27	3 10 17 24	1 8 15 22 29	5 12 19 26	3 10 17 24 31
Saturday	3 10 17 24 31	7 14 21 28	4 11 18 25	2 9 16 23 30	6 13 20 27	4 11 18 25

topic

5

## planning your own time

Session 5.1 Setting Priorities

Session 5.2 Planning Your Own Workload

SESSION 5.1

SETTING PRIORITIES

Objective : To enable trainees to examine systematically the things they have to do and to decide which should be given priority in particular circumstances.

Time : 2 - 2 1/2 hours.

Material : Ranking exercise "The United Farmers' Co-operative Society."

Session Guide :

- 1) Ask trainees to imagine themselves in a familiar situation; having far more things to do than time to do them. How should they decide which ones to do?

Trainees might answer that they first do the tasks that are the most important. Ask any so responding to say which of the following two tasks is the most important and therefore to be done first:

- i) preparation of the annual report due in a few months' time,
- ii) signing a Local Purchase Order for additional supplies of stationery.

Obviously, the first is most important but most managers would rightly select the second to do first - because it is more urgent.

- 2) Ask trainees what proportion of their time they spend in the field as opposed to that in the office. Most will agree that they spend too little time in the field. Ask them why this is so.

Their explanations might include the following points:

- There is no transport available.
- They have too much office work.
- They often achieve little in the field because no one is available to meet them.

- Visitors from elsewhere, including government officials, expect to find them in the office.
- They must be in the office to supervise the work of others.
- Routine field visits are very rarely more urgent than immediate office tasks.

Ask how this problem can be overcome. Trainees will probably suggest remedies such as:

- Supply another vehicle to the society.
- Improve the availability of spare parts.
- Increase the allocation of petrol or diesel fuel.
- Provide funds for an assistant manager.
- Improve telephone service in the field.

Stress that it is always easy, and usually pointless, to suggest that problems of this sort can be solved by the provision of extra resources from outside the society. Ask why this is so:

- Everyone prefers to suggest solutions beyond his control.
- Anyone who suggests that he himself can do something to solve a problem, without outside assistance, invites the question, "Why did you not do it before?"
- Change, even for the better, is usually uncomfortable; people naturally prefer to suggest changes which will probably never take place.
- Additional resources, of any kind, involve a greater need for management, which is the scarcest resource and the most difficult to bring in from outside a society.

3) Ask trainees to look again at the reasons put forward for failing to spend more time in the field. How could they be alleviated without outside resources?

- Allocate transport effectively for the most important purposes.
- Delegate whatever office work is less important than regular.
- Plan regular field visits so that farmers and others would know when they might expect to meet the manager.

- Do not treat unexpected outside visitors as more important than regular field contact. Expect them to plan their own visits.
  - Develop the ability and autonomy of existing staff by giving them responsibility for less critical tasks.
  - Plan office routine to minimise the need for management intervention. Establish certain times for the manager to be present.
- 4) Such improvement depends on planning and especially on the setting of priorities. Managers must be able to decide how to spend their time in relation to:
- the importance of the various tasks that need doing;
  - the urgency of those tasks;
  - the practicality of doing the tasks; obviously, a less urgent task in the field should have priority over an urgent one in the office if the manager happens to be in the field at the time.

Many managers set priorities and plans only at the day-to-day level; they may make the right decisions in response to what happens every day, but they never consider what should be their priority in the long term. Events are in control of them, rather than the reverse.

- 5) Remind trainees of the six objectives which were used in Session 2.1 and 3.1 for the Cotton Growers' Society. Allow trainees five minutes to rank them in order of priority. Opinions will differ. Ask trainees to comment on the following:
- (1) 90% membership achieved;
  - (2) 80% of members using fertilizer;
  - (3) extension service;
  - (4) construction of three storage depots;
  - (5) selection of appropriate processing machinery;
  - (6) holding three open meetings.

Although this may appear consistent in terms of the importance of the objectives, it could be argued that 90% membership depends on the meetings, and 80% fertilizer usage depends on the depots and the extension staff.

Trainees should then discuss which is more important, effective fertilizer use by existing members or increased membership. The answer clearly depends on the long-term aims of the society. This is a very difficult issue. Stress that there is no right or wrong answer here. Trainees must recognise the need to ask such questions; many societies fail because they do not.

- 6) Ask trainees to suggest similar long-term priority questions facing their societies, but which may not have been asked. Trainees might include such issues as:
- Is improved input supply more or less important than improved collection, processing and marketing?
  - Is membership education more or less important than staff training?
  - Should the society encourage its members to diversify their crops, even at the risk of lower incomes in the short-term?
  - Should the society encourage its members to change from subsistence to cash crops, even at the risk of possible malnutrition for their families?

These are questions of policy. A manager's job is to identify the issues on which decisions must be made, to advise the board and the membership as a whole, and then to suggest programmes to implement the policy decisions.

- 7) Ask trainees to describe situations where long-term policy priorities must be subordinate to short-term problems. Their suggestions might include drought, flood or other crises where short-term survival is all-important.

Ask trainees to recall examples of such crises. How did their societies deal with them? Did they distract management from the achievement of long-term objectives?

- 8) Trainees are now to do an exercise in setting short-term priorities. Stress that managers should not only react to messages, crises or instructions, as they are required to do in the exercise. They must also, most importantly, determine what must be



done to achieve the objectives of their society. They must fit these tasks in with those imposed abruptly on them from outside.

Divide trainees into groups of not more than five people. Distribute a set of the handouts to each and allow them up to 30 minutes to complete the assignment.

- 9) Reconvene the groups. Ask each one in turn to present and explain their sequence. Summarise these on the chalkboard/OHP in a table of the following form:

Item	Group X	Group Y	Group Z
A			
B			
C			
D			
E	Enter the rankings each group gives to each of the items, without yet commenting on what is correct and what is not.		
F			
G			
H			
I			
J			
K			

The groups' opinions will differ. The following is a possible order of priority, with some explanation for the choice:

- i) I - Clearly, the damage to the vehicle and the building may require immediate action. Stephen should deal with this first.
- ii) K - Members' livelihood may be threatened if seasonal credit is unavailable. This must be obtained as soon as possible, by handwritten submission if no other typist is available.
- iii) E - Stephen should be sure to send a message to Thasius via Eustace, asking him to return to duty at once.

- iv) A - This should be easily settled by reference to the records and a request for a receipt. Unchecked member discontent should not be allowed to fester.
  - v) C - Stephen should investigate the apparent failure to submit accounts as a high priority, but it is not the most urgent task since it will probably take some time to clear up.
  - vi) D - This may require some time to investigate, but the misunderstanding must be investigated and cleared up quickly in order to avoid rumours and loss of member goodwill.
  - vii) B - This is important, but may take some investigations, and needs further specific information from the mill. It is too vague a complaint to merit high priority.
  - viii) J - Eunice could probably deliver a membership form quicker than anybody else, so this should await her return.
  - ix) G - Thasius has not displayed the necessary qualities, in that he has absented himself without leave. This letter cannot be dealt with unless it is discussed with him in any case, and can therefore await his return.
  - x) F - Unless the society is in dire need of stationery, a polite note apologising for any inconvenience can be sent when Eunice returns and her workload permits it.
  - xi) H - Personal matters must not come before the society; Stephen should deal with this as he thinks fit but in his own time.
- 10) Stress that the particular order of priorities selected is less important than the need for methodical setting of priorities and day-to-day, and even hour-to-hour, work planning.

Trainees should ask themselves, when they return to work after the course, "Am I really doing the thing which most urgently needs to be done, or am I taking the easy option by doing something which is easy to do and delaying things that are difficult or embarrassing?"

- 11) Ask trainees to keep the handouts for use in the following session.

The United Farmers' Co-operative Society

It is Monday morning on November 30th, and Stephen, the manager of the United Farmers' Co-operative Society, has just returned from a two-week training course on planning. He finds the accompanying set of papers on his desk, awaiting his attention.

The society has about 250 members and collects, grades, stores and markets its members' crops, which are planted in March and harvested in October. Stephen's own secretary, Eunice, will type his letters adequately but is really not capable of acting as an assistant or making any decisions on the manager's behalf. The stores and accounts clerk, Thasius by name, is fairly competent at his job of keeping the books and stock records and preparing quarterly and annual figures, but he has neither the experience or time to do anything else.

Victor, the stores foreman, has Kismet and Eustace working for him in the stores. The society also employs Gray and Majid to drive its two three-ton-lorries. The manager has a motor cycle provided for his own personal transport.

Stephen realises that he is bound to be disturbed at his work by members of the staff with their problems, so that it may take some time before he is able to deal with all the papers. He therefore decides that he should first place them in order of priority, before actually dealing with any of them. In this way, he believes, he will be sure that he spends his time most profitably for the society.

Assignment :

Rank the papers in order of priority, number one being that which the manager should deal with first and number eleven being that which he should deal with last. You should not at this stage decide how he should deal with them, but only their order, and you should be prepared to explain why you have chosen this order.

Item A

November 24<sup>th</sup>

Stephen,

Jonah, membership No 192, came in and said that his account had not been credited for 20 bags he delivered in June.

I could find no record of such a delivery, he says he wants an explanation right away.

Thasius

Item B

# The Union Milling Corporation

13 November 1983

Dear Mr Stephen,

We are attempting to improve the quality of our products, and this of course depends on what we receive from societies such as your own.

I note from our records that your society appears to be failing to maintain the standards expected in the co-operative movement. I should be grateful if you would explain the situation as soon as possible so that we can decide what action to take before next harvest.

Yours sincerely,



B. Cribalot

General Manager

Item C

# MEMO

---

FROM: The Regional Co-operative Auditor

TO: Mr. Stephen, Manager, United Farmers Co-operative  
Society

DATE: 25 November, 1983

I AM CONCERNED TO NOTE THAT THE QUARTERLY ACCOUNTS FOR YOUR SOCIETY FOR THE PERIOD ENDED 30TH JUNE 1983 HAVE NOT YET BEEN SUBMITTED, WHEREAS THE ACCOUNTS FOR THE QUARTER ENDED 30TH SEPTEMBER WILL BE DUE BY THE END OF THIS WEEK.

PLEASE FORWARD BOTH SETS OF ACCOUNTS BY RETURN.

Item D

Mr. Stephen,

Mr. Victor asked me to remind you as soon as you return about the crop infestation disease which affected members' crops last year. Some members say that they were promised some medicine to put in the ground in order to avoid the problem next year, but they have heard nothing since.

Eunice

Item E

From: Tharvus  
To: Stephen

I have had to take my 1984 three weeks leave entitlement in advance because my father's brother has passed away. Please excuse any inconvenience, I shall do my best to return by the middle of December. Please ask Eustace to bring my wages for November, he passes very near my uncle's farm everyday.



Item F

---

***The National Printing Company Limited***

November 12, 1983

Dear Mr. Stephen,

Our Representative will be visiting your area and plans to call on you on Tuesday, November 24 to introduce our new line of stationery to your Society.

I should be grateful if you would see him, the enclosed sample will give you some idea of the quality we can offer.

Yours sincerely,



F. Sellalot  
Sales Manager

---

Mr. Stephen,

The Representative called on Tuesday, he seemed rather annoyed that you were not here.

Eunice

Item G

THE NATIONAL HOUSING FINANCE CORPORATION

Dear Sir,

Mr. Thasius has approached us for a mortgage in order to buy a house, and he tells us that you will be able to vouch for his moral probity, financial responsibility and employment security.

We also need to know his exact salary, net of deductions.

We look forward to hearing from you and many thanks for your help.

Yours faithfully,



G. Lookalot  
Chief Accountant

Item H

Steve: I am sending this note by  
Najid. You are my most respected  
cousin, and I am in trouble  
with the police. Could I ask  
you to send a message saying  
when I can come and see you,  
and enclosing \$10 or so to  
enable me to buy food for my  
family

Your loving cousin

Edgar

Item I

MR Stephen,

I am very sorry Sir, I did not intend to do what I did to the truck, nor to the godown wall either. I crave mercy I always drive satisfactorily & clean licence first mistake. Family of 15 children depend on your mightiness.

Gunny

Item 1

November 27th

Mr. Stephen,

I am not feeling at all well and I am afraid I have got the flu. I hope I can get back to work by the end of next week, I have put all the papers on your desk.

Eunice

P.S. My brother Edun wants to join the Society. Please allot him a membership number and send him an application form, c/o myself, at your earliest convenience.

Item K

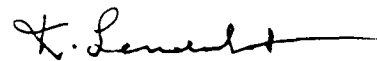
## THE CO-OPERATIVE BANK

18 November 1983

Dear Mr Stephen,

Co-operative Society Consolidated loan applications for the 1984 seasonal crop lending programme should have been submitted by November 16th at the latest. We note that your Society has not submitted its application. If this does not arrive by the end of the month, we cannot be sure that your Society can be included in the allocation procedure.

Yours sincerely,



K. Lendalot  
Manager

SESSION 5.2

PLANNING YOUR OWN WORKLOAD

Objective : To enable trainees to plan their own daily workload and to modify it as needed.

Time : 2 1/2 - 3 hours.

Material : Planning game "Stephen's Diary".  
Handouts from Session 5.1.  
Diary page.

Session Guide :

1) Ask trainees if they keep a diary at work to record forthcoming appointments and so on. Ask one or more trainees who do keep such a diary to describe it briefly. If appropriate, circulate a page from a typical day or week. What does it contain? Most diaries contain no more than the following:

- a note of the time and place of specific meetings involving other people,
- a few reminders of minor tasks which may otherwise be forgotten.

What proportion of a typical day is actually occupied by the events or tasks noted in the diary?

- It would be unusual for the appointments listed in a typical diary to actually occupy more than 4 or 5 hours of a 40 hour work-week. How do managers occupy the rest of their time in:
  - general administrative and management tasks and
  - dealing with correspondence (as in the last session)?

Trainees may have difficulty in actually accounting for all the time they spend at work. This does not necessarily mean that they are not working hard.

2) Ask trainees to attempt to define the essential difference between the work of a manager and a doctor, a farmer, a priest or a mechanic.

Managers do things through other people:

- They do not generally keep books, drive lorries, load crops or teach classes.

Clearly, a manager has to do more than just tell people to do things; how does a manager actually do his job of managing other people?

- He decides what should be done (setting objectives).
- He decides how it should be done (planning).
- He decides by whom it should be done (usually allocating some tasks such as report writing, negotiating with other organisations or setting prices to himself).
- He monitors progress and ensures that the tasks are correctly carried out by instructing, encouraging, assisting, motivating and generally working with the people for whom he is responsible.

Management is sometimes described as "decision-making". Ask trainees how much of their time they really spend making decisions.

Managers actually spend most of their time communicating. They may be obtaining information as a basis for making future decisions, or ensuring that earlier decisions are being carried out; but the actual process of analysis and decision-making occupies very little time.

3) Ask trainees why the diffuse and varied nature of management makes it hard to be an effective manager.

- A doctor or a mechanic knows whether he is doing the job or not at any time. A manager cannot be sure; he may be busy but wholly ineffective. He does not have immediate "feedback" (in the form of sick patients or non-functioning machines, for instance) to warn him of his failure.

Regular personal planning can help to make ineffective use of time less likely, reducing the risk of "aimless busyness".



4) Ask trainees to describe and contrast a manager who totally fails to plan his work with one who plans everything very carefully. How do they differ in the way they spend their working time?

- A non-planning manager reacts to what happens in his society from one moment to the next. He attempts to deal with things as they come up. He is certain to be diverted as some other task presents itself.
- A highly organised manager works to a schedule and refuses to be diverted by anything else.

Ask trainees which of the two extremes is the best. They may opt for the extreme planner since this is a course on planning, but over-rigid planning can be as bad as no planning at all. How will such a manager respond to a request for advice from a subordinate or an unexpected visit by an influential or highly irritated member?

5) Trainees are now to participate in a planning game. The objective is to demonstrate the importance of effective but flexible planning, to give trainees practice in dealing with unexpected occurrences.

Divide trainees into teams of not more than five members each. Explain the game as follows:

- Each team is to represent the manager of the United Farmers' Co-operative Society described in the previous session. The team is to plan the forthcoming week's work and then to adjust the plan as events unfold during the week, so as to complete as many high-priority tasks as possible, leaving only those of low-priority undone at the end of the week.
- Each trainee will be given a list of tasks which the manager believes he should do during the week and a note of how long each is expected to take. He will also have the various documents which he found on his desk and which were dealt with in the last session.
- Trainees will also be given the manager's diary for the week, which already includes a number of appointments. They will be allowed up to 45 minutes to decide which tasks should be done, and when, and to complete the diary accordingly. They may, if

they wish, cancel appointments already made if they considered something else to be more important.

- Trainees will then work through the week; a variety of unexpected events will occur. Trainees will have to decide whether or not these justify altering their plans. If so, they will have to make the appropriate changes in the diary.
  - Trainees will check which tasks they have or have not completed at the end of the week. The instructor will then announce "penalty points" for each uncompleted task; the higher the priority of the undone task, the greater the penalty. The team which accumulates the least penalty points will be the winner. If possible, a suitable prize should be made available to the winning team.
  - The game should give trainees an opportunity to practise effective group decision-making as well as short-term workload planning. Teams should be allowed no more than 15 minutes to react to each occurrence and to any changes they think fit.
  - In the interests of simplicity, each day is broken up into 16 thirty-minute segments. Although some tasks may, in fact, be completed in far less than 30 minutes, teams may only allocate times to tasks in multiples of 30 minutes. No allowance is made for lunch, although this is also rather unrealistic. Tasks may be carried over from one day to the next, but if they must be done outside the office, travel time must be allowed for the manager to return home and back. (1/2 hour in each direction.)
  - When filling in the diary, trainees should use the code letters given to the various items in the last session, included in the handout material and in announcements by the instructor.
- 6) Distribute copies of all papers for this session to the trainees. Ask them to read them through. Deal with any questions or misunderstandings. Make sure that all trainees have copies of the papers of the previous session. Allow them up to 45 minutes to complete the initial plan for the week. Look at their work to see that they have understood what is required. Point out that they may wish (and may be wise) to leave blank periods to allow for unexpected events.

7) When the initial diary has been completed, start the game by announcing the following event for Monday:

- Eunice, the secretary, returns at lunch time.
- The meeting of the Community Development Group (if not cancelled) lasted an extra hour, so that anything scheduled at 3.00 p.m. or 3.30 p.m. could not be completed.

Allow teams up to 15 minutes to re-adjust their schedules, before proceeding to the following day. Allow a similar time after announcing the events of each day.

Tuesday:

- The Registrar's Department Inspector fails to turn up, thus freeing the two hours allocated for this visit.
- A letter from the Co-operative Insurance Company warns the society that unless its renewal instructions are mailed this week the society's insurance will lapse. There are a number of changes required before the instructions can be sent. C<sup>o</sup> time = 3 hours.

Wednesday:

- Thasius returns to work.
- Stephen's motor cycle breaks down, thus adding one hour to any field visit scheduled for the day, and making him one hour late for any meeting scheduled immediately after his return from the field.

Thursday:

- A team of researchers from the university arrives to gather information for a survey. They need a wide range of data, and would like to have lengthy discussions with Stephen. D<sup>o</sup> time = 2 hours.
- A small group of members calls at the office. They are seriously concerned about what they feel to be inadequate services of the United Farmers' Society. They ask Stephen to meet with them then and there at 3.30 p.m., to discuss their problem. E<sup>o</sup> time = 1 1/2 hours.

Friday:

- A sudden storm has damaged the roof during the night. No work can be done in the office until 11.00 a.m.
- A prominent member invites Stephen to lunch at short notice. F<sup>o</sup> time = 2 hours plus travel.

8) Allow teams up to 20 minutes to list the tasks which they have not completed and to finalise their diaries, which list the tasks that they did complete. They may require further copies of the blank diary page, so that they can hand in a legible copy. They should also keep a rough one for their own reference.

9) Collect the lists of uncompleted tasks and the diary sheet. Read out the following list of penalty points, stressing that the points are awarded in a scale from 0 to 5:

- "0" means that the task is of low priority and no damage will be done if it has not been completed during the week.
- "5" means that it is a high-priority task and severe damage will be done to the society if it has not been completed during the week.

A = 3 points	I = 5 points	Q = 1 point/day	Y = 3 points
B = 2 points	J = 2 points	R = 3 points	Z = 5 points
C = 3 points	K = 5 points	S = 2 points	A <sup>o</sup> = 1 point
D = 3 points	L = 2 points	T = 1 point	B <sup>o</sup> = 5 points
E = 5 points	M = 4 points	U = 5 points	C <sup>o</sup> = 5 points
F = 0 points	N = 3 points	V = 1 point	D <sup>o</sup> = 1 point
G = 1 point	O = 0 points	W = 3 points	E <sup>o</sup> = 4 points
H = 0 points	P = 2 points	X = 5 points	F <sup>o</sup> = 2 points

Explain and discuss these penalty point allocations as appropriate. If possible, an assistant should carefully check the trainees' diaries and lists and calculate the penalty points for each team. He should ascertain that all tasks claimed to have been completed have, in fact, been allocated sufficient time in the diary, and that all those omitted are listed as uncompleted.

10) Announce the result, and, if the prize is available, make the award at this time. A total of 20 or less penalty points represents excellent planning; under 30 is good, under 40 is ad-

equate and anything over 40 suggests that far too much time is being wasted on low-priority tasks.

Stress that while the game is not entirely realistic, it is designed to emphasise the importance of careful use of time, detailed planning and flexibility. No manager has enough time; good management has been defined as "making the best use of scarce resources". Since time is the scarcest and most valuable resource, a good manager is one who does not waste time complaining that he has not enough of it, but carefully allocates what he has in order to achieve the best results.

Stephen's Diary

Your team represents Stephen, the manager of the United Farmers' Co-operative Society. You have just returned from a two-week training course on Practical Co-operative Planning. You have found on your desk the papers already dealt with in the previous session. You have now ranked them in the following order of priority, and have decided to deal with them briefly as described below. (You have also estimated how long it will take in each case.)

1)	I:	Investigate damage to vehicle and godown	1 hour
2)	K:	Prepare seasonal credit submission	4 hours
3)	E:	Instruct Eustace to tell Thasius to return to work	1/2 hour
4)	A:	Investigate member's complaint	1/2 hour
5)	C:	Check progress on quarterly accounts	2 hours
6)	D:	Investigate misunderstanding over soil treatment	1 hour
7)	B:	Examine the quality records and reply to Mill requesting further information	3 hours
8)	J:	Issue membership application number	1/2 hours
9)	G:	Discuss Thasius' reference request and reply	1 hour
10)	F:	Reply to printing supplier	1/2 hour
11)	H:	Deal with family problem (outside working hours)	nil

In addition to these tasks, Stephen knows that a number of other things should be done and also has several appointments in his diary for the week. Tasks requiring travel to the field require an extra 1/2 hour in each direction; if two or more tasks in the field are carried out consecutively, no additional travel time is required for travel between them.

The tasks Stephen feels should be done and the approximate time each will take are as follows:

L:	Prepare job description for Thasius, since his is a new appointment.	1 hour
M:	Have annual performance appraisal meeting with Victor, which was due two weeks ago.	1 1/2 hours

- |    |   |                     |
|----|---|---------------------|
| N: | Carry out routine visits to members in the field, which should be done on a weekly basis when possible.   | 3 hours<br>+ travel |
| O: | Visit office equipment supplier in town, in answer to a long-standing invitation to lunch and to inspect new typewriters and duplicating equipment. | 2 hours<br>+ travel |
| P: | Analyse performance record of processing machinery, for summary and entry in annual records.  | 1 hour              |
| Q: | Carry out regular warehouse inspection, daily when possible, at random times during the day.  | 1/2 hour<br>per day |
| R: | Instruct Victor, Eustace and Kismet in a new method of fumigation.  | 2 hours             |
| S: | Carry out regular quarterly inspection and test driving of Majid's vehicle, due last week.  | 1 1/2 hours         |
| T: | Check and send in regular weekly report of vehicle mileage and fuel consumption.  | 1 hour              |
| U: | Calculate staff wages and deductions, ready for payment on Friday.  | 2 hours             |
| V: | Visit neighbouring society to examine new type of storage bins.   | 2 hours<br>+ travel |
| W: | Inspect stocks of bags to decide how many should be discarded, how many repaired, how many retained and how many re-ordered.                        | 1 1/2 hours         |

Stephen's diary for the week is reproduced on the attached page. A variety of other calls on his time will probably arise during the week, and you should now decide which of the tasks listed above will be done during the week, and when, and which you will leave until the following week or later. You should complete the diary accordingly, using the code letters for each task.

If you believe that any of the tasks in the above list, or in the papers on Stephen's desk, are more important than those recorded in the diary, you are free to cancel any of these appointments already made; but you cannot re-schedule them during that week if time later becomes available.

When you have done this, the week will "start", and the instructor will announce various events. If these involve things to be done, the instructor will write them on the chalkboard/OHP, together with a code letter and the time each will take. You should include those which you think you must deal with. Amend the diary accordingly from day-to-day. Tasks which can obviously be "split" and have another task in the middle of them can be divided in this way.

At the end of the "week", you should list all the code letters and diary items not completed. Give the list to the instructor together with your finished diary page, which includes all the tasks you have managed to complete, indicated by their code letter.

The instructor will then announce the penalty points attributable to each task not completed, and will calculate the number of points incurred by each team. The team with the lowest number of penalty points will be the winner.



Diary Page

Time	Monday	Tuesday	Wednesday	Thursday	Friday
9.00 a.m.					
9.30 a.m.					
10.00 a.m.		Y			
10.30 a.m.		Y			
11.00 a.m.		Y			
11.30 a.m.		Y			
12.00 noon					
12.30 p.m.				A°	
1.00 p.m.				A°	
1.30 p.m.	X			A°	
2.00 p.m.	X			A°	
2.30 p.m.	X				
3.00 p.m.					
3.30 p.m.					
4.00 p.m.			Z		B°
4.30 p.m.			Z		B°

X = Community Development Group Meeting (1.30 to 2.00)  
 Address Community Development Group (2.00 to 3.00)

Y = Receive visit from Registrar's Department Building  
 Inspector (10.00 to 12.00)

Z = General Purpose Committee Meeting (4.00 to 5.00)

A° = Travel (12.30 to 1.00 and 2.00 to 2.30)  
 Visit Vehicle Supplier (1.00 to 2.00)

B° = Pay Wages (4.00 to 5.00)

topic

6

## overcoming barriers

Session 6.1 Persuasion and Influence

SESSION 6.1

PERSUASION AND INFLUENCE

Objective : To enable trainees to identify personal and institutional barriers which may hinder the achievement of their societies' objectives and to plan to overcome these barriers effectively.

Time : 2 - 3 hours.

Material : Case-study "Indrajit's Influence". (This should be amended as necessary to take account of local circumstances. It should be distributed to individual trainees the day before the session, so that they can read and consider it before completing the assignment in groups.)

Session Guide :

- 1) Ask trainees to recall the main lessons and techniques to which they have been exposed during the preceding sessions; they should mention at-least the following:
  - The need to be aware of the fundamental aims of the co-operative, and the need for clearly stated measurable objectives.
  - The need to identify all the activities required to complete a task.
  - The need to identify the resources required for any activity, and to plan so that they will be available.
  - The need to estimate the staff workload, and to allocate and schedule tasks to avoid uneven workloads.
  - The use of planning charts.
  - The critical path technique.
  - The need to involve, in the planning work, those responsible for implementing the plans.
  - The need for flexibility and rapid reaction to change.

- The need to set priorities and to distinguish between what is important and what is urgent.
- The need to identify pressure groups and individual interests, and to try to satisfy these in order to achieve society objectives.

Point out that many co-operative managers appreciate all these matters and also master the actual planning technique. Still they fail to achieve society objectives, because of certain specific difficulties which they cannot overcome.

2) Ask trainees to recall a situation where they failed to obtain for their society something which they wanted. Examples might include:

- failure to secure an increased budget for fuel;
- failure to obtain an allocation of an extra vehicle;
- failure to arrange for the transfer of a much-needed staff member;
- failure to secure a sufficient allocation of fertilizer;
- failure to obtain priority services from a tractor or other common service facility.

Ask trainees what stopped them from getting what they wanted.

Answers might include:

- The resource was in short supply, so that there was not enough to satisfy everybody.
- Another society or other organisation competing for the same service presented a better case.
- Their own society actually did not have as good a claim on the resource as the other organisation which was more fortunate.

Ask what really determined who succeeded and who failed. Why are some organisations more successful than others in securing allocations of scarce resources, or otherwise getting what they want?

3) Trainees will soon mention "politics" as the real origin of most of their difficulties. Ask them what they really mean when they blame their problems on "politics".

Their answers will vary, but might include the following points:

- Some managers know the "right people" and therefore get what they want.
- Some societies are located in areas which have more powerful political representation and thus receive better services.
- Some managers or committee members use their personal connections to bring pressure on those responsible for allocating scarce resources.
- Managers or committee members may corrupt powerful officials by entertaining them or making special favours available to them.

Trainees may be reluctant even to mention methods of this sort. The term "political" is often used to mean "illegitimate", "unfair", "illegal" or "immoral".

Ask trainees for examples where scarce resources have been allocated to other organisations, or some other decision has been made against the interests of their society, because, they believe, "illegitimate" methods of persuasion were used.

Choose an example which is not illegal, but which involves indirect manoeuvring, subtle pressure and possibly threats. Ask the trainee who mentioned it and others to say why they believe the methods employed have been "wrong".

Their answers will inevitably do no more than repeat words already used such as "unfair", "illegitimate" or "underhanded".

4) Ask which is worse:

- a manager who used methods of this sort, within the law, and thus achieves his society's objectives and benefits his members accordingly;
- a manager who adheres strictly to formal procedures by submitting reports and written requests thus failing to obtain beneficial resources for his members.

Ask trainees to mention examples of highly successful managers of co-operative societies or other organisations. Is their success

the result of familiarity with planning techniques or "principles of management" or because they have successfully persuaded people to do what they want?

Ask trainees how they measure success in management:

- by what a manager does from day to day?
- by what a manager achieves for his organisation?

Clearly, success is judged by results and not by activity. Stress that "politics" is as much a part of management as anything else. Trainees must consider this as a legitimate and important part of their work which they must plan and implement like any other.

- 5) Ask trainees what basic principles underlie their own and other managers' decisions; what leads them to make the decisions they do?

Trainees may mention generally accepted reasons such as:

- the good of their organisation;
- benefit for the co-operative movement;
- the good of the nation as a whole.

Ask trainees if there could be other motives behind a manager's behaviour or decisions.

Elicit motives such as:

- desire for personal advancement;
- desire for personal security;
- desire for status and power;
- desire for personal public recognition;
- desire for respect from colleagues and subordinates;
- desire for money;
- desire for more leisure.

Stress that we must not forget such motivations, since they stimulate people to behave in certain ways. Stress that the reverse is

also true; fear of loss of any of these personal benefits can also effect behaviour.

Managers must be aware of the strength of both positive and negative motives and what really lies behind a manager's decisions.

- 6) Divide trainees into groups of not more than five members each. Distribute the case-study and allow up to 45 minutes for the assignment to be completed.

Stress that Indrajit will have to influence certain people. This requires action just like any other aspect of management. Groups must come up with specific recommendations for things Indrajit must do, not general guidelines which may raise more questions than they answer.

Reconvene the groups. Ask each one, in turn, to present their suggestions. Briefly summarise the salient points of each on the chalkboard/OHP.

Before asking trainees to compare, comment on and discuss the various alternatives, stress that they should be presenting a plan of action. -Group recommendations:

- must have a specific objective;
- must be something that Indrajit can actually do;
- must be realistic and feasible.

Suggestions such as "influence the civil servants" are not enough; trainees must say how Indrajit can identify and reach the right people, and with what message.

- 7) Group views will obviously differ. There is, of course, no right or wrong answer to a problem of this sort. The purpose of the case-study is to show that it is necessary and possible to:
  - identify the people responsible for decisions which vitally affect a society:
  - determine what their specific interests and needs are;

- design ways of satisfying these needs which at the same time minimise the damage to the society or even actually benefit it.

An outline of one possible approach to the problem might be as shown on Sheet 4.

Indrajit should immediately prepare a detailed but simple brief, outlining the present situation and demonstrating the likely effects of the proposed change. The objective should be to identify as many influential people as possible, including Mr. Rich himself if this can be done, with the existing system, so that they cannot logically attack it.

- 8) Trainees may feel that this type of planned public relations campaign is not their function. Stress that "political" problems of this sort are the most important ones they face. This is the way in which they should attempt to overcome them.



Influential Individual or Group	Need	Suggested Approach by Indrajit
Local MP	Votes and support	Set up a large delegation of members to call on the MP, followed by detailed personal briefing by Indrajit and one or two influential members.
The Co-operative Bank	Continuation of profitable and trouble free lending operation	Direct contact by Indrajit at local level, indirect contact at HQ level through personal introductions.
Powerful Individual Members	Continued efficient fertilizer supply	Indrajit to convene an informal meeting; members to identify their own personal contacts and to prepare an integrated programme of contact and "lobbying".
Ministry of Agriculture	Continued smooth operation of system	Invite Minister or senior staff to visit and observe the Modern Maize Growers' Society fertilizer supply and credit system. Personal contact and discussion at local level.
Maize Marketing Board	Adequate supplies of maize, avoidance of illegal trader purchases	As for Ministry of Agriculture, invite visits by senior level staff and fully brief and discuss situation with staff at the local level.
Mr. Rich	Wealth and status	Obtain personal introduction and consider inviting him to see the society, learn to know the area and its people, possibly engage him in some local activities.
The General Public	Continued economic supplies of maize	Contact editors of journals, radio and newspapers, "place" articles describing the existing system and pointing out the dangers of change.
The Membership in General	Continued good income	Brief members informally and at a special meeting. Consider a mass delegation to Parliament if necessary.

Indrajit's Influence

Indrajit realised that the threat facing his society was one for which his co-operative management training courses had in no way prepared him. Nevertheless, it was perhaps the most important challenge he had met in his four years of experience.

The danger, as he saw it, was not only that all his work on the fertilizer distribution scheme would be wasted, but also that the very existence of the co-operative was in doubt.

The Modern Maize Growers' Society had been established some ten years ago, when the government set up the National Maize Marketing Board. This took over the distribution of maize from the extortionate alien traders who had long exploited producers and consumers alike. At that time, it had been laid down that the Board would only purchase maize from co-operative societies, not from individual farmers or traders. As a result, hundreds of new societies rapidly had to be started.

In many cases these were failures. Some quickly fell under the influence of a small number of large farmers who manipulated the co-operatives in their own interest, exploiting the weaker members as badly as had the foreign traders. Other societies collapsed altogether, forcing farmers either to sell at high prices to illegal traders or to stop producing surplus maize at all. In most cases, however, the societies performed their trading function reasonably well. They did not become the "powerful instruments for rural revolution" which some politicians had said they should, but at least they provided farmers with slightly better prices than before. They did enable the Marketing Board to purchase the surplus maize without too much difficulty.

Four years ago, when Indrajit came to the Modern Maize Growers' Society, it was typical of the moderately successful co-operatives in the country. All wishing to sell maize in the area designated for the co-operative were members, as required, and most sold the bulk of their maize through the society. Some sold their surplus maize through illegal channels at times of shortage when local market prices were higher, or when they wanted cash more quickly than the co-operative's payment system could provide it. They also sold illegally when obliged to sell to traders who had lent them money during the growing season.

Indrajit had made some remarkable changes during the four years he had been manager. He had totally overhauled the society's payment system, so that farmers received their money very quickly indeed. He had successfully persuaded a number of the more powerful local farmers (including the local member of parliament who owned a small farm in the area) to become involved in the society's affairs. Previously, they had ignored the co-operative, some selling most of their maize through illegal channels or acting as illegal traders for their own and other smaller farms.

In addition, Indrajit had started a fertilizer supply service which was a model of its kind. Most members had not until then used any fertilizer; those who did bought it from private traders who provided no accompanying advisory service, charged high prices, and offered no credit. The Ministry of Agriculture operated an extension service but it was very badly organised. Its extension agents very rarely came to the area covered by the co-operative. Indrajit himself had introduced fertilizer to some of the more influential farmers, who, in turn, demonstrated its advantages to others. By now, over 60% of members were using fertilizer correctly, and the proportion was increasing every season. Indrajit had arranged a seasonal credit scheme in conjunction with the Co-operative Bank. This functioned so effectively that the principles of the scheme had been copied in a number of other areas, largely at the bank's suggestion.

A year ago, there had been a complete change in government policy towards co-operatives and, indeed, towards most other aspects of the economy. The country was suffering from chronic inflation and balance-of-payments problems. A new president had been appointed who was now introducing new measures to liberalise the economy. These included opening of the trade in maize to private traders. Some local people had immediately started trading in maize, especially in areas where co-operatives were inefficient. A number of societies had come near to collapse as a result, but the Modern Maize Growers' was very efficient and had little to fear from private competition. The private traders had secured a small proportion of the business, but Indrajit thought that this was a useful stimulus to the efficiency of his own co-operative. It proved to have that effect. Members became increasingly concerned to promote their own society's efficiency, proud of the good reputation that their organisation enjoyed.

Now, however, the trend towards encouragement of private industry had led to a far more dangerous proposal. The famous Mr. Rich, who enjoyed wide political influence and was involved in a number of large businesses, had secured a majority share holding in the recently de-nationalized Fertilizer Corporation. In the country as a whole, very little fertilizer was used. Mr. Rich had negotiated a joint venture with a multinational chemical company whereby it would construct a major new fertilizer manufacturing plant, on condition that high import duties would be imposed on foreign fertilizer. The company would be granted the sole right to set up and control the distribution system to the farm level.

The main users of fertilizer, both actual and potential, were big farmers and plantations. It would be quite feasible for the company to distribute directly to them. The company also proposed to set up a network of depots to supply the needs of smaller consumers. In any case, it needed the government to approve the monopoly so that the joint venture agreement could be finalised and construction started on the new factory.

Indrajit was sure that the Fertilizer Corporation would never provide as good a distribution service as the Modern Maize Growers'. It would inevitably tend to favour larger customers. What Indrajit expected was that it would fail to satisfy smaller users for a year or so, and would then delegate its monopoly on supply to small farmers to one or two nominated private suppliers. There was no reason to suppose that the Fertilizer Corporation would provide any better service than it had in the past. It had never yet offered any advisory services. No mention of this important element had been made in the initial discussions with the Ministry of Agriculture, or so a friendly official had reported to Indrajit.

Locally manufactured fertilizer was almost certain to be more expensive than the imports currently used by the Modern Maize Growers' Society. Maize prices had already been substantially increased as part of the economic liberalisation campaign. Hence, it was unlikely that the government would risk greater unpopularity by allowing a further price increase to compensate for higher fertilizer prices.

Indrajit knew that if the society were deprived of the right to distribute fertilizer it would have to dismiss some employees. It would be impossible to eliminate totally the extra facilities and staff introduced to handle the fertilizer scheme. As a result, the remaining maize marketing business would have to bear higher overheads. This together with members' disappointment about the failure of the fertilizer scheme (almost certain to be blamed on the society) would probably lead to increased selling of maize through private channels. This would further increase the overhead costs chargeable to the remaining business. Indrajit foresaw a vicious circle which could only end in the total collapse of the society.

The monopoly proposal had not yet been formally presented to Parliament. Indrajit felt that once this happened, there would be little hope of stopping it. The question was being discussed in official circles, various administrative possibilities to simplify the change-over were being put forward by the Ministry of Agriculture, and Mr. Rich was quietly but vigorously lobbying MPs and other influential people inside and outside Government for their support. A brief mention of the proposal had appeared in the newspaper, referring to it as a possible addition to the new economic policy, but few people seem to have fully grasped its implications.

Indrajit knew that this was the most important problem he had yet faced. The normal routine of the society was sufficiently well-organised to run without too much regular attention from the manager; Indrajit could devote most of his time to this serious threat. His difficulty was that he did not know exactly what to do.

Assignment :

- 1) Identify the people or groups of people who could have some influence on the decision to take over the distribution of fertilizer from the Modern Maize Growers' Society.
- 2) Determine what their needs are, as individuals and institutions.
- 3) Make specific recommendations to Indrajit as to how he could influence the decision by satisfying the needs of those responsible for it in ways not damaging the society.

topic

7

# planning and careers

Session 7.1 Personal Long-term Planning

SESSION 7.1PERSONAL LONG-TERM PLANNING

Objective : To enable trainees to take an objective view of their own position and ambitions; to apply simple planning techniques to their own careers.

Time : 1 hour plus up to 3 hours individual work and as many one-to-one Instructor/Trainee counselling sessions as their wishes and time allow.

Session Guide :

- 1) Ask trainees what is the most important operation for which they are wholly responsible, which they must direct, and for which they must plan. They may refer to their society, or some aspect of it, but remind them that they must also manage their own careers. Which is most important?

Trainees may not previously have thought of themselves as something which they must manage in the same way as they manage a co-operative society. Stress that someone who cannot manage his or her own career is unlikely to be able to manage other people or the workings of a whole organisation. If someone can manage himself successfully, the organisation for which he is responsible will have a better chance of success.

- 2) Ask trainees to identify the two fundamental starting points of planning. Before trying to plan a manager must know:
  - the objective,
  - the resources available and needed?

Remind trainees of the aims of co-operatives discussed in Session 2.1. What might be appropriate aims for individuals like themselves? Trainees might suggest:

- to obtain a secure future for their families,
- to make a worthwhile contribution to fellow-beings and to society at large,

- to attain a position giving satisfaction from all other points of view.

Refer to the more specific, measurable objectives discussed in Session 2.1. What objectives might an individual define for himself in order to work towards his overall aim? Elicit such as:

- to earn a certain sum of money every year,
- to attain the position of manager of a certain co-operative society or one of a certain size,
- to attain, after a certain number of years, a position of even more responsibility and concomitant level of earnings.

- 3) Ask trainees to suggest what resources an individual must identify and work with, in the planning of his or her own career, in the same way as a manager of a co-operative must plan for the best use of human, physical, and financial resources and the environment.

If trainees refer to "money" as a resource for individuals, stress that money is seldom there initially as a resource to be managed. Money is, rather, the result of effective personal management. Try to elicit instead individual resources like those below, any of which might be lacking:

- physical health and strength,
- sound family support and encouragement,
- education,
- basic intelligence,
- an aptitude for and ability to work with figures, with technical equipment, with people, etc.
- energy, initiative, willingness to take risks, integrity, determination, etc.

Allow trainees up to ten minutes to write down, privately and individually, their five most significant strengths and weaknesses.

Tell them that they need not read them out, but should be ready to answer the question:



"How can a person plan his or her own career to take advantage of strengths and minimise the effect of weaknesses?"

- He/she can plan to overcome the weaknesses, by consciously undertaking training, or by setting clear, definable and realistic targets for overcoming those that cannot be remedied in a classroom.
- He/she can select a career where weaknesses would be least damaging. This will increase the chance of success.

Ask trainees for examples of weaknesses, possibly drawn from their own personal lists, and routes towards personal ambitions obviously inappropriate if the person had fully recognised the weakness in question:

- A shy and retiring person should not choose to advance through elected office or politics.
- A person with no aptitude for figures should not attempt to be an accountant.
- A person with poor stamina should not choose an occupation involving extensive field work.
- A person who cannot work happily in a large organisation with many rules and regulations should not aim to advance himself through a central office position.

What alternative plans might people with the above weaknesses, or others identified by trainees, make in order to achieve their overall aims?

- A shy person might concentrate on figures and accounting, aiming for success via reputation for diligence and thorough analysis.
- A person who dislikes figures might work in social service or personnel, or in a non-technical selling or extension job.
- A person with poor physical health might aim to work in a large organisation, rising through the office hierarchy by hard work and energy, without the need to spend long periods in the field.
- A person with a dislike of large organisations could remain in a small co-operative society or obtain a position in a small branch of a larger society.

- 4) Ask trainees to write down individually what they would like to be doing ten years from now; what overall aims do they have for themselves, and what position, in what kind of organisation, would they see themselves occupying then?

Stress that they need not show what they are writing to anybody else. If their ambitions lie outside the co-operative sector, perhaps in politics or business, they should admit this to themselves at least. They will not do themselves or the co-operative movement any good if they stay in it without really wishing to.

- 5) Ask trainees to compare what they have just written down with their brief notes as to major strengths and weaknesses. Are the two statements consistent?

If not, they should either modify their long-term goals and plans, or should take immediate steps to remedy their weaknesses. In either case, this must start with planning.

Trainees should now be ready to write for themselves a "personal corporate plan" which should be structured approximately as follows:

- a) A statement of their long term aims and objectives.
- b) A survey of their personal strengths and weaknesses.
- c) Identification of any inconsistency between the two, and of steps that must be taken to overcome this.
- d) Outline of a detailed year-by-year plan to reach the ultimate long-term objective, stating individual annual goals, and particular steps and sub-goals necessary.

This document should perhaps be four or five pages long, and need not be discussed with the instructor or anybody else. Allow trainees two to three hours or more to write their plans at leisure.

Stress that this is an invaluable exercise in personal development which can make a significant difference to the achievement of their own ambitions and to the success of the organisation they manage.

- 6) At an appropriate later time, ask trainees to bring their "personal corporate plans" to the instructor. If they wish them to remain confidential, they need only show the paper in order to demonstrate that they have completed the exercise.

It is probable, however, that a surprisingly large number of trainees will invite the instructor to read through, analyse and discuss their plans with them. Some may wish to go through the plan in front of the rest of the group and to invite comments on the feasibility of what they propose.

Personal exposure of this sort is not to everybody's taste, but it can be a very valuable exercise for anyone who wants to do it.. It can very significantly help other trainees who may realise that they are not alone in their problems and aspirations, and that a rational management approach is just as appropriate for personal planning as for a co-operative.

If necessary, the instructor may choose to offer an example by presenting his or her own personal corporate plan, asking trainees to comment on the strategy outlined for achieving it. An example of this kind, whether from the instructor or a trainee, can often lead to others volunteering to do the same, despite initial reticence. Time should be allowed for this. The whole reporting-back session should be scheduled in such a way that it can go on as long as necessary, but without embarrassment if it stops after only a short period.

topic

8

# action commitment

Session 8.1 Action Commitment

SESSION 8.1

ACTION COMMITMENT

Objective : To enable trainees to apply the planning technique they have learned to their own situations, preparing a plan for a common activity or a special project in their societies.

Time : Up to one day.

Session Guide :

- 1) Remind trainees about the short stories (micro case-studies) discussed in Session 1.2 on the first course day. The stories illustrated consequences of bad management - some societies lost money due to lack of planning or poor planning. Point out that one purpose of this course was to help the trainees to avoid such consequences by applying a proper planning technique in the management of their societies.
  
- 2) Remind trainees about the difference between the classroom experience they -are just completing and the reality of co-operative management. The two may very easily become unrelated. The ambition of this course, however, is that trainees should apply what they have learned in the classroom to the daily management of their co-operative societies.

Ask trainees to consider the costs and benefits associated with this course: the costs of the course have now all been incurred but benefits have yet to be gained. The last session must be seen, therefore, not as the end of a training programme, but as the beginning of individual trainee activities which will eventually more than repay the money and time invested. The last session should be a "bridge" between the classroom and the co-operatives.

- 3) It is assumed that trainees were told initially that at the end of the course they would be expected to prepare a detailed plan for some of the operations or projects they must implement on their return home. Part of this exercise involves the identification of the tasks involved in the operation.

This final day gives them an opportunity to develop the plan, using what they have learned during the course and in consultation with other trainees, and to present the solution to the whole group for criticism and comment.

- 4) Some trainees may not be able to identify any specific project which they must implement in the near future. If so, they should be asked to select a possible project or to work out a detailed plan for any of the common activities of their societies.

Those who cannot come up with their own suggestions may choose one of the following examples:

Possible special projects

To plan:

- the construction of a new building,
- the construction of any other plant or structure, e.g., a processing plant, a drier, an irrigation system, etc.,
- the re-organisation of the system for collecting and receiving agricultural produce from members, including setting up some new buying centres,
- making the society multi-purpose by opening a shop for consumer goods,
- the introduction of a new crop.

Common activities

To plan:

- the preparations for the buying season (collecting and receiving produce);
- the procedures and timing of credit services (information, applications, processing, disbursement, collection of loans);
- the supply services (planning, information, sales promotion, budgeting, ordering, receipt of goods, despatch to members, payments);
- a membership campaign (outline of total programme contents, design of each meeting and activity, prepare information material,

engage meeting leaders, train meeting leaders, prepare time plans, invitations, follow-up, etc.);

- the Annual General Meeting;
- the annual "Co-operative Day".

5) When all trainees have selected a special project or a common activity for this final, realistic planning assignment, organise their work along the following lines:

- Trainees who have selected very specific projects should work out their plans on their own. Those who have selected very common operations and have similar working conditions might work in groups, trying to design a "basic plan" first, to be later adjusted to each one's specific conditions.
- Remind trainees that the plans must be detailed. It is likely that some trainees still do not realise the need to include minor tasks, or simply cannot identify these tasks. Circulate among trainees. Check their initial lists of activities, assisting those who tend to forget details. Those who point out that they have difficulties in obtaining all the necessary information for the planning (e.g., regarding timing of certain activities) should be asked to make an assessment on their own in any case. They will at least have begun the groundwork and can easily adjust the plan later on.

Allow about two hours for this individual or group work.

- The trainees should then meet in groups of 5 or 6. Each trainee should now present his plan to the other group members. He should present the complete list of activities to be carried out, indicating the timing and relationships among all tasks. The other group members should then comment, criticize and offer suggestions on how to improve the plan. They should particularly try to identify tasks neglected in the total plan.
- Finally, all the groups meet in a plenary session. At least some trainees from each group, if not all, should now present their plans to the whole class of trainees. Time should be allowed for a short discussion of each presentation.

Through this procedure, each trainee gets the opportunity to prepare a work plan, to consult a number of experienced colleagues and to receive their advice.

- 6) Ask trainees to write out their final plans, with timing, charts and networks as needed, giving a copy of the plan to the instructor.
- 7) Tell trainees, that if at all possible, the instructor will visit each trainee at about the time for implementation of his plan. It must be stressed that the purpose of the visit is not to evaluate the trainee, but to measure the effect of the training course - to find out whether this course actually will help trainees to apply new and better planning techniques.
- 8) Trainees should be encouraged to arrange to meet each other at work after the course for continued "group consultancies".

If possible, a brief reunion of all course participants should also be arranged to take place after an appropriate interval. This can provide an opportunity for the trainees (i) to share their experiences in attempting to apply what has been learned, (ii) to describe progress in implementing their work plans, and (iii) to exchange ideas for more effective co-operative management and planning in the future.