FINANCIAL MANAGEMENT
material for management training in agricultural co-operatives

TRAINER'S MANUAL

international labour office, geneva
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by Malcolm Harper
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.

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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:

(i) 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
- Risk Management
- Project Preparation and Appraisal
- Work Planning
- Export Marketing
- Management of Larger Agricultural Co-operatives

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 PROGRAMME

1. **Target Group**

Target groups for this training programme on "Financial Management" are substantive and potential managers, assistant managers and accountants of agricultural co-operative societies. Co-operative officers and auditors could also benefit from the programme.

2. **Aim**

The aim of the programme is to enable trainees to prepare and use budgets and to analyse, interpret and act upon the accounts of a co-operative enterprise in such a way as to make the most effective use of the resources and so provide the best possible service to the society, its members and its customers.

In particular, the course should improve trainees' ability:

- to describe the condition of a co-operative society in financial terms, and to change the description to reflect changes in the society;

- to relate an operating statement to a statement of condition, and to identify the relationships between them;

- to appraise the financial condition and the management of a co-operative society by using appropriate financial ratios;

- to deploy the funds already within their societies as effectively as possible before looking outside for external funds;

- to identify the various external sources of funds available to a society, and to assess which are suitable in particular circumstances;

- to successfully apply for bank loans for their societies when this is an appropriate form of finance;

- to manage the movement of money within their society in such a way as to minimise the amount of idle money and maximise the opportunities for profitable investment;
- to appropriately grant credit to customers and to manage their accounts for the greatest benefit to the society;

- to maintain stocks at the optimum levels;

- to value stock in such a way that the figure gives an accurate picture of the financial position of the society;

- to select the most suitable method of financing the ownership or use of equipment or facilities;

- to plan the movement of money within their societies effectively;

- to decide on the most appropriate dividend or bonus distribution for the long term interests of their members;

- to explain the financial condition of their societies to the committee and members;

- to prepare, use and explain statements of the sources and uses of money in a co-operative society;

- to appraise the financial results of "sick" co-operative societies, and to recommend appropriate improvements;

- to demonstrate the need for budgets and to avoid common reasons for failure to prepare and use budgets effectively;

- to prepare estimates of the costs and revenue items that make up an operating budget;

- to prepare cash budgets;

- to use an operating and a cash budget as an aid to dealing with unexpected events;

- to use budgets effectively as a measure of management performance.

3. **Use**

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

4. Duration

The complete programme, as described in this manual, consists of 24 learning sessions. Session times vary from 1 to 3 hours. The total programme will take approximately 50 to 55 hours, or between 8 and 10 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 Financial Management 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.

Remember that knowledge is like fire, you can share it with other people without losing anything yourself. You should treat each trainee as a source of ideas and suggestions which are at least as valuable as your own, and the material is designed to help you to draw out, or "elicit", these contributions.

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 seven TOPICS and each topic is covered by a number of SESSIONS (see the table of contents on page X1). 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 prepare 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:

1. Read carefully; be sure you understand the content, and that you envisage what is intended to happen in the classroom.

2. 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.

3. Work through the case studies yourself, and try to predict all the possible analyses and answers which trainees may come up with.

4. Look up and write down on the material itself, as many local examples as you can to illustrate the points that are raised.

5. 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:

1. 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.
2. 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.

3. Bear all the learning points in mind, and do not forget the job-oriented objectives of the session.

4. Be flexible, do not follow the material slavishly and be prepared to change the approach, depending on what trainees, themselves, suggest.

5. Avoid, whenever possible, telling the trainees anything; in a successful session all the points will have been elicited from them by skillful questioning.

6. 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.

7. 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.

8. 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).

9. 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.

10. 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.

11. Write trainees' own words on the chalkboard whenever possible; do not follow the words in the material, even if they are more precise.
12. 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.

13. 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.

14. Call on the silent and, if necessary, silence those who talk too much.

15. Be sure that everybody understands what is going on; do not allow the discussion to be taken over by the few who understand.

16. 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 Financial Management, I hope that I shall be able to
....................................................................................................................
....................................................................................................................
....................................................................................................................
<table>
<thead>
<tr>
<th>TOPICS</th>
<th>SESSIONS</th>
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<tr>
<td>FINANCIAL STATEMENTS AND ANALYSES</td>
<td>1.1 Introduction</td>
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<tr>
<td></td>
<td>1.2 The financial picture of an enterprise</td>
</tr>
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<td></td>
<td>1.3 The statement of operations</td>
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<td>1.4 Financial ratios</td>
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<td>2.1 Loan hunger</td>
</tr>
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<td></td>
<td>2.2 Sources of funds</td>
</tr>
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<td>2.3 Bank loans</td>
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<td>THE MANAGEMENT OF ASSETS</td>
<td>3.1 Money management</td>
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<td>3.2 The management of accounts receivable</td>
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<td>3.4 Stock valuation and management</td>
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<td>WHAT MEMBERS WANT TO KNOW</td>
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<td>4.3 Sources and applications of money</td>
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<td>FINANCIAL PROBLEMS</td>
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<td></td>
<td>6.3 Cash budgeting</td>
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<td></td>
<td>6.4 Dealing with change</td>
</tr>
<tr>
<td></td>
<td>6.5 Budgeted and actual results</td>
</tr>
<tr>
<td>ACTION COMMITMENT</td>
<td>7.1 Action commitment</td>
</tr>
</tbody>
</table>
financial statements and analyses

Session 1.1 Introduction
Session 1.2 The Financial Picture of an Enterprise
Session 1.3 The Statement of Operations
Session 1.4 Financial Ratios
SESSION 1.1

INTRODUCTION

**Objective:** To demonstrate the importance of improved financial management in co-operatives, to ensure that all participants are aware of the objectives of the programme, to introduce trainees to one another and to ensure that all administrative details are in order.

**Time:** 1 to 2 hours.

**Material:** Completed pre-course questionnaire, timetable and a list of participants.

**Session Guide:**

1) The opening of the programme should be brief and to the point. The speaker should include the following points:

   - The need to make the best use of all available resources.

   - Examples of financial management errors which make co-operative societies perform less effectively than necessary. The reasons for these errors.

   - Examples of serious problems or failures that have been caused by inadequate financial management.

   - The essential and vital role and tremendous responsibility of a society manager in this context.

2) In order to exemplify the objectives and the contents of the course, confront participants with a number of questions like the following, and explain that the course will deal with problems of this type:

   - Are you sure that your society is using every cent of its capital in the most economical way? If not, do you know how the situation can be improved?
- Are you sure that every item of farm supply, or produce, which the society has in stock, will be sold for at least what it cost the society? If not, do you know what effect any failure to sell these items at cost will have on the society's results?

- Are you completely sure that every customer or member who owes money to the society will repay it, when due? If not, do you know which customers, and what amount, are most at risk and where to direct your efforts to improve the situation?

- Has your society ever been unable to pay its members, or suppliers, when it should? If so, what advance warning have you that it might not be possible to pay, and what did you do about it?

- Is the society always successful in obtaining bank loans when it needs them?

- Do all the members of your society completely understand and agree with the way the society is managed? If not, how successful have your attempts been to explain and justify the society's policies?

Emphasise that the programme is designed to enable managers to improve the financial position of their societies, not by begging for more money from Government or members, but by improving the management of the money they already have.

3) Go briefly through the timetable, stressing to trainees that they will be required to contribute their own experience and ideas, and not merely to listen to other people talking. People learn by doing, rather than by listening.

4) Ask each trainee to summarise his prior training and experience, and to state what he hopes to gain from attending this course. Refer to the pre-course questionnaire if necessary. Identify the special experience that each trainee brings to the course, emphasising the point that the group as a whole is an extremely powerful source of expertise and experience.

5) Explain that the purpose of the course is to improve trainees' abilities actually to manage their societies more effectively, and
not merely to repeat theories or principles without putting them into practice. Explain the main features of the "Action Commitment" which is included in this programme:

- Before the end of the programme each trainee is expected to have identified at least one major problem, related to financial management, which they are going to solve on their return home.

- During the final course day (Session 7.1) everyone will work out, in consultation with fellow trainees, detailed "action plans" to which trainees will commit themselves for solving the problems.

Tell trainees that the instructor intends to contact them at a later date in order to assess how successful they have been in implementing their plans. The course, rather than they themselves, will be evaluated by their success.

6) Ensure that any administrative problems are dealt with. Matters of accommodation, payment of expenses, transport, rooms for private study and any other points of information should be settled now.
SESSION 1.2

THE FINANCIAL PICTURE OF AN ENTERPRISE

Objective: To enable trainees to describe the condition of a co-operative society in financial terms, and to change the description to reflect changes in the society.

Time: 1 to 2 hours.

Session Guide:

1) It is assumed that trainees have some basic knowledge of book-keeping and accounts. Many good book-keepers and accountants, however, have the skills necessary to prepare accounts but are not able to describe exactly what these accounts mean, or to use them as a basis for improved financial management.

The session introduces basic accounting concepts from a rather unusual perspective. This may be unfamiliar or even unacceptable to some traditionally trained accountants, but it is hoped that all participants will gain a greater understanding of the real meaning of accounts, and of ways in which such accounts can be explained to people with no knowledge of accounting.

2) Write on the chalkboard/OHP* a number of common accounting terms such as "debtors" "creditors" "balance sheet" "debit" "assets" or "liabilities". Trainees may know their meaning, but stress that when accountants use technical terms of this sort they often, quite without realising it, confuse people who are not familiar with accounting, and make them believe that accounting data can only be understood and used by accountants.

Worse still, some book-keepers and accountants conceal the real meaning of accounts from themselves, by using words which they have learnt to apply to certain stages or parts of the process of accounting, but which they cannot apply to the real world.

*OHP = overhead projector
3) Ask trainees to imagine that a group of farmers had decided to start a co-operative in order to market their crops. What will be the first thing they will do, which can be expressed in financial terms?

- They will each contribute a certain amount of share capital to the society.

Ask trainees to suggest an appropriate number of people and the amount which each might contribute, and elicit the suggestion that there might be 100 farmers, each contributing $10.

Trainees should assume for the purpose of this session that the hypothetical society is a very simple one. In what form are the farmers likely to contribute their share capital?

- In cash.

Ask a trainee who has little or no knowledge of book-keeping or accounting to suggest how this society might now be described in financial terms. What will the members need to know about the financial condition of their society?

Elicit a statement in the following form, which should be written on the chalkboard:

\[
\begin{array}{cccc}
\text{Possessions} & $ & \text{Sources} & $
\hline
\text{Cash} & 1,000 & \text{Members' Share Capital} & 1,000 \\
& & 100 Shares @ $10 each & \\
\text{TOTAL} & 1,000 & \text{TOTAL} & 1,000 \\
\end{array}
\]

It is not important at this stage, or later in this session, whether the possessions and sources are presented opposite each other, on the left or the right, or in column form. Similarly the sequence under each heading of possessions and sources is unimportant.
The terms used should not necessarily be those used in this ma-
terial. "Assets" and "Liabilities" should be avoided, but elicit
words or phrases from trainees which can clearly describe, to
their satisfaction, the nature of each item.

Trainees may prefer, for instance, "how the money is used" and
"where the money came from", to "possessions" and "sources". Use
whatever words or phrases they themselves suggest.

4) The remainder of this session may be dealt with in one of three
different ways:

A) The actual transactions listed in the materials may be used as
they are, modified only to include local currency and institu-
tions such as banks or marketing boards.

B) A new set of transactions may be prepared, which are more
typical of a local society such as may be familiar to
trainees. In this case, the changes to the balance sheet, and
subsequent profit and loss exercise in Session 1.3, must be
prepared well in advance.

C) Trainees may be invited to suggest transactions as they might
occur. If this approach is followed, it is vital to have a
colleague to list the transactions carefully, and to check the
mathematics at each stage. The instructor must be prepared to
deal with difficult transactions, and should only use this
approach if he or she is completely familiar with local
accountancy practices.

It is important if methods B) or C) are used to be sure that all
the different types of transaction that follow are dealt with.

If method C) is used, trainees may suggest items which are impos-
sible because there is not enough money, or stock, to allow the
transaction to take place. Ask other trainees to explain the dif-
ficulty, and remind trainees that societies frequently enter into
obligations which they cannot fulfil because they do not have up-
to-date figures of the sort now being produced.
Following method A), elicit the next and following transactions as below:

- Open an account with the local commercial bank and put $900 of the cash into it.

The description should be amended as follows:

<table>
<thead>
<tr>
<th>Possessions</th>
<th>$</th>
<th>Sources</th>
<th>$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cash</td>
<td>100</td>
<td>Members' Share Capital</td>
<td>1,000</td>
</tr>
<tr>
<td></td>
<td></td>
<td>100 Shares @ $10 each</td>
<td></td>
</tr>
<tr>
<td>Bank Balance</td>
<td>900</td>
<td></td>
<td></td>
</tr>
<tr>
<td>TOTAL</td>
<td>1,000</td>
<td>TOTAL</td>
<td>1,000</td>
</tr>
</tbody>
</table>

The objective is to present a dynamic "moving picture" of the society through a succession of financial descriptions which trainees will soon realise are in fact balance sheets. It is not therefore necessary to retain each version on the chalkboard. Rub out the entries which disappear or are amended, and replace them with the latest items.

Trainees need not copy the results themselves. This would delay the session and the intention is that they should understand each entry as it is made, rather than remember the complete sequence which is only an example.

5) Elicit the next transaction, which is to receive $500 in cash deposited by members as loans to the society. Ensure that all trainees understand the difference between members' share contributions and any funds they may lend to the society, in return for regular payment of interest.

The description should be amended as follows:

<table>
<thead>
<tr>
<th>Possessions</th>
<th>$</th>
<th>Sources</th>
<th>$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cash</td>
<td>600</td>
<td>Members' Share Capital</td>
<td>1,000</td>
</tr>
<tr>
<td></td>
<td></td>
<td>100 Shares @ $10 each</td>
<td></td>
</tr>
<tr>
<td>Bank Balance</td>
<td>900</td>
<td>Members' Loan Account</td>
<td>500</td>
</tr>
<tr>
<td>TOTAL</td>
<td>1,500</td>
<td>TOTAL</td>
<td>1,500</td>
</tr>
</tbody>
</table>
6) The next item is:

- Pay $300 by cheque as a year's rent in advance for a store.

The description should be amended as follows:

<table>
<thead>
<tr>
<th>Possessions</th>
<th>$</th>
<th>Sources</th>
<th>$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cash</td>
<td>600</td>
<td>Members' Share Capital</td>
<td>1,000</td>
</tr>
<tr>
<td></td>
<td></td>
<td>100 Shares @ $10 each</td>
<td></td>
</tr>
<tr>
<td>Bank Balance</td>
<td>600</td>
<td>Members' Loan Account</td>
<td>500</td>
</tr>
<tr>
<td>Right to Use Store</td>
<td>300</td>
<td></td>
<td></td>
</tr>
<tr>
<td>for a Year</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>TOTAL</td>
<td>1,500</td>
<td>TOTAL</td>
<td>1,500</td>
</tr>
</tbody>
</table>

Ensure that trainees appreciate that an item of this sort, such as insurance, rent or any other advance payment for services to be provided later, is something which the society "owns", namely the right to use the service for whatever period it has been bought. Trainees should assume that sums paid by cheque are taken away from the society's account, or added to it, at the time of the transaction.

7) The next item is:

- Purchase members' crops for $400 in cash.

The description should be amended as follows:

<table>
<thead>
<tr>
<th>Possessions</th>
<th>$</th>
<th>Sources</th>
<th>$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cash</td>
<td>200</td>
<td>Members' Share Capital</td>
<td>1,000</td>
</tr>
<tr>
<td></td>
<td></td>
<td>100 Shares @ $10 each</td>
<td></td>
</tr>
<tr>
<td>Bank Balance</td>
<td>600</td>
<td>Members' Loan Account</td>
<td>500</td>
</tr>
<tr>
<td>Right to Use Store</td>
<td>300</td>
<td></td>
<td></td>
</tr>
<tr>
<td>for a Year</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Stock of Crops</td>
<td>400</td>
<td></td>
<td></td>
</tr>
<tr>
<td>TOTAL</td>
<td>1,500</td>
<td>TOTAL</td>
<td>1,500</td>
</tr>
</tbody>
</table>

Trainees should begin to appreciate at around this stage that this is a very simple balance sheet. Ask why the two figures at the bottom must always be the same:
- Because they are merely different ways of describing the same sum of money, saying how it is used and where it has come from. In the same way if someone describes a person by saying "he is a man" and "he is called Abdul Mtenga", the thing that is being described remains the same.

8) The next item is:

- Sell one quarter of the crop, originally purchased for $100, for $120 in cash.

The description should be amended as follows:

<table>
<thead>
<tr>
<th>Posessions</th>
<th>$</th>
<th>Sources</th>
<th>$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cash</td>
<td>320</td>
<td>Members' Share Capital</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>100 Shares @ $10 each</td>
<td>1,000</td>
</tr>
<tr>
<td>Bank Balance</td>
<td>600</td>
<td>Members' Loan Account</td>
<td>500</td>
</tr>
<tr>
<td>Right to Use Store</td>
<td>300</td>
<td>Surplus</td>
<td>20</td>
</tr>
<tr>
<td>for a Year</td>
<td></td>
<td>Stock of Crops</td>
<td>300</td>
</tr>
<tr>
<td>Stock of Crops</td>
<td></td>
<td>TOTAL</td>
<td></td>
</tr>
<tr>
<td>TOTAL</td>
<td>1,520</td>
<td>TOTAL</td>
<td>1,520</td>
</tr>
</tbody>
</table>

Ensure that trainees understand why the surplus is a source of money just like loans or members' shares, except that the society itself has generated it.

9) The next item is:

- Sell a further one quarter of the crop, originally bought for $100, for $130 to be paid in a month's time.

The description should be amended as follows:
### Possessions

<table>
<thead>
<tr>
<th>Possessions</th>
<th>$</th>
<th>Sources</th>
<th>$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cash</td>
<td>320</td>
<td>Members' Share Capital</td>
<td>1,000</td>
</tr>
<tr>
<td></td>
<td></td>
<td>100 Shares @ $10 each</td>
<td></td>
</tr>
<tr>
<td>Bank Balance</td>
<td>600</td>
<td>Members' Loan Account</td>
<td>500</td>
</tr>
<tr>
<td>Right to Use Store</td>
<td>300</td>
<td>Surplus</td>
<td>50</td>
</tr>
<tr>
<td>for a Year</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Stock of Crops</td>
<td>200</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Amount Owed by Customer</td>
<td>130</td>
<td>Amount Owed to Supplier</td>
<td>100</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>1,550</strong></td>
<td><strong>TOTAL</strong></td>
<td><strong>1,550</strong></td>
</tr>
</tbody>
</table>

Ensure that trainees realise that the right to receive a certain sum of money in the future is a "possession", like the right to use a store. If they disagree, ask whether any of them would refuse to pay for an IOU from a rich man (who is also honest) to pay $10 in one day's time. Clearly his IOU is in itself a possession.

10) The next item is:

- Purchase sacks for $100, to be paid in a month's time.

The description should be amended as follows:

<table>
<thead>
<tr>
<th>Possessions</th>
<th>$</th>
<th>Sources</th>
<th>$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cash</td>
<td>320</td>
<td>Members' Share Capital</td>
<td>1,000</td>
</tr>
<tr>
<td>Bank Balance</td>
<td>600</td>
<td>Members' Loan Account</td>
<td>500</td>
</tr>
<tr>
<td>Stock of Crops</td>
<td>200</td>
<td>Surplus</td>
<td>50</td>
</tr>
<tr>
<td>Amount Owed by Customer</td>
<td>130</td>
<td>Amount Owed to Supplier</td>
<td>100</td>
</tr>
<tr>
<td>Sacks</td>
<td>100</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>1,650</strong></td>
<td><strong>TOTAL</strong></td>
<td><strong>1,650</strong></td>
</tr>
</tbody>
</table>

If trainees cannot see that when a supplier allows credit this is a source of money show them by acting out a credit transaction as
follows that if somebody allows a society credit this is exactly the same as granting the society a loan:

(a) Seller gives goods to buyer.
(b) Buyer gives cash to seller.
(c) Seller returns cash to buyer.

This is no different from the seller giving a loan to the buyer without any goods having changed hands at all.

11) The next item is:

- The society purchases furniture for $300, paying by cheque.

The description should be amended as follows:

<table>
<thead>
<tr>
<th>Possessions</th>
<th>$</th>
<th>Sources</th>
<th>$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cash</td>
<td>320</td>
<td>Members' Share Capital</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>100 Shares @ $10 each</td>
<td>1,000</td>
</tr>
<tr>
<td>Bank Balance</td>
<td>300</td>
<td>Members' Loan Account</td>
<td>500</td>
</tr>
<tr>
<td>Right to Use Store</td>
<td>300</td>
<td>Surplus</td>
<td>50</td>
</tr>
<tr>
<td>for a Year</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Stock of Crops</td>
<td>200</td>
<td>Amount Owed to Supplier</td>
<td>100</td>
</tr>
<tr>
<td>Amount Owed by</td>
<td>130</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Customer</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sacks</td>
<td>100</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Furniture</td>
<td>300</td>
<td></td>
<td></td>
</tr>
<tr>
<td>TOTAL</td>
<td>1,650</td>
<td>TOTAL</td>
<td>1,650</td>
</tr>
</tbody>
</table>

12) The next item is:

- The society pays its bill in cash to the supplier of sacks, and the customer pays a cheque for what he owed to the society.

The description should be amended as follows:
Trainees should note that the total has gone down. This does not indicate any decline in the fortunes of the society but merely that it has paid its bill.

13) The next item is:

- The Co-operative Bank extends a loan of $1,000 to the society, which is paid direct to members by the bank for crops which are put into stock by the society.

The description should be amended as follows:

```
Possessions $ Sources $
Cash 220 Members' Share Capital
  100 Shares @ $10 each 1,000
Bank Balance 430 Members' Loan Account 500
Right to Use Store
  for a Year 300 Surplus 50
Stock of Crops 200
Sacks 100
Furniture 300
TOTAL 2,550 TOTAL 2,550
```
The description should be amended as follows:

<table>
<thead>
<tr>
<th>Possessions</th>
<th>$</th>
<th>Sources</th>
<th>$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cash</td>
<td>190</td>
<td>Members' Share Capital</td>
<td>1,000</td>
</tr>
<tr>
<td></td>
<td></td>
<td>100 Shares @ $10 each</td>
<td></td>
</tr>
<tr>
<td>Bank Balance</td>
<td>430</td>
<td>Members' Loan Account</td>
<td>500</td>
</tr>
<tr>
<td>Right to Use Store for a Year</td>
<td>300</td>
<td>Surplus</td>
<td>20</td>
</tr>
<tr>
<td>Stock of Crops</td>
<td>1,200</td>
<td>Bank Loan</td>
<td>1,000</td>
</tr>
<tr>
<td>Sacks</td>
<td>100</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Furniture</td>
<td>300</td>
<td></td>
<td></td>
</tr>
<tr>
<td>TOTAL</td>
<td>2,520</td>
<td>TOTAL</td>
<td>2,520</td>
</tr>
</tbody>
</table>

Trainees must see that the surplus has been reduced because of the cost of wages. It is to be hoped that the work performed for these wages will in time yield a greater surplus than the cost. However, the financial picture after the payment of wages but before realising the gain must reflect the expense and not the surplus which is as yet unknown.

15) The next item is:

- The society sells one half of the total stock of crops, which cost $600, for $750 paid by cheque, and a further quarter, which cost $300, for $400 to be paid in a month's time.

The description should be amended as follows:
16) The next items:

- Six months have passed since the society started. The society repays the Co-operative Bank loan of $1,000, plus $50 interest, by cheque. The customer who owed the society money pays $350 by cheque but then disappears without paying the remaining $50. The society sells the remaining stock for $450 in cash. The sacks are found to be, 50% worn out. An estimate is made that the furniture is going to last three years from the date of its original purchase, the society pays $30 in cash as interest on members' loans and the society pays a further $30 wages in cash.

The description should be amended as follows:

<table>
<thead>
<tr>
<th>Possessions</th>
<th>£</th>
<th>Sources</th>
<th>£</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cash</td>
<td>190</td>
<td>Members' Share Capital</td>
<td>1,000</td>
</tr>
<tr>
<td></td>
<td></td>
<td>100 Shares @ $10 each</td>
<td></td>
</tr>
<tr>
<td>Bank Balance</td>
<td>1,180</td>
<td>Members' Loan Account</td>
<td>500</td>
</tr>
<tr>
<td>Right to Use Store</td>
<td>300</td>
<td>Surplus</td>
<td>270</td>
</tr>
<tr>
<td>for a Year</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Stock of Crops</td>
<td>300</td>
<td>Bank Loan</td>
<td>1,000</td>
</tr>
<tr>
<td>Sacks</td>
<td>100</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Furniture</td>
<td>300</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Amount Owed by</td>
<td>400</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Customer</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>TOTAL</td>
<td>2,770</td>
<td>TOTAL</td>
<td>2,770</td>
</tr>
</tbody>
</table>
ABC Society, Financial Condition on 1.7.83

<table>
<thead>
<tr>
<th>Possessions</th>
<th>$</th>
<th>Sources</th>
<th>$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cash</td>
<td>580</td>
<td>Members' Share Capital</td>
<td>1,000</td>
</tr>
<tr>
<td>Bank Balance</td>
<td>480</td>
<td>Members' Loan Account</td>
<td>500</td>
</tr>
<tr>
<td>Right to Use Store</td>
<td>150</td>
<td>Surplus</td>
<td>420</td>
</tr>
<tr>
<td>for Six Months</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sacks</td>
<td>50</td>
<td>Less:</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Rent</td>
<td>150</td>
</tr>
<tr>
<td>Furniture</td>
<td>250</td>
<td>Use of Sacks</td>
<td>50</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Interest</td>
<td>30</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Bad Debts</td>
<td>50</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Use of Furniture</td>
<td>50</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Interest to Bank</td>
<td>50</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Wages</td>
<td>30</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>410</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Net Surplus</td>
<td>10</td>
</tr>
<tr>
<td>TOTAL</td>
<td>1,510</td>
<td>TOTAL</td>
<td>1,510</td>
</tr>
</tbody>
</table>

It may be preferable to deal with each item separately. In any case, trainees should understand the following points:

- If a customer owes money and disappears, the remaining money due to be paid by him can clearly no longer be counted as a "possession". The society should certainly still attempt to recover it, but if there is any real doubt that it will be recovered the amount should be counted as a loss rather than continuing to count it as a possession which may actually be worthless.

- Half a year is one-sixth of the total life of the furniture and this proportion of its value has therefore been "used up". The furniture is now worth only five-sixths of what it was originally worth, and the reduction in its value caused by its use should be counted as a cost, to reduce the surplus. Trainees will be aware that this is called "depreciation".

- Similarly, the decline in value of the sacks must be reflected by a reduction on the value of the possessions and an extra cost to be charged against the surplus.
17) The purpose of this session has been to demonstrate the real meaning of the technical terms of accounting. If trainees have not by now realised, ask those who are familiar with book-keeping and accounts to "translate" the simple terminology which has been used into the normal accounting terms. Ensure as before that all trainees understand what they mean.
SESSION 1.3

THE STATEMENT OF OPERATIONS

Objective: To enable trainees to relate an operating statement to a statement of condition, and to identify the relationships between them.

Time: 2 to 3 hours.

Material: A list, on paper, chalkboard or OHP, of the transactions used in the previous session. The list suggested in the previous session is provided in a handout, to be used if method A is followed, or to show the format if methods B or C are used.

Session Guide:

1) If there has been a long delay between this and the previous session, remind trainees of the "Dynamic Balance Sheet" that was presented then. Point out that trainees themselves produced during that session a series of "still pictures" which showed the condition of the society at the moment after certain transactions were completed.

Remind trainees of the appearance of a piece of movie film. If it is examined outside a projector, it appears as a series of pictures showing a stationary view which changes very slightly from one to the next. If shown through a projector, however, it gives a moving picture which shows what happens as time progresses. It is nevertheless difficult to see exactly the condition and position of everything on the movie without "freezing it" for a "still".

Trainees are now ready to produce a "movie" of the society over the six months' period for which they produced a number of "stills" during the previous session.

2) Distribute or otherwise display on chalkboard or OHP the list of transactions used in the previous session. Ask trainees to exam-
ine this list in relation to the "balance sheets" or "still pictures" produced in the previous session.

Certain transactions affected the revenue, cost and surplus of the society, and others made changes in the way which money was used or obtained at a particular time.

Ask trainees which of the following transactions directly affect the surplus of a society:

(a) Repayment of a debt by a customer who purchased goods on credit.
(b) Payment of interest to the bank.
(c) Receipt of a loan from the bank.
(d) Additional members buy shares.

- (a) is a movement of money from one asset heading (accounts receivable) to another (cash). The profit (or loss) was made when the goods were sold.
- (b) affects the surplus, because it is an expense.
- (c) is an increase in the money available to the society, but it does not belong to the society. If they make good use of it, the surplus will belong to them, but the loan itself must be repaid.
- (d) is like (c). The money is available to the society, but cannot be distributed to members. It is to be used, but does not actually belong to the society.

Stress that the surplus is not affected by whether suppliers, or sales, are paid for in cash, by cheque or on credit. The amounts of the transactions are what is important.

3) Go through the list of transactions from the previous session and ask trainees to decide what items relate to the "moving picture" which they are about to produce. Elicit the conclusion that the following items should be used to makeup the moving picture:

4, 5, 6, 7, 8, 11, 12, 13, 14b, 14c, 14d, 14e, 14f, 14g and 14h.
Trainees may still argue that if a society is granted a loan this should be reflected in any statement of how the society has prospered and its surplus. Stress that loans have to be repaid, and that the only aspect of a loan which affects the surplus is the interest payment which reduces it.

Trainees may also have difficulties seeing the difference between 8 and 9, the purchase of furniture and of sacks. Stress that furniture is a relatively permanent item of equipment, whose purchase does not affect the operating results of the period in which it happens to be bought. Sacks are part of trade; any remaining stocks will be considered as possessions of the society at the end of the period, but the cost of the sacks must be set against income to produce the surplus (or loss).

Trainees may find the above inconsistent with the inclusion of 14f and 14g in the calculation of the surplus. Stress that the use of the furniture, as opposed to its total costs, is an expense for the period, and is a part of the "moving picture".

4) Allow trainees up to 30 minutes individually to produce a "moving picture", operating statement or profit and loss account for the society, using the figures presented in the handout. Their answers should be as follows:

<table>
<thead>
<tr>
<th>SALES</th>
<th>$</th>
<th>$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Crops</td>
<td>120</td>
<td>130</td>
</tr>
<tr>
<td></td>
<td>750</td>
<td>400</td>
</tr>
<tr>
<td></td>
<td></td>
<td>450</td>
</tr>
<tr>
<td>Total Sales</td>
<td>1,850</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>EXPENSES</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Rent</td>
<td>150</td>
<td></td>
</tr>
<tr>
<td>Crop Purchases</td>
<td>400</td>
<td></td>
</tr>
<tr>
<td>Sacks</td>
<td>50</td>
<td></td>
</tr>
<tr>
<td>Wages</td>
<td>30</td>
<td></td>
</tr>
<tr>
<td>Crops</td>
<td>1,000</td>
<td></td>
</tr>
<tr>
<td>Interest to Bank</td>
<td>50</td>
<td></td>
</tr>
<tr>
<td>Bad Debts</td>
<td>50</td>
<td></td>
</tr>
<tr>
<td>Interest to Members</td>
<td>30</td>
<td></td>
</tr>
<tr>
<td>Depreciation of Furniture</td>
<td>50</td>
<td></td>
</tr>
<tr>
<td>Wages</td>
<td>30</td>
<td></td>
</tr>
<tr>
<td>Total Expenses</td>
<td>1,840</td>
<td></td>
</tr>
</tbody>
</table>

| SURPLUS | $  | 10  |
Stress that the result of the calculation is the same as the surplus shown in the last "balance sheet" which was produced. This shows that the "moving picture" merely fills in the gaps between the "stills" which were produced in the first session, but the ultimate result is the same.

5) Trainees with accountancy training will realise that the above profit and loss accounts, and the balance sheets, were not presented in the normal way.

Ask trainees to suggest the critical differences between the two following classes of assets and liabilities:

<table>
<thead>
<tr>
<th>Assets</th>
<th>Liabilities</th>
</tr>
</thead>
<tbody>
<tr>
<td>Class A</td>
<td></td>
</tr>
<tr>
<td>Cash</td>
<td>Accounts Payable</td>
</tr>
<tr>
<td>Bank Balance</td>
<td>Short Term Loans</td>
</tr>
<tr>
<td>Accounts Receivable</td>
<td></td>
</tr>
<tr>
<td>Stocks</td>
<td></td>
</tr>
<tr>
<td>Class B</td>
<td>Long Term Loans</td>
</tr>
<tr>
<td>Equipment</td>
<td>Retained Surplus</td>
</tr>
<tr>
<td>Land</td>
<td>Members' Capital</td>
</tr>
<tr>
<td>Buildings</td>
<td></td>
</tr>
</tbody>
</table>

Elicit the response that Class A are more current or immediate. The assets can be turned into cash reasonably quickly, and the liabilities are more likely to have to be repaid at short notice.

Class B are long term. The society will not usually dispose of its equipment and/or buildings unless it wishes to wind up its operations altogether, and long term loans, members' share capital or retained earnings are unlikely to have to be repaid at short notice.

Stress that the more "current" assets and liabilities are usually separated from the longer term ones in Class B, in whatever way the balance sheet is presented.
6) Stress that there are a number of different ways of presenting accounts, and that the sequence or position of particular items is far less important than a clear understanding of what they mean.

Remind trainees of the balance sheet prepared in the previous session. Ask one with some knowledge of accounting to describe other ways in which the same data might have been presented.

Depending on local accountancy practice, the following terms and layout may be presented and discussed, using the following figures:

(a) "American" (as used in Session 1)

<table>
<thead>
<tr>
<th>Assets</th>
<th>$</th>
<th>Liabilities</th>
<th>$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cash</td>
<td>100</td>
<td>Accounts Payable</td>
<td>100</td>
</tr>
<tr>
<td>Bank Balance</td>
<td>200</td>
<td>Short Term Loans</td>
<td>50</td>
</tr>
<tr>
<td>Accounts Receivable</td>
<td>150</td>
<td>Long Term Loans</td>
<td>300</td>
</tr>
<tr>
<td>Inventory</td>
<td>50</td>
<td>Members' Equity</td>
<td>400</td>
</tr>
<tr>
<td>Machinery &amp; Equipment</td>
<td>200</td>
<td>Retained Earnings</td>
<td>150</td>
</tr>
<tr>
<td>Land &amp; Buildings</td>
<td>300</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>1,000</strong></td>
<td><strong>Total</strong></td>
<td><strong>1,000</strong></td>
</tr>
</tbody>
</table>

(b) "British"

<table>
<thead>
<tr>
<th>Liabilities</th>
<th>$</th>
<th>Assets</th>
<th>$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Members' Capital</td>
<td>400</td>
<td>Land &amp; Buildings</td>
<td>300</td>
</tr>
<tr>
<td>Reserves</td>
<td>150</td>
<td>Machinery &amp; Equipment</td>
<td>200</td>
</tr>
<tr>
<td>Long Term Loans</td>
<td>300</td>
<td>Stocks</td>
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<tr>
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<tr>
<td>Creditors</td>
<td>100</td>
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</tr>
<tr>
<td></td>
<td></td>
<td>Cash</td>
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</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>1,000</strong></td>
<td><strong>Total</strong></td>
<td><strong>1,000</strong></td>
</tr>
</tbody>
</table>

(c) Vertical Layout

<table>
<thead>
<tr>
<th>Funds Employed</th>
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</thead>
<tbody>
<tr>
<td>Members' Equity</td>
<td>400</td>
</tr>
<tr>
<td>Retained Earnings</td>
<td>150</td>
</tr>
<tr>
<td>Long Term Loans</td>
<td>300</td>
</tr>
<tr>
<td></td>
<td>850</td>
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</table>
Employment of Funds

<table>
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</thead>
<tbody>
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<tr>
<td>Bank Balance</td>
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<tr>
<td>Accounts Receivable</td>
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</tr>
<tr>
<td>Inventory</td>
<td>50</td>
</tr>
<tr>
<td>Machinery &amp; Equipment</td>
<td>200</td>
</tr>
<tr>
<td>Land &amp; Buildings</td>
<td>300</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>1,000</strong></td>
</tr>
</tbody>
</table>

Less Current Liabilities:

<table>
<thead>
<tr>
<th>Category</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Short Term Loans</td>
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</tr>
<tr>
<td>Accounts Payable</td>
<td>100</td>
</tr>
<tr>
<td><strong>Less Current Liabilities</strong></td>
<td><strong>850</strong></td>
</tr>
</tbody>
</table>

(d) Alternative Vertical Layout

Fixed Assets

<table>
<thead>
<tr>
<th>Category</th>
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</tr>
</thead>
<tbody>
<tr>
<td>Machinery &amp; Equipment</td>
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<tr>
<td>Land &amp; Buildings</td>
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<tr>
<td><strong>Total</strong></td>
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Current Assets

<table>
<thead>
<tr>
<th>Category</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cash</td>
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<tr>
<td>Accounts Receivable</td>
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<tr>
<td>Inventory</td>
<td>50</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>500</strong></td>
</tr>
</tbody>
</table>

Less Current Liabilities

<table>
<thead>
<tr>
<th>Category</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Short Term Loans</td>
<td>50</td>
</tr>
<tr>
<td>Accounts Payable</td>
<td>100</td>
</tr>
<tr>
<td><strong>Net Current Assets</strong></td>
<td><strong>350</strong></td>
</tr>
<tr>
<td><strong>Total Funds Employed</strong></td>
<td><strong>850</strong></td>
</tr>
</tbody>
</table>

Represented By

<table>
<thead>
<tr>
<th>Category</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Members' Equity</td>
<td>400</td>
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<tr>
<td>Retained Earnings</td>
<td>150</td>
</tr>
<tr>
<td>Long Term Loans</td>
<td>300</td>
</tr>
<tr>
<td><strong>Total Funds Employed</strong></td>
<td><strong>850</strong></td>
</tr>
</tbody>
</table>
Even if trainees are unlikely ever to meet any more than one form of presentation, it is useful to be exposed to alternatives in order to stress that the rules of terminology and presentation are not fixed and final. A society, within the law, should choose whatever layout and terminology are most readily understood by the majority of people and particularly by the membership.

7) If trainees are fluent in a local vernacular language, which is different from that being used in the course and from the language normally used for accounts, ask each trainee individually to write down a translation of the following items into the local vernacular, in random order, without writing down the English or other formal term beside each translation:

"Assets"  
"Liabilities"  
"Accounts Receivable"  
"Accounts Payable"  
"Depreciation"  
"Members' Share Capital"  
"Retained Earnings"  
"Balance Sheet"  
"Surplus"  
"Stocks"  
"Accrued Interest"

When they have finished, they should hand their translations to another trainee. Each should then translate the vernacular back into English or other formal language, and suggest which of them relates to which of the above terms. Approximate phrases in simple English might be:

Assets: What a society owns.
Liabilities: Where the society got its money from.
Accounts Receivable: Money owned by customers to the society.
Accounts Payable: Money owned by the society to suppliers.
Depreciation: The fall in value of equipment because it has been used.
Members' Share Capital: The money that members contribute to start a society or to expand it and which they do not expect to be returned to them unless they leave.
Retained Earnings: That part of the society's surplus that is not given back to members but is re-invested in the society.

Balance Sheet: A statement of what a society owns and where it obtained the money from.

Surplus: The difference between the value of the society's sales and the cost of what was sold and of running the society.

Stock: Crops or requisites which belong to the society but have not yet been sold.

Accrued Interest: Interest that has been earned but has not yet been received.

Trainees attempts to translate these terms into the local vernacular may reveal that they do not really understand them. The exercise should also improve their ability to explain and present financial figures to poorly educated members.

8) Ask trainees to compare the "dynamic" balance sheets produced in Session 1.2 and the operating statement produced in this session, with what actually happens in their societies.

- How often are balance sheets and operating statements produced?
- How up-to-date are they?

In most societies complete accounts are produced only once a year, and are not completed for several months, or even a year or more after the period to which they relate.

How can managers use official audited figures of this sort, which are infrequent and out-of-date?

- The should themselves produce "informal" accounts, and train their staff to do the same. These cannot be used for official purposes but can be used for day-to-day management, which is the main reason for preparing accounts.
"Informal" accounts can be based on the audited accounts. It is only necessary to incorporate changes from month to month in order to have an approximate picture of the condition of a society as a basis for planning and management.

9) Trainees may be impressed by the way in which financial accounts can describe the condition and operation of a co-operative society.

Ask trainees to suggest what aspects of a society are not shown in the financial accounts. Do such accounts tell a prospective member, lender, supplier or other interested outsider everything he or she needs to know before making a decision about the society?

Accounts are about the past. They are inevitably out-of-date when they are completed, even by a day, and more normally by several months. Lenders and others are concerned with the future, as are managers. Accounts can at best do no more than indicate what the future will bring and the accounts say little about the quality and commitment of the people, including staff, management, committee members and the membership at large. A history of good results can say something about the management, but critical staff may have changed recently and accounts say nothing about changes of this sort.

The value of accounts to an outsider depends to a great extent on the quality of the accountants and management who prepared them, and any auditors who audited them. Stock values, the collectability of the accounts receivable, and the real value of equipment, for instance, can only be assessed by practical society managers, and auditors can do little to correct mistakes or deceptions.

Accounts can thus reveal only one aspect of a society's situation and progress. They are nevertheless a very valuable and generally under-used tool, and are essential for any effective attempt by management to improve the situation of a society.
Transactions of the ABC Society

1) Foundation of the society, 100 members contribute $10 each in cash.

2) The society puts $900 in the local commercial bank.

3) Members lend $500 to the society in cash.

4) The society pays $300 by cheque for one year's store rental.

5) The society buys members' crops for $400 cash.

6) The society sells one-quarter of crops in stock for $120 cash.

7) The society sells one-third of crops still remaining for $130 to be paid in one month.

8) The society purchases sacks for $100, payable in one month.

9) The society purchases furniture for $300 by cheque.

10) The society pays the amount owed to the sack supplier in cash, and the customer pays the $130 owed to the society by cheque.

11) Members deliver $1,000 worth of crops, and the society borrows $1,000 from the Co-operative Bank which is paid directly to members.

12) The society pays $30 wages in cash.

13) The society sells one-half of the stock of crops for $750 paid by cheque, and a further one-quarter of the stock for $400 payable in one month.

14) After six months since the start of the society:

   (a) The society repays the Co-operative Bank loan by cheque.

   (b) The society pays $50 interest by cheque.

   (c) The customer who owed the society $400 pays $350 by cheque and then disappears.

   (d) The society sells the remaining crops for $450 in cash.
(e) The society pays $30 interest in cash to members.

(f) One-half of the sacks have been lost or damaged beyond repair.

(g) The furniture has lost one-sixth of its original value.

(h) The society pays $30 wages in cash.
SESSION 1.4

FINANCIAL RATIOS

Objective: To enable trainees to appraise the financial condition and the management of a co-operative society by using appropriate financial ratios.

Time: 2 to 3 hours.

Material: Exercise "The Rationc Society".

Session Guide:

1) Trainees have in the previous two sessions confirmed their ability to prepare a balance sheet and statement of operations, and have perhaps increased their understanding of what these statements really mean.

Remind trainees that accounts are of no value unless they are used to improve the management of an enterprise. During this session they will be introduced to simple techniques for using accounts to identify problems. In subsequent sessions they will consider ways in which better financial management can correct these problems. They will thus have covered the three stages which must all be included if the work of preparing accounts is not to be a total waste of time:

- Prepare accounts
- Decide what problems the accounts reveal
- Correct the problems

2) Ask trainees whether co-operative accounts are really used in this way. Failures can occur at any stage.

- The accounts are not completed at all, or are completed so late that they are no longer of any value as a basis for appraising the conduct of the society now.
- The accounts are prepared and audited as is required by law, but accountants consider that this is all they are required to do.

- Managers have neither the time nor the ability to analyse the accounts and decide what needs to be done, and accountants have no wish to help them.

- The accounts are appraised using techniques such as will be introduced in this session, and the conclusions are presented in a report. This report is regarded as the final objective, and nothing is done to correct the problem it identifies.

3) Ask trainees what the following statements tell them about the problems, or lack of them, of the co-operative societies they describe:

- "Society A's stocks are worth $10,000."
- "Society B's customers owe the society $2,500."
- "Society C owes its suppliers $250,000."
- "The total share capital of society D is $2,000."
- "Society E's cash, bank balance, stock and accounts receivable total $2,000."

These statements give some indications of the scale of the society's operations. What more is needed before the data can be used to give any indication of the financial condition of the society?

A single figure, in isolation, is of virtually no use at all. The relationships between figures are needed before any appraisal is possible.

Ask trainees to consider the following four additional statements about the same societies. What can they now say about them?

- "Society A's sales are $8,000 per year."
- "Society B's sales are $100,000 per year."
- "Society C's annual purchases are $6m per year."
- "Society D has bank loans totalling $18,000."
- "Society E's accounts payable and short term loans total $4,000."

4) Clearly both the figures about each society can be used to make some evaluation of the quality of management. Some problems can be identified and some remedies suggested. Ask trainees what these might be:

- Society A has goods in stock worth one-and-a-quarter times its annual sales ($10). This means that goods are on average in stock for one-and-a-quarter years, or 15 months. This is far too long, and the society should dispose of the surplus stock, and revise its buying procedures to ensure that the accumulation of funds in stock does not occur again.

- Society B's customers owe the society $1 of the yearly sales ($2,500). Expressed in time, 1/40 of the year is just over one week (52/40). This means that the average customer is taking just over one week to pay his bill. This suggests good credit management which should be encouraged to continue.

- Society C owes its suppliers $1 of the value of what it buys in a year ($250,000). On average, the society is being allowed about two weeks' credit by its suppliers $\frac{52}{24}$. This is not a long period of trade credit and the society is clearly a good payer. It should perhaps demand longer credit from its suppliers.

- Society D's members have only invested $\frac{1}{10}$ of the total long term capital in their society ($\frac{2,000}{18,000 + 2,000}$. They should as quickly as possible increase their own stake in the society.

- Society E's short term obligations, that is, the amount of money it may be called upon to pay at short notice, are twice as much as its current assets, that is, the amount of money that could possibly be raised at short notice. The society may easily find itself unable to pay its bill.
These conclusions may, however, not be correct. What further information is required before an outsider can confidently appraise the financial condition of a society, from accounting figures of this sort?

Show that all these conclusions are based on assumptions about what ratios are "correct". Ask trainees what factors might mean that the conclusions suggested about the societies above are wholly wrong. There are a number of possibilities including:

- Society A's sales may have been very low because no stock was available. Now that they have stock, this may be sold in a very short time or society's A's managers may have sensibly accumulated supplies of an item which is now in short supply, or was about to become far more expensive and have purchased sufficient for more than a year.

- Society B may be in a cash business which has given credit for political reasons to one particular customer who has no intention of paying. This may be a bad or doubtful debt which indicates bad management although it is a small proportion of the total business or society B may be unnecessarily limiting their sales by refusing to grant credit to credit-worthy customers.

- Society C may be failing to obtain trade credit from suppliers who would allow it, and thus provide the society with a free source of funds or society C may be very unreliable and a persistent bad payer, so that suppliers refuse to grant credit.

- Society D may have borrowed money on the security of a building which they have bought, and which far more than cover the amount outstanding because it has increased in value or society D may have borrowed a large amount for a brief period to finance purchases of materials or produce which will almost immediately be sold for cash. It would not be appropriate for members' share capital to finance such short term transactions since there would for the rest of the year be insufficient use for it.

- Society E may, like Society D, have borrowed a large sum temporarily, which will be repaid through the sale of a "fixed asset", such as a car or building, or the suppliers to which
the society owes its accounts payable may have undertaken not to demand payment except with adequate notice.

6) Trainees may be familiar with the "liquidity ratio" used in the example of society E, and may have learnt to apply this and other ratios to any set of accounts, without understanding why.

Stress that ratios are only of value if we know what we are trying to find out before we apply them.

Ask trainees what ratios, or pairs of figures from the balance sheet and profit and loss account, the following enquirers should use:

- A supplier of a scarce farm input, who wants to know whether a certain society will sell his goods quickly to the farmers who need them.
  (Stocks divided by sales per month/year, to show how long goods are held in stock on average.)

- A prospective member, who wants to check how secure the promised dividend payments are likely to be.
  (Total surplus divided by dividend paid out, to check on the "safety margin".)

- A banker, trying to decide whether to lend the society money.
  (The members' share capital and retained surplus divided into the total liabilities, to find out what proportion of the money used in the society has been contributed by the members.)

Stress that there are no standard acceptable ratios. What is safe in one country, or for one type of society, may be very risky for another.

7) Divide trainees into a minimum of four groups and distribute the exercise. Each group should be asked to put themselves in the position of one of the following people and to make the indicated decisions, which should be presented on the chalkboard/OHP. They should be asked to indicate in their presentation what financial ratios they have used to make their decision, and why.
a) A supplier must decide whether or not to agree to a request from the society to supply $3,000 worth of requisites on 90 days' credit, to be delivered in 1982.

b) A bank must decide whether or not to accept a request from the society for overdraft facilities for a maximum amount of $10,000, to be made available as required from September 1982.

c) A farmer must decide whether or not to remain a member or to withdraw and market his own crops.

d) A co-operative officer must decide whether or not the society is properly managed.

8) Allow groups up to 45 minutes to analyse the figures and to prepare their answers. They should, if possible, be given OHP transparencies or flipchart sheets on which to present their decisions and the calculations on which they are based.

Circulate among the groups as they are working on the exercise. Ensure that they remember that single figures are of little value and every judgement must be based on the relationship between at least two figures. Trainees who are familiar with financial ratios may calculate all the standard ratios, and then be unable to use them at all. Ensure that all trainees realise that there is no point in calculating a ratio between figures unless:

- The objective of the calculation is clear.
- The analyst knows what he will do with the answers when he gets them.

9) Reconvene trainees and ask each group in turn to present their answers. Even simple figures such as these can be analysed in many different ways, but the following conclusions and calculations indicate the type of answers each group may produce. If any important items are not mentioned by trainees, elicit them by asking trainees to consider the relationship between the two figures involved. If they are still unable to appreciate its significance, select an absurdly high or an absurdly low figure for the ratio and ask trainees what this would mean. This should demonstrate the meaning of difference in financial ratios.
Some possible answers follow. Ensure that every group presents its conclusions, and that these are properly discussed, before giving these answers. Trainees' suggestions may be more appropriate than these. Avoid giving the impression that there is only one correct answer to these or any other financial management problems. Decisions must be based on sound judgement and knowledge of local circumstances.

a) A supplier should not be willing to extend $3,000 credit for 90 days, or indeed to extend any credit at all.

- The accounts for the year ending in March were not ready until October. This indicates poor financial management, and the figures are in any case too out-of-date to be the basis for the decision.
- The present total accounts payable is over twice the cash and the bank balance $\frac{6,000}{2,500}$. If those who are already owed money should demand it, the society could not pay. A further $3,000 would be very risky.
- The current assets exceed current liabilities by four times $\frac{24,000}{6,000}$. This current ratio, as it is called, appears adequate, but the stock which is included in the current assets may not be really "current", that is, easily turned into cash.
- The stock of crops is only one-fifth. $\frac{10,000}{50,000}$. The sale of crops, but the selling high season has passed and the society only had one-tenth this amount of stock last year. The difference should be investigated.
- The existing accounts payable are probably owed to suppliers of requisites, not to members, since the crop selling season has passed. If this is so, the society may take an average of nearly six months to repay its borrowers $\frac{6,000}{13,000} \times 12$ months). This is too long.

b) The bank should not allow an overdraft:

- The calculations on which the supplier's negative decision was based also apply to the bank, since trade credit and a
short term bank loan are fundamentally similar transactions.

- The existing bank loan is to be repaid over ten years. This will require an annual payment of $2,000.

In addition, the society has to pay a loan interest of about $2,000. This is twice the society's surplus, and it is not clear that the society will in fact be able to repay the existing bank loan.

Any further loan would not be advisable.

c) A farmer should withdraw from the society for the reasons already presented and the following:

- The society has nearly one fifth (\(\frac{10,000}{49,000}\)) of its members' crops in stock two months after the selling season. This suggests that they may be unsaleable for some reason, and that the marketing operation has been incompetently managed.

- Surplus is only 2% of total sales (\(\frac{1,500}{65,000}\)). This is a very narrow margin, and can easily turn into a loss.

- The society has over half a year's supply of requisites in stock (\(\frac{7,000}{13,000}\)). This indicates overstocking, or an accumulation of items which cannot be sold.

d) The co-operative officers should comment on all the above points and the following additional ones:

- The crop selling season was in December and January, but at the end of March the society was owed $4,500 which is about one month's worth of sales on an annual basis (\(\frac{4,500}{50,000\times12}\)). This may be a bad or a doubtful debt.

- The bad debt of $300 is one-half of 1% of total sales (\(\frac{300}{65,000}\)), even this amount is excessive, particularly since it is 20% of the total surplus (\(\frac{300}{1,500}\)).

- Surplus is 50% of the members' capital (\(\frac{1,500}{2,000 + 1,000}\)).
This is a very high rate of return, far higher than would be earned by members if they had put their money in the bank. The society is able to do this, however, only because it has borrowed too much from the bank. The members have only contributed 10% (\(\frac{2000 + 1,000}{30,000}\)) of the total amount of money used by the society, this is not enough.

- The society has decided to distribute two-thirds (\(\frac{1,000}{1,500}\)) of surplus as dividend. This is wholly unjustified, since all the surplus, and more, is needed to reduce the society's independence on borrowed money by being added to retained earnings.

Remind trainees that each of the four interests represented in the exercise would in fact have asked for the previous year's accounts as well as the current year, in order to make comparisons and identify trends. Since decisions are invariably about the future, and accounts describe only what is past, it is necessary to examine past trends and to decide whether they will continue.

Trainees may be anxious for standards or norms, to enable them to decide easily whether a given society's ratios are "correct" or not. Stress that every situation must be judged on its merits.

- Some stocks have to be held for six months or more.
- Some customers may need several months' credit, and be well able to pay.
- At certain seasons, a society may need to borrow a large sum on short term credit. It would be contrary to members' interest to demand a larger share of the capital from them.

It may be possible to calculate average ratios for a number of societies with the same type of business, and to use these as standards. Any deviations must however be examined before being criticised. No two situations are identical.

10) To conclude, repeat with the trainees the most common financial ratios which have been explained in this session. At the same time, present the actual formula on the chalkboard/OHP:
Stock turn ratio = \[\frac{\text{The sales}}{\text{(Average stock (at sell. prices))}}\]  

Average period (weeks) of accounts receivable = \[\frac{\text{Accounts receivable} \times 52}{\text{Total sales on account}}\]  

Average period (weeks) of accounts payable = \[\frac{\text{Accounts payable} \times 52}{\text{Total purchases on account}}\]  

Debt ratio = \[\frac{\text{Foreign capital}}{\text{Total capital}}\]  

Current ratio = \[\frac{\text{Current assets}}{\text{Current liabilities}}\]  

Quick ratio = \[\frac{\text{Current assets - stock}}{\text{Current liabilities}}\]  

Interest coverage ratio = \[\frac{\text{Net profit} + \text{interest obligations}}{\text{Interest obligations}}\]  

Net surplus % = \[\frac{\text{Net surplus} \times 100}{\text{Total sales}}\]  

Return on members capital = \[\frac{\text{Net surplus}}{\text{Total of share capital and reinvested surplus}}\]  

Dividend coverage = \[\frac{\text{Net surplus}}{\text{Dividend paid}}\]
The Rationec Society

The Rationec Co-operative Society has been in operation for five years. The society purchases members' crops in July, August and September, and sells them the following December and January. They also supply fertilizers and other requisites to members during the planting season in February and March. The society prepared its accounts for the financial year ending 31 March 1982 and they were ready in October 1982. They read as follows:

**SALES OF CROPS**

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<tr>
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**GROSS SURPLUS ON CROPS**

<table>
<thead>
<tr>
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**SALES OF REQUISITES**

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<td>Purchases</td>
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<tr>
<td>Less: Closing Stocks</td>
<td>7,000</td>
</tr>
<tr>
<td>Cost of Goods Sold</td>
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**GROSS SURPLUS ON REQUISITES**

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**TOTAL GROSS SURPLUS**

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**EXPENSES**

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<td>Transport</td>
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<td>Interest Paid</td>
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<td>Stationery and Postage</td>
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<tr>
<td>Committee Members' Expenses</td>
<td>700</td>
</tr>
<tr>
<td>Packing Material</td>
<td>400</td>
</tr>
<tr>
<td>Bad Debts</td>
<td>200</td>
</tr>
</tbody>
</table>

**TOTAL EXPENSES**

<table>
<thead>
<tr>
<th>Description</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>10,500</td>
</tr>
</tbody>
</table>

**NET SURPLUS**

<table>
<thead>
<tr>
<th>Description</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1,500</td>
</tr>
</tbody>
</table>

(Dividend agreed at the annual meeting in August 1982, $1,000)
### Balance Sheet for the Rationic Co-operative Society as at 31 March 1982

<table>
<thead>
<tr>
<th>Assets</th>
<th>$</th>
<th>Liabilities</th>
<th>$</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Current:</strong></td>
<td></td>
<td><strong>Current:</strong></td>
<td></td>
</tr>
<tr>
<td>Cash</td>
<td>2,000</td>
<td>Accounts Payable</td>
<td>6,000</td>
</tr>
<tr>
<td>Bank Balance</td>
<td>500</td>
<td>Long Term:</td>
<td></td>
</tr>
<tr>
<td>Accounts Receivable</td>
<td>4,500</td>
<td>Bank Loan (repayable over ten years)</td>
<td>20,000</td>
</tr>
<tr>
<td>Stock: Crops</td>
<td>10,000</td>
<td>Members' Loan Accounts</td>
<td>1,000</td>
</tr>
<tr>
<td>Requisites</td>
<td>7,000</td>
<td>Share Capital</td>
<td>2,000</td>
</tr>
<tr>
<td><strong>Fixed:</strong></td>
<td></td>
<td>Proposed Dividend</td>
<td>1,000</td>
</tr>
<tr>
<td>Furniture &amp; Equipment</td>
<td>6,500</td>
<td>Reinvested Surplus</td>
<td>500</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>30,500</td>
<td><strong>Total</strong></td>
<td>30,500</td>
</tr>
</tbody>
</table>
sources of money

Session 2.1 Loan Hunger
Session 2.2 Sources of Funds
Session 2.3 Bank Loans
SESSION 2.1

LOAN HUNGER

Objective: To enable trainees to deploy the funds already within their societies as effectively as possible before looking outside for external funds.

Time: 2 to 3 hours.

Material: Exercise "The Loan Hungry Society".

Session Guide:

1) Ask trainees to name the most important financial problem of co-operative societies. Most of them will reply "shortage of capital".

They may mention items such as stock, credit or equipment which they cannot obtain. The reason for their inability will, however be the same:

- Shortage of capital.

Ask trainees how they might expect to acquire such capital. Most will probably suggest a bank loan.

Ask trainees what is involved in getting a bank loan. Elicit difficulties such as:

- The need for security.
- Long delays in approval and disbursement.
- Complicated paperwork.
- The need to pay interest.
- The possibility of not getting a loan at all.

Are there other sources of funds which are within the society, which may be more immediately available than bank loans and are also more under the control of the manager?
Write the following balance sheet on the chalkboard/OHP:

<table>
<thead>
<tr>
<th>Assets</th>
<th>$</th>
<th>Liabilities</th>
<th>$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cash</td>
<td>1,500</td>
<td>Accounts Payable</td>
<td>2,500</td>
</tr>
<tr>
<td>Bank Balance</td>
<td>3,500</td>
<td>Bank Overdraft</td>
<td>nil</td>
</tr>
<tr>
<td>Accounts Receivable</td>
<td>1,500</td>
<td>Long Term Loan</td>
<td>4,000</td>
</tr>
<tr>
<td>Stocks</td>
<td>1,000</td>
<td>Members' Loan Accounts</td>
<td>500</td>
</tr>
<tr>
<td>Plant and Machinery</td>
<td>3,000</td>
<td>Members' Share Capital</td>
<td>3,000</td>
</tr>
<tr>
<td>Land and Buildings</td>
<td>4,500</td>
<td>Retained Surplus</td>
<td>5,000</td>
</tr>
<tr>
<td>Total</td>
<td>$15,000</td>
<td>Total</td>
<td>$15,000</td>
</tr>
</tbody>
</table>

If the society requires $2,000 at once to pay for a new piece of equipment, or to increase the level of stocks, where can they get the money?

- Trainees may look only at the liabilities or sources side of the balance sheet when they need money. Ask them to examine the assets or uses side, to see if there is already any money there which could be used.

Trainees should realise that the society can use $2,000 from its bank balance, or perhaps $1,000 from cash and $1,000 from the bank. Unless the money happens to be needed immediately for paying members or a similar purpose, it can be used to buy whatever other possession is needed. It is obvious enough that cash and bank balances can be used as a "source" of money although in a different way from the sources on the other side of the balance sheet.

There may not be many co-operative societies which have surplus funds in cash or in the bank. Are there other items on the assets or possessions side of the balance sheet which might be used as a "source" of money in the same way as cash or a positive bank balance?

Trainees may find it hard to appreciate that the ways in which money is used can themselves be a source of money. Ask trainees to suggest how money can in fact be obtained from the following asset items:
Cash: By physically removing the money.
Bank Balance: By signing a cheque.
Accounts Receivable: By recovering the money owed by customers.
Stocks: By selling stocks.
Plant and Machinery: By selling one or more pieces of equipment.
Land and Buildings: By selling some of the land and buildings.

2) Trainees will see that it is possible to withdraw money which is being used to finance one possession or asset. The assets of the society are however the things which it possesses in order to carry out its functions. How can a co-operative society operate without giving credit, holding stocks or owning equipment, land and buildings?

Ask trainees what they as managers should do with any money that may be in cash or in the bank, and is not immediately needed. They should put it in a deposit account so that it earns some interest over the period when it is not needed, rather than lying idle.

Ask trainees why co-operative societies hold stocks of their members' crops for a period. Why do they not keep the money on deposit in the bank and sell members' crops as soon as they receive them?

- Because the society can make a bigger surplus by investing its money in produce and selling it at a higher price than they can by putting the money on deposit in the bank.

Stress that every asset item on the balance sheet is in fact an investment like a deposit account in the bank or stocks of produce. The society should keep its money in a particular investment, or asset item only so long as there are not more profitable alternatives available.

3) Ask trainees to suggest things they believe they need in their societies, but for which they have no money available. The suggestions may include items such as:
- A new vehicle.
- Office equipment, such as a typewriter.
- A stand-by electrical generator.

Ask trainees to make specific suggestions to estimate the approximate cost of the thing they believe their society needs, and to compare this with the total value of the assets owned by their society.

Choose one trainee whose suggested purchase is relatively small in relation to the total of all the assets in the society. Ask him/her to say why the proposed purchase is needed. What benefit will it bring to the society? Answers might be as follows:

- A new motorcycle: "Improved communication with members".
- A new typewriter: "Higher typist productivity and better image to outsiders".

Stress that a purchase such as this must be justified in financial terms. It may be difficult to estimate how much extra surplus will result to the society because of investments of this kind, but it may be easy to decide whether money which is presently being used in some other way would be better employed on a new purchase such as has been suggested.

4) Ask the trainee who has proposed a particular investment to go through the list of assets in his or her society. If a recent balance sheet is not available, it is sufficient to list the items and to make a very approximate estimate of the value of each.

Ask the remaining trainees to examine the list of assets with their approximate values. Can they suggest from their own experience examples of money which is tied up unproductively in one or more asset items, and might be released for a more profitable use?

If trainees cannot immediately think of examples, ask questions about each item such as:

- Are all the loans to customers (stress that accounts receivable are not more than loans to customers and interest free ones at
that) really profitable in that they will be paid and that the customer in question would cease to purchase from the society if credit was withdrawn?

- How much money could be withdrawn from accounts receivable if these loans were gradually withdrawn?

- Are there many items of farm inputs or equipment which have been in stock for a long period and which are unlikely to be sold for several months or even years? If so, could part of the money tied up in this way be released by heavily publicised price reductions, and if so how much?

- Does the society have any equipment which is underused or is not used at all? Could this equipment be sold and, if so, for how much?

- Does the society own any land or buildings, which could be sold and replaced by rented property, or even continue to be occupied on a rental basis? Could the money which would be raised in this way be used more profitably to purchase other assets?

5) Trainees may not wish to admit that any assets owned by their societies should be disposed of or reduced in quantity, because if they do admit this they feel that they or their predecessors made a mistake when the item was originally purchased, or credit given to a customer. Stress that what was right yesterday may well be wrong tomorrow. The foolish manager is the one who refuses to admit that yesterday's decision may now be wrong.

It may have been a mistake to stock a particular kind of farm tool, or to offer credit to a particular customer, but it is a far worse mistake to allow the effect of this error to continue rather than correcting it by withdrawing whatever funds can be recovered.

6) Distribute the exercise and allow trainees 30 minutes on their own to prepare their answers.

Ask individual trainees to suggest their answers to the first question and to give their reasons. There are a number of possibilities which include:
<table>
<thead>
<tr>
<th>Cash and Bank Balance</th>
<th>Possible Cash Raised</th>
</tr>
</thead>
<tbody>
<tr>
<td>It may be possible to reduce the total by $1,000, unless the season for crop payments is imminent.</td>
<td>$ 1,000</td>
</tr>
</tbody>
</table>

Accounts Receivable:

Customers are on average taking 3.6 months to pay for their goods. This is too long for security, quite apart from the uneconomical use of funds, and should be reduced to 1\(\frac{1}{2}\) months at the most, or $6,250, thus withdrawing $8,750 from the money that has been lent to customers.  

Stocks of Requisites:

Stocks equal one year's sales. Unless there are particular shortages or possibilities of a dramatic increase in use, these should be reduced to three months or one-quarter of a year at most, or $2,500, as soon as possible.  

Land and Buildings:

Land and buildings can be an excellent investment, since they often increase in value. The society should not, however, keep its money in these assets if it can more profitably be used to finance daily operations. They should, if the other sources are insufficient, investigate the possibility of selling some or all of the land and/or buildings, and renting similar property, or even renting it back from whoever buys it.

Total (not including any property sales)  

$17,250
Stress that these suggestions are based on ratios. There is no "correct" ratio for stocks, accounts receivable or anything else, but each society's accounts must be judged in the light of circumstances.

7) Ask trainees to suggest how they would go about "extracting" the money from the various ways in which it is being used at the moment. Only cash can be physically removed from the cash box, and money can be taken from the bank by signing cheques. How could the manager go about removing money from the other possessions?

Refer back to Item 1 if necessary. It is obviously easier to sign a cheque than to reduce stocks or accounts receivable, but it can be done.

- Accounts receivable may be reduced by pressing customers more vigorously for payment, and by refusing further deliveries to particularly slow payers, even after they have paid what they owe. Legal action can be threatened if necessary (this will be dealt with in more detail in Session 3.2).

- Stocks of requisites can be reduced by investigating the items making up the stock. Overstocked items should not be reordered until stocks have come down to three months sales, some may have to be reduced in price to be sold while others may be disposed of by aggressive promotion. (Stock management will be dealt with in more detail in Session 3.4.)

- Land and buildings can sometimes be sold and rented back from the purchaser who is looking for a secure investment, or it may be possible to raise a mortgage on the security of land and buildings if they are not already pledged as security for existing loans.

8) The actual asset items to be used as a source of cash will inevitably depend on the particular circumstances of the society, and the time of the year. There are few organisations of any kind, however, where some money which is "sleeping" in underused assets cannot be "woken up" to provide the resources that management believe can only be obtained by a loan from outside. Loans cost money, and involve an obligation. Money that is already in the society can be put to a different and better use without cost or obligation.
The manager of the LHS was very disappointed when the bank manager refused his loan application. He had also failed to persuade the members to increase their shares, and none of the society's suppliers were willing to extend any trade credit.

The manager was sure that the society needed a new tractor, and that they could earn an extra surplus of $2,000 per year from hiring it out after paying all expenses. Since the LHS had been waiting for two years to be allocated a tractor, the manager knew that there were plenty of other farmers and societies which would be willing and able to pay cash if he could not, so that the LHS would then have to wait a further two or three years until their turn came up again. He felt that he had tried every possible source, and looked at the accounts of his society in despair. The tractor would cost $10,000, in cash, and it seemed impossible to get the money.

**LHS, Operating Statement for the Year Ending 31 December 1982**

<table>
<thead>
<tr>
<th>Sales of Produce</th>
<th>40,000</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sales of Requisites</td>
<td>10,000</td>
</tr>
<tr>
<td>Total</td>
<td>50,000</td>
</tr>
<tr>
<td>Cost of Goods Sold</td>
<td>35,000</td>
</tr>
<tr>
<td>Gross Surplus</td>
<td>15,000</td>
</tr>
<tr>
<td>Expenses:</td>
<td></td>
</tr>
<tr>
<td>Wages</td>
<td>4,000</td>
</tr>
<tr>
<td>Interest Charges</td>
<td>1,500</td>
</tr>
<tr>
<td>Packing Material</td>
<td>1,500</td>
</tr>
<tr>
<td>Transport</td>
<td>3,000</td>
</tr>
<tr>
<td>Administration</td>
<td>2,000</td>
</tr>
<tr>
<td></td>
<td>12,000</td>
</tr>
<tr>
<td>Net Surplus</td>
<td>3,000</td>
</tr>
</tbody>
</table>
### LHS, Balance Sheet as at 31 December 1982

<table>
<thead>
<tr>
<th>Assets</th>
<th>$</th>
<th>Liabilities</th>
<th>$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cash</td>
<td>500</td>
<td>Accounts Payable</td>
<td>5,000</td>
</tr>
<tr>
<td>Bank Balance</td>
<td>1,500</td>
<td>Overdraft</td>
<td>2,000</td>
</tr>
<tr>
<td>Accounts Receivable</td>
<td>15,000</td>
<td>Long Term Loan</td>
<td>13,000</td>
</tr>
<tr>
<td>Stocks of Requisites</td>
<td>10,000</td>
<td>Members' Savings Accounts</td>
<td>4,000</td>
</tr>
<tr>
<td>Plant and Equipment</td>
<td>8,000</td>
<td>Members' Share Capital</td>
<td>10,000</td>
</tr>
<tr>
<td>Land and Buildings</td>
<td><strong>20,000</strong></td>
<td>Retained Earnings</td>
<td><strong>21,000</strong></td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>55,000</td>
<td><strong>Total</strong></td>
<td>55,000</td>
</tr>
</tbody>
</table>

**Assignment:**

1) Where should the manager of the LHS try to obtain the $10,000 he needs for the tractor?

2) How should he go about getting this money from the sources you have identified?
SESSION 2.2

SOURCES OF FUNDS

Objective: To enable trainees to identify the various external sources of funds available to a society, and to assess which are suitable in particular circumstances.

Time: 2 to 3 hours.

Material: Exercise "Sources of Funds".

Session Guide:

1) Remind trainees that managers, like individuals and nations, must be sure they are using the resources they already have properly, before seeking more resources from outside. Co-operative societies must analyse all their existing assets, as demonstrated in the previous session, before attempting to add new liabilities.

Ask trainees to suggest the most popular source of outside capital. They will refer to bank loans. Stress that bank loans are indeed one source of capital, but only one of many different sources, and not necessarily the best. The purpose of this session is to identify all the different sources of capital available to a co-operative society, and to decide which are the most appropriate in particular circumstances.

2) Ask trainees to suggest as many as possible of the outside sources of funds which are available to a co-operative society. They should think of the items on the liability side of the balance sheet. Elicit a list such as the following which should be written on the chalkboard/OHP:

Accounts Payable
Overdraft - Short Term Bank Loan
Long Term Bank Loans
Members' Savings Accounts
Members' Share Capital
Retained Surplus
If customer deposits are a feasible source of funds for societies represented by trainees, ask trainees to suggest how a society whose products are in short supply can use this fact to obtain more capital. Elicit the suggestion that customers can be asked to make advance payments in order to guarantee a share of the available deliveries. This is particularly attractive if prices are controlled and cannot therefore be increased to take account of the high demand.

Other sources such as government grants, charitable donations or gifts of material or equipment may also be locally available. These should be included, or others excluded, as appropriate.

Ensure that trainees appreciate that all these are in fact sources of extra capital, which can increase the "sources" side of the balance sheet, and can be used to buy more items and thus increase the "possessions" side by the same amount. Remind trainees that when a supplier allows a society to pay for goods sometime after receiving them, the effect is the same as a loan.

Ask trainees what is different about retained earnings. This is the only source of finance which lies within a society. The others all involve bringing new money in from outside, temporarily or for a long period.

Ask trainees individually to rank the sources of capital in order of preference. Which do they believe is the most attractive to a co-operative society and so on down to the least attractive?

Opinions will of course differ. The purpose of this small exercise is to force trainees to think about the advantages and disadvantages of each source, and eventually to realise it is impossible to state which source is "best" without taking account of the particular circumstances of the society and the use to which the finance is to be put.

Ask trainees to read out their rankings from 1 to 6, write their figures beside each item in order to make a table of the following form:
### Rank

<table>
<thead>
<tr>
<th>Source</th>
<th>Rank</th>
</tr>
</thead>
<tbody>
<tr>
<td>Accounts Payable</td>
<td>5 1 5 etc.</td>
</tr>
<tr>
<td>Overdraft/Short Term Loans</td>
<td>4 3 1 etc.</td>
</tr>
<tr>
<td>Long Term Loans</td>
<td>6 2 6 etc.</td>
</tr>
<tr>
<td>Members' Savings Accounts</td>
<td>1 4 2 etc.</td>
</tr>
<tr>
<td>Members' Share Capital</td>
<td>2 5 4 etc.</td>
</tr>
<tr>
<td>Retained Surplus</td>
<td>3 7 3 etc.</td>
</tr>
</tbody>
</table>

Estimate the approximate average in order to indicate the general opinion of the trainees.

4) Ask a trainee who has ranked Accounts Payable highly to give his reasons. After summarising these on the chalkboard/OHP ask a trainee who has given Accounts Payable a low rank to state why. Elicit the advantages and disadvantages of each source of funds in the same way.

Trainees should at least give the following advantages and disadvantages for each source:

#### Accounts Payable

**Advantages:**
- No interest is payable.
- Automatically increase as volume of purchases increases.
- All being well, suppliers should be willing to continue to extend credit for as long as the society continues to buy from them.
- Goodwill, or bargaining power, may allow a society occasionally to "stretch" suppliers' credit if this is necessary in an emergency.

**Disadvantages:**
- The society may be tied to substandard suppliers.
- Suppliers may add something to the cost of goods in order to cover the cost of credit.
- Suppliers may be able to withhold credit at short notice, and to force payment by refusing supplies.
- Not a significant source for societies which do not buy a great deal from outside suppliers.

**Short Term Loans - Overdrafts**

**Advantages:**
- Need only be borrowed when needed, thus saving interest charges.
- Once granted, overdraft facilities can be used immediately merely by writing a cheque.
- Banks usually charge their lowest interest rates on overdrafts.

**Disadvantages:**
- Facility can be withdrawn at short notice.
- Amount likely to be seriously limited for a weak society.
- Overdrafts not likely to be given at all to new and unknown customers of the bank.

**Long Term Loans**

**Advantages:**
- Funds can be retained, once a loan is negotiated, and repayments cannot be unexpectedly demanded.
- Bank is likely to assist and advise management of long term borrowers.
- The grant of a long term loan may be taken by suppliers, customers, or others as evidence of sound establishment of the borrowing society.
- Can be fairly easily obtained to fund the purchases of land and buildings which can be used for security.

**Disadvantages:**
- High and continuing interest charges.
- Funds must continue to be borrowed and paid for even when not needed.
- Banks may demand a minimum balance on non-interest paying current account as an informal condition for approving a long term loan.
- Banks are likely to demand security which, if seized, will destroy the society.

- Banks demand complete investigation and continuing access to the society's accounts and operations.

Members' Savings Accounts

**Advantages**

- Low interest rate payable.

- Unlikely all to be withdrawn at the same time.

- No investigation of figures or accounts required by members.

- May be regarded by outsiders as evidence of member loyalty and commitment.

**Disadvantages**:

- High administrative costs of maintaining individual small accounts.

- Poor members are unlikely to contribute any substantial sum.

- May be seasonal because of agricultural cycle and need of farmers.

Members' Share Accounts

**Advantages**:

- Funds are committed to the society and cannot be withdrawn unless member resigns.

- Low interest is payable.

- Regarded by the potential lenders as evidence of members' commitment.

**Disadvantages**:

- Only smaller sums are likely to be available.

- Unlikely to be available to finance expansion of facilities to attract new membership, as funds only come in when new members actually join.

Retained Surplus:

**Advantages**:

- No interest payable.
- Totally committed to the society and cannot be withdrawn.
- Can be used at the discretion of the society without any interference from outside.

**Disadvantages**
- Accumulates slowly only as the society prospers rather than before.
- Can only be increased at the expense of the dividend, which may disappoint members.
- Cannot be called upon when needed to finance expansion or recover from difficulties, but grows only with the society's growth and success.

5) Distribute the exercise and allow trainees up to 45 minutes to answer the questions individually.

When they have completed the exercise, ask for trainees' answers. Record the number of trainees choosing each source, and ensure that every trainee makes a decision in each case. Some suggested solutions are as follows. Different answers may be acceptable if they are effectively supported by convincing arguments, particularly where they relate to local circumstances.

- Society A should obtain a long term loan, preferably in the form of a mortgage secured on the value of the property.
- Society B should ask its suppliers to extend credit for extra purchases.
- Society C should request overdraft facilities from the bank.
- Society D should ask its members for additional share capital to buy the machine, and to improve the balance between members' and outsiders' investments.
- Society E should reinvest $500 per year from the surplus, if possible, in order to finance the increasing credit to be given to customers.

6) Ensure that trainees understand the reasons for these answers. If time allows, and trainees need further reinforcement of their understanding of the meaning of balance sheets, ask them to amend
the balance sheets in each case to show the effect of additional finance, if it is acquired as suggested in the above answers and used as proposed.

Trainees may suggest retained surplus or "reserves" as this is sometimes called, as an immediate source of funds. Stress that the amount already "retained" or "reserved" cannot be used to finance any new purchase, any more than money already lent to the society can be used. It is already being used in the assets, and the retained surplus can only be used for new purchases as it is increased from the earnings of the society in the future.

7) Stress that an effective society manager must not only select the right sources of funds. He must also manage the source of sources in such a way as to ensure money continues to be available.

- Loan repayments must be scheduled so that they can be paid when due. (Later sessions on the timing of money flows will cover the necessary techniques.)
- Members' savings accounts must be efficiently administered so that no mistakes are made and members can withdraw and deposit money as when they wish.
- Suppliers who are owed money must be encouraged to continue to allow the society credit.

Ask trainees to give examples of customer behaviour which will lead them as managers to refuse to grant further credit even if the customer's basic business is sound. These may include:

- Payments delayed without notification.
- Clerical errors leading to time wasting disputes.
- Continued unnecessary queries arising from administrative inefficiencies.

Are their own societies totally innocent of these and other types of poor management, so that their suppliers will be discouraged from granting them credit, even if there is no question of their basic financial soundness?
8) A number of decisions must be made when dealing with accounts payable. There are no clear cut answers, but trainees should be aware of the alternatives available:

- Should suppliers be warned if payment will be delayed, or is such a warning likely to remind them to press for payment when they would not otherwise have done so?
- If funds are short, should all suppliers receive a share of what can be paid in proportion to the amount owed to them, or should some receive preference?
- Which suppliers should be paid first, and which can be kept waiting?

The answers to these and other accounts payable decisions depend on the nature of each supplier. Stress that the society manager must be familiar with all his important suppliers, and the record of accounts payable must be correct and up-to-date so that decisions can be made on the basis of complete information.

9) Ask trainees if there are ways in which possessions needed by a society may be obtained without using any additional funds, either from inside or outside the society.

If trainees are unable to suggest how this can be done, ask them how they would personally expect to finance the purchase of a car, or to obtain the services of a tractor on their own farm if they could not afford to buy one.

- Cars and other equipment can be obtained by hire purchase. A small deposit is usually required, and the item is effectively a possession of the society even if it is legally owned by the supplier until completely paid for.
- Items which are not needed for full-time use can sometimes be hired as they are required. The hire charge per hour may look excessive, but may well be moderate when compared with the actual cost of owning a particular item for a complete year.

These and other options are covered in more detail in Session 3.5.
10) Remind trainees of the large range of alternative sources of funds which are available. Within each of them there may also be many options, such as different competing banks or alternative suppliers who may grant credit.

A society manager should not try one source and give up if he fails to obtain what he needs. He should be aware of all possible sources, and select those which are most appropriate for the particular purpose required.
Sources of Funds

Each of the following societies wishes to obtain funds as stated for the purpose described. Recommend what source of funds their management should choose in each case, assuming that the money presently employed in the assets cannot be redeployed. The new finance must come from an increase in liabilities.

**SOCIETY A**

<table>
<thead>
<tr>
<th>Assets</th>
<th>$</th>
<th>Liabilities</th>
<th>$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cash and Bank Balance</td>
<td>1,000</td>
<td>Accounts Payable</td>
<td>1,500</td>
</tr>
<tr>
<td>Accounts Receivable</td>
<td>2,000</td>
<td>Overdraft</td>
<td>1,500</td>
</tr>
<tr>
<td>Stocks</td>
<td>3,000</td>
<td>Long Term Loan</td>
<td>2,000</td>
</tr>
<tr>
<td>Plant and Equipment</td>
<td>2,000</td>
<td>Members' Loan Accounts</td>
<td>1,000</td>
</tr>
<tr>
<td>Land and Buildings</td>
<td>5,000</td>
<td>Members' Share Capital</td>
<td>3,000</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Retained Earnings</td>
<td>5,000</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>13,000</td>
<td><strong>Total</strong></td>
<td>13,000</td>
</tr>
</tbody>
</table>

Society A needs $3,000 to pay for an extension to existing buildings.

**SOCIETY B**

<table>
<thead>
<tr>
<th>Assets</th>
<th>$</th>
<th>Liabilities</th>
<th>$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cash and Bank Balance</td>
<td>500</td>
<td>Accounts Payable</td>
<td>200</td>
</tr>
<tr>
<td>Accounts Receivable</td>
<td>2,000</td>
<td>Overdraft</td>
<td>500</td>
</tr>
<tr>
<td>Stocks</td>
<td>1,500</td>
<td>Long Term Loan</td>
<td>5,000</td>
</tr>
<tr>
<td>Plant and Equipment</td>
<td>4,000</td>
<td>Members' Loan Accounts</td>
<td>1,000</td>
</tr>
<tr>
<td>Land and Buildings</td>
<td>5,000</td>
<td>Members' Share Capital</td>
<td>3,300</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Retained Earnings</td>
<td>2,000</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>13,000</td>
<td><strong>Total</strong></td>
<td>13,000</td>
</tr>
</tbody>
</table>

Society B needs $1,000 to pay for increased purchases of materials that are essential for processing members' seasonal crops.
### Society C

<table>
<thead>
<tr>
<th>Assets</th>
<th>$</th>
<th>Liabilities</th>
<th>$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cash and Bank Balance</td>
<td>100</td>
<td>Accounts Payable</td>
<td>2,000</td>
</tr>
<tr>
<td>Accounts Receivable</td>
<td>1,900</td>
<td>Overdraft</td>
<td>nil</td>
</tr>
<tr>
<td>Stocks</td>
<td>1,000</td>
<td>Long Term Loan</td>
<td>2,000</td>
</tr>
<tr>
<td>Plant and Equipment</td>
<td>5,000</td>
<td>Members' Loan Accounts</td>
<td>1,000</td>
</tr>
<tr>
<td>Land and Buildings</td>
<td>2,000</td>
<td>Members' Share Capital</td>
<td>1,000</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Retained Surplus</td>
<td>4,000</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>10,000</td>
<td><strong>Total</strong></td>
<td>10,000</td>
</tr>
</tbody>
</table>

Society C needs $2,000 to pay members for their crops which are about to be harvested and will be sold in two months.

### Society D

<table>
<thead>
<tr>
<th>Assets</th>
<th>$</th>
<th>Liabilities</th>
<th>$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cash and Bank Balance</td>
<td>1,000</td>
<td>Accounts Payable</td>
<td>1,000</td>
</tr>
<tr>
<td>Accounts Receivable</td>
<td>1,500</td>
<td>Overdraft</td>
<td>3,000</td>
</tr>
<tr>
<td>Stocks</td>
<td>4,500</td>
<td>Long Term Loan</td>
<td>8,000</td>
</tr>
<tr>
<td>Plant and Equipment</td>
<td>7,000</td>
<td>Members' Loan Accounts</td>
<td>1,000</td>
</tr>
<tr>
<td>Land and Buildings</td>
<td>2,000</td>
<td>Members' Share Capital</td>
<td>1,000</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Retained Surplus</td>
<td>2,000</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>16,000</td>
<td><strong>Total</strong></td>
<td>16,000</td>
</tr>
</tbody>
</table>

Society D needs $1,000 to pay for a new machine to increase processing capacity.

### Society E

<table>
<thead>
<tr>
<th>Assets</th>
<th>$</th>
<th>Liabilities</th>
<th>$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cash and Bank Balance</td>
<td>500</td>
<td>Accounts Payable</td>
<td>1,000</td>
</tr>
<tr>
<td>Accounts Receivable</td>
<td>2,500</td>
<td>Overdraft</td>
<td>2,000</td>
</tr>
<tr>
<td>Stocks</td>
<td>3,000</td>
<td>Long Term Loan</td>
<td>7,000</td>
</tr>
<tr>
<td>Plant and Equipment</td>
<td>3,000</td>
<td>Members' Loan Accounts</td>
<td>500</td>
</tr>
<tr>
<td>Land and Buildings</td>
<td>6,000</td>
<td>Members' Share Capital</td>
<td>3,000</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Retained Surplus</td>
<td>1,500</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>15,000</td>
<td><strong>Total</strong></td>
<td>15,000</td>
</tr>
</tbody>
</table>

Society E will need an extra $500 next year to pay for increased credit which customers will demand on the expected sales.
SESSION 2.3

BANK LOANS

Objective: To enable trainees successfully to apply for bank loans for their societies when this is an appropriate form of finance.

Time: 12 to 2 hours.

Material: Case Study "The Tractor Project".

Session Guide:

1) In some countries, particularly where agricultural co-operatives are relatively new and in need of special support, bank loans on easy terms are granted almost automatically.

Stress that trainees must nevertheless understand how to obtain bank finance without special terms, since co-operative societies will in due course be expected to stand on their own feet without any special privileges or support.

Present the following two "liability" statements on the chalkboard/OHP:

<table>
<thead>
<tr>
<th>Society A</th>
<th>Society B</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bank Loan</td>
<td>$4,000</td>
</tr>
<tr>
<td>Members' Share Capital and Undistributed Surplus</td>
<td>$1,000</td>
</tr>
<tr>
<td>Total</td>
<td>$5,000</td>
</tr>
</tbody>
</table>

Ask trainees to write down which set of liabilities demonstrated "better" financial management, and why.

Ask trainees to indicate which they have chosen. Record the numbers voting for each on the chalkboard, and ask one of what is probably the majority who prefer Society B to state why.
They will probably refer to the fact that Society A is relying excessively heavily on external sources of finance, namely a loan. Members have demonstrated little commitment to the society, and if significant surpluses have ever been made they have all been withdrawn in the form of dividend.

Ask any trainee who preferred Society A to say why.

They should refer to the fact that the management of Society A have shown financial skill and acumen because they obtained 80% of the money needed to finance their society's operations from sources other than the members. Most co-operative society members are relatively poor. If management can use money other than theirs to finance their society, they are being well served.

Ask trainees whether they, or their members, would prefer to invest their money in something which paid 15% interest a year or 60% interest a year, all other things being equal:

- Clearly everyone would prefer a "return" of 60% to one of 15%.

Ask trainees to assume that both societies paid a dividend of $600 to their members. What rate of interest on their investment in the society would the members be receiving?

- **Society A**: $600 dividend on $1,000 of investment = 60%
- **Society B**: $600 dividend on $4,000 of investment = 15%

Ask trainees who preferred the financial management of Society B to say which manager has succeeded in creating the best return for his members. Are they prepared to change their earlier views, and to choose Society A? If not, why not?

2) Ask trainees what essential factor has been omitted from the foregoing calculations. Clearly a society which borrows more money has to pay more interest. Its surplus will therefore be lower, so it is not possible to assume that the dividend of $600 will be the same for Society A and for Society B.
Ask trainees to assume that the $600 must be reduced because of interest. If both societies pay 10% annual interest on their bank loans, what interest will they pay, and how much surplus would be left in each case?

- **Society A**: 10% on $4,000 = $400
  
  $600 - $400 = $200 net surplus.

- **Society B**: 10% on $1,000 = $100
  
  $600 - $100 = $500 net surplus.

Trainees can thus see that Society B has earned two-and-a-half times as much surplus as Society A, and they may now wish yet again to change their mind and prefer the financial management of Society B.

What is the percentage return on members' investment in both cases?

- **Society A**: $200 on $1,000 = 20%

- **Society B**: $500 on $4,000 = 12 1/2%

Clearly Society A is still a better investment for its members than Society B. Ask trainees who voted for Society B if they still maintain their view, and why.

3) Ask trainees to individually calculate the surplus after interest at 10% on the loan, and the resulting rate of return on members' investment, for a variety of other surplus amounts before deducing interest. These should include: $100, $200, $300, $400, $500, $600, $700, $800, $900 and $1,000.

Ask them for their results and list them on the chalkboard/OHP as follows:
<table>
<thead>
<tr>
<th>Surplus Before Interest</th>
<th>Surplus After Interest</th>
<th>Return on Members' Investment of $1,000</th>
<th>Surplus After Interest</th>
<th>Return on Members' Investment of $4,000</th>
</tr>
</thead>
<tbody>
<tr>
<td>$</td>
<td>$</td>
<td>60%</td>
<td>900</td>
<td>22½%</td>
</tr>
<tr>
<td>1,000</td>
<td>600</td>
<td>50%</td>
<td>800</td>
<td>20%</td>
</tr>
<tr>
<td>900</td>
<td>500</td>
<td>40%</td>
<td>700</td>
<td>17½%</td>
</tr>
<tr>
<td>800</td>
<td>400</td>
<td>30%</td>
<td>600</td>
<td>15%</td>
</tr>
<tr>
<td>700</td>
<td>300</td>
<td>20%</td>
<td>500</td>
<td>12½%</td>
</tr>
<tr>
<td>600</td>
<td>200</td>
<td>10%</td>
<td>400</td>
<td>10%</td>
</tr>
<tr>
<td>500</td>
<td>100</td>
<td>-</td>
<td>300</td>
<td>7½%</td>
</tr>
<tr>
<td>400</td>
<td>-</td>
<td>-</td>
<td>(100)</td>
<td>(-10%)</td>
</tr>
<tr>
<td>300</td>
<td>(100)</td>
<td>(-20%)</td>
<td>200</td>
<td>5%</td>
</tr>
<tr>
<td>200</td>
<td>(200)</td>
<td>(-30%)</td>
<td>100</td>
<td>2½%</td>
</tr>
<tr>
<td>100</td>
<td>(300)</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

Ensure that all trainees understand the method of calculation and ask them to compare the results for the two societies. What should they now conclude about the quality of financial management of Societies A and B?

If results improve, the return on Society A's members' investment increases very rapidly, while Society B's members' return increases far more slowly.

- If results get worse, Society A's members' return goes down very quickly, and Society A starts to lose money well before Society B.

4) Ask trainees what difference it makes to the bank which has lent Society A $4,000 if the surplus increases. Does the bank earn any more money as a result of the society's success?

- The bank continues to earn the interest of $400. Members obtain all the benefit.
What happens to the bank if the surplus before charging interest falls below $400? Does this make any difference to the money received by the bank?

- If the society loses money, it may not be able to pay interest at all. The bank would then lose the interest payment.

What is the effect on members of Society A if the surplus increases or decreases?

- If results improve, the return on members' investment increases dramatically and they do very well indeed.
- If results become worse, they will receive no return at all.

What is the effect on members and the bank if either Society A or Society B go bankrupt?

Society A is rather more likely to have to close down sooner because of the burden of interest charges, but if it does go bankrupt and members lose their investment, they will only lose a total of $1,000. The bank will lose $4,000.
- Society B may survive longer, but if it does go bankrupt members would lose $4,000. The bank will only lose $1,000.

Ask trainees to put themselves in the position of a bank manager. Which society will they prefer to lend money to, and why?

Bankers gain nothing more from the increased prosperity if Society A does well, and are more likely to lose their loan if it does badly. They would prefer to lend money to co-operative societies whose members contribute a larger rather than a smaller share of the total investment.

5) Distribute the case study briefs to all trainees and divide the group into two groups. One group should imagine themselves to be the management committee of the society and prepare the list of information items as is described in the brief. The other group should imagine themselves to be the bank loan approval committee, and should prepare the list of questions which is described in their brief.
Allow the two groups up to 30 minutes to produce their respective lists. They should work separately so that they cannot overhear one another's discussions. Each group should prepare a list of the questions, in two copies. One copy should be retained by the spokesman of the group, and the other should be given to the instructor.

When the groups have finished the preparation of their lists, reconvene trainees. The spokesman for the bank should start the proceedings by reading out their first question. The committee management spokesman should then read out the item in their list which, in his judgement, indicates that they have predicted that such a question would be asked. The instructor should then rule whether or not the answer is sufficient. If it is, both sides receive one point, but if not, and if the instructor judges that the question is a reasonable one, the bank only receives the point.

If the question is not judged to be a reasonable one, nobody receives any points.

The game should continue in this way until the bankers have run out of all their questions. If the management have any remaining answers, they should then read them out. If the instructor rules that they are reasonable items of information, which the bankers should have asked for, but have not, the management receive one point.

The instructor must check on his or her copy list that the group has in fact thought of the question, or information, before the game started, rather than making up items or questions on the spur of the moment.

The winning group is the one which accumulates the most points. It is vital to keep the game going briskly, and to avoid lengthy discussions as to whether certain questions have or have not been answered. The instructor must make it clear from the outset that his word is final, and that complaints from either side will be rewarded by points being given to the other side.
6) The banker's questions and requests should include the following points. If any have been omitted, ensure that trainees appreciate their importance:

- Can the society show a cash flow forecast which shows that the amount to be repaid every quarter will in fact be available at the appropriate time?
- How much income will the tractor earn for the society every year, and at what times during the year?
- How many members will use the tractor?
- How much money will members pay per hour, per day or per acre?
- How does the society's management know how many members will use the tractor? On what is their estimate based?
- How does the society's management know that members will be willing to pay the proposed hire charge?
- Will members pay in cash or credit for use of the tractor?
  - If members pay by credit, what is the society's experience of members' debt repayment?
  - How much extra income will members themselves earn, after paying for the cost of hiring the tractor?
- How much will it cost to operate the tractor?
- How much will it cost to maintain the tractor?
  - How does the management of the society know how much it will cost to run and maintain the tractor?
  - For how many days is the tractor expected to be out of service every year for repairs?
  - Does the society have, or can they obtain, the services of a competent driver for the tractor?
- How long will the tractor last?
- Who will maintain the tractor?
- Can spare parts be obtained for the tractor?
- Will the tractor be insured?
- What competitive sources of tractor hire are available to members?
- Will the society itself earn an additional surplus after paying all the costs and the quarterly repayments?

What is the worst likely set of circumstances if things do not go as well as planned? Will the society still be able to repay if these circumstances occur?

- What experience does management have of managing similar operations?

- How well has the society itself been managed in the past?

- What security has the society to offer in case they are unable to pay the loan?

7) In many countries inappropriate equipment or supplies are "dumped" on co-operative societies, because of aid projects which are "tied" to particular suppliers or improper purchasing procedures at high levels. Stress that managers can and should protect their societies from this danger by insisting on detailed analysis of this sort, even if the bank does not demand it.

Stress that cash flow forecasts, evidence of members' willingness and ability to pay for services, or produce a certain quality and quantity of crops, and all other statements of this kind are estimates, forecasts or guesses about the future. What information about the past can a bank manager use to find out whether or not the society is likely to be able to perform as the managers say it will?

Management performance in the past, as indicated by continuing successful operation and achievement of forecasts, is the best evidence of likely continuing success in the future.

How can the management of a society give the manager of a bank continuing close familiarity of their affairs, so that the bank can judge their eligibility for a loan when they apply for it?

Opening and properly maintaining a bank-account, over as long a period as possible. Bank managers can then examine the record from their own figures, and satisfactory conduct of a savings or current account is the best way of ensuring that a request for a loan will be granted.
8) Ask trainees whose societies have already received loans how successfully they have maintained and developed their relations with the bank or other lending institution. Are they more or less likely to receive further loans in the future?

Stress the necessity for careful planning and effective management of the loan once it has been approved:

Repayment schedules must be based on realistic cash flow forecasts (to be dealt with in Session 6.3) with a margin for unexpected problems.

Lenders must be approached as early as possible to arrange for short term finance, rescheduling or delays if they appear likely to be necessary.

Bank loans are not a grant whose source can be ignored once they have been approved. The best way to get a large loan is to manage a smaller one successfully.
The Tractor Project

The members of the Borrowing Farmers Society (BFS) wanted to have the use of a tractor hire service, and the manager decided to apply to the bank for a loan for the purchase of a tractor which would then be hired out to members, together with a driver, in order to enable them to plough and cultivate their fields more quickly, more effectively and less expensively.

The bank offered loans to co-operative societies for tractor purchase on a five year basis, repayable quarterly. A suitable tractor could be purchased for $10,000 and the repayments would be $700 a quarter including interest.

Management Brief:

You realise that the bank manager will want more information than the fact that you want to borrow $10,000 to buy a tractor. You have decided to list all the information which you expect the bank manager will want to have, before actually obtaining any of it. You should therefore prepare a list of all the information at this stage. If, for instance, you believe the manager will want to know the average age of members, you need only write down "The average age of the members of the society". You need not suggest what the average age actually is.

Banker's Brief:

You understand that the manager of the BFS wishes to borrow $10,000 to buy a tractor. You naturally wish to obtain certain information from the manager as a basis for your decision whether or not to approve the loan, and you therefore have decided to write down all the questions to which you will require answers. You need not consider at this stage what sort of answers you will expect. If, for instance, you feel that a bank should not grant a loan to a society whose members' average age is over a certain figure you need only write in your list the question "What is the average age of the members of the society?".
the management of assets

Session 3.1 Money Management
Session 3.2 The Management of Accounts Receivable
Session 3.3 Stock Management
Session 3.4 Stock Valuation and Management
Session 3.5 Rent, Buy or Lease?
Session 3.6 The Movement of Money
SESSION 3.1

MONEY MANAGEMENT

Objective: To enable trainees to manage the movement of money within their society in such a way as to minimise the amount of idle money and maximise the opportunities for profitable investment.

Time: 1 to 2 hours.

Material: Tape Dialogue "The Conservative Co-operative Society." (To be recorded, if possible, well before the session.)

Session Guide:

1) Ask one or more trainees to state how much cash they actually have in their pocket at the moment. The amount is likely to be small.

Ask trainees why they have so little money, in relation to their total income or the value of the other things they possess.

They will probably answer:

- Because the cash may be stolen.
- Because they are not rich people.

Ask trainees how much money millionaires carry about with them. They may not know, but some rich people actually carry no money at all, because they know they can always obtain credit. Others only carry as much cash as they will need to pay for what they expect to buy before the next opportunity to obtain cash arises.

Ask trainees how much cash they would carry if there was no risk of theft. Illustrate that security is indeed a problem, but that there is another reason not to carry large amounts of cash as well as poverty and security:

Money in itself is a totally useless possession. It only becomes useful when we buy something with it.
Money is a form of "stock". Like stocks of requisites or consumer goods, it should only be held in the amount expected to be needed before it can be "re-stocked", by a visit to the bank or otherwise.

2) Play the dialogue, or if a tape recorder is not available ask two suitably selected trainees to act the roles of Selene and Mr. Abdul. Stop the dialogue at each "bleep" and ask trainees to comment on Mr. Abdul's policies. How might they be improved? Their answers should include the following points:

A) Bills should be paid when due but not before. If a society pays a supplier earlier than necessary, they are depriving themselves of use of the money. If, like most societies, they are borrowing money from the bank, they are incurring unnecessary interest charges. If they have cash, it could be earning interest for the society on deposit, before it was paid to the supplier.

B) Some supplier discounts are worth taking, and others are not. Assume that the bank pays 12% interest on deposits. If a supplier allows 12% discount for payment within seven days, but otherwise expects payment at the end of the month following that of the invoice, for instance, the society may be giving away two months' interest which they could earn from the bank, or 2% to gain 12%. Each settlement discount must be examined individually, and if the society has funds at its disposal, the manager should ask suppliers which do not offer settlement discounts to consider doing so.

C) When cheques are in the mail money is still in customers' accounts. A one week delay in presenting a cheque for $10,000 costs $25 if the interest rate is 12% per year (4 month x 2 year x 12% annual interest). It is worth some time, and some expense and effort, to present cheques more quickly.

D) If cheques are accumulated the money is not available to the society. It should be paid in daily, if possible to a bank that will credit accounts on the same day that cheques are received. In addition to the loss of interest on the money, the organisation that wrote the cheques may be in
temporary or longer term difficulties. The first cheques to be presented are the ones to be paid if funds are short.

Societies or unions with distant depots should when possible make arrangements for cheques to be put into nearby bank branches rather than being collected together and paid in at the headquarters office. If rural bank branches are unable to credit the central account immediately, and policy does not permit depots to have their own accounts, special deposit accounts should be opened for the organisation at rural branch banks which can be regularly cleared to the central office by arrangement but will earn interest in the meantime.

A good manager should delegate responsibility for routine procedures, so that he can concentrate on managing the finances of his society properly.

E) A society's members are not customers or suppliers in the ordinary sense but they are the society and should therefore be able to have the use of money that is paid to them as soon as possible. The society should not make it difficult for them to obtain the funds that are theirs:

- The payment procedures for members should be as simple as possible.
- Payments should be made in cash up to a certain maximum.
- Cheques below a certain figure should be made out at the collection centres.

Banks should be asked to make arrangements for local payments, by branches, agencies or mobile banking trucks.

F) If staff are paid by cheque, they and the society gain in many ways.

- Staff and the society avoid the risk of theft.
- Staff learn to make use of banking facilities.
- Payments can more easily and economically be organised by the society.
Payments can be made by direct transfer at the bank, without the staff ever having to receive the cheque or to present it to the bank at all.

It should be done whenever possible, unless there are no banking facilities convenient for the society's staff.

G) Banks are in business like any other organisation. Societies should investigate the services offered by competing banks and should negotiate for improved services, lower interest charges, higher interest rates on deposits, special cash services and so on using the implied threat of changing to another bank as a bargaining point.

The uses of finance should be planned like any other commodity (this will be covered in Session 6.3). The society should be able to forecast when money will come in and go out, and if a significant amount of money is to be in surplus for even a week or more, it should be put on deposit or in a fixed term account, yielding higher interest, for one month, three months or more. Bankers will always welcome customers who leave their money in a current account, because this increases their profit. This is not in the interests of the customer.

H) A society should keep no more cash on the premises than is absolutely necessary. The amount should if possible be so small that it can safely be left in the hands of a reliable clerk. This society clearly needs a better internal control system.

3) If time allows play the tape a second time. After each "bleep" ask trainees whether their societies are behaving in the same way as the chief accountant of the Conservative Co-operative Society.

It is right to be careful and cautious with money, and to maintain strict systems of control to prevent losses. Effective management of this sort does not mean that a society should have money management systems and policies like those of Mr. Abdul.

If trainees' societies all use a standard system, ask one trainee to describe the movement of a cheque, or cash payment, from the
moment it leaves the customer to the moment it is available to the society to be spent. If trainees' societies operate different systems, ask others to describe the procedures in their societies.

Identify points of delay. Ask trainees for suggestions as to how the movement of money can be accelerated without reducing security. Show how faster systems are often more secure, because cash and cheques are not allowed to accumulate.

Societies may be unable to deposit cash or cheques in the bank because there are no convenient branches. If societies have to use one particular bank, which is not locally represented, discuss ways in which they can make arrangements with other banks which do have rural branches. If no local banking facilities are available, discuss the possibilities of making joint arrangements with other local organisations for transporting cash and cheques.

Discuss each stage in the movement of cash in a society, and ask trainees how they might improve their society's cash management policies. If they are not actually in a position to change policies themselves, show by example from the dialogue, or their own societies, how it is possible to calculate the cost of present policies, such as described in the dialogue, and the benefits of change. Management, and members, do not welcome change for its own sake. However, if they can be shown the financial benefits of new policies they may be willing to adopt them.
Selene, a new trainee accountant, has just joined the Conservative Co-operative Society. She is talking to Mr. Abdul, who has been the chief accountant of the society for 20 years.

Selene: It's good of you to give me some time, sir, I wonder if I could ask you to tell me something about your financial management policy, so that I can make sure that what I do fits in with it.

Mr. Abdul: Of course, young lady, it's nice to meet somebody who wants to learn, too many young people these days think they know it all. Now when I was a young man, things were different, you see . . .

Selene: Yes, sir, I know times have changed. Tell me, how do we decide when to pay our bills? I have heard a lot about uncreditworthy societies, but nobody says that about us.

Mr. Abdul: Nor will they ever, so long as I am in charge. If we have the money, I reckon to sign a cheque in settlement the same day that we receive the invoice, and if we can't do that, I make sure it is paid within a few days at most.

Selene: I see, no wonder we are popular with our suppliers. I suppose that we must save quite a lot of money by taking settlement discounts when they are offered.

Mr. Abdul: Yes we do, although fewer and fewer businesses seem to offer them nowadays. Still 22, 12% or less is better than nothing, and we always pay at once and take the discount, however little it seems to be.

Selene: What about people paying us, how do we get most of our payments, do customers pay in cash or what?
Mr. Abdul: Oh no, our customers pay by cheque, and if I am away the cheques are kept until I return. I have to keep in touch with what's going on.

Selene: It is very convenient now that the new branch of the bank has been opened up just along the road, do you send someone down there every morning after the mail comes in? Perhaps that's something I could help with right away, to start to get a feel for the society's business.

Mr. Abdul: Oh no, we don't bank at that branch, we bank at the head office in the centre of town. That is the only bank that was here when I started, and we know all the people there. I make a point of going myself, I can't get down every day, of course, but I like to have a large handful of cheques to deposit when I do go down. It shows them what a substantial society we are, so I keep the cheques in this drawer for a few weeks, and then I take them down when it's worth a trip.

Selene: What about our branch depots, do they take their cheques to the bank themselves, or what?

Mr. Abdul: No, I like to see every cheque myself, I can keep my fingers on the pulse that way. The depot managers put the cheques they get every week in the mail on Friday. The postage service is getting worse all the time, but we usually get it by the following Friday, with any luck.

Selene: What about our members? Do we pay them by cheque or cash?

Mr. Abdul: No cash in the field is my policy. It's safer that way, and we have a good system. When the depot has received their crops, they send us the voucher copies of the receipts they give to members. We raise the cheques here, I go through them and sign them myself, it was five hundred
or so this season, but I am determined not to allow growth to put me out of touch. Then we send them to the branch, crossed cheques of course in the mail, and the members come and get them from their branches when they hear that they have arrived. This system avoids any mistakes, and I am sure our members like to cash their cheques down at the central branch bank in town. It makes a real outing for them when they come in to get their cash, some of them have to travel all night I believe.

BLEEP E

Selene: What about our own staff, should I open a bank account now I am working here?

Mr. Abdul: If you wish, young lady, but there is no need I can assure you. Our people have always liked to get their money in real cash at the end of every month. The bank keeps talking to me about paying by cheque, but I'm not going to do that to any of our staff just because the bank suggested it.

BLEEP F

Selene: You said we have banked with the same bank for 20 years. Have you ever thought about trying any of the others, all different kinds of banks seem to be opening up here nowadays?

Mr. Abdul: Now look here, young lady, one thing you have to understand is the importance of personal relationships in business. Why, I meet some clerks at the bank whose fathers were just starting when I joined the society, no new, modern glass-fronted banks can replace that sort of relationship. Why, the manager of one of the new branches that have opened up here had the nerve to call on me the other day, touting for business like a salesman. I showed him the door pretty quickly.
Selene: I expect he realised his mistake pretty quickly, too. Tell me, sir, how many accounts do we have at the bank?

Mr. Abdul: Just one, young lady, like we always have had. They put a poster up in the bank about deposit accounts, and what they call fixed term deposits. They can't fool me, the small print said that you had to give a week's notice or more to get your money out. Imagine having to ask a bank permission for use of your own money! No, it's our old current account for me, one of the longest established and best managed accounts in the bank they always tell me down there. It is nice to have respect of that sort nowadays.

Selene: Yes, it must be. What about our petty cash - how do we manage that, who is in charge of it, and so on?

Mr. Abdul: I am, of course, I've got to keep my finger on the pulse. I always like to keep a float of $1,000 or so, too, you can never be sure what is going to happen. I shall never forget the riots 15 years ago. The banks were shut for a week, and where would we have been without my float? It is there in the safe behind me and only I have the key.

Selene: Excuse me, sir, but isn't the safe door open?

Mr. Abdul: Of course not . . My God, where's the money, stolen, over $2,000, there's no morality these days, robbers, bandits, thieves, get the police. Help, help, help!

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SESSION 3.2

THE MANAGEMENT OF ACCOUNTS RECEIVABLE

Objective: To enable trainees to appropriately grant credit to customers and to manage their accounts for the greatest benefit to the society. (This session should be omitted if trainees' societies never grant credit.)

Time: 2 to 3 hours.

Material: Accounts Summary "The Careful Credit Crop Collection Co-operative".

Session Guide:

1) Although the management of credit granted to customers and of that granted to members have much in common, this session deals with credit relationships between a society and outside organisations such as marketing boards, private companies, co-operative unions or exporters.

It may be adapted to cover credit to members, but this is more thoroughly covered in the MATCOM course on "Co-operative Savings and Credit".

Remind trainees that if a society allows a customer to receive goods or services but to pay them at a later date, it is effectively making a loan to him. If they were bankers, or indeed as individuals, would they give loans to all the organisations which receive credit from their societies?

Stress that customers' credit must be managed as carefully as a banking operation or a credit scheme for members:

The funds which are "lent" to customers could have been used for other purposes. Any credit transaction must be the most effective way that the money could be used.
The funds which are "lent" to customers who take credit may never be repaid. Management must minimise the risk of default with the same care as bank managers.

2) Granting credit to customers is the same as giving them an interest free loan. Ask trainees why a society which would never make an interest free loan, even to its own members, may nevertheless grant credit to a customer:

- Other competing suppliers also give credit.
- Customers would refuse to buy if they had to pay cash.
- Government or other public sector customers may be administratively incapable of paying cash on delivery for their supplies.

Remind trainees of the previous session and the conservative views of Mr. Abdul. Ask trainees whether their customers pay their bills as promptly as Mr. Abdul wanted to:

- Most private sector companies appreciate that trade credit is a fee source of capital, and they try to take as much of it as they can without seriously prejudicing their relationships with suppliers.
- Many public sector organisations and co-operatives are starved of funds and depend on trade credit for their finance. The Government may ultimately guarantee the debts, but they will delay payment indefinitely if they are allowed to do so.
- Many organisations are grossly badly managed. They fail to pay their bills not because they have no money but because their administrative systems for raising cheques fail to function.

For all these reasons, co-operative managers must control the granting of credit very closely.

3) Ask trainees to identify the major decisions that have to be made in the management of accounts receivable:

- Should the customer be allowed to have credit at all?
- Should a customer be allowed to add to outstanding debts?
- What steps should be taken, and when, to collect outstanding debts from a customer who has not paid?

What factors should be taken into account in making the first two types of decisions?

- The amount of credit requested and its cost in terms of extra interest paid on loans or lost on deposits.
- The extra surplus likely to be earned on the sale which will be made because credit has been granted.
- The possibility of default.

Ask trainees whether they or any other business managers really have enough time to appraise every credit decision as an investment "project". They are investment "projects", but they are generally too small and there are far too many of them in most organisations, for individual appraisal to be possible. How can the decisions be made correctly, even though time and information are inadequate?

- Obtain information about the customer from sources such as banks, credit agencies and, informally, personal contacts in other societies which are already said to be granting credit to that customer.
- Set a "credit limit" or a maximum amount which the customer must be allowed to owe the society, and ensure that any further despatches of produce are only made if this does not make the customer's account exceed the limit.
- Start with low credit limits and raise them only after some period of favourable experience.

Stress that effective management of accounts receivable depends on correct and up-to-date records of which customers owe how much. Ask trainees whether they can immediately find out how much any given customer owes their society, today. Stress the need for immediate entry of purchases and payments, and for the balance owing to be calculated after each transaction.
4) Trainees may feel that the whole credit function is out of their control. They may be compelled to supply only to one marketing board, national milling company or similar organisation which is a very slow payer. What can they do to improve the situation?

Ask trainees whether they themselves pay all their suppliers in the same order as their bills come in. Do some suppliers get paid more quickly than others, and if so why?

- They are monopoly suppliers of essential products or services.
- They provide some financial incentive to encourage their customers to settle their bills more quickly.
- They make life very uncomfortable for credit customers who do not pay on time.
- They ensure that their customers are regularly and currently informed of the amount owed by them.

How can a co-operative society learn from its suppliers, and encourage even the least effectively managed corporations to pay more quickly?

- They can offer settlement discounts, such as 22% for 7 day settlement. If the normal terms of payment are 30 days, it appears uneconomic to give a 21% reduction for only 3 weeks, but if the customer would otherwise wait for 3 months or more it is clearly a profitable step.
- They can surcharge all bills owing for over a certain period with a penalty interest charge, of say 1% a month. Some customers may not accept this, but it has some effect.
- They can ensure that management, sales departments and anyone else in contact with slow paying accounts are aware of the problem and the amounts owing, and will try to do something about it on a personal level.
- They can ensure that their accounts are kept up-to-date, and that their own marketing staff and the slow customers are regularly sent clear and correct statements of what is owing by whom.
5) Circulate copies of typical local invoices and statement forms, or display replicas on the chalkboard/OHP. These forms are really the only form of communication between the society and its customers. What information do they contain?

- The invoice gives details of every transaction by which further credit was taken through new sales on credit.
- The statement gives an up-to-date figure of how much is owing, with a summary of the amounts paid by the customer, or additional credit taken by the customer, since the last statement was prepared.

Does the accounts receivable figure in the balance sheet of a society give any information about how long the average or worst amounts owing have in fact been owing to the society?

- It does not, and none of the normal accounting documents actually indicate which credit customers are the slowest payers, and how seriously they are in arrears.

This information is the basis for any effective credit control systems. How can it be obtained?

6) Write on the chalkboard/OHP "The Slow Marketing Board owes the Careful Co-operative $10,000." Ask trainees to suggest whether the account gives cause for concern or not.

Clearly this figure on its own is no indication of the condition of the account. Ask trainees what further information is necessary and write the following statement on the chalkboard/OHP:
Most societies would clearly be very concerned about the $1,100 owing for over three months, and would press for repayment of $4,300 owing for over two months. Only if the account is "aged"
in this way can the society decide which accounts give particular cause for concern.

7) Distribute the exercise and allow trainees up to 30 minutes to complete it individually.

When they have finished, ask them to read out their rankings.

Ask trainees how they reached their conclusions. They should have realised that the first stage is to "age" the accounts as described earlier in this session. The results of this process for the four accounts are as follows:

<table>
<thead>
<tr>
<th>Amounts Owing</th>
<th>Account A</th>
<th>Account B</th>
<th>Account C</th>
<th>Account D</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 month or more</td>
<td>$9,000</td>
<td>$8,200</td>
<td>$8,500</td>
<td>$5,800</td>
</tr>
<tr>
<td>2 months or more</td>
<td>9,000</td>
<td>6,500</td>
<td>8,500</td>
<td>4,500</td>
</tr>
<tr>
<td>3 months or more</td>
<td>7,800</td>
<td>4,700</td>
<td>700</td>
<td>2,400</td>
</tr>
<tr>
<td>4 months or more</td>
<td>4,900</td>
<td>2,600</td>
<td>700</td>
<td>500</td>
</tr>
<tr>
<td>5 months or more</td>
<td>4,900</td>
<td>300</td>
<td>700</td>
<td>-</td>
</tr>
<tr>
<td>6 months or more</td>
<td>2,600</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>7 months or more</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

Clearly customer A is the worst offender. Customer C is the second worst followed by B and D.

Stress that the largest amount owing is not necessarily the slowest payer. Large sums of arrears, and eventual defaults, can arise from neglected small accounts.

8) Techniques such as account "aging" show which accounts are most seriously in arrears. It is far more difficult, however, actually to extract money from customers who do not wish to pay.

Divide trainees into two approximately equal-sized "teams". Ask everyone in one team individually to imagine that they are accounts managers for a customer who owes money to a number of different suppliers, but wishes to delay payment as long as possible. They should write down as many specific ways as they can
think of that such a manager would use to delay payment which was due.

The members of the other team should individually write down all the specific ways they can think of which they, as co-operative managers, would use to accelerate payment to their societies, in spite of the various devices which the other group is attempting to design. Explain that the objective of the forthcoming game is for the slow payers to think of "tricks" that the managers have not foreseen, and for the managers to have thought of everything in advance.

9) Allow up to 20 minutes for trainees to produce their lists. Tell them to stop writing, and to put down their pens.

Ask a "slow payer" to read out an item from his list. Note this on the chalkboard/OHP and then ask a trainee from the "other" side to read out one of his ideas, which should be one which in some way overcomes the delaying tactics already presented by the first trainee. Continue the exercise until no other ideas remain. Ensure that ideas for accelerating payment which prevent particular delaying techniques are listed opposite one another on the chalkboard/OHP.

The "slow payers" will score one point for every "trick" they have written down which has not been foreseen by the managers. The "managers" score a point for every distinct device they have "left over" after covering all the "tricks" from the other side.

The instructor's judgement must be accepted as final, and time must not be wasted in argument over details.

"Managers" devices which allow further delay or re-scheduling should not be accepted. If a customer has not paid after one period, he is even less likely to pay in future.

The completed list will differ according to trainees' experience and local conditions, but may include items such as the following:
<table>
<thead>
<tr>
<th>Devices to Delay P moment.</th>
<th>Devices to Aceelerate Payment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Never pay until pressed to do so.</td>
<td>Send regular reminders, increasingly demanding in tone.</td>
</tr>
<tr>
<td>Request copy invoices and statements when pressed for payment.</td>
<td>Ensure that all documents are sent on schedule, and by personal messenger or recorded delivery if one payment is particularly delayed.</td>
</tr>
<tr>
<td>Insist on clarification of small contested items for packaging or other minor items before considering paying any sums at all.</td>
<td>Ensure that every entry on accounts, however trivial, is correct and agreed by customers when it is made.</td>
</tr>
<tr>
<td>Maintain at least one &quot;clean&quot; account, to whom all requests for references are referred.</td>
<td>Discuss accounts problems with informal contacts in other societies and organisations.</td>
</tr>
<tr>
<td>Claim that a cheque has already been sent in the post when pressed for payment.</td>
<td>Collect delayed cheques personally.</td>
</tr>
<tr>
<td>Send cheques with incorrect dates, wrong payees' names or other deliberate errors so that they have to be returned for correction.</td>
<td>As above.</td>
</tr>
<tr>
<td>Ensure that senior management are insulated from delayed payment problems.</td>
<td>Use telephones, telegrams and high level personal contacts to persuade senior management to accelerate payment.</td>
</tr>
<tr>
<td>Resist all pressures, confident that suppliers will not go to the expense of legal action because the costs exceed the sums to be recovered.</td>
<td>Be willing to take legal action even if it is not profitable in order to demonstrate serious intentions to all credit customers.</td>
</tr>
</tbody>
</table>

10-Remind trainees that good credit management, like any other aspect of co-operative management, means "making the best of available resources". Most small organisations such as agricultural marketing societies are faced with slow paying customers, but some succeed in obtaining a greater share of what is owing to them more quickly than others. This is not good luck but good management.
It was December 1st, 1982. The financial year of the CCCCC ended on December 31st, and Johnson, the chief accountant, was concerned about the apparently excessive amount of money tied up in accounts receivable. He hoped he could improve the situation before the final accounts were prepared at the end of the year, but he knew that he could not deal with the whole problem all at once. He had to have some idea of which customers he should approach first, because they were the worst offenders.

He knew that it was normal to delay payment for two months, and recognised that the para-statal customers served by CCCCC would not generally be "chased" until the accounts were three months overdue or more.

He obtained copies of the statements for the society's four largest customers. The total amounts owing were different, but he knew that these figures alone could not guide him as to which should be dealt with most urgently.

<table>
<thead>
<tr>
<th>Customer A</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Month</strong></td>
</tr>
<tr>
<td>------------</td>
</tr>
<tr>
<td>January</td>
</tr>
<tr>
<td>February</td>
</tr>
<tr>
<td>March</td>
</tr>
<tr>
<td>April</td>
</tr>
<tr>
<td>May</td>
</tr>
<tr>
<td>June</td>
</tr>
<tr>
<td>July</td>
</tr>
<tr>
<td>August</td>
</tr>
<tr>
<td>September</td>
</tr>
<tr>
<td>October</td>
</tr>
<tr>
<td>November</td>
</tr>
</tbody>
</table>
## Customer B

<table>
<thead>
<tr>
<th>Month</th>
<th>Invoice</th>
<th>Paid</th>
<th>Owing</th>
</tr>
</thead>
<tbody>
<tr>
<td>January</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>February</td>
<td>2,000</td>
<td>1,100</td>
<td>900</td>
</tr>
<tr>
<td>March</td>
<td>2,200</td>
<td>800</td>
<td>2,300</td>
</tr>
<tr>
<td>April</td>
<td>2,100</td>
<td>1,200</td>
<td>3,200</td>
</tr>
<tr>
<td>May</td>
<td>1,900</td>
<td>1,200</td>
<td>3,900</td>
</tr>
<tr>
<td>June</td>
<td>1,700</td>
<td>700</td>
<td>4,900</td>
</tr>
<tr>
<td>July</td>
<td>2,300</td>
<td>900</td>
<td>6,300</td>
</tr>
<tr>
<td>August</td>
<td>2,100</td>
<td>1,300</td>
<td>7,100</td>
</tr>
<tr>
<td>September</td>
<td>1,800</td>
<td>600</td>
<td>8,300</td>
</tr>
<tr>
<td>October</td>
<td>1,700</td>
<td>800</td>
<td>9,200</td>
</tr>
<tr>
<td>November</td>
<td>3,100</td>
<td>1,000</td>
<td>11,300</td>
</tr>
</tbody>
</table>

## Customer C

<table>
<thead>
<tr>
<th>Month</th>
<th>Invoice</th>
<th>Paid</th>
<th>Owing</th>
</tr>
</thead>
<tbody>
<tr>
<td>January</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>February</td>
<td>8,500</td>
<td>-</td>
<td>8,500</td>
</tr>
<tr>
<td>March</td>
<td>-</td>
<td>2,000</td>
<td>6,500</td>
</tr>
<tr>
<td>April</td>
<td>-</td>
<td>1,300</td>
<td>5,200</td>
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<tr>
<td>May</td>
<td>-</td>
<td>3,100</td>
<td>2,100</td>
</tr>
<tr>
<td>June</td>
<td>7,900</td>
<td>1,000</td>
<td>9,000</td>
</tr>
<tr>
<td>July</td>
<td>-</td>
<td>2,500</td>
<td>6,500</td>
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<tr>
<td>August</td>
<td>-</td>
<td>1,200</td>
<td>5,300</td>
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<tr>
<td>September</td>
<td>7,800</td>
<td>1,200</td>
<td>11,000</td>
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<tr>
<td>October</td>
<td>-</td>
<td>1,900</td>
<td>10,000</td>
</tr>
<tr>
<td>November</td>
<td>-</td>
<td>1,500</td>
<td>8,500</td>
</tr>
</tbody>
</table>
### Customer D

<table>
<thead>
<tr>
<th>Month</th>
<th>Invoice</th>
<th>Paid</th>
<th>Owing</th>
</tr>
</thead>
<tbody>
<tr>
<td>January</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>February</td>
<td>1,800</td>
<td>-</td>
<td>1,800</td>
</tr>
<tr>
<td>March</td>
<td>1,400</td>
<td>-</td>
<td>3,200</td>
</tr>
<tr>
<td>April</td>
<td>900</td>
<td>4,000</td>
<td>100</td>
</tr>
<tr>
<td>May</td>
<td>1,200</td>
<td>-</td>
<td>1,300</td>
</tr>
<tr>
<td>June</td>
<td>2,000</td>
<td>-</td>
<td>3,300</td>
</tr>
<tr>
<td>July</td>
<td>1,700</td>
<td>-</td>
<td>5,000</td>
</tr>
<tr>
<td>August</td>
<td>1,900</td>
<td>-</td>
<td>6,900</td>
</tr>
<tr>
<td>September</td>
<td>2,100</td>
<td>4,500</td>
<td>4,500</td>
</tr>
<tr>
<td>October</td>
<td>1,300</td>
<td>-</td>
<td>5,800</td>
</tr>
<tr>
<td>November</td>
<td>3,000</td>
<td>-</td>
<td>8,800</td>
</tr>
</tbody>
</table>

**Assignment**

Rank the four customers in the order of seriousness of arrears of payment.
SESSION 3.3

STOCK MANAGEMENT

Objective: To enable trainees to maintain stocks at the optimum levels.

Time: 2 hours.

Session Guide:

1) The whole topic of farm input stock management is dealt with in the MATCOM course "Supply Management". Stocks of agricultural crop are covered in two separate courses on "Collecting and Receiving Agricultural Produce" and "Storage Management". Trainees with particular responsibilities in this area should have specialised training, and the instructor may care to refer to the other manuals for further background information.

Ask trainees to name items which their societies stock, that is items which the society owns and keeps in stock for more than one day, before they are used or sold.

Trainees' suggestions may include items such as:

- Fertilizer, pesticides and other farm inputs.
- Sprayers, implements and farm tools.
- Crops.

Remind trainees that there are many other items which are stocked by a co-operative society, for its own use, in addition to the crops or inputs it buys from and sells to members. These include:

- Stationery
- Vehicle spare parts
- Light bulbs
- Fuel
and similar supplies.
Ask trainees whether they keep stock personally, at home. Remind them that almost every household has some stock of foodstuffs that will not be consumed on that day.

2) Ask trainees whether their societies would save money if they did not have to hold any stocks. What facilities and staff are involved in storing goods?

- Storerooms, warehouses, storage compounds.
- Staff to protect, inspect and maintain/move the stock.
- Administrative systems to control stock levels.
- Protective coverings such as tarpaulins for stocks stored in the open.
- Greasing or other protection to protect metal items from rusting.
- Special packaging which would not be necessary if items were not to be stored.
- Chemical treatments to rotting or insect damage.
- Silos, bins, tanks or similar equipment.

In addition to these physical facilities, what other costs are involved in holding stocks?

- Stock must be insured against fire and theft.

If trainees do not themselves identify the financial costs involved in "tying up" money in stock, remind them of the session on ratios and "loan hunger".

Why, for instance, will it cost money for a society such as the following to put $1,000 more goods in stock, even if the physical facilities and staff are already available?
### XYZ Society, Balance Sheet

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<tr>
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<td>500</td>
</tr>
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<td>Accounts Receivable</td>
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<td>Overdraft</td>
<td>600</td>
</tr>
<tr>
<td>Stock</td>
<td>100</td>
<td>Loans</td>
<td>1,000</td>
</tr>
<tr>
<td>Plant and Equipment</td>
<td>1,000</td>
<td>Members' Share Capital</td>
<td>1,500</td>
</tr>
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<td>2,000</td>
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<td>5,100</td>
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<td>5,100</td>
</tr>
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- The $1,000 will have to come from somewhere. If it is borrowed from the bank the society will have to pay interest on it.
- If it is "extracted" from other assets, such as accounts receivable or land and buildings, the society will be deprived of whatever benefit it was gaining by giving credit or owning a building.

3) Ask trainees to consider the items actually stocked in their societies. Does their value increase or decrease while they are lying unused in a storage cupboard, warehouse or silo, and for what reasons?

- Some items increase in value because of inflation.
- Agricultural co-operative's crops may increase in value because their price is lowest at harvest time. If they are kept too long, however, they start to decay and lose their value very rapidly.
- Seeds are often of virtually no value if stored for more than a year.
- Fertilizer becomes damp and solidified so that members refuse to buy it without a substantial discount as they have to break it up before using it.
- Metal tools become rusty in storage.
- Even in a clean and well organised warehouse, labels become dusty and torn and packages become dirty and unattractive if they remain in storage for a long period.
- Some chemicals have a limited shelf life and are of no value once this has expired.

- Manufacturers and agricultural research stations are always developing new and improved chemicals, crop varieties and equipment. If an improved item becomes available, farmers will not be willing to buy the older variety, or may only do so at reduced price.

Confirm trainees' understanding of the effects of storage on the value of goods by asking them to describe what items are likely to be found in the far corners of storage warehouses, in the backs of stationery cupboards or in the inaccessible bins of a spare parts store.

Every store contains at least some items which are virtually valueless because they have been stored for so long. They may be valued at their original cost in the "stock" item in the balance sheet, but the money that was originally paid for them has actually been totally lost.

4) Ask trainees why they themselves or their societies spend money on holding stocks. Would it not be more economical to eliminate stock holdings altogether and thus save the money? What benefits arise from holding stocks and why do societies not purchase items as they need them? Ask trainees for examples to illustrate the advantages of stock holding:

- It may cost about the same amount of money to order and transport one item as it costs for a reasonable supply. No office, for instance, would purchase one envelope or one pencil at a time, because the cost of ordering and transporting the single item would be far more than the cost of the item itself.

- It may not be possible to forecast when items will be needed, or to obtain them quickly enough if none are in stock when the need does arise. No one can say, for instance, when minor vehicle spares or light bulbs are likely to be needed.

- The supplier may be unreliable or inefficient, so that it is necessary to purchase supplies when they are available, even
if they are not needed immediately. Fertilizers can often only be purchased at a particular time, and if the society does not buy them at that time, none will be available at all.

- Quantity discounts may be offered for larger orders, so that the saving in price exceeds the cost of holding stocks. Co-operative farm supply services can only exist because there is a profit margin between the cost of the item and the price for which members buy it, and the lower price is not usually available for one sack of fertilizer, one bottle of chemical, or one packet of seeds.

- The value of some items may be expected to rise during the time they are in stock. Agricultural marketing societies may increase their surplus by keeping the crop in stock until the price has risen.

5) Stress that holding stocks involve costs and benefits. The objective of successful stock management must therefore be to minimise the cost and maximise the benefits. Stock should not be held if the costs exceed the benefits.

It may be fairly easy to decide whether or not a certain item should be stocked and societies' managers are not called upon to make this sort of decision very often. What kind of decision must they make about items which are already held in stock?

- When to order more stock?
- How much?

Give trainees a locally familiar example, preferably of an item which is required fairly steadily throughout the year. This may be typewriter ribbons, spark plugs, hoes or sprayers. Ask trainees how they decide when to order new supplies of the item in question. What information do they need?

Elicit the following items of information from trainees:

- The rate of use of the item.
- The time it will take to receive the new supplies once they have been ordered.
- The minimum quantity which should be allowed to be in stock at any one time.
- The maximum quantity which can be stored.
- The quantities in which the item is normally packed.
- Any information about the cost of ordering and transporting the goods, and lower prices that may be offered for particular quantities.
- The funds that are available and the cost of obtaining more money.

Clearly a manager does not obtain all this information when deciding about re-ordering envelopes or spark plugs. Ask trainees why they do not nevertheless order one pad of paper or 10,000 spark plugs. The decision to order more reasonable amounts is in fact based on almost unconscious knowledge of the kind of information listed above.

6) Ask trainees to consider the following example, which should be presented on the chalkboard/OHP:

**Portable Hand Sprayers**

<table>
<thead>
<tr>
<th>Sales</th>
<th>10 per month</th>
</tr>
</thead>
<tbody>
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At what stock level should they decide to order more supplies?

Trainees may calculate as follows:

- Three months' usage x ten sprayers required = 30 sprayers.
- The society should order when stocks fall to 30.

Ask trainees how many sprayers will be in stock before the new order arrives?

- Nil
Clearly stocks should not be allowed to fall to zero, unless there will be no further requirement for a long period. Ask trainees what they would suggest as a minimum level, below which the number of sprayers in stock should not be allowed to fall.

The answer depends on the reliability of demand estimates, the steadiness of demand and the likelihood that the supplier will in fact deliver in three months.

Trainees may suggest that the stock should not be allowed to fall below 15 units. At what level should the manager then place a new order?

- 30 units to allow for expected delivery delay time
  - 15 units to allow for more stock
  - 45 units

The manager should place a new order when stock falls to 45 units.

Many items which are stocked by co-operatives are seasonal. They are only used in certain months of the year.

Fertilizer, for instance, is often needed only in one brief planting season. The total requirement should be ordered in enough time to ensure delivery. Stress that the techniques covered in this session apply mainly to items for which the demand is fairly steady all year.

7) The manager must now decide how many sprayers. Ask trainees to suggest what additional information he needs, and write the data on the chalkboard/OHP as trainees suggest it. If they do not suggest a particular item, show that it is necessary by asking them whether it would be possible to make the decision without it.

(a) Maximum stock that can be accommodated 100
(b) Estimated cost of each sprayer $20
(c) The annual cost of borrowing money to finance stocks 12%
(d) "Fixed" costs of placing and transporting an order which do not depend on the size of the order $10

(e) The annual rate of decrease in the value of sprayers through rust, risk of replacement by better models or damage. (Trainees may feel this is high. Stress that few items are worth anything after ten years). $2 or 10% of value

(f) The annual cost of storing sprayers, covering insurance, space, labour and security. 3% of value or 60c each

(g) The minimum quantity which must be ordered to obtain the supplier's discount 10 sprayers

(h) Number of sprayers in one package, if manufacturers will not open packages for whole-sale orders 10 sprayers

Trainees may suggest that it is unnecessary to include the cost of borrowing money, because the society would be unlikely to raise a loan especially to buy sprayers. They would be paid for in cash which was already available. Stress that it reduces the amount available for lending to members or placing on deposit. When cash is exhausted, more may have to be borrowed. Each transaction should bear the cost of what eventually happens because of a large number of transactions.

Trainees should understand the need for items (d), (e) and (f) as a result of discussion earlier in the session. Ask them how they would estimate the cost of these items in their own societies.

- The cost of ordering and collecting goods can be roughly estimated by dividing the cost of that proportion of staff and transport time which is used for ordering and transporting supplies by the number of orders placed, not the value. This will give an approximate cost per order.

- Ask trainees if they have any idea of how much it costs to place an order, or even to write a letter, in their societies. Stress that administrative costs of this sort should be calculated and controlled. This is not only necessary in order to estimate quantities to order, but, more importantly, to make sure that they are monitored and reduced if possible. They are almost always higher than they should be, because they are not obvious.
- Some estimate can be made of the time it will take for an item to become valueless. Seeds may last two years, fertilizers four, but even hardware items such as sprayers will not last forever. A ten year life in storage, is probably the most that can be expected.

- It is not necessary to build extra warehouse space or hire extra store keepers because one extra sprayer is stocked. Nevertheless, as with funds tied up in stocks, every item must bear its cost of the storage operation.

Ask trainees how they would estimate the cost of storage. If all storage costs, including insurance, rent, labour and so, amount to $6,000 per year, how can they estimate the storage cost for one particular item, if the total value of goods in storage is $200,000? Elicit the suggestion that storage costs can very approximately be allocated on the basis of the value of what is stored.

On this basis, the cost of storage can be calculated as follows:

\[
\begin{align*}
\text{Total storage cost for 12 months} & = \$6,000 \\
\text{Total value of all stocks} & = \$200,000 \\
\text{Storage cost per year per dollar's worth} & = \frac{\$6,000}{\$200,000} \\
& = 0.03 \text{ or three cents} \\
& = 0.03 \text{ or three per cent}
\end{align*}
\]

In this case it therefore costs 3% of the value of an item to store it for a year. Trainees may object that bulky items may have the same value as smaller ones, but clearly cost more to store. This is clearly true for space and labour costs, but not for insurance. The figure must be very approximate in any case, and it would be impractical to attempt to measure the cubic volume of every item in an attempt to obtain a more "accurate" figure.

Ask trainees how they will use this information to decide how many sprayers to order. Work through the exercise as follows, ensuring that trainees understand the logic underlying each stage, even if they are not able to suggest the method themselves.
(a) The costs of holding stock must be combined. These are:

- Cost of money: 12%
- Reduction of value in stock: 10%
- Cost of storage: 3%

\[
\text{Cost of storage} = 3\% = 25\% \text{ or } \$5 \text{ per sprayer per year}
\]

(b) These are annual costs, and consequently apply to the total annual demand of 120 sprayers.

(c) The manager must then calculate the costs of various different sizes of order, so that he can find the lowest total cost. Ask trainees to suggest a reasonable order. This might be 40 units. The calculations are as follows:

- 40 sprayers per order = 3 orders per year \((120/40)\)
- Cost of placing order: \(3 \times \$10 = \$30\)

(d) The cost of carrying stock will depend on the average number in stock. Show by simple graph of the following form that the average level of stock will be half way between the minimum (15) and the maximum \((40 + 15)\) reached when the new order arrives.

![Graph showing average number in stock]

The average of 15 and 55 = \(\frac{70}{2} = 35\) units.

(e) The total cost of order 40 sprayers can thus be calculated:
9) Remind trainees that they must now calculate the costs of a number of other possible order sizes, in order to determine the cheapest. Allow trainees up to 30 minutes to calculate the cost of ordering 10, 20, 30, 40, 50, 60, 70 and 80 units. The task should if necessary be divided up among trainees so that each does two or three calculations only. Elicit the fact that it is not possible to order 90 units, since the highest stock would be 105 units (90 + 15). This exceeds the space available.

Ask them for their answers which should be written on the chalkboard as follows:

<table>
<thead>
<tr>
<th>No. Ordered</th>
<th>No. of Orders</th>
<th>Cost of Orders $</th>
<th>Lowest Stock</th>
<th>Highest Stock</th>
<th>Average Stock</th>
<th>Cost of Stock $</th>
<th>Total $</th>
</tr>
</thead>
<tbody>
<tr>
<td>10 sprayers</td>
<td>12</td>
<td>120</td>
<td>15</td>
<td>25</td>
<td>20</td>
<td>100</td>
<td>220</td>
</tr>
<tr>
<td>20 sprayers</td>
<td>6</td>
<td>60</td>
<td>15</td>
<td>35</td>
<td>25</td>
<td>125</td>
<td>185</td>
</tr>
<tr>
<td>30 sprayers</td>
<td>4</td>
<td>40</td>
<td>15</td>
<td>45</td>
<td>30</td>
<td>150</td>
<td>190</td>
</tr>
<tr>
<td>40 sprayers</td>
<td>3</td>
<td>30</td>
<td>15</td>
<td>55</td>
<td>35</td>
<td>175</td>
<td>205</td>
</tr>
<tr>
<td>50 sprayers</td>
<td>2.4</td>
<td>24</td>
<td>15</td>
<td>65</td>
<td>40</td>
<td>200</td>
<td>224</td>
</tr>
<tr>
<td>60 sprayers</td>
<td>2</td>
<td>20</td>
<td>15</td>
<td>75</td>
<td>45</td>
<td>225</td>
<td>245</td>
</tr>
<tr>
<td>70 sprayers</td>
<td>1.7</td>
<td>17</td>
<td>15</td>
<td>85</td>
<td>50</td>
<td>250</td>
<td>267</td>
</tr>
<tr>
<td>80 sprayers</td>
<td>1.5</td>
<td>15</td>
<td>15</td>
<td>95</td>
<td>55</td>
<td>275</td>
<td>290</td>
</tr>
</tbody>
</table>

Trainees may be confused by the figures for the numbers of orders to be placed if 50, 70 or 80 sprayers are ordered, since they are not whole numbers. Show that 1.5 orders per year, for instance, is the same as 3 orders in 2 years. Stress that in any case the total cost figures are lowest for 20 sprayers, and since the sprayers must be ordered in multiples of 10, this is the number to be ordered.
### Customer D

<table>
<thead>
<tr>
<th>Month</th>
<th>Invoice</th>
<th>Paid</th>
<th>Owing</th>
</tr>
</thead>
<tbody>
<tr>
<td>January</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>February</td>
<td>1,800</td>
<td>-</td>
<td>1,800</td>
</tr>
<tr>
<td>March</td>
<td>1,400</td>
<td>-</td>
<td>3,200</td>
</tr>
<tr>
<td>April</td>
<td>900</td>
<td>4,000</td>
<td>100</td>
</tr>
<tr>
<td>May</td>
<td>1,200</td>
<td>-</td>
<td>1,300</td>
</tr>
<tr>
<td>June</td>
<td>2,000</td>
<td>-</td>
<td>3,300</td>
</tr>
<tr>
<td>July</td>
<td>1,700</td>
<td>-</td>
<td>5,000</td>
</tr>
<tr>
<td>August</td>
<td>1,900</td>
<td>-</td>
<td>6,900</td>
</tr>
<tr>
<td>September</td>
<td>2,100</td>
<td>4,500</td>
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</tr>
<tr>
<td>October</td>
<td>1,300</td>
<td>-</td>
<td>5,800</td>
</tr>
<tr>
<td>November</td>
<td>3,000</td>
<td>-</td>
<td>8,800</td>
</tr>
</tbody>
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**Assignment**

Rank the four customers in the order of seriousness of arrears of payment.
SESSION 3.3

STOCK MANAGEMENT

Objective: To enable trainees to maintain stocks at the optimum levels.

Time: 2 hours.

Session Guide:

1) The whole topic of farm input stock management is dealt with in the MATCOM course "Supply Management". Stocks of agricultural crop are covered in two separate courses on "Collecting and Receiving Agricultural Produce" and "Storage Management". Trainees with particular responsibilities in this area should have specialised training, and the instructor may care to refer to the other manuals for further background information.

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Trainees' suggestions may include items such as:

- Fertilizer, pesticides and other farm inputs.
- Sprayers, implements and farm tools.
- Crops.

Remind trainees that there are many other items which are stocked by a co-operative society, for its own use, in addition to the crops or inputs it buys from and sells to members. These include:

- Stationery
- Vehicle spare parts
- Light bulbs
- Fuel
and similar supplies.
Ask trainees whether they keep stock personally, at home. Remind them that almost every household has some stock of foodstuffs that will not be consumed on that day.

2) Ask trainees whether their societies would save money if they did not have to hold any stocks. What facilities and staff are involved in storing goods?

- Storerooms, warehouses, storage compounds.
- Staff to protect, inspect and maintain/move the stock.
- Administrative systems to control stock levels.
- Protective coverings such as tarpaulins for stocks stored in the open.
- Greasing or other protection to protect metal items from rusting.
- Special packaging which would not be necessary if items were not to be stored.
- Chemical treatments to rotting or insect damage.
- Silos, bins, tanks or similar equipment.

In addition to these physical facilities, what other costs are involved in holding stocks?

- Stock must be insured against fire and theft.

If trainees do not themselves identify the financial costs involved in "tying up" money in stock, remind them of the session on ratios and "loan hunger".

Why, for instance, will it cost money for a society such as the following to put $1,000 more goods in stock, even if the physical facilities and staff are already available?
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- **When** to order more stock?
- **How much**?

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- The rate of use of the item.
- The time it will take to receive the new supplies once they have been ordered.
- The minimum quantity which should be allowed to be in stock at any one time.
- The maximum quantity which can be stored.
- The quantities in which the item is normally packed.
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Clearly a manager does not obtain all this information when deciding about re-ordering envelopes or spark plugs. Ask trainees why they do not nevertheless order one pad of paper or 10,000 spark plugs. The decision to order more reasonable amounts is in fact based on almost unconscious knowledge of the kind of information listed above.

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At what stock level should they decide to order more supplies?

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- The society should order when stocks fall to 30.

Ask trainees how many sprayers will be in stock before the new order arrives?

- Nil
Clearly stocks should not be allowed to fall to zero, unless there will be no further requirement for a long period. Ask trainees what they would suggest as a minimum level, below which the number of sprayers in stock should not be allowed to fall.

The answer depends on the reliability of demand estimates, the steadiness of demand and the likelihood that the supplier will in fact deliver in three months.

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The manager should place a new order when stock falls to 45 units.

Many items which are stocked by co-operatives are seasonal. They are only used in certain months of the year.

Fertilizer, for instance, is often needed only in one brief planting season. The total requirement should be ordered in enough time to ensure delivery. Stress that the techniques covered in this session apply mainly to items for which the demand is fairly steady all year.

7) The manager must now decide how many sprayers. Ask trainees to suggest what additional information he needs, and write the data on the chalkboard/OHP as trainees suggest it. If they do not suggest a particular item, show that it is necessary by asking them whether it would be possible to make the decision without it.

(a) Maximum stock that can be accommodated 100

(b) Estimated cost of each sprayer $20

(c) The annual cost of borrowing money to finance stocks 12%
(d) "Fixed" costs of placing and transporting an order which do not depend on the size of the order $10

(e) The annual rate of decrease in the value of sprayers through rust, risk of replacement by better models or damage. (Trainees may feel this is high. Stress that few items are worth anything after ten years).

(f) The annual cost of storing sprayers, covering insurance, space, labour and security. 3% of value or 60c each

(g) The minimum quantity which must be ordered to obtain the supplier's discount 10 sprayers

(h) Number of sprayers in one package, if manufacturers will not open packages for whole-sale orders 10 sprayers

Trainees may suggest that it is unnecessary to include the cost of borrowing money, because the society would be unlikely to raise a loan especially to buy sprayers. They would be paid for in cash which was already available. Stress that it reduces the amount available for lending to members or placing on deposit. When cash is exhausted, more may have to be borrowed. Each transaction should bear the cost of what eventually happens because of a large number of transactions.

Trainees should understand the need for items (d), (e) and (f) as a result of discussion earlier in the session. Ask them how they would estimate the cost of these items in their own societies.

- The cost of ordering and collecting goods can be roughly estimated by dividing the cost of that proportion of staff and transport time which is used for ordering and transporting supplies by the number of orders placed, not the value. This will give an approximate cost per order.

- Ask trainees if they have any idea of how much it costs to place an order, or even to write a letter, in their societies. Stress that administrative costs of this sort should be calculated and controlled. This is not only necessary in order to estimate quantities to order, but, more importantly, to make sure that they are monitored and reduced if possible. They are almost always higher than they should be, because they are not obvious.
- Some estimate can be made of the time it will take for an item to become valueless. Seeds may last two years, fertilizers four, but even hardware items such as sprayers will not last forever. A ten year life in storage, is probably the most that can be expected.

- It is not necessary to build extra warehouse space or hire extra store keepers because one extra sprayer is stocked. Nevertheless, as with funds tied up in stocks, every item must bear its cost of the storage operation.

Ask trainees how they would estimate the cost of storage. If all storage costs, including insurance, rent, labour and so, amount to $6,000 per year, how can they estimate the storage cost for one particular item, if the total value of goods in storage is $200,000? Elicit the suggestion that storage costs can very approximately be allocated on the basis of the value of what is stored.

On this basis, the cost of storage can be calculated as follows:

\[
\begin{align*}
\text{Total storage cost for 12 months} & = 6,000 \\
\text{Total value of all stocks} & = 200,000 \\
\text{Storage cost per year per dollar's worth} & = \frac{6,000}{200,000} \\
& = 0.03 \\
& = 3\% \\
\end{align*}
\]

Or three cents
Or three per cent

In this case it therefore costs 3% of the value of an item to store it for a year. Trainees may object that bulky items may have the same value as smaller ones, but clearly cost more to store. This is clearly true for space and labour costs, but not for insurance. The figure must be very approximate in any case, and it would be impractical to attempt to measure the cubic volume of every item in an attempt to obtain a more "accurate" figure.

Ask trainees how they will use this information to decide how many sprayers to order. Work through the exercise as follows, ensuring that trainees understand the logic underlying each stage, even if they are not able to suggest the method themselves.
(a) The costs of holding stock must be combined. These are:
- Cost of money: 12%
- Reduction of value in stock: 10%
- Cost of storage: 3%
  
  25% or $5 per sprayer per year

(b) These are annual costs, and consequently apply to the total annual demand of 120 sprayers.

(c) The manager must then calculate the costs of various different sizes of order, so that he can find the lowest total cost. Ask trainees to suggest a reasonable order. This might be 40 units. The calculations are as follows:

- 40 sprayers per order = 3 orders per year (140)
- Cost of placing order: 3 x $10 = $30

(d) The cost of carrying stock will depend on the average number in stock. Show by simple graph of the following form that the average level of stock will be halfway between the minimum (15) and the maximum (40 + 15) reached when the new order arrives.

![Graph showing average number in stock](image)

The average of 15 and 55 = \( \frac{70}{2} = 35 \) units.

(e) The total cost of order 40 sprayers can thus be calculated:
Cost of placing orders and transport $ 30
Cost of holding the average stock of 35 units 175
Total $ 205

9) Remind trainees that they must now calculate the costs of a number of other possible order sizes, in order to determine the cheapest. Allow trainees up to 30 minutes to calculate the cost of ordering 10, 20, 30, 40, 50, 60, 70 and 80 units. The task should if necessary be divided up among trainees so that each does two or three calculations only. Elicit the fact that it is not possible to order 90 units, since the highest stock would be 105 units (90 + 15). This exceeds the space available.

Ask them for their answers which should be written on the chalkboard as follows:

<table>
<thead>
<tr>
<th>No. Ordered</th>
<th>No. of Orders</th>
<th>Cost of Orders $</th>
<th>Lowest Stock</th>
<th>Highest Stock</th>
<th>Average Stock</th>
<th>Cost of Stock $</th>
<th>Total $</th>
</tr>
</thead>
<tbody>
<tr>
<td>10 sprayers</td>
<td>12</td>
<td>120</td>
<td>15</td>
<td>25</td>
<td>20</td>
<td>100</td>
<td>220</td>
</tr>
<tr>
<td>20 sprayers</td>
<td>6</td>
<td>60</td>
<td>15</td>
<td>35</td>
<td>25</td>
<td>125</td>
<td>185</td>
</tr>
<tr>
<td>30 sprayers</td>
<td>4</td>
<td>40</td>
<td>15</td>
<td>45</td>
<td>30</td>
<td>150</td>
<td>190</td>
</tr>
<tr>
<td>40 sprayers</td>
<td>3</td>
<td>30</td>
<td>15</td>
<td>55</td>
<td>35</td>
<td>175</td>
<td>205</td>
</tr>
<tr>
<td>50 sprayers</td>
<td>2.4</td>
<td>24</td>
<td>15</td>
<td>65</td>
<td>40</td>
<td>200</td>
<td>224</td>
</tr>
<tr>
<td>60 sprayers</td>
<td>2</td>
<td>20</td>
<td>15</td>
<td>75</td>
<td>45</td>
<td>225</td>
<td>245</td>
</tr>
<tr>
<td>70 sprayers</td>
<td>1.7</td>
<td>17</td>
<td>15</td>
<td>85</td>
<td>50</td>
<td>250</td>
<td>267</td>
</tr>
<tr>
<td>80 sprayers</td>
<td>1.5</td>
<td>15</td>
<td>15</td>
<td>95</td>
<td>55</td>
<td>275</td>
<td>290</td>
</tr>
</tbody>
</table>

Trainees may be confused by the figures for the numbers of orders to be placed if 50, 70 or 80 sprayers are ordered, since they are not whole numbers. Show that 1.5 orders per year, for instance, is the same as 3 orders in 2 years. Stress that in any case the total cost figures are lowest for 20 sprayers, and since the sprayers must be ordered in multiples of 10, this is the number to be ordered.
10) If time allows, ask a trainee to draw a rough graph on the chalkboard to show the relationship between the quantities ordered and the total annual cost of ordering. This should be in the following form:

Trainees with secondary school mathematics may recall that a relationship such as this can be expressed as a formula. Trainees may be interested in the formula for calculating the lowest cost/order quantity, which is:

Quantity to order = the square root of twice the annual requirement times the cost of placing and transporting each order, divided by the cost per unit times the percentage cost of storing one unit per year.

or

\[\text{Quantity to order} = \sqrt{\frac{2 \times \text{units} \times \text{cost per order}}{\text{cost per unit} \times \text{storage cost \%}}}\]

Trainees may wish to check the formula by calculating the answer to the sprayer problem. The figures are as follows:

\[\text{Quantity to order} = \sqrt{\frac{2 \times 120 \times 10}{20 \times .25}} = 21.9\]

This means 20 units, since they are only available in lots of 10.
Stress that formulae and graphs of this sort can be misleading, since they give a false impression or precision. The cost figures on which the calculations are based are only very rough estimates, and there is a very wide margin of error.

11) If time allows, ask trainees for data from their own societies for one or more items, and ask them to calculate the lowest cost/order quantity using the formula or the longer trial and error method, with or without a graph, as they wish.

Ask whether the answer is the same as the quantities actually ordered by their societies. If not, are there additional items of information which mean that the society is correct, or should the quantity be changed?
SESSION 3.4

STOCK VALUATION AND MANAGEMENT

Objective: To enable trainees to value stock in such a way that the figure gives an accurate picture of the financial position of the society.

Time: 1 to 2 hours.

Material: Exercise "The Accurately Valued Society."

Session Guide:

1) Remind trainees of the various balance sheets that have been used in previous sessions, and of the balance sheets of their own society. What do the figures for the value of stock actually tell an outsider about the value of stock? What does "value" mean in this case?

Stress that, as with all accounting decisions, the manager must be aware of the purpose of information he is putting together, before deciding on what basis to make the calculation. Remind trainees that they have to spend considerable time and effort in stock-taking, or counting the number of all the items held in stock by their society. What is the purpose of stock-taking?

- To discover and thus in future prevent losses through theft, carelessness or other management deficiencies.
- To ensure that the figures used in the calculation of the surplus are correct.
- To ensure that the balance sheet figures are correct.

Remind trainees that the stock figures used in accounts are a combination of the number of each item and a value, which is based on it. Financial managers work in values and not quantities.

If stock-taking and stock records are to be of any use, therefore:
- The actual accounts must be accurate.
- The values used to convert the quantities into money must be accurate.

2) Distribute the exercise and allow trainees, on their own, up to 15 minutes to work on the problem. At this stage, their answers are not important. The intention is to demonstrate that there are many different ways of valuing stock.

Ask individual trainees to describe how they are setting about the problem. Attempt to elicit at least the following nine different approaches. If trainees have not identified all eight, show by discussion that the others are also possible and reasonable. Present the various answers on the chalkboard/OHP in the following form:

(a) 30 hoes at current purchase price = 30 x $8.80 = $264.
(b) 30 hoes at most recent selling price = 30 x $9.60 = $288.
(c) 30 hoes at current selling price., i.e. 20% on current buying price = 30 x $10.56 = $316.80
(d) 30 hoes at purchase price of original stock = 30 x $7 = $210.
(e) 30 hoes at actual purchase price, assuming that stock has been properly managed so that the hoes which have been in stock longest have been sold first: 10 hoes at $8.80 = $88
   20 hoes at $8  = $160
   $248
(f) 30 hoes at average purchase price during the year:

   \[
   30 \times \frac{\$7 + \$8 + \$8.80}{3} = $238
   \]

(g) 30 hoes at probable future replacement cost, assuming that the new factory opens on schedule and provides equivalent products at the promised price:

   \[
   30 \times \$7.50 = $225
   \]

(h) 30 hoes at the weighted average of the costs of the hoes that were bought during the period:
\[
\text{Value of 30 hoes} = 10 \times 7 + 20 \times 8 + 10 \times 8 + 10 \times 8.80 = 7.96
\]

(i) 30 hoes at whatever price can be obtained for them if they had to be sold today. This will depend on their condition (which is not perfect), the demand for hoes in early January and people's opinion about the reliability of the factory, but the figure will almost certainly be lower than (a), (b), (c), (e) and (f).

3) Ask trainees if they have ever heard the terms "LIFO" and "FIFO". Ensure that all trainees appreciate that:

- LIFO means "Last in first out".
- FIFO means "First in first out".

Ask trainees which of the above methods of valuation is LIFO and which is FIFO.

(d) is LIFO, in that it assumes that the stock that remains is that which was bought earliest.

(a) is FIFO, in that it assumes that the remaining stock is that which was bought most recently.

The other methods are not based on the earliest or the latest purchase prices at all, and are thus neither LIFO nor FIFO.

Ask trainees which of the two methods, LIFO, or FIFO, is the best in terms of actual stock management.

Trainees should appreciate that it is wrong to adopt LIFO when issuing stock, since this leaves old stock untouched and thus likely to be damaged or deteriorate.

The valuation method, however, is not necessarily the same as the way in which the stock is actually issued. FIFO should always be the basis of the physical management of stock, but the valuation method may nevertheless be different.
4) Point out that there is a range from $210 to $316.80. Ask trainees whether it matters what method is used. What difference will it make to the society? Ask trainees to suggest what would be the effect on the society, including the management, the members and any outsiders whose opinion is important to the society, of figures such as (a), (b) or (c) which are higher than the original cost of the hoes, or figures 8(d), (g) and probably (h) which are lower than the original cost?

- If stocks are valued at more than their cost (methods (a), (b) or (c)) the difference will appear in the surplus item on the liabilities side of the balance sheet, to match the increase on the assets side. The society has not really made the surplus until the items are sold, and this method will overstate the surplus and may lead to excessive dividends, or, if the society is subject to tax, to higher than necessary taxes.

- If stocks are valued at less than their cost (methods (d), (g) or (h)) the society will appear to make a loss, and the surplus may be understated. They will also not be adequately covered by insurance if the same figures are used for this purpose.

- Selling prices are usually based on stock valuations. If the value is too high, members will complain that the society is exploiting them, if the value is too low, the society will not be able to replace goods which are sold with the money it received for them.

5) These arguments suggest that the right figure to use is the actual cost of the items in stock, that is method (e). Ask trainees what disadvantages this method has for the society's staff, the members and outsiders.

- It is difficult to calculate, particularly if price changes are frequent, and the stock includes items which have been bought at a number of different prices so that it has not been practical to segregate the stock and to know exactly how many remain at each price.

- If items have been stocked for some time, and can only be repurchased at a far higher price, a selling price calculated on
the basis of actual cost will not be sufficient to allow the society to buy new supplies.

- If the stock has been reduced in value because it has been in storage for a long time, or if less expensive replacements are available, as with the hoes, the prices will overstate the real "value" of the stock.

Remind trainees of Session 1.4 on ratios. Artificially high stock figures will increase the current assets and give an inaccurately favourable view of the society's financial position, while the reverse will also be the case.

Ask trainees to identify articles in stock in their own societies whose present "value" is significantly higher or lower than the purchase price. Do items of this sort make up a significant portion of the total value of stocks? If so, what conditions have caused the difference between actual cost and current value?

- Inflation means that current values are higher than the purchase price.
- Rapid changes, inadequate storage facilities and bad storage management mean that current values are lower than original purchase prices.

Stress that no single method of stock valuation is ideal. The actual methods used may be determined by the Registrar's Department or the auditors, but it is important that managers should appreciate the alternatives that are available.

- They should ask the auditors what method they are using, and to explain why.
- They should understand the ways which every method used can lead to management errors, or misunderstandings by members or outsiders, and make appropriate allowances.
- They should be able to assist the auditors by providing data which conforms to the preferred method.
- If the auditors do not dictate which method is used, and managers are permitted to decide for themselves, they should be
able to make the decision and not have to rely on a junior ac-
countant who may know of one method and may be unaware of the
alternatives and why they may be preferable.

6) Refer back to the nine methods, (a) to (i), a summary of which
should have been retained on the chalkboard/OHP. Ask trainees
what method they would propose for their own societies.

- The answer depends on the situation of the society, but the
most practical method is (a), the current purchase price. This
has the following advantages:
  - It is administratively simple, involving one calculation.
  - It is likely to be closest to the cost of obtaining new sup-
    plies.
  - Selling prices based on the current purchase price are
    likely to be similar to prices charged by competing organi-
    sations, and to be sufficient to pay marketing costs and the
    costs of obtaining new supplies.

There are disadvantages, however. How would trainees attempt to
minimise them?

- Stocks should be properly taken care of to avoid deterioration
  in storage. This will avoid losses of value which might lead
  to the actual value being overstated if method (a) is used.

- The oldest stock should always be used first, even if members
  find it preferable, and staff find it easier, to draw only from
  the stock most recently arrived and to leave the older stock at
  the back of the bin, or store.

- Stock should be regularly inspected. If some stock has been
  damaged or is too old, so that it cannot be expected to be sold
  at the right price, it should be segregated and "written down"
  to a new lower value or "written off" to no value at all. It
  should still, of course, be sold for whatever price it can
  fetch. Many managers spend time, calculating stock values in
  theory, rather than inspecting the actual goods and taking
  steps to prevent further loss.
Ask trainees how they value work in progress, such as coffee beans, tea, timber or other materials whose processing is incomplete when stock is valued. Elicit the following suggestions:

- Raw materials should be valued as discussed in this session.
- Finished items should be valued at the chosen raw material value, plus the average cost of processing.
- Semi-finished items, still in progress, should be valued at raw material value plus half the processing cost.

7) Stress that while stock valuation is important, correct stock management is even more so. Stocks should be bought only in the right quantities, at the right time, and goods in storage or in process should be properly managed so that the value is maintained or even increased by being stored.
The Accurately Valued Society

The manager of the AVS was pleased that the stock-taking at the end of 1982 was finished, and no major errors had been revealed. The accounts were to be prepared by a new employee, who had had some training in book-keeping but was not a qualified accountant. She had asked the manager for the figures, but when he showed her the stock record cards, such as the example overleaf, she pointed out that she needed financial values and not just quantities. She asked the manager if he would take the record for one item and calculate the stock value for her so that she could follow the same procedure for all the others.

The manager took the card for hoes, and set about the task of valuing the 30 hoes in stock. He saw that the buying price had increased twice during the year, and that the society had sold hoes for the current buying price plus 20%. He knew that further price increases were expected in the future, and in order to be quite sure that the example was correct, he went to have a look at the hoes themselves. There were indeed 30 in stock. A few of them were rather rusty since they had been soaked when the roof leaked in June.

The manager wondered whether the Government owned farm tool factory, which was supposed to start producing in March, would really produce better hoes at $7.50 each, as they had promised in the circular he had received from the Union two weeks ago. The manager had ordered 50 hoes from the factory, along with some other items, but he was pleased to see that his own society had reasonable stocks of the old hoes, in case the new manufacturer failed to come up to expectations.
<table>
<thead>
<tr>
<th>Date</th>
<th>Opening Stock</th>
<th>Amount Purchased</th>
<th>Buying Cost Each $</th>
<th>Amount Sold</th>
<th>Selling Price Each $</th>
<th>Closing Stock</th>
</tr>
</thead>
<tbody>
<tr>
<td>3.1.82</td>
<td>-</td>
<td>10</td>
<td>7.00</td>
<td>-</td>
<td>-</td>
<td>10</td>
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<td>14.2.82</td>
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<td>-</td>
<td>6</td>
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<td>15.4.82</td>
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<td>20</td>
<td>8.00</td>
<td>-</td>
<td>-</td>
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<td>-</td>
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<td>-</td>
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<td>-</td>
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<tr>
<td>31.12.82</td>
<td>30</td>
<td>-</td>
<td>- stock</td>
<td>check</td>
<td>-</td>
<td>30</td>
</tr>
</tbody>
</table>

**Assignment:**

How much is the current stock of hoes worth?
SESSION 3.5

RENT, BUY OR LEASE?

Objective: To enable trainees to select the most suitable method of financing the ownership or use of, equipment or facilities.

Time: 1 to 2 hours.

Material: Vehicle and property rental and lease rates and information from local sources.

Session Guide:

1) Remind trainees that Sessions 3.1 to 3.4 have dealt with the management of money, amounts owing by customers and stocks. What other possessions or "uses" of money remain to complete the list of headings under which assets are classified?

- Plant, equipment and machinery.
- Land and buildings.

Ask trainees what they understand about good management of assets of this sort.

- Machinery must be properly selected, maintained and used. Buildings must be properly designed and built, or selected, and must then be properly maintained and used in the most effective way.

This session is not about the physical management of these assets, but about their financial management, and in particular the various ways in which they can be obtained. The material must be modified to take account of whatever leasing, rental or hire purchase facilities are locally available. If co-operative societies are not presently using such facilities, it is still important that they should be made aware of them.
2) Ask trainees to imagine that they have been offered two positions as co-operative society managers, both with equal salaries and similar to one another in every way except that Society A owns two lorries and a warehouse, while Society B does not have its own facilities of this sort. Which job will they prefer, all things being equal?

Take a show of hands to obtain the majority view. It is probable that most trainees will prefer the society which owns its own facilities to that which does not:

- Ownership indicates stability and wealth.
- The manager who controls vehicles and buildings is more powerful, and can operate more flexibly than the manager who must rent such facilities when they are needed.

Remind trainees of traditional and modern possessions such as the following:

- Jewellery owned by wealthy women, or purchased for them by their friends.
- Cattle owned by nomadic pastural farmers.
- Large and expensive stereo high fidelity radios and tape recorders often bought by people who visit other countries.
- The large numbers of wives who used to be bought by powerful men in some societies.
- Large shiny cars owned by successful business people and politicians.

Why do people own this type of possession?

- Possessions of this sort are often valued because their ownership confers status. Other people respect those who own them.

Ask trainees what is different about possessions of this kind from the machinery or buildings owned by co-operative societies:
- Co-operative societies own things not for their own sake, nor to encourage admiration from others. Machinery and buildings are valued because they are used, and the benefit lies in their use rather than in ownership itself.

3) Ask trainees whether any of their societies has all the money it needs. It is unlikely that any will reply affirmatively.

Ask those who feel that their societies need more money to explain why. Divide their answers into three categories:

(i) To enable them to purchase more current assets such as stocks, or to give more customers credit.

(ii) To enable them to reduce liabilities by repaying loans or debts owed to suppliers.

(iii) To purchase equipment or buildings which they believe they need.

Ask trainees from the last category to mention specific items such as a crop store, a lorry, a motorbike, a typewriter or an office building. What alternative ways are there of obtaining the use of such items without buying the asset itself?

- By renting a suitable building or piece of equipment.

- By leasing a building or buying equipment on hire purchase so that the money does not have to be paid out at once.

4) Ask trainees who have suggested that their societies need items of this sort to estimate how many days during the year the item will actually be used as it is intended to be used, for the benefit of the society, rather than being misused or lying idle. How many days during the year are co-operative vehicles, for instance, used for trivial purposes because they happen to be available?

Answers will vary. It is clear from experience and research that:

- Most co-operative vehicles are generally used for less than 150 days a year.
Co-operative stores are generally in use for about 90 days a year if used only for crop storage, and 200 days if they are also used for input storage as well.

Ask trainees to estimate the annual cost of owning, maintaining and operating the facilities such as they suggest the co-operative should purchase. The estimates will vary for different individuals and in different conditions, but the following figures may be used as a very approximate rule of thumb:

- The cost of owning a building, including interest foregoing on the purchase price, maintenance, security, insurance and taxes equals one-fifth of the total purchase cost per year. Example: A building costing $50,000 to buy will cost $10,000 per year to own.

- The annual cost of use of a vehicle, including wages for the driver, maintenance, insurance, fuel and taxes equals three-quarters of the new price of the vehicle. Example: A lorry costing $10,000 will cost $7,500 a year to run.

- If equipment such as mills or vehicles is rented without fuel or operators, the fixed costs of ownership should be compared with rental.

5) Ask trainees whether it is possible to rent or hire suitable buildings or vehicles, instead of purchasing them. In most countries it is possible. Compare the daily rental costs suggested by trainees, or drawn from locally available information, with the running cost as assessed by trainees or as estimated using the rule of thumb methods suggested above, divided by the average days of usage during the year. Develop a table of the following form:
6) The figures are likely to be fairly similar, as shown in the example above. Ask trainees why co-operative societies often prefer to own rather than rent facilities of this sort, in addition to the cost saving if there is one:

- They want the facility to be available when needed.
- They can control the maintenance and standard of service provided by the facility.
- They are aware that prices usually increase. It is therefore better to buy an asset now rather than wait until it becomes more expensive.

Ask trainees to suggest reasons why it might be better to rent, even if the price of rental is slightly higher than the cost of ownership:

- The service is more flexible and need not be paid for when not used.
- The scale and type of the facility can be increased or otherwise varied without having to dispose of an item which is no longer suitable.
- The company renting out a vehicle may have an alternative available in case of breakdown.

Trainees probably indicated their preference earlier in the session for managing a society which owned its own facilities. Ask
them whether they as managers have too little to do, just the right amount, or too much work. Most will claim, probably rightly, to be overburdened.

What effect does ownership of facilities of the sort described above have on the management of a society?

- The management task is more complex, there is more routine to be remembered and senior management's time must be devoted to the facilities which if they were rented would in part be managed by someone else.

7) Trainees originally suggested what their societies would purchase if they had the money. Ask trainees to mention examples of fixed asset purchases that societies have made recently, which may have been paid for out of available funds, from a loan or a combination of the two. In addition to the advantages of rental already mentioned, why else might it have been preferable to rent rather than to buy the asset in question?

Ask trainees to state how the two transactions mentioned below will effect this balance sheet:

<table>
<thead>
<tr>
<th>Assets</th>
<th>$</th>
<th>Liabilities</th>
<th>$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cash and Bank Balance</td>
<td>10,000</td>
<td>Accounts Payable</td>
<td>3,000</td>
</tr>
<tr>
<td>Accounts Receivable</td>
<td>5,000</td>
<td>Overdraft</td>
<td>4,000</td>
</tr>
<tr>
<td>Plant and Equipment</td>
<td>7,000</td>
<td>Long Term Loan</td>
<td>5,000</td>
</tr>
<tr>
<td>Land and Buildings</td>
<td>13,000</td>
<td>Members' Share Capital</td>
<td>10,000</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Undistributed Surplus</td>
<td>13,000</td>
</tr>
<tr>
<td>Total</td>
<td>35,000</td>
<td>Total</td>
<td>35,000</td>
</tr>
</tbody>
</table>

(a) Society purchases a vehicle for $9,000 and pays in cash.

"Cash" goes down to $1,000.
"Plant and Equipment" goes up to $16,000.

(b) Society purchases a building for $20,000, financed by a bank loan.

"Land and Buildings" goes up to $33,000.
"Long Term Loan" goes up to $25,000.
What effects do each of these transactions have on the society's future ability to purchase assets as they may be needed?

(a) The cash is no longer available.

(b) The bank will be unlikely to extend a further loan.

Societies should therefore consider renting equipment, or buildings, not only when they do not have the funds or cannot borrow the money, but at any time. (If leasing or hire purchase facilities are locally quite unavailable to co-operative societies, the following sections should not be used.)

8) The examples already mentioned assumed:

- The society is not trying to make year-round use of the item purchased.
- The equivalent facilities can be rented.

Either or both these assumptions may not be true. Ask trainees whether there is any other way of obtaining plant, equipment, or land and buildings, if there is a genuine economic use for them:

- Plant and equipment can be hire purchased.
- Buildings can be leased.

Ensure that trainees are familiar with hire purchase and leasing as they are available to co-operative societies. If possible, distribute information about hire purchase and leasing terms which are locally available.

Stress that leasing and hire purchase involve regular contractual payments, just like repayment of a bank loan. Why is it that sometimes it is possible to acquire equipment or property in this way, even if a bank loan could not be obtained?

Any transaction of this sort is really borrowing money, but there are some critical differences:
- Lease and hire purchase payments are usually higher than repayments of a bank loan. Banks usually lend at low rates of interest to reliable borrowers. Hire purchase and leasing companies are willing to accept rather higher risks, but expect higher rates of interest.

- The lessor or seller through hire purchase retains the right to recover the item, or repossess the property, without any delay if payment fails to arrive. A bank usually has to go through lengthy legal procedures even to seize goods which have been pledged as collateral for loans.

- The seller can demand right of entry for inspection of equipment or property that has been leased or hire purchased.

- The seller may demand a substantial deposit, before the item is released, whereas the bank would not expect even the first repayment for some months or even a year. This reduces the risk to the seller.

A lease or hire purchase agreement is thus some more expensive and has more onerous conditions than a bank loan. If the society can show to its own satisfaction that income from the use of the asset exceeds the repayments, it can nevertheless be a very useful way of purchasing items when other finance is not available.

9) Ask trainees why it may also be preferable to lease or hire purchase such items even if a bank would be willing to lend the money, at lower rates of interest and with less conditions.

They should consider the effects of a loan, and of a lease or hire purchase agreement, on the society's balance sheet:

- Lease and hire purchase agreements do not generally appear in the balance sheet of a co-operative society. The payments are added to the expenses like any other cost of operations.

- A society which may in the future wish to raise a bank loan for another purpose should consider leasing or hire purchase assets which can be acquired in this way, in order to "reserve" the ability to raise a bank loan for an occasion when there is no alternative.
If the co-operative societies are taxed, and taxation regulations are such that there are advantages to leasing, ask trainees how the following two alternatives might effect the taxation of a society:

(a) A vehicle is leased for $2,500 a year, payable over five years after which the vehicle becomes the property of the society.

(b) A vehicle purchased for $10,000, financed by a bank loan which is repayable at $2,000 a year, for five years.

The vehicle is in both cases estimated to last five years.

(a) The lease payments will be added to the expenses, and will thus reduce the surplus by $2,500 a year.

(b) The vehicle will be depreciated over five years, that is $2,000 a year, and the interest charge of $500 a year will also be added to expenses. The surplus will thus be reduced by $2,500 a year.

If the life of the vehicle is the same as the duration of the repayments, there is no difference. Ask trainees what would be the effect if the vehicle were to be depreciated over ten years.

(a) Lease $2,500. No change, annual cost $2,500, for five years.

(b) Depreciation $1,000 per year for 10 years, interest $500 per year for 5 years, i.e. total cost years 1 to 5 $1,500, years 6 to 10 $1,000.

Ask trainees why it might be better for the society to have a lower surplus in the immediate future, and a higher one later:

- To reduce taxation.
- To reduce member pressure for large surplus distribution in the early years.

What alternative, (a) or (b), will be preferable if the society wanted to reduce its surplus in the immediate future?
- The lease would mean that in years 1 to 5 the surplus would be $1,000 a year less, and in years 6 to 10 would be $1,000 more.

The decision will depend on taxation and the rates of depreciation allowed to be charged. Co-operative society managers should in any case consider the alternatives of:

- short term rental;
- lease or hire purchase;
- outright purchase.

when considering the purchase of important fixed assets. The use of one method rather than another may make the acquisition possible. The choice of method will also make the acquisition more profitable.
SESSION 3.6

THE MOVEMENT OF MONEY

Objective: To enable trainees to plan the movement of money within their societies effectively.

Time: 1 to 2 hours.

Material: Case Study "The Moving Money Society".

Session Guide:

1) Ask trainees whether they have ever been unable to pay their members for their crops when they wish. For how long did the members have to wait, why did the delay occur? (If no trainees have ever been so unfortunate as to suffer in this way, ask whether they have ever been unable to settle bills, pay wages or make some other payment when they wished to do so.)

Elicit through discussion:

- The problem usually arises not because there will not eventually be enough money, but because the money is not available when it is needed. It is a matter of timing rather than the amount.

- The delay often occurs because money due to the society from another organisation, such as a bank, a large customer or perhaps the Government, was also delayed.

Trainees should appreciate that their own problems arise from similar problems in other organisations, and will in turn cause further problems elsewhere.

Ask whether the delay is entirely the fault of the other organisations which failed to pay the society in time. Could their managers have attempted to avoid it, and how?
- Could they have pressed the organisations which were due to pay the society earlier, and harder, to obtain a greater share of whatever money they had?

- Could they have arranged for an alternative source of money to carry the society over the period of difficulty?

- Could they at least have warned the members, or others to whom money was due, to enable them to make whatever alternative arrangements they could?

What would they as managers have needed to know in order to be able to take steps of this sort?

- They would have had to know in advance that the problem was likely to occur. If they had known this, they could have planned the movement of money in advance.

2) Remind trainees of Sessions 2.1 - 2.3. What are the sources from which a society can obtain money?

- Other assets where money is being used.
- Banks or other financial institutions.
- Suppliers credit.
- Members' deposits or share capital.
- Undistributed surplus.

Stress that the manager must plan and control two different kinds of money:

- Money coming into the society (from customers, banks, members, etc).
- Money within the society (from one asset item to another).

Managers must forecast how money will move, and if they identify shortfalls, they must take steps to prevent them.

3) Write the following simplified operating statement on the chalkboard/OHP:
Ask trainees whether this is a successful society. Is it likely to fail?

Trainees will consider it successful. Write up the following further information:

- Receipts from sales received six months after selling.
- All costs paid in cash.

Is the society successful?

Clearly the society will run out of money unless some alternative source of finance can be arranged. Stress that **profitability** and **bankruptcy** can happen together.

Confirm trainees understanding of the importance of timing. **Why** can a society run out of money even though its revenue exceed its costs?

- If a society sells something, their customers do not necessarily pay at the same time. They may buy on credit.
- If a society purchases something, they may not necessarily pay for it at the same time. They may be allowed credit by the supplier, or they may have to pay in advance.
- If a society uses something, it may have been purchased on credit or maybe drawn from stocks. It is not necessarily paid for at the same time.

Stress that operating statements and profit or loss forecasts do not say **when** the actual money changes hands in a society’s transactions. The problems identified earlier in the session were problems of **timing**, and it is therefore necessary to use some other technique for forecasting the movement of money to avoid such problems.
4) Ask trainees to calculate the cash balance in the following case:

- A society started on January 1st with $100 in cash.
- During January they will pay out $70 for wages and will receive $130 from customers.
- During February they will pay out $130 for wages and supplies and will receive $80 from customers.
- During March they will pay out $150 for wages and will receive $30 from customers.
- How much money will the society have at the end of March?

Trainees should easily calculate the answer to minus $10. Ask them to explain how they arrived at this, and demonstrate the following layout as a way of solving cash flow problems of this sort:

<table>
<thead>
<tr>
<th></th>
<th>January</th>
<th>February</th>
<th>March</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cash in Hand</td>
<td>100</td>
<td>160</td>
<td>110</td>
</tr>
<tr>
<td>Received</td>
<td>130</td>
<td>80</td>
<td>30</td>
</tr>
<tr>
<td>Total</td>
<td>230</td>
<td>240</td>
<td>140</td>
</tr>
<tr>
<td>Paid Out</td>
<td>70</td>
<td>130</td>
<td>150</td>
</tr>
<tr>
<td>Balance</td>
<td>160</td>
<td>110</td>
<td>(-10)</td>
</tr>
</tbody>
</table>

Ask trainees how they would react if their own forecasts showed a negative position:

- Press past customers for earlier payment.
- Arrange a bank loan for whatever period was necessary.
- Persuade suppliers or members to accept a delay in payment.

5) Distribute the case study and allow trainees up to 45 minutes to complete the first part of the assignment. Warn them that it is vital to lay out the calculations neatly and to avoid simple mathematical errors. Trainees who have completed the first part may go on to the second part if they have enough time.

Ask a trainee who has the right answer, or has at least approached the problem in the right way, to lay out his or her calculations on the chalkboard/OHP and to explain them to the remaining trainees. The calculations should be laid out as follows:
| ITEM                      | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC |
|---------------------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Starting Balance          | 1,500 | 1,900 | 2,300 | 700 | (500) | (13,500) | (14,000) | (1,600) | 700 | 100 | (600) | (1,300) | $ |
| Payments from Customers    | 1,000 | 1,000 | - | - | 4,000 | - | 13,000 | 3,000 | - | - | - | 5,000 |
| Total Received            | 2,500 | 2,900 | 2,300 | 700 | 3,500 | (13,500) | (1,000) | 1,400 | 700 | 100 | (600) | 3,700 |
| Wages etc.                | 500  | 500  | 500  | 500  | 500  | 500  | 600  | 600  | 600  | 600  | 600  | 600  |
| Transport                 | 100  | 100  | 100  | 700  | 800  | - | - | 100  | - | 100  | 100  | 100  |
| Loan Repayments           | - | - | 1,000 | - | - | - | - | - | - | - | - | - |
| New Motorcycle            | - | - | - | - | 700 | - | - | - | - | - | - | - |
| Paid to Members for their crops | - | - | - | - | 15,000 | - | - | - | - | - | - | - |
| Total Paid Out            | 600  | 600  | 1,600 | 1,200 | 17,000 | 500  | 600  | 700  | 600  | 700  | 700  | 700  |
| Net Balance               | 1,900 | 2,300 | 700 | (500) | (13,500) | (14,000) | (1,600) | 700 | 100 | (600) | (1,300) | 3,000 |
6) Ask trainees who have had time to suggest answers to the second part. They should include:

- Attempt to arrange overdraft facilities from the bank to cover the periods of April, May, June and July, and October and November, when the society is forecast to have a negative cash balance.

- Ask some of the late payers to bring forward at least $1,400 of their debt of $5,000, to be paid $700 in October and $700 in November, and thus avoid the second less important period of cash deficit.

- Ask members to accept payment in July rather than May, offering if necessary an extra 1% or 2% bonus at the end of the year to compensate for the delay, in lieu of the interest saved.

- Ask those customers expecting to pay in July and August to pay in May, when the crop is delivered, and offer a 1% or 2% price reduction or other inducement to cope with officials if necessary.

Calculate the effects of these suggestions and others. Stress that while it may not be possible totally to eliminate the deficit, and a bank overdraft may be necessary, it is better to reduce the amount of credit from the bank if it is possible. A problem of this type can only be solved by requesting and persuading a number of outside organisations to assist.
The Moving Money Society (MMS)

It was early January 1982 and the manager of the MMS was anxious to avoid last year's problems. For most of the year, he remembered he had been attacked by members and suppliers and the bank, complaining that they had not received payments when due. They had all told him to plan his cash flow more effectively. He was not sure what they meant, but he had attempted to estimate how money would move in and out of the society during the coming twelve months, and had summarised his estimates as follows.

The society paid wages of $500 a month in cash, payable during the last week of the month. The figure would probably increase to $600 a month from July onwards, because of a national wage increase.

The customers who still owed a total of $2,000 for crops they had received last year would pay $1,000 in January and $1,000 in February, all being well. The main activity of the society took place in May, members would then deliver their crops and the manager estimated that they would expect to be paid $15,000 during May.

He hoped that the motorcycle which he used for visiting farmers would last until then, but there was no doubt it would be necessary to buy a new one for $700 in cash during that month. The main transport bill, for moving members crops, of $800 would also have to be paid out in May. Collection of crops would start in April and $700 would also have to be paid to the transport contractor during that month.

Other incidental transport costs, he estimated, would amount to $100 a month in January, February and March, and a further $100 a month, approximately, in August, October, November and December.

It was always difficult to estimate when customers would pay for the crops they bought from the society. The manager anticipated, however, that $4,000 would be paid during May. A further $13,000 should come in during July and $3,000 during August. He hoped that late payers could be persuaded to be more prompt this year, and that they would pay a total of $5,000 in December.
It was important to keep goodwill with the bank, since the MMS had annoyed them last year by unexpected requests for money. The manager of MMS was determined to pay the $1,000 long term loan repayment in March when it was due. At least the year is starting well, he thought. There was $1,500 in the bank on January 1st, 1982.

**Assignment:**

**Part 1**

Work out how much money the MMS will have at the end of each month during 1982 if the manager's forecasts are correct.

**Part 2**

If the answers to the above indicate that there may be some problems, suggest what the manager might do now to minimise them.
what members want to know

Session 4.1  Dividend Policy
Session 4.2  Explaining Financial Statements
Session 4.3  Sources and Applications of Money
SESSION 4.1

DIVIDEND POLICY

Objective: To enable trainees to decide on the most appropriate dividend or bonus distribution for the long term interests of their members.

Time: 1 to 2 hours.

Material: Case Study "The Divided Dividend Society" and Role Play Briefs.

Session Guide:

1) Ensure that all trainees are clear what a dividend is. The words used differ from one country to another and they include:

- Bonus Distribution
- Patronage Refund
- Surplus Distribution

Stress that whatever it is called, the dividend is money paid to members from the surplus of the co-operative society at the end of a year, usually in proportion to their use of the society's services.

Ask trainees what is the fundamental difference between a dividend and the payment of interest on share capital or loan accounts:

- Dividends are paid in proportion to members' purchases and/or sales. Interest is paid in proportion to the amount of money members have lent to the society.

Ask trainees to describe and explain any local regulations, or universally applied practices which have the force of regulations, limiting the distribution of dividends. These may limit the proportion of the surplus to be distributed to a certain maximum, and may also prescribe a certain proportion to be retained for education or other purposes.
Such undistributed dividends are often known as "reserves"; refer to Session 1.2 and the discussion on misleading accounting terminology. Ensure that trainees appreciate that such "reserves" are a source and not a use of money; a society with large reserves can still have no money.

2) List the following motives for joining an agricultural co-operative society. Allow trainees five minutes to rank them 1 to 5 in order of importance to new members of their societies, as they understand them:

(a) The co-operative is the most efficient source of marketing services which is available.
(b) The co-operative is a local community enterprise and local people want to belong to it.
(c) The law prevents the marketing of crops and/or distribution of necessary farm inputs by any other type of organisation. Farmers must be members.
(d) The society pays a dividend.
(e) The co-operative is the only practical source of agricultural marketing services which is available.

Ask trainees to read out their rankings. Opinions will obviously differ, unless the Government actually requires that farmers market their crops and/or buy certain necessary inputs from a co-operative.

It is unlikely, however, that the dividend is the strongest motive for many members to join or remaining in the society. Ask trainees why this should be so, when the dividend is the most basic difference between a co-operative and an ordinary private business, from the point of view of average members.

- Many societies rarely pay dividends, so that they are not expected.
- Dividends are often very small, so that they are not particularly important to members.
Dividends are often declared but compulsorily credited to members' share accounts rather than being paid out in cash.

3) Ask trainees why dividends are often small or totally omitted:

- Societies are unprofitable because of mismanagement, or Government policies which "squeeze" the margins between farm prices and wholesale prices. They cannot afford to pay dividends.
- Societies need to expand their services but are short of capital, they must retain everything for re-investment.
- Societies' management and members feel the society should charge even lower prices than their competitors, and pay higher prices for produce. The surplus is therefore very small.
- Members are disloyal and societies cannot absorb their fixed overheads on a declining volume of business. They therefore lose money and cannot afford dividends.

Show that at least some of these problems faced by co-operative societies, which stop them paying dividends, are in fact caused failure to pay dividends. There is thus a vicious circle which management must attempt to break.

4) Distribute the Case Study, containing the Accounts of the DDS, to all trainees, and allow up to 15 minutes to study the situation. The role play exercise which follows can then be carried out in one of three ways:

(a) Half the trainees can be given the manager's brief and the others the committee members' brief. The role play is then conducted as a debate between two equal groups, with the instructor acting as a chairman.

(b) The manager's brief can be given to one trainee and the committee members' brief to three others. The remaining trainees can have the accounts alone. The four "actors" then act out the meeting, and the others comment on it.

(c) The trainees are divided into groups of four (or, when necessary, three or five). All are given the accounts and one member of each group given the manager's brief and the re-
mainder the committee member's brief. Each group plays out the meeting, and all then report on the results.

The choice will depend on the nature of the group, the facilities and the time available. Whichever approach is used, it is vital that none of those playing the committee members' roles should see the manager's brief, and vice versa.

It is important that the two sides genuinely represent the interests of management and members. In some countries, committee members and managers act together, sometimes against the rank and file membership. In such cases the material should be changed so that the "committee members" role is played by informal representatives of the membership at large.

5) After the meetings have been completed, by using whatever method is thought to be appropriate, reconvene trainees and invite discussion and comment on the arguments put forward by both sides.

Ask trainees to identify the objective of the committee members and of the manager. They should not forget that they are people as well as office holders, and nobody can be expected to ignore his or her own personal interests. Their comments may include arguments such as the following:

Committee Members

If a high dividend is paid:

- They will obtain more cash themselves.
- They will gain status and recognition from members who will give the committee credit for a generous policy.
- The society is a base for personal status and power. Generous dividends will encourage member loyalty which ensures the survival and growth of the society.
- Non-members will join, thus increasing the scale and status of the society and its committee members.
- Local people will be more prosperous, and thus the more influential members of the community will also benefit.
Manager

If a low dividend is paid:

- He will gain recognition from his advisers and Government.
- The bank will reduce pressure for increased members' investment.
- The society's suppliers will be able to be paid, and will thus reduce their pressure on the manager.
- The manager's own salary and that of the staff will be secure.
- The society will be on a financially sounder basis and will thus retain and attract more members.
- Greater liquidity will allow members to be paid more quickly for their crops.

6) Ask trainees to identify the objectives which both "sides" have in common. These include:

- Increasing the number of members.
- Paying members more quickly.
- Improving storage facilities.
- Financial strength and growth of the society in general.

Did both sides in the discussion focus on areas of potential agreement, such as these or on areas of disagreement?

Management and their committees will almost inevitably differ in their approach to dividend policy. It should have been possible to compromise on a dividend distribution of $1,000 or $1,200, that is 14% or 12% on trade, which will satisfy committee members and the manager.

Stress that compromise is necessary, and an amicable agreement is more likely to be reached if both sides look for objectives on which they agree rather than to those on which they are bound to disagree.
The Divided Dividend Society (DDS)

Accounts

The Operating Statement and Balance Sheet for the Divided Dividend Society (DDS) for the year 1982 are as follows:

**Operating Statement**

<table>
<thead>
<tr>
<th></th>
<th>$</th>
<th>$</th>
<th>$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sales of Members' Crops</td>
<td>60,000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cost of Crops</td>
<td>48,000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Gross Surplus on Crops</td>
<td>12,000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sales of Farm Requisites</td>
<td>20,000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cost of Requisites</td>
<td>14,000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Gross Surplus on Requisites</td>
<td>6,000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total Gross Surplus</td>
<td>18,000</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Expenses:**

- Wages: 8,000
- Transport: 3,000
- Interest: 2,000
- Rent: 1,000
- Postage, Telephone and Stationery: 400
- Miscellaneous: 600

Total Expenses: 15,000

Net Surplus: 3,000

(before decision on the year's surplus)

**Balance Sheet for the DDS on 31st December, 1982**

<table>
<thead>
<tr>
<th><strong>Assets</strong></th>
<th>$</th>
<th>$</th>
<th><strong>Liabilities</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>Cash</td>
<td>100</td>
<td>Accounts Payable</td>
<td>5,000</td>
</tr>
<tr>
<td>Bank Balance</td>
<td>2,400</td>
<td>Overdraft</td>
<td>2,500</td>
</tr>
<tr>
<td>Accounts Receivable</td>
<td>5,000</td>
<td>Long Term Loan</td>
<td>27,000</td>
</tr>
<tr>
<td>Plant and Equipment</td>
<td>14,000</td>
<td>Members' Loan Account</td>
<td>3,500</td>
</tr>
<tr>
<td>Land and Buildings</td>
<td>26,000</td>
<td>Undistributed Surplus</td>
<td>4,000</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Members' Share Accounts</td>
<td>5,500</td>
</tr>
<tr>
<td>Total</td>
<td>47,500</td>
<td>Total</td>
<td>47,500</td>
</tr>
</tbody>
</table>

The manager and the committee now have to decide on the amount of surplus to be distributed to members, so that they can make an appropriate recommendation at the forthcoming Annual General Meeting. It was normal for the members at the AGM to approve whatever recommendation might be made by a unanimous resolution of the committee and the manager.
In addition to the accounts themselves, a number of other factors were believed to be relevant to the decision and these can be summarised as follows:

- This was the fourth year of the society's existence. After a loss of $3,000 in the first year, the surplus had been $2,000 in 1980 and $2,000 in 1981. No dividend had been paid because of the need to conserve the resources for growth and future prosperity.

- During 1982 there had been some delays in paying members for their crops because of the large volume they had produced and the society's shortage of cash.

- The improved crop production meant that the 100 members of the society now had, in most cases for the first time in their life, a little money over and above their needs for subsistence. This had awakened expectation and they were very anxious for better things in future.

- Some societies such as the DDS were said to be preparing a loan scheme for 1983. The bank was ready to extend loans to societies which were giving loans to society members, provided that societies could demonstrate their members' and management's commitment.

- Some members had suffered during 1982 because the society's suppliers had withheld deliveries of essential requisites until the society settled their outstanding bills. The society was still under pressure from one or two suppliers to settle outstanding accounts payable.

- The transport arrangements and management of the society will not only deal with existing members' crops and supplies, but could probably handle half as much business again without adding to expenses significantly. This would greatly increase the surplus, and the society was therefore very anxious to recruit new members.

- When the scheme for members' savings had been introduced early in 1982 the response had been enthusiastic. The Co-operative Bank, which assisted in the administration of the scheme, had publicly congratulated the society for its success. The bank was not, however, willing to increase its overdraft or long term loan without further evidence of members' own willingness to invest in their society.
A number of members had bought improved grain storage facilities on their own farms, following designs and guidelines provided by the co-operative officers. One of the reasons for this was that the bumper crop in 1982 had completely filled the society's store and some farmers had lost a part of their crop when the society had been arranging the temporary rental of extra storage space.
Role Play – Manager’s Brief

You have successfully managed the DDS for four years, and you are determined that the success you have achieved should not be thrown away by short term policies. You are about to meet with the committee in order to decide and agree on the dividend proposal to be submitted to the forthcoming AGM.

The committee members are well respected by the membership. They are richer than most of the members, the society has been an important way for them to increase their local influence and authority, but they are, you believe, genuinely interested in the well-being of the members of the society, if only because they are members themselves.

You have decided to suggest that, as happened last year, no dividend should be paid. You are prepared if strongly pressed to accept a 1% patronage dividend of $800, but you would be reluctant to accept anything over this. Your reasons can be summarised as follows:

- You have been continually harrassed during the year by suppliers and members for payment. You want to show that as much money as possible is available to increase the society's cash balance and avoid similar embarrassment next year.

- The average sales of crops and requisites was about $800 per member last year, on which the society earned an average of $180 per member gross surplus. There would be few extra expenses involved if the society had more members, and you estimate that about $100 extra net surplus would be earned for every new member. You therefore wish to avoid any problems of payment or supplier shortage next year, so that more members will be encouraged to join by this success which those who have already joined are enjoying.

- There were some short term storage problems last year and emergency storage had to be rented at a high cost at the last moment. You have obtained an estimate for enlarging the existing store to accommodate any likely increase in crop production, and the cost will be $1,500. This is an unusually favourable price, because the builder happens to have some surplus material from another contract but you cannot take advantage of this if the available cash is paid out to members as dividend.
- Your relations with the bank manager are good, but he would like you to pay off the overdraft as soon as possible. He will, of course, be willing to extend overdraft facilities again this season if he is satisfied with the way the amount currently outstanding is dealt with.

- The Co-operation Bank has recently announced their new credit scheme for societies such as the DDS. They are willing to advance $9 for every $1 the society retains from the surplus. You would like to offer this service to your members but if most of the surplus is distributed there would be no money left to lend to members and thus obtain bank support in the ratio of 9 to 1.

- Your own salary, and the wages of your staff, were delayed last year because of the shortage of cash. You wish to prevent this happening again.

- You owe your job and your opportunities for advancement to the Co-operative Department of the Ministry. The local co-operative officer has made it clear that the department regards prudent financial management as the most important qualification for promotion.
Role Play - Committee Members' Brief

You are a committee member of the DDS and you are shortly to attend a committee meeting in order to decide on the dividend proposal to be presented to the AGM for 1982. You are a reasonably prosperous farmer, but not much better off than the bulk of the members of your society. You are anxious to promote the strength and growth of the society. In this way you will, you hope, maintain the increase you have enjoyed in your own income and will also strengthen the status you enjoy as a committee member of a successful society.

You have seen the accounts and you are delighted that the surplus is $3,000, which is $1,000 more than it has ever been. You know that there is over $2,000 in the society's bank account, and you believe that the society should pay a patronage bonus of 3%, or $2,400. You realise that the manager may wish to distribute rather less than this, because he was the one who recommended no dividend at all in previous years. You would be willing, if pressed, to reduce your proposed dividend to 22%, or $2,000, but you feel that it would be very wrong for the society to distribute less than two-thirds of the available surplus. Your reasons may be summarised as follows:

- A number of members were dissatisfied at the society's failure last year to pay them on time, or to provide some necessary farm supplies which were needed. You feel that the members' loyalty will be revived if they receive a substantial dividend to compensate them for their earlier difficulties.

- The manager has on more than one occasion spoken of the need to recruit new members, because extra crops and supplies could be handled with little increase in expenses. On one occasion he mentioned the society might expect to earn an extra net surplus of $100 for every new member recruited. You are sure that many of the farmers who are not yet members will join when they know that members have received a generous dividend.

- As an influential person in the community, you know of many members who have severe financial problems. They often ask you to help, and you know that if every member receives $3 for every $100 of business they have transacted with the society they would be grateful to you and able to solve some of their immediate problems.
- A number of members, including yourself, have had to construct emergency granaries on their farms because the society's storage was full and they could not take up all your crop when it was harvested. You feel that the society should pay for the cost of this construction. You appreciate that a direct refund would be impossible, but a generous dividend would cover some of your costs.

- You and many other members have opened savings accounts with the society in addition to your share capital subscription. You would like to increase your savings, but you have no cash available. If you receive a generous dividend, you might put some part of it in your savings account.

- You have heard that some societies are lending their members money to cover the cost of seed and fertilizer. Nobody said anything about the DDS doing this, and you believe that members would probably prefer a generous dividend so that they could pay for the farm supplies themselves.
SESSION 4.2

EXPLAINING FINANCIAL STATEMENTS

Objective: To enable trainees effectively to explain the financial condition of their societies to the committee and members.

Time: 1½ to 2 hours.

Material: Case Study "The Diagrammatic Farmers Society" and accounts from previous sessions.

Session Guide:

1) Remind trainees of the previous session and of the decision reached on dividend distribution by the manager and the committee. The following material is based on a dividend of 14% on sales, or $1,000, but use whatever percentage was generally agreed.

Ask trainees how they would explain such a decision to a full meeting of members. Stress that the first task before attempting to explain anything to anyone is to try to decide what they will want to know. Lengthy explanations about something in which they are not interested bore people or make them suspicious.

Ask trainees to suggest the kind of questions that ordinary members with no accounting knowledge might ask. Note suggestions such as the following on the chalkboard:

- How was the surplus earned?
- Why were crop prices not higher and some supply prices lower, since the surplus showed that this would have been possible?
- How does this year compare with other years?
- What is going to happen to that part of the surplus which will not be distributed?
Ask each trainee to choose one question from those written on the chalkboard. Allow trainees individually up to 30 minutes to decide how they will answer the question, and to make a rough sketch of a diagram which they think would help. Ensure that all trainees have copies of the accounts handout from the previous session. They should assume that the education and literacy of the members are at the same level as typical members of their own societies.

If possible, they should be given blank transparencies or flip-chart sheets on which to present their suggestions.

2) When trainees have finished, ask a selected trainee briefly to answer the question he or she has chosen, and to present the diagram proposed on the chalkboard/OHP. Ask the remaining trainees to list carefully and to comment on each explanation. Was it clear, could a typical member have understood it, was it interesting so that all members would have paid attention?

Stress that:

- Explanations must be **brief**, particularly to people with limited education.
- Explanations must be **simple**, and easy to understand.
- Explanations must be interesting, amusing or provoking, in order to attract people's attention.

Possible answers, and diagrams, for the four questions suggested in "1" above are as follows:

How was the surplus earned?

This 'pie' (circle, see next page) represents all the money that the society has **received**, $80,000 which our customers paid for produce and the members paid for farm supplies. We have **used** the money in this way: $62,000 was paid to members for produce and to suppliers for farm inputs, $15,000 was used for running expenses, and there is now $3,000 left as a net surplus.
Why were crop prices not higher, and farm supply prices lower, since the surplus showed that this would have been possible?

It is difficult to say exactly how much we will be able to sell your crops for, and exactly how much farm supplies will cost, and nobody can tell what volume of crops members will produce until after the harvest. The diagram shows that the surplus is only very small when compared with all our business. If we had taken the risk and paid a few cents more for your crops, or charged a few cents less for farm supplies, the surplus might very easily have been turned into a loss. (The same diagram can be used to show the small size of the surplus in relation to total sales.)

How did this compare with other years?

The surplus was $2,000 in 1980 and $2,000 in 1981. This year it was $3,000. No dividend was paid in 1980 or 1981, because we used the surplus to expand our business and develop the society. But this year we are proposing that all the increase in surplus will be paid to members in recognition of their loyalty. If members receive all the surplus, the society will never have the power to help them.
What is going to happen to that part of the surplus which is not distributed?

I am sure you will remember the trouble we had last year because stores were full. $1,500 will be spent to make the stores larger. We need to buy improved seeds and fertilizer. The bank will lend us $9 for every $1 the society is willing to lend its members, so we are preparing to use the rest, $500, for this purpose. The bank will lend $9 \times 500$, that is $4,500$, we shall then have $5,000$ to start a credit scheme next year. The diagram below shows what we hope to do.
3) Divide trainees into groups and distribute the case study. Allow up to 45 minutes for completion of the assignment. If time allows they should be given large sheets of paper or OHP transparencies on which to do their diagrams, but stress that the verbal explanations are also vital.

Remind them that their answers must be brief, simple and interesting, and ensure that they only use presentation methods which are available in their societies.

4) When they have completed the assignment, ask group representatives to present their answers to the three questions. Each trainee, individually, should "grade" the presentations of the other groups for brevity, simplicity and interest, on a scale of 1 to 4:

- 1 = Poor
- 2 = Adequate
- 3 = Good
- 4 = Excellent

They should note their marks in the following way:

<table>
<thead>
<tr>
<th></th>
<th>Group A</th>
<th>Group B</th>
<th>Group C</th>
<th>Group D</th>
</tr>
</thead>
<tbody>
<tr>
<td>Brevity</td>
<td>2</td>
<td>4</td>
<td>3</td>
<td>2</td>
</tr>
<tr>
<td>Simplicity</td>
<td>3</td>
<td>4</td>
<td>3</td>
<td>2</td>
</tr>
<tr>
<td>Interest</td>
<td>1</td>
<td>4</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>Total</td>
<td>6</td>
<td>12</td>
<td>8</td>
<td>6</td>
</tr>
</tbody>
</table>

After all presentations have been made, each group should summarise the marks its members have given to the others.

Collect the marks together and add them together on the chalkboard in a similar format to the above. The "winning" group with the highest total, may if appropriate be given some form of prize.

5) Groups' suggestions will naturally vary. Their answers, and some possible illustrations, might be as follows:
(a) "The tonnage of crops handled has increased by a half. The cost dealing with the tonnage has increased only by a third. If operation costs had increased as much as the tonnage, and had also increased in line with the increase in the crop prices (as members' incomes have), they would have gone from $15,000 to $25,425. It is a good achievement to have kept $5,425 below this amount. The picture illustrates the situation."

(b) "The loan fund is for the continuing use of all members who wish to use it. Members do not think they are entitled to break up or remove society's furniture just because they are members, and the loan fund belongs to everyone, and to no individual in the same way. If the present rate of default continues, the funds will be reduced to less than $4,500 in five years and under $2,000 in ten years. If members repay promptly, the funds will remain available for all members indefinitely. The diagram (see next page) illustrates the way in which the fund will decrease if members do not improve their repayment record."
(c) "Members have invested $5,000 in the society and the bank has lent a further $15,000, making a total of $20,000 in all. The bank will only lend more money if members put more of their money in. This is only reasonable since members get higher incomes if the society does well while the bank just gets its interest. If the society fails, members lose their money but so does the bank. Since the bank gains nothing from good times but loses as badly as members in bad times, they feel that members should share more of the risk. The bank has put in three times as much money as members, and they are willing to continue this. $1 left in the society is worth a total of $1 + $3 = $4 to the society and thus to members. If it is distributed it is worth only $1.

Stress that diagrams are no substitute for sincere attempts to understand members', or committee members' reasons for uncertainty or suspicion, and reasonable discussion. Simple clear diagrams can, however, make it easier and quicker to explain the financial situation to people who are unfamiliar with financial information.
The manager of the DFS was reasonably pleased with the results. The total tonnage of produce handled had increased from 1,000 tons, worth $150,000 in 1981, to 1,500 tons, worth $250,000 in 1982. Operating expenses had increased from $15,000 to $20,000, as might have been expected, and the surplus has gone up from $2,000 to $3,000.

The only major cause for concern was the seasonal credit scheme. The society had in 1981 created a loan fund of $10,000 with the help of a grant. The whole amount had been lent out, at 10% interest which covered the administrative costs but made no allowance for defaults. 15% of the borrowers had not repaid, and the manager was taking strong steps to recover their debts.

Members' share capital and surplus from previous years which had not been distributed amounted to $5,000 at the end of 1981, and bank loans to $15,000. The society needed to borrow a further $5,000 in 1983, to pay for expansion plans, but the bank manager had said that he would only lend the society more money if members increased their investment in the same proportion.

The society's manager had as a result of this pressure successfully persuaded the committee to suggest that no dividend should be paid but that the money should be credited to members' investment in the society.

The manager had talked briefly to a number of members, and he had been warned to expect suspicious or even hostile questions on three subjects:

(a) Members were annoyed that the society's operating expenses had increased by $5,000 in 1982. They were sure that waste, theft or both were responsible.

(b) The members felt that the manager was wrong to put so much pressure on those who, through no fault of their own, had failed to repay their loans. Members knew that the loan fund was a gift to the society, which should not have to be repaid, so why should not those who were unfortunate not be allowed to retain the money?
They felt, in any case, that the society's manager had no right to threaten members with expulsion or even legal action.

(c) The members wanted all the surplus, or as much as regulations allowed, to be distributed as dividend. They considered that the money was theirs, and there was no reason why they should not have it.

The manager realised that he would have to prepare his answers to these questions very carefully. Most members were illiterate or poorly educated, and the manager thought he should also prepare some simple diagrams if these would help him to explain the position to the members.

**Assignment**: 

Advise the manager on how he should deal with the three expected types of questions. Produce a sketch of any diagrams you would propose to support his explanation.
SESSION 4.3

SOURCES AND APPLICATIONS OF MONEY

Objective: To enable trainees to prepare, use and explain statements of the sources and uses of money in a co-operative society.

Time: 2 to 3 hours.

Material: Handouts 1 and 2.

Session Guide:

1) Remind trainees of Sessions 2.1 and 2.2. All the important "assets" and "liabilities" from the balance sheet were covered, so that trainees should be able to use the money already in the society and external sources of money in the most efficient way. The results of good financial management of this sort can be seen in the balance sheet, but actual changes in sources of money, and the way it is used, can only be seen by comparing balance sheets from two different times. The purpose of this session is to show how it is possible to prepare a statement which describes how money has moved in the society, or how it is planned that money should move.

2) Write the two following simplified balance sheets on the chalkboard/OHP. Ask trainees to compare them, and to say what changes have taken place in the way money is used, and where it has come from, during 1982.

XYZ Society Balance Sheet 31 December 1981

<table>
<thead>
<tr>
<th>Assets</th>
<th>$</th>
<th>Liabilities</th>
<th>$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cash and Bank Balance</td>
<td>2,000</td>
<td>Accounts Payable</td>
<td>2,000</td>
</tr>
<tr>
<td>Accounts Receivable</td>
<td>2,000</td>
<td>Loans</td>
<td>5,000</td>
</tr>
<tr>
<td>Plant and Equipment</td>
<td>6,000</td>
<td>Members' Capital</td>
<td>3,000</td>
</tr>
<tr>
<td>Total</td>
<td>10,000</td>
<td>Total</td>
<td>10,000</td>
</tr>
</tbody>
</table>
Ask trainees to list the changes in each item which have occurred during the year:

- Cash and Bank Balance has decreased by $1,500.
- Accounts Receivable have increased by $500.
- Plant and Equipment have increased by $2,000.
- Accounts Payable have decreased by $1,000.
- Loans have increased by $1,000.
- Undistributed Surplus has increased by $1,000.
- Members' Share Capital is unchanged.

3) Show that some of the changes are new investments, or ways of using money. More equipment has been bought, and some of the suppliers' bills have been paid.

Others are ways in which the society has obtained the money, or sources. More money has been borrowed from the bank, and a surplus has been earned and retained in the society.

Stress that if cash is increased, this too is a use of money, since money has been put in the bank, or the cash box, rather than being used in any other way. Similarly, reduction in cash is a source, since money is taken out and spent on something.

Ask trainees to go through the list of changes and decide which are uses of money and which are sources of money.

Trainees should identify each of the changes in the XYZ Society's balance sheet as follows:
- Cash decrease is a **source** of money (less money is in cash or the bank).

- Accounts Receivable increase is a **use** of money (more money has been "lent" to customers).

- Plant and Equipment increase is a **use** of money (the society has bought more plant and equipment).

- Accounts Payable decrease is a **use** of money (the society has paid more of its bills).

- Loan increase is a **source** of money (the bank has lent more money).

- Undistributed Surplus increase is a **source** of money (surplus has been earned and has been retained in the society).

Ask trainees to total the uses and the sources, separately:

<table>
<thead>
<tr>
<th>Uses</th>
<th>$</th>
<th>Sources</th>
<th>$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Accounts Receivable increase</td>
<td>500</td>
<td>Cash decrease</td>
<td>1,500</td>
</tr>
<tr>
<td>Plant and Equipment increase</td>
<td>2,000</td>
<td>Undistributed Surplus</td>
<td>1,000</td>
</tr>
<tr>
<td>Accounts Payable decrease</td>
<td>1,000</td>
<td>Loan increase</td>
<td>1,000</td>
</tr>
<tr>
<td>Total Uses</td>
<td>3,500</td>
<td>Total Sources</td>
<td>3,500</td>
</tr>
</tbody>
</table>

Stress that the two columns must balance, because the statement says two things about the same amount of money; how it has been used and where it has come from.

Ask trainees whether they have ever been asked why a profitable society does not necessarily have more cash.

Show how the XYZ society example demonstrates why a $1,000 undistributed surplus does not necessarily lead to an increased amount of cash. The money is quite properly used in other ways, which themselves enable the society to earn still more surplus.

This type of analysis can be used:

- To show how money has been used in the past, and where it has come from.
- To plan how money will be used, and from what sources it will come in the future.

4) Distribute Handout 1 and allow trainees up to ten minutes to complete the first part. This should confirm their understanding of the effects of different types of changes on balance sheet items. Ask selected trainees to suggest and explain answers for each of the ten items, and ensure that all trainees understand why answers are as follows:

1) Source 6) Use
2) Use 7) Source
3) Source 8) Use
4) Use 9) Use
5) Use 10) Source

Ask trainees how a decrease in plant and equipment can be a source of money, even if no plant and equipment has been sold. Why does the value of plant and equipment on the balance sheet go down, over time, even when no equipment is sold?

- An allowance for depreciation, or a reduction in value because of use, is deducted from plant and equipment in order to cover the replacement cost which is necessary.

Ask trainees whether money is actually paid out to anybody when machinery is depreciated. Does any financial transaction actually take place?

- Depreciation is an imaginary expense. No money actually leaves the society, as it does for any other type of expense. It is nevertheless necessary to make some allowance for the cost of using equipment which lasts a number of years.

- Depreciation is thus in a sense a source of money, in that profits are reduced by depreciation but no money actually leaves the society. The amount has to be "added back" and depreciation is therefore a source.

5) The very simple statement of sources and uses of money which was produced for the XYZ Society was a statement and explanation of
what had happened in the past. Managers are more interested in what **will** happen, and this form of statement can also be used to assist in planning the future movements of money in a society.

Allow trainees up to 15 minutes to study the rather over-simplified problem which is described in Part B of the handout.

Elicit the following stages in the solution of the problem, and ensure that all trainees understand the calculation and argument.

- Cash can be reduced by $1,000 to $1,500, this is a **source**.
- Undistributed surplus will produce a further $2,000, this is a **source**.
- This makes a total of $3,000 from the two obvious sources.
- The bank loan has to be reduced by $4,000, this is a **use**, and is $1,000 more than the obvious sources. A further source(s) of $1,000 must be identified.

- Possibilities include:
  - Refusing all credit facilities to customers, thus releasing $500 from accounts receivable, and
  - asking suppliers to allow $500 more credit to the society, thus making up the needed $1,000.

Or

- Ask members to contribute more share capital by reinvesting their dividends, thus producing a sum of $1,000.

Or

- Selling some part of the plant and equipment which may not be fully utilised, or can be replaced by rented equipment, to produce the sum of $1,000.

The actual decision will probably be a combination of a number of sources, and will depend on circumstances, but analysis of the balance sheet has revealed the alternative available. A possible statement of the proposed sources and uses of money during 1983 is as follows:
Ask trainees to draw up a forecast 1983 balance sheet which would result from this programme of movement of money. Their answer should be:

<table>
<thead>
<tr>
<th>Assets</th>
<th>$</th>
<th>Liabilities</th>
<th>$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cash</td>
<td>1,500</td>
<td>Accounts Payable</td>
<td>1,500</td>
</tr>
<tr>
<td>Accounts Receivable</td>
<td>500</td>
<td>Loan</td>
<td>2,000</td>
</tr>
<tr>
<td>Plant and Equipment</td>
<td>8,000</td>
<td>Members' Share Capital</td>
<td>3,500</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Undistributed Surplus</td>
<td>2,000</td>
</tr>
<tr>
<td>Total</td>
<td>10,000</td>
<td>Total</td>
<td>10,000</td>
</tr>
</tbody>
</table>

6) Ask trainees what is forecast to happen to the total amount of money involved in the society. Will the society be "worth" more or less at the end of 1983 than at the end of 1982?

The society's total value will have decreased by $1,000 from $11,000 to $10,000. Does this indicate that the society has not been successful?

Stress that the total value of money employed in the society is less important than the amount of members' money, originally invested by them or left in rather than being distributed as dividend. What is forecast to happen to this part of the "value" of the society?
Members' investment will increase from $4,000 ($3,000 + $1,000) to $6,500 ($3,000 + $3,500). This is the best indicator of the growth of the society, and of its ability to finance its own operations rather than depending on banks, suppliers or other external sources which cannot be relied upon to maintain their support in difficult times.

7) Distribute Handout 2 and allow trainees up to 30 minutes to complete the assignment. Ask a trainee who appears to have produced a correct statement of the sources and uses of the money of the Flowing Society during 1982 to present his analysis and to explain the situation to the rest of the trainees as if they were members. The statement should be as follows:

<table>
<thead>
<tr>
<th>Sources</th>
<th>$</th>
<th>Uses</th>
<th>$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Stock reduced by</td>
<td>200</td>
<td>Cash increased by</td>
<td>100</td>
</tr>
<tr>
<td>Accounts Payable increased by</td>
<td>100</td>
<td>Accounts Receivable</td>
<td>100</td>
</tr>
<tr>
<td>Undistributed Surplus increased by</td>
<td>300</td>
<td>Plant and Equipment increased by</td>
<td>100</td>
</tr>
<tr>
<td></td>
<td>300</td>
<td>Overdrafts reduced by</td>
<td>300</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>600</td>
</tr>
</tbody>
</table>

Ensure that all trainees have the correct figures or understand why they have not.

The manager's explanations should be in simple terms, and should be based on the statement above. Members should be made to understand that the $300 surplus which was not distributed in the form of dividend has been used to pay off part of the bank loan. A further $100, however, has become available because suppliers have granted the society more credit, and this means that the total amount owned has increased by $100. The value of members' own investment in the society has increased by the full $300 of the surplus.

8) If time allows, ask trainees to construct similar statements of sources and uses of money from successive balance sheets of their
own or other co-operative societies, and to forecast the sources and uses and future balance sheets from the current financial years.

Stress that this form of analysis is a very valuable tool:

To explain accounts to committee members, staff and the members as a whole.

To assist the manager to understand past changes and to plan future movements of money more effectively.
Handout 1 - Sources and Uses of Money

A) - If loans increase, this is a source of money.

- If land and buildings increase, this is a use of money.

State whether each of the following types of changes between balance sheets is a source or a use of money:

1) Decrease in cash

2) Increase in plant and equipment

3) Increase in undistributed surplus

4) Decrease in accounts payable

5) Decrease in members' savings deposits

6) Increase in accounts receivable

7) Decrease in plant and equipment

8) Increase in land and buildings

9) Decrease in overdraft

10) Increase in members' share capital

B) The manager of the XYZ society examined his balance sheet for 31st December 1982:
b) The manager of the XYZ society examined his balance sheet for 31st December 1982:

<table>
<thead>
<tr>
<th>Assets</th>
<th>$</th>
<th>Liabilities</th>
<th>$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cash</td>
<td>2,500</td>
<td>Accounts Payable</td>
<td>1,000</td>
</tr>
<tr>
<td>Accounts Receivable</td>
<td>500</td>
<td>Bank Loan</td>
<td>6,000</td>
</tr>
<tr>
<td>Plant and Equipment</td>
<td>8,000</td>
<td>Undistributed Surplus</td>
<td>1,000</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Members' Share Capital</td>
<td>3,000</td>
</tr>
<tr>
<td>Total</td>
<td>11,000</td>
<td>Total</td>
<td>11,000</td>
</tr>
</tbody>
</table>

The Government had just imposed a credit squeeze, and the bank had told the manager that the loan must be reduced to $2,000 by the end of 1983. The society needed a minimum of $1,500 in cash to pay for day-to-day operations, and the manager anticipated that the society would earn a surplus of $3,000 in 1983. $1,000 of this would have to be distributed as dividend to satisfy members who were impatient for some reward for their loyalty and patience. He wondered how he would be able to reduce the loan as the bank manager demanded.

Assignment:

Advise the manager of XYZ Society as to how he might reduce the loan, and draw up a proposed statement of sources and uses of money for the coming year, together with forecast balance sheet for 31 December 1983.
The balance sheets for the Flowing Co-operative Society (FCS) for the end of 1981 and the end of 1982 were as follows:

### Balance Sheet for FCS, 31 December 1981

<table>
<thead>
<tr>
<th>Assets</th>
<th>$</th>
<th>Liabilities</th>
<th>$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cash and Bank Balance</td>
<td>100</td>
<td>Accounts Payable</td>
<td>200</td>
</tr>
<tr>
<td>Accounts Receivable</td>
<td>300</td>
<td>Overdraft</td>
<td>500</td>
</tr>
<tr>
<td>Stock</td>
<td>400</td>
<td>Undistributed Surplus</td>
<td>700</td>
</tr>
<tr>
<td>Plant and Equipment</td>
<td>600</td>
<td>Members' Share Capital</td>
<td>1,000</td>
</tr>
<tr>
<td>Land and Buildings</td>
<td>1,000</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>2,400</strong></td>
<td></td>
<td><strong>2,400</strong></td>
</tr>
</tbody>
</table>

### Balance Sheet for FCS, 31 December 1982

<table>
<thead>
<tr>
<th>Assets</th>
<th>$</th>
<th>Liabilities</th>
<th>$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cash and Bank Balance</td>
<td>200</td>
<td>Accounts Payable</td>
<td>300</td>
</tr>
<tr>
<td>Accounts Receivable</td>
<td>400</td>
<td>Overdraft</td>
<td>200</td>
</tr>
<tr>
<td>Stock</td>
<td>200</td>
<td>Undistributed Surplus</td>
<td>1,000</td>
</tr>
<tr>
<td>Plant and Equipment</td>
<td>700</td>
<td>Members' Share Capital</td>
<td>1,000</td>
</tr>
<tr>
<td>Land and Buildings</td>
<td>1,000</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>2,500</strong></td>
<td></td>
<td><strong>2,500</strong></td>
</tr>
</tbody>
</table>

The members of the FCS were showing a growing interest in the way their society was run, and in particular the financial aspects. When they asked the manager at the Annual General Meeting to tell them what had happened during the year, he reminded them that the society had sold $5,000 worth of produce, and that they had received a bonus of $200. The remaining $300 of the surplus was being reinvested in the society.

The members were not content with this, however. "How had the $300 been used?" they asked. The manager showed them the balance sheets, but this only made them more suspicious. "Look", they said, "you say that $300 has been re-invested but even simple farmers like us can see that the final total value of the society has only increased by $100 from $2,400 to $2,500. Something fishy is going on".
Eventually the chairman quietened the meeting down. He promised that the manager would produce a statement explaining the difference between the two balance sheets and showing them exactly how the society's position had changed during the year.

**Assignment:**

Prepare a statement which explains in simple words exactly how money has moved into, out of and within the FCS during 1982.
financial problems

Session 5.1  The Society Doctor
Session 5.2  Bankruptcy
SESSION 5.1

THE SOCIETY DOCTOR

Objective: To enable trainees to appraise the financial results of "sick" co-operative societies, and to recommend appropriate improvements.

Time: 2 to 3 hours.

Material: Case Study "The Sick Societies".

Session Guide:

1) Ask trainees to estimate the proportion of co-operative societies in the country which earn a surplus for their members. The exact figure is probably not available in any published statistics, but in some countries the majority of agricultural societies are losing money, or are only sustained by open or concealed subsidies which can be withdrawn at short notice.

Ask trainees to suggest reasons for this state of affairs. Elicit factors such as:

- Drought, floods or other climatic factors.
- Low international prices for cash crops.
- Members' disloyalty.
- Members' failure to repay loans.
- Government policies which "squeeze" or even eliminate the marketing margins between farm prices and selling prices on which societies must survive.
- Shortages of fertilizer and other farm inputs on which members rely.
- Failure of monopoly customers such as marketing boards to pay their bills on time.
- Inadequate supply of competent staff.
All these reasons have one thing in common. They are the fault of factors other than the managers of the societies themselves.

Stress that it is only human nature to blame circumstances or people over which we have no control. Managers who are dissatisfied with the performance of their societies wish to believe that the fault is not their own.

Ask trainees to suggest management errors, and in particular financial management errors, which make many co-operative societies perform even less effectively than necessary, and which could be improved. They should draw on the material already covered in previous sessions, and their suggestions might include:

- Granting credit, or loans, to unsuitable customers or members.
- Failure to recover money due to the society from its customers.
- Failure to explain financial statements clearly to members, staff or the committee.
- Accumulation of excessive stocks of slow moving equipment or underused machinery.
- Failure to plan the movement of money, to make a forecast and prevent cash shortages.
- Excessive reliance on loans as a source of finance.

Stress that ignorance of balance sheets, financial ratios, financial statements of sources and uses of funds, or cash flow forecasts is not itself a problem. These techniques are only of any value if they are used to avoid the financial management weaknesses which are suggested above.

2) Present simple balance sheets such as the following on the chalkboard/OHP. Allow trainees 15 minutes to draw up a statement of the sources and uses of funds in the society during 1982:
### Balance Sheet for ABC Society, 31 December 1981

<table>
<thead>
<tr>
<th>Assets</th>
<th>$</th>
<th>Liabilities</th>
<th>$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cash and Bank Balance</td>
<td>500</td>
<td>Accounts Payable</td>
<td>500</td>
</tr>
<tr>
<td>Accounts Receivable</td>
<td>2,500</td>
<td>Loan</td>
<td>6,500</td>
</tr>
<tr>
<td>Stocks</td>
<td>3,000</td>
<td>Members' Share Capital</td>
<td>3,000</td>
</tr>
<tr>
<td>Land and Buildings</td>
<td>4,000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>10,000</td>
<td>Total</td>
<td>10,000</td>
</tr>
</tbody>
</table>

### Balance Sheet for ABC Society, 31 December 1982

<table>
<thead>
<tr>
<th>Assets</th>
<th>$</th>
<th>Liabilities</th>
<th>$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cash and Bank Balance</td>
<td>1,500</td>
<td>Accounts Payable</td>
<td>500</td>
</tr>
<tr>
<td>Accounts Receivable</td>
<td>1,500</td>
<td>Loan</td>
<td>6,500</td>
</tr>
<tr>
<td>Stocks</td>
<td>2,000</td>
<td>Members' Share Capital</td>
<td>2,000</td>
</tr>
<tr>
<td>Land and Buildings</td>
<td>4,000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>9,000</td>
<td>Total</td>
<td>9,000</td>
</tr>
</tbody>
</table>

The sources and uses of funds statement should read as follows:

<table>
<thead>
<tr>
<th>Sources</th>
<th>$</th>
<th>Uses</th>
<th>$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reduction in Accounts</td>
<td>1,000</td>
<td>Increase in Cash</td>
<td>1,000</td>
</tr>
<tr>
<td>Receivable</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Reduction in Stocks</td>
<td>1,000</td>
<td>Loss and consequent reduction in Members' Share Capital</td>
<td>1,000</td>
</tr>
<tr>
<td>Total Sources</td>
<td>2,000</td>
<td>Total Uses</td>
<td>2,000</td>
</tr>
</tbody>
</table>

3) Ask trainees to compare the two balance sheets for the ABC Society. Which is more likely to be more "comfortable" for the manager, and is less likely to suffer from a cash crisis?

- The cash balance on 31 December 1982 is $1,000 higher than the year before, although the society suffered a loss during 1982.

Ask trainees to explain the apparent paradox. A society which has lost money during the year has more cash at the end of that year. Is this likely to occur?
If a society sells goods on credit, and the volume of business is shrinking, the amount owed by customers will decrease as repayments from last year's business come in, but are not replaced by new bills from this year's business. Increased cash is often associated with reduced volume and the resulting loss.

Ask trainees to suggest how the balance sheet for the ABC Society might appear if it lost $2,000 in 1983 because of shrinking business, and the following changes in assets also took place:

- Accounts Receivable decreased by $500 as bills were paid and not replaced.
- Stock went down by $1,000.
- The society sold surplus land for $1,000.

The balance sheet would be as follows:

**Balance Sheet for the ABC Society, 31 December 1983**

<table>
<thead>
<tr>
<th>Assets</th>
<th>$</th>
<th>Liabilities</th>
<th>$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cash and Bank Balance</td>
<td>2,000</td>
<td>Accounts Payable</td>
<td>500</td>
</tr>
<tr>
<td>Accounts Receivable</td>
<td>1,000</td>
<td>Loan</td>
<td>6,500</td>
</tr>
<tr>
<td>Stocks</td>
<td>1,000</td>
<td>Members' Share Capital</td>
<td>nil</td>
</tr>
<tr>
<td>Land and Buildings</td>
<td>2,000</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>7,000</td>
<td><strong>Total</strong></td>
<td>7,000</td>
</tr>
</tbody>
</table>

Trainees should note that the society has even more cash after a further year of losses. The Members' Share Capital is now worth nothing, but the society could still pay off part of the bank loan without embarrassment.

Clearly the same process could be continued so that the Members' Share Capital was worth less than nothing, but the cash balance could be maintained or even increased.

Stress that losses and declining business are not necessarily associated with cash crises. If a society such as the ABC Society has no proper systems for calculating the surplus or loss, or pro-
Producing a balance sheet, management and members might believe that they were doing well.

4) Distribute the case study and allow trainees up to 20 minutes individually to complete the assignment for The First Society. If suitable data can be obtained, it is far more effective to use real examples from local societies, rather than the case study provided. Real balance sheets and operating statements can be simplified, and may have to be disguised. The case study can be used as a model but the figures should if possible be replaced.

Ask for suggestions:

**Part A:**

Answers may be expressed in different ways, but the fundamental point is that total expenses have increased by 59% over 2 years, but total revenue has increased by only 14%.

Trainees should not neglect inflation. Revenue has in fact *decreased* in real terms. Introduce if necessary the difference between "real" increases and increases which have been produced by inflation, by asking whether the increase in produce sales from $75,000 to $80,000 really is an increase at all. Inflation at 10% per year would have increased sales from $75,000 in 1980 to $82,500 in 1981 and $90,750 in 1982, without any increase in real volume at all.

Trainees should also identify major causes of increased expenses. Salaries and postage, telephone and stationery have both more than doubled whereas wages and transport have remained more or less constant in real terms.

**Part B:**

Possible improvements might include:

- Reduction in the number of salaried staff and/or salary levels.
- Budget for wages, transport, telephone and stationery to ensure that they remain in line with the volume of business.
- Attempt to increase trade by encouraging extra business per member and/or recruiting new members.
Part C:

Answers may include:

- Check on legally imposed farm gate prices and society selling prices. Have increases in these been kept well below the rate of inflation, so that volume has in fact increased in real terms? (This would not in itself totally explain the problem, since expenses have increased by far more than inflation, but it would account for some part of it.)

- Find out whether salaries have been statutorily increased at a faster rate than inflation, or staff numbers have been increased because of administrative increases in society establishments imposed by central authorities.

- Check on postal and telephone charge increases.

5) Allow trainees 20 minutes to complete the assignment for The Second Society.

Part A:

Here expenses have increased by less than 9% in 2 years, which is a major decrease in real terms. Total sales have increased by only 3z%, but the total cost of what was sold has gone up by over 5%. This means that the gross surplus has gone down by over 10%, which means a decline of over 30% in real terms if the 2 years inflation of 20% is taken into account.

Part B:

Possible recommendations might include:

- Increase selling prices and/or reduce prices paid to members.

- Prevent leakages to ensure that all crops and requisites which are bought by the society are in fact delivered to and eventually sold by the society.

- Redirect crop and requisite marketing activities towards items with higher gross margins.

Part C:

Suggestions may include:
- Investigate official pricing policy for crops and requisites, to find out whether marketing societies are being "squeezed" by official policies which attempt to satisfy farmers by paying higher prices and consumers by charging low ones, but do not allow for marketing costs between the two.

6) Allow trainees up to 20 minutes to complete the assignment for The Third Society.

**Part A:**

Here the problem is a 12% decline in sales over 2 years, rather than a decrease in the gross margin percentage. Expenses have increased by 16% over 2 years, which is less than the rate of inflation, but they should have decreased in line with volume if the surplus was to be maintained.

**Part B**

Recommendations may include:

- Assist members to grow and market more produce.
- Recruit new members.
- Encourage greater sale of requisites by selecting the right products' and pricing and promoting them properly.
- Improve members' loyalty by providing a better level of service rather than appealing to their "better nature" or threats of compulsion.

**Part C**

Items of information may include:

- Investigate the trend in members' use of alternative outlets for their crops and supply sources for requisites, and examine the cause of this "disloyalty".
- Compare members' production and requisite use with national or regional data. If long term climatic or market changes appear to be affecting volume, investigate the possibility of introducing new crops.

7) Remind trainees of Session 1.4, where they dealt with financial ratios. Point out that in this exercise the balance sheets have
been omitted in the interest of simplicity. Remind trainees of the ways in which figures from operating statements such as those given for The Sick Societies can be compared with balance sheet figures in order to obtain information on performance in areas such as

- Speed of recovery of customers' or members' debts.
- Turnover of stock of crops or farm supplies.
- Use of suppliers' credit as a source of capital.
- Members' willingness to support their own society through share capital and re-investment of surplus rather than withdrawal in the form of dividends.

Stress that managers must keep up-to-date records in order to be aware of losses or reduced surpluses as soon as they occur, and be able to pin-point the reasons for the trouble.

Ask trainees to give the dates of their latest audited trading accounts, and any informal but nevertheless reliable figures. Are they sufficiently recent to be a guide to management, or do they merely describe events which took place so long ago that nothing could be done to remedy whatever caused the problem?

Stress that even if audited figures are not available, every society manager should have a trading account and balance sheet at most three months after the end of each year at the very least, and simpler figures should be available at least quarterly, one month or less after each quarter. If trainees do not have accounts as recent as this, stress that more and better trained accountants are not necessarily the reason. Managers themselves should keep in touch with claims of sales and costs on a daily, weekly and monthly basis.

Remind trainees that there are three stages which must be involved if accounts are to be of any value:

(a) Accounts must be *prepared*, correctly and on time.

(b) Accounts must be *analysed* and conclusions drawn.
(c) **Action** must be taken to remedy whatever deficiencies are identified.

Unless all three stages are completed, the preparation and analysis of accounts are a total waste of effort.

8) Remind trainees that there are no standard ratios. Each society's situation must be judged on its merits.

Ask trainees whether there is any single rule by which a society's figures can be evaluated. How does a co-operative society differ from an ordinary commercial enterprise in this way?

- A private investor can ultimately evaluate his business by comparing the return on his money, (including his own earnings if he cannot obtain employment otherwise) with what a bank would pay as interest on the same sum on deposit.

- A co-operative society may provide services to its members which are otherwise unavailable, so that the surplus, or members' return on their investment, is of little significance.

A society's performance can therefore only be judged by analysis of its accounts and familiarity with its operations.
The Sick Societies

The Registrar of Co-operative Societies has identified a number of societies which are, according to accounts, losing money. The members and the management of each society are anxious to remedy the situation, but they need advice as to what they should do. Inflation in the country is running at about 10% per year.

You are a consultant on Co-operative Management, and the Registrar has sent you some brief details about each of the societies. He has asked you to study them and tell him:

(A) What you believe to be the problem(s) in each society.

(B) What remedy you propose.

(C) What further information you require before confirming your views.
The First Society

The trading accounts for the First Society for the three years 1980, 1981 and 1982 are as follows:

<table>
<thead>
<tr>
<th>Item</th>
<th>1980</th>
<th>1981</th>
<th>1982</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sales of Produce</td>
<td>75,000</td>
<td>80,000</td>
<td>85,000</td>
</tr>
<tr>
<td>Paid to Members for Produce</td>
<td>65,000</td>
<td>69,000</td>
<td>73,500</td>
</tr>
<tr>
<td>Gross Surplus on Produce</td>
<td>10,000</td>
<td>11,000</td>
<td>11,500</td>
</tr>
<tr>
<td>Sales of Requisites</td>
<td>30,000</td>
<td>32,000</td>
<td>35,000</td>
</tr>
<tr>
<td>Cost of Requisites</td>
<td>25,000</td>
<td>26,800</td>
<td>29,500</td>
</tr>
<tr>
<td>Gross Surplus on Requisites</td>
<td>5,000</td>
<td>5,200</td>
<td>5,500</td>
</tr>
<tr>
<td><strong>Total Gross Surplus</strong></td>
<td>15,000</td>
<td>16,200</td>
<td>17,000</td>
</tr>
</tbody>
</table>

Expenses:

<table>
<thead>
<tr>
<th>Item</th>
<th>1980</th>
<th>1981</th>
<th>1982</th>
</tr>
</thead>
<tbody>
<tr>
<td>Management Salaries</td>
<td>3,500</td>
<td>5,900</td>
<td>8,300</td>
</tr>
<tr>
<td>Wages</td>
<td>4,000</td>
<td>4,400</td>
<td>5,500</td>
</tr>
<tr>
<td>Transport</td>
<td>4,000</td>
<td>4,500</td>
<td>5,000</td>
</tr>
<tr>
<td>Rent</td>
<td>500</td>
<td>500</td>
<td>500</td>
</tr>
<tr>
<td>Postage, Telephone and Stationery</td>
<td>600</td>
<td>900</td>
<td>1,300</td>
</tr>
<tr>
<td>Interest</td>
<td>1,200</td>
<td>1,300</td>
<td>1,400</td>
</tr>
<tr>
<td><strong>Total Expenses</strong></td>
<td>13,800</td>
<td>17,500</td>
<td>22,000</td>
</tr>
</tbody>
</table>

**Net Surplus/Loss**

<table>
<thead>
<tr>
<th>Item</th>
<th>1980</th>
<th>1981</th>
<th>1982</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Net Surplus/Loss</strong></td>
<td>1,200</td>
<td>(1,300)</td>
<td>(5,000)</td>
</tr>
</tbody>
</table>
The trading accounts for The Second Society for the three years 1980, 1981 and 1982 are as follows:

<table>
<thead>
<tr>
<th>Item</th>
<th>1980</th>
<th>1981</th>
<th>1982</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sales of Produce</td>
<td>115,000</td>
<td>118,000</td>
<td>120,000</td>
</tr>
<tr>
<td>Paid to Members for Produce</td>
<td>107,000</td>
<td>110,000</td>
<td>111,900</td>
</tr>
<tr>
<td>Gross Surplus on Produce</td>
<td>8,000</td>
<td>8,000</td>
<td>8,100</td>
</tr>
<tr>
<td>Sales of Requisites</td>
<td>38,000</td>
<td>38,200</td>
<td>38,500</td>
</tr>
<tr>
<td>Cost of Requisites</td>
<td>30,000</td>
<td>31,500</td>
<td>32,300</td>
</tr>
<tr>
<td>Gross Surplus on Requisites</td>
<td>8,000</td>
<td>6,700</td>
<td>6,200</td>
</tr>
<tr>
<td><strong>Total Gross Surplus</strong></td>
<td>16,000</td>
<td>14,700</td>
<td>14,300</td>
</tr>
<tr>
<td>Expenses:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Management Salaries</td>
<td>4,500</td>
<td>4,700</td>
<td>5,000</td>
</tr>
<tr>
<td>Wages</td>
<td>4,300</td>
<td>4,800</td>
<td>5,200</td>
</tr>
<tr>
<td>Transport</td>
<td>4,200</td>
<td>4,200</td>
<td>4,100</td>
</tr>
<tr>
<td>Rent</td>
<td>1,000</td>
<td>1,000</td>
<td>1,000</td>
</tr>
<tr>
<td>Postage, Telephone and Stationery</td>
<td>700</td>
<td>700</td>
<td>700</td>
</tr>
<tr>
<td>Interest</td>
<td>800</td>
<td>800</td>
<td>800</td>
</tr>
<tr>
<td><strong>Total Expenses</strong></td>
<td>15,500</td>
<td>16,200</td>
<td>16,800</td>
</tr>
<tr>
<td><strong>Net Surplus/Loss</strong></td>
<td>500</td>
<td>(1,500)</td>
<td>(2,500)</td>
</tr>
</tbody>
</table>
The Third Society

The trading accounts for The Third Society for the three years 1980, 1981 and 1982 are as follows:

<table>
<thead>
<tr>
<th>Item</th>
<th>1980</th>
<th>1981</th>
<th>1982</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sales of Produce</td>
<td>150,000</td>
<td>135,000</td>
<td>130,000</td>
</tr>
<tr>
<td>Paid to Members for Produce</td>
<td>127,000</td>
<td>114,500</td>
<td>110,500</td>
</tr>
<tr>
<td>Gross Surplus on Produce</td>
<td>23,000</td>
<td>20,500</td>
<td>19,500</td>
</tr>
<tr>
<td>Sales of Requisites</td>
<td>60,000</td>
<td>57,000</td>
<td>54,000</td>
</tr>
<tr>
<td>Cost of Requisites</td>
<td>45,000</td>
<td>43,000</td>
<td>40,500</td>
</tr>
<tr>
<td>Gross Surplus on Requisites</td>
<td>15,000</td>
<td>14,000</td>
<td>13,500</td>
</tr>
<tr>
<td>Total Gross Surplus</td>
<td>38,000</td>
<td>34,500</td>
<td>33,000</td>
</tr>
<tr>
<td>Expenses</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Management Salaries</td>
<td>5,800</td>
<td>6,400</td>
<td>7,000</td>
</tr>
<tr>
<td>Wages</td>
<td>8,500</td>
<td>9,600</td>
<td>11,400</td>
</tr>
<tr>
<td>Transport</td>
<td>17,000</td>
<td>17,800</td>
<td>18,500</td>
</tr>
<tr>
<td>Rent</td>
<td>1,400</td>
<td>1,500</td>
<td>1,500</td>
</tr>
<tr>
<td>Postage, Telephone and Stationery</td>
<td>1,300</td>
<td>1,400</td>
<td>1,400</td>
</tr>
<tr>
<td>Interest</td>
<td>2,000</td>
<td>2,300</td>
<td>2,200</td>
</tr>
<tr>
<td>Total Expenses</td>
<td>36,000</td>
<td>39,000</td>
<td>42,000</td>
</tr>
<tr>
<td>Net Surplus/Loss</td>
<td>(2,000)</td>
<td>(4,500)</td>
<td>(9,000)</td>
</tr>
</tbody>
</table>
SESSION 5.2

BANKRUPTCY

Objective: To enable trainees to recognise bankruptcy and to dispose of the assets of a bankrupt society as efficiently and equitable as is possible.

Time: 1 1/2 to 2 hours.

Session Guide:

1) In certain countries, the Government policy of subsidising farmers may protect co-operative societies from going bankrupt. Banks may never demand repayment of loans, and para-statal suppliers may extend indefinite credit.

Stress that co-operatives - possible subsidies apart - might be exposed to the same economic realities as any other enterprise. Trainees must therefore learn how to avoid bankruptcy, and how to deal with it if it comes.

2) Ask trainees what they understand by the term "bankruptcy". They may use words such as "broke". Present the following balance sheet on the chalkboard/OHP and ask trainees whether or not they show bankrupt societies:

(a) The No Hope Society

<table>
<thead>
<tr>
<th>Assets</th>
<th>$</th>
<th>Liabilities</th>
<th>$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cash</td>
<td>-</td>
<td>Accounts Payable</td>
<td>500</td>
</tr>
<tr>
<td>Accounts Receivable</td>
<td>400</td>
<td>Overdraft</td>
<td>900</td>
</tr>
<tr>
<td>Stock</td>
<td>1,000</td>
<td>Long Term Loans</td>
<td>2,000</td>
</tr>
<tr>
<td>Equipment</td>
<td>3,000</td>
<td>Undistributed Surplus</td>
<td>-</td>
</tr>
<tr>
<td>Land and Buildings</td>
<td>-</td>
<td>Members' Share Capital</td>
<td>1,000</td>
</tr>
<tr>
<td>Total</td>
<td>4,400</td>
<td>Total</td>
<td>4,400</td>
</tr>
</tbody>
</table>
Trainees will probably suggest that both societies are indeed bankrupt. Ask them for their reasons, which may include:

**The No Hope Society**
- There is no cash at all.
- All the surplus appears to have been distributed to members, if any surplus had ever been earned.
- Long term loans and overdraft exceed members' share capital by almost 3 to 1 ($2,900/$1,000).

**The Despair Society**
- Current liabilities exceed current assets by 3 to 1 (1,500/$500).
- Members' share capital is actually negative.

Ask trainees whether their own, or most co-operative societies, have day-to-day figures so that their managers know what position they are in. If not, how do they know that they are in fact bankrupt until long after the event?

Stress that neither of these societies is necessarily bankrupt. The society is bankrupt only when it cannot meet its obligations.
Ask trainees to suggest what might happen to mean that the society was in fact bankrupt.

- Suppliers might call for their bills to be paid.
- The bank might withdraw overdraft facilities.
- Members might wish to withdraw their deposits.

A society may be in a condition which would make it bankrupt if something of this sort happened, but until this happens the society can survive.

Ensure that trainees appreciate the difference between "insolvency" and "bankruptcy":

- An insolvent society could not pay its bills if all the people and institutions to which it owes money were to demand repayment, within their rights, at the same time. Society "E" in Session 1.4, is insolvent but not yet bankrupt.
- A bankrupt society has failed to repay legitimate demands, and the creditor has refused to allow further delay and has handed the case over for legal action.

3) Ask trainee's to suggest what might be the balance sheet of a typical commercial or co-operative bank. If possible, obtain a set of published accounts from a local bank and summarise these on the chalkboard. Typical figures, very much simplified, might be as follows:

**The ABC Co-operative Bank**

<table>
<thead>
<tr>
<th>Assets</th>
<th>$m</th>
<th>Liabilities</th>
<th>$m</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cash</td>
<td>5</td>
<td>Accounts Payable</td>
<td>1</td>
</tr>
<tr>
<td>Government Securities</td>
<td>10</td>
<td>Customers' Current Accounts</td>
<td>34</td>
</tr>
<tr>
<td>Overdrafts lent to Customers</td>
<td>30</td>
<td>Customers' Deposits</td>
<td>40</td>
</tr>
<tr>
<td>Long Term Loans to Customers</td>
<td>40</td>
<td>Undistributed Surplus</td>
<td>15</td>
</tr>
<tr>
<td>Accounts Receivable</td>
<td>3</td>
<td>Share Capital</td>
<td>10</td>
</tr>
<tr>
<td>Equipment</td>
<td>2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Land and Buildings</td>
<td>10</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>100 m</td>
<td>Total</td>
<td>100 m</td>
</tr>
</tbody>
</table>
Ask trainees what would happen if all the customers withdrew their current accounts on one day, as they are perfectly entitled to do:

- The bank would have to find $34m. Cash would yield $5m, an immediate sale of Government securities a further $10m. If the bank could not raise a further $19m immediately it would be bankrupt.

Ask trainees why banks do not very often go bankrupt:

- Customers do not choose to withdraw all their money all at once, and the amount of money "lent" to the bank in the form of current accounts and deposits remains more or less stable.

Why might customers suddenly decide without warning to withdraw their money?

- If they lost confidence in the bank, and came to believe that their money might be lost if it was not very quickly withdrawn. Banks survive because of customers' confidence. If they lose confidence, they are proved correct because their loss of confidence actually "bankrupts" the bank.

4) Banks are an extreme case. Ask trainees whether typical co-operative societies, including their own, which are not in the condition of the No Hope or the Despair Societies, would in fact survive if:

- Suppliers withdrew their credit facilities without notice and wanted immediate payment.

- The bank withdrew short loans without notice.

- Members withdrew their deposits without notice.

Stress that all these actions might be completely legal. If they all happened at any one time, however, few societies would be able to find the necessary cash, they would be unable to meet their obligations and would be bankrupt.
Few co-operative societies have as good an "image" of financial stability as most banks. Many suppliers, banks and even members are not fully confident of their strength. Why is it then that the individuals and organisations to which societies owe their current liabilities do not more frequently demand payment together, and at short notice, thus "breaking" the society?

- They should, if they are themselves good financial managers, only allow as much credit to the society as they believe the society will be able to repay when it is due. Therefore they will not demand it back at short notice.

- They value the sales they make to the society, the profit they make through lending or, in the case of members, the services they receive from it.

- They will not voluntarily destroy the society unless they believe that they will not be repaid otherwise.

If an enterprise is declared bankrupt, it can rarely pay all its obligations, and may only pay a small part. It is therefore usually in the interests of those to whom the society owes money to allow it to survive, in the expectation that they will eventually be repaid in full.

5) Explain the local procedure for bankruptcy proceedings. Stress that an organisation is not legally bankrupt until it has officially been declared as such. This happens when one or more of a group of people or organisations to which a society or other enterprise owes money, having failed to obtain what they are owed, ask the Government, Registrar or other body to declare the enterprise bankrupt.

The Registrar then appoints a "Receiver" to take over the operations of the society from the manager and members. He or she then has to run the society in the interests of those to whom it owes money, rather than the members, in order to pay them what is owed as quickly as possible.

Ask trainees what might be the quickest way to achieve this, that is, to extract as much cash as quickly as possible from the society:
- To sell off the assets one by one for whatever they will fetch.
- To sell the assets, if possible with the support of the membership, to another organisation or society which will either take over the obligations or pay a certain amount of cash for the complete organisation.

6) Ask trainees to suggest how they can try to avoid bankruptcy.

What long term measures can they take to reduce the risk of this type of crisis of confidence that can lead to bankruptcy?

- Manage the society effectively so that it earns and reinvests a substantial surplus, and ensure that the society has enough cash or other assets that can easily be turned into cash to meet even unlikely demands for payment.
- Insure the society against the type of disaster that might lead to bankruptcy, such as fire, third party claims in case of accidents, total crop failure or staff dishonesty.
- Cultivate good personal relationships with banks, suppliers and members so that they will, if called upon, support the society through a crisis.
- Plan the flow of money within the society (see Session 3.6) so that periods of cash shortage can be foreseen and prevented.
- Use every opportunity for presenting a favourable "image" of the society, such as addressing business gatherings, radio or press publicity about the society's achievements, or general word of mouth publicity. Attempt to warn members and staff of the dangers of allowing unfavourable rumours to spread about their society.

7) Stress that even if a manager follows all these guidelines, a crisis could still occur. Ask trainees for examples of what might cause this to happen and remind them that a crisis of confidence can be as severe as a crisis in fact:

- Drought or other bad weather may severely reduce members' harvest and thus the society's income.
- Unexpected price changes, arising possibly from ill-conceived Government policies, international price movements or local gluts can destroy the economy of the society's operations.

- A prominent member of the society may become involved in some sort of scandal, and thus erode public confidence in the society even if the scandal has nothing to do with it.

- A staff or board member may abscond or otherwise cheat the society. They may actually "break" the society or the news of the scandal may erode confidence and have the same effect.

- Well publicised problems of other societies may reduce public confidence in all co-operatives, even if in fact they are well managed.

What can a manager do to minimise the chances of bankruptcy if in spite of all the above precautions, a crisis does occur?

- Approach members, banks and any buyers most likely to lose if the society does go bankrupt, and ask for their support. Stress that if they delay their demands they will in the end receive more than if they attempt to force the society to bankruptcy.

- Ensure that all money due to the society is paid at once. In times of crisis timing is all important, and it is worth spending money to get money in quickly (see Session 3.1).

- Delay payment if by all means possible. It may be appropriate to take the kind of steps which trainees were attempting to prevent in Session 3.2.

8) It is unlikely that trainees will themselves have to act as receivers, but they should be aware of the law and procedures and, in particular, of the rights of the various individuals in relation to money owed by the society.

- They should be able to warn members of what their position will be if the society goes bankrupt, in order to enlist their support to prevent this.

- They should be able to evaluate the position of their own society if it is itself owed money by a bankrupt customer.
- They can more effectively enlist support from suppliers, banks and others if they know what will happen to those owed money by a society which does go bankrupt.

Ask trainees to list the various types of organisations or individuals to whom the society can owe money. Elicit the following list, which should be written on the chalkboard/OHP in a random order:

- Suppliers.
- Banks.
- Suppliers of equipment which has been bought on credit.
- Building societies or other finance organisations that provide mortgages.
- Members for their share capital.
- Members for their deposit accounts.
- Employees for their wages.
- Members for their share of any undistributed surplus.
- The Government for any tax due on surplus or staff salaries.

9) Ask trainees to put themselves in a position of a receiver who has to recover as much as possible, as fast as possible, from the assets of a bankrupt society in order to pay off its obligations. Refer back to the No Hope and the Despair Societies, whose balance sheets were displayed earlier in the session. Is it unlikely that the receiver could in either case be able to recover the full value of the assets in order to pay all the obligations or liabilities?

- Cash is available in full.
- Customers may pay all their accounts receivable but this may be reduced because of disputed items such as packing charges which have been allowed to accumulate over time.
- If stock has to be sold immediately, it is unlikely to be sold for its full value.
- Secondhand plant and equipment can rarely be sold for the value as expressed in the balance sheet.

- Land and buildings may be sold for their balance sheet value or even more in cases where the society is of some age and the figures are kept at their original cost price.

10) If a society owes $10,000 and its assets can only be sold for $6,000 what can be done? Stress that although it would be possible for the receiver to pay 60% of all the amounts owed, debts are usually paid in order. Certain classes of debts are paid first, and others receive what may remain.

Allow trainees ten minutes to rank the interest groups identified above. Which do they believe should be paid first, which next and so on?

Ask for their suggestions, elicit a generally agreed ranking, and compare this with the local law of bankruptcy. This will vary, but the following ranking is a common one:

(1) Equipment bought on hire purchase and not completely paid for still belongs to the seller and may be recovered by him.

(2) Land, buildings and any other assets which have been used as security for mortgages or other loans can be seized by the lender. If their sale value exceeds the amount which they secured, the excess can be used to pay off other debts.

(3) Debts owed to the Government are generally placed higher than those of other organisations to which money is owed.

(4) Wages and salaries due to employees may rank before or after the Government.

(5) Members' deposits, as opposed to their share accounts, may come next.

(6+7) Suppliers who have supplied goods on credit without any security come next, and any unsecured short or long term bank loans are ranked at the same level.
Members rank last. Their original investment and their share of undistributed surplus are combined and if any money is left after all the other debts have been settled they receive whatever proportion of their investment that is possible.

Confirm trainees' understanding of the procedure by asking them to calculate what proportion of the money owed to each of the following groups' liabilities need in fact be paid if the receiver succeeded in recovering the amount stated:

**The No Hope Society**

<table>
<thead>
<tr>
<th>Assets</th>
<th>Recovered</th>
<th>Liabilities</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cash</td>
<td>-</td>
<td>Accounts Payable 500</td>
</tr>
<tr>
<td>Accounts Receivable</td>
<td>400</td>
<td>300</td>
</tr>
<tr>
<td>Stocks</td>
<td>1,700</td>
<td>Overdraft 900</td>
</tr>
<tr>
<td>Plant and Equipment</td>
<td>3,000</td>
<td>Undistributed Surplus</td>
</tr>
<tr>
<td>Land and Buildings</td>
<td>300</td>
<td>Share Capital 2,000</td>
</tr>
<tr>
<td>Total</td>
<td>5,400</td>
<td>Total 5,400</td>
</tr>
</tbody>
</table>

The bank overdraft, long term loan and accounts payable amount to $3,400. The $3,100 which had been recovered could be used to pay 2,100 (3,400), or 91 percent of these debts; the members would receive nothing.

Stress that bankruptcy is bad for everyone but worse for members. They are almost certain to lose their share capital, they will probably lose at least a part of their investment accounts and will lose whatever services they gain from the society.

Members should be aware of this risk, and should be encouraged to elect board members and employ competent staff in order to avoid this type of loss.
The Reasons for and Uses of Budgets
Preparing Budgets—The Basic Figures
Cash Budgeting
Dealing with Change
Budgeted and Actual Results
SESSION 6.1

THE REASONS FOR AND USES OF BUDGETS

Objective: To enable trainees to demonstrate the need for budgets and to avoid common reasons for failure to prepare and use budgets effectively.

Time: 12 to 2 hours.

Session Guide:

1) Use one or more of the following analogies to demonstrate the need for planning:

- A carpenter who is to make a chair needs more than tools, screws, glue and timber. He needs a plan showing him what to make, and a ruler to measure what he is doing and thus compare it with the plan.

- A ship's pilot needs to plan his route on a chart, and then to find out where he actually is at regular intervals. He can then correct his direction to bring his vessel back to the planned route if necessary.

- A community needs rules to govern people's behaviour, law courts to ascertain if they have broken the rules, and a penal system to bring people back to legal behaviour.

In every case there is a need for a standard, such as a plan, design or rules, and a measuring device, such as a ruler, to find out if the plan is being followed. Only then can any necessary corrections be made.

Society managers need a plan and a measure. These are provided by the budget and the accounts.

Remind trainees of the techniques for cash management, and analysis of sources and application of funds. Stress that these, and other techniques must be part of an overall financial planning system. Such a system is often called a "budgeting system".
- Forecast the way in which money will come into and go out of their society.
- Control the actual flow of funds in order to take corrective action if what actually happens differs significantly from their forecast.

2) Stress that budgets are an estimate of future income and expenditure, which are produced in advance of every year, and are subdivided to show the expected results for each quarter, month or even week if needed.

Draw a diagram as follows on the chalkboard:

A) Annual Budgets

B) "Rolling" Quarterly Budgets

Show that if, as is often the case, management produce budgets once a year, for the whole of the next year, and then use them without revision for 12 months, as in "A", they are often hopelessly out of date and useless for practical management by the last quarter.

Ask how this can be avoided. Elicit the suggestion that budgets should be revised quarterly, as in "B", on a "rolling" basis. Current experience can then be incorporated.
Ask trainees how many of their societies actually prepare annual budgets before the beginning of each year, and use them as an aid to improved management.

Budgets are often regarded as an unnecessary and time wasting formality which are required by Government Departments or other authorities but are of no value to those who actually manage societies.

Stress that managers must understand why budgets are useful, so that they can prepare them properly and use them themselves, rather than regarding them as a needless irritation.

3) Divide trainees into two groups, A and B, and attempt to include in Group A as many as possible of those with accountancy training or who are otherwise likely to be familiar with and in favour of budgetary procedures.

Ask the members of Group A individually to write down as many reasons as they can which might be used to argue against the necessity of preparing budgets. They need not necessarily believe in the reasons themselves, but they should feel able to present and support them. Group B should individually write down as many reasons as they can think of in favour of preparing budgets.

Allow trainees up to 20 minutes to complete their lists. Ask one member at a time from Group A to read out one argument against budgeting, and summarise these on the chalkboard. Continue until all the arguments have been noted, and do the same for Group B. The lists should include the following arguments among others.

**Group A**

i) Actual results are never the same as budgets, so why waste time attempting to forecast the future?

ii) Agricultural results are particularly dependent on the weather. Forecasts can be no more than guesses.

iii) Sudden Government price changes cause even more changes and can never be foreseen.
iv) Optimistic budgets raise false expectations, and pessimistic ones depress people unnecessarily. It is impossible to budget correctly.
v) If budgets are not achieved, responsible staff object to the budgets rather than trying to improve their performance. This is not difficult in such an unpredictable activity as an agricultural co-operative.
vii) Managers are deluded into believing that their main task is to prepare budgets and not to manage reality.
viii) Accurate budgets take months of management time to prepare, and inaccurate ones are even worse than useless.
ix) Managers can "pad" budgets to allow for their own failures, or "milk" one underspent budget to cover an overspent one. They are an ineffective control device.

Group B
- Budgets allow management to identify financial problems before they occur.
- Budgets enable management to decide what investments they can and cannot afford.
- Budgets allow top management and others to compare the performance of different societies and managers.
- Loan applications must be based on budgeted future results.
- Budgets can be used to demonstrate the advantages of belonging to a society to present or prospective members.
- The process of producing budgets forces managers to analyse their past and future performance.
- Budget setting and analysis identifies and prevents inconsistencies in planning.
- If budgets are regularly compared with actual performance managers can ignore seasonal factors and concentrate efforts where they are really needed.

4) Ensure that all the above arguments, and any others, are properly understood. The arguments in favour should be developed in this
and subsequent sessions, but those against should be discussed and either refuted or at least shown to be less important than those in favour.

Elicit the following and other counter-arguments to the points listed by Group A and numbered in the list above.

i) Budgets can never be correct; they merely show the effects of a likely set of circumstances, and, most importantly, allow managers to judge the effects of changes whenever they are likely to occur.

ii) As above; management can at once see the likely effects on results of a certain percentage shortfall in crop deliveries, for instance, if other circumstances remain unchanged.

iii) As above; management can see the effects of crop and input price changes, and can if possible put an effective case to the authorities responsible for policy making or make other arrangements to ensure the survival of the society in spite of the change.

iv) Budgets should be neither optimistic or pessimistic, but realistic. There is no point in hiding unpleasant truths from members or anyone else.

v) Staff responsible for achieving budgets must be involved in preparing and agreeing on them so that they are in effect setting their own targets.

vi) Budgets should be prepared by constant reference to real world conditions, and should be produced as a practical management tool rather than a burdensome central office requirement.

vii) Budgets must not be overemphasised. Management should prepare them because they understand how to use them, and must learn how to make use of them themselves rather than merely to use them as a way of threatening their subordinates.

viii) If budgets are prepared by managers for their own use they will not distract them from management but will focus their attention on their real responsibilities.

ix) Budgets should not be a threat but a management tool; managers are not likely to need to deceive themselves.
5) Remind trainees that discussions of variations from budget often concentrate on criticisms of the budget, rather than analysis and correction of the variations. Why is this?

The managers whose performance is being evaluated did not themselves prepare or agree to the budgets. They therefore argue that the budget, rather than their performance, should be changed.

Stress that this is like shooting at a wall and then placing the target so that the "bull's-eye" is on the spot which happened to be hit. Demonstrate the absurdity of such a procedure on the chalkboard. Many societies use budgets in this way.

6) Ask trainees whose societies regularly prepare and use budgets to state which of the following most accurately reflects their view of budgets:

(a) A threat.
(b) A useful tool.
(c) An irrelevant waste of time.

If "(b)" is their choice they are probably using budgets effectively. If "(a)" or "(c)" are closer to trainees' real opinions, it is likely that budgets are causing more trouble and management dissatisfaction than they are worth, and if their use cannot be improved it would be better not to prepare them at all.
SESSION 6.2

PREPARING BUDGETS - THE BASIC FIGURES

Objective: To enable trainees to prepare estimates of the costs and revenue items that make up an operating budget.

Time: 12 to 2 hours.

Material: Exercise "The Controlled Co-operative Society".

Session Guide:

1) Ask trainees to suggest the major out-goings which must be forecast and included in the budget of an agricultural marketing society which uses hire transport. They should assume for the purposes of this session that they are dealing with a society which buys, stores and resells its members' crops, but has no input supply or processing activities and does not run a loan scheme. Elicit all possible expenses and include also local expense headings.

<table>
<thead>
<tr>
<th>Predictability Rating</th>
<th>Item</th>
<th>Factors Likely to Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>C</td>
<td>Payments to members for crops</td>
<td>Member loyalty, number of members, price, quality, amount produced.</td>
</tr>
<tr>
<td>B</td>
<td>Wages for permanent workers</td>
<td>Official wage awards, staff sickness, proportion of newly hired staff.</td>
</tr>
<tr>
<td>A</td>
<td>Salaries for staff</td>
<td>Official salary awards, staff sickness, proportion of newly hired staff.</td>
</tr>
<tr>
<td>C</td>
<td>Wages for casual workers</td>
<td>Volume of crop purchase, wage levels.</td>
</tr>
<tr>
<td>A</td>
<td>Housing allowances</td>
<td>Official housing costs.</td>
</tr>
<tr>
<td>C</td>
<td>Overtime payments</td>
<td>Volume of crop handled and wage rates.</td>
</tr>
<tr>
<td>A</td>
<td>Superannuation and pension payments</td>
<td>Official trade union negotiated fringe benefits.</td>
</tr>
<tr>
<td>C</td>
<td>Transport hire charges</td>
<td>Fuel, vehicle and driver costs, volume of crop.</td>
</tr>
<tr>
<td>Predictability Rating</td>
<td>Item</td>
<td>Factors Likely to Change</td>
</tr>
<tr>
<td>-----------------------</td>
<td>-------------------------------------------</td>
<td>--------------------------------------------------------------</td>
</tr>
<tr>
<td>A</td>
<td>Rent</td>
<td>Timing of lease.</td>
</tr>
<tr>
<td>B</td>
<td>Insurance</td>
<td>Value of crops and other property and risk.</td>
</tr>
<tr>
<td>C</td>
<td>Bags</td>
<td>Price of bags, volume of crops, life of bags.</td>
</tr>
<tr>
<td>A</td>
<td>Licences</td>
<td>Government regulations.</td>
</tr>
<tr>
<td>B</td>
<td>Repairs to furniture and equipment</td>
<td>Age of equipment, unexpected accidents and office furniture need for replacement.</td>
</tr>
<tr>
<td>A</td>
<td>Committee member subsistence and travel allowance</td>
<td>Rates, number of members and number of meetings.</td>
</tr>
<tr>
<td>B</td>
<td>Electricity</td>
<td>Price, volume of business.</td>
</tr>
<tr>
<td>A</td>
<td>Education costs</td>
<td>Management's decisions as to need, number of new members recruited.</td>
</tr>
<tr>
<td>A</td>
<td>Printing and stationery</td>
<td>Need for publicity.</td>
</tr>
<tr>
<td>A</td>
<td>Postage</td>
<td>Rates, volume of official correspondence.</td>
</tr>
<tr>
<td>A</td>
<td>Telephone</td>
<td>Rates, control exercised, need for immediate communication.</td>
</tr>
<tr>
<td>A</td>
<td>Bank charges</td>
<td>Rates charged, activity in account.</td>
</tr>
<tr>
<td>B</td>
<td>Interest</td>
<td>Amount borrowed, current interest rates.</td>
</tr>
<tr>
<td>B</td>
<td>Dividend</td>
<td>Decision of AGM.</td>
</tr>
<tr>
<td>A</td>
<td>Donations</td>
<td>Decisions of management, number of requests.</td>
</tr>
<tr>
<td>A</td>
<td>Depreciation</td>
<td>Management decision.</td>
</tr>
</tbody>
</table>

Ask trainees to suggest headings for money coming into the society. These are obviously far fewer, but might include the following:
2) Ask trainees to assume that the society in question is not introducing any new services but is merely continuing its business in the same way as before. When preparing a budget, and therefore estimating the future annual costs or revenue under the headings already identified, should the manager automatically assume that all the outgoings and incomings will be the same as for the previous year?

Clearly he should not. The obvious factor which affects all financial items, in nearly all countries, is inflation. Obtain advance figures for inflation over the last four or five years, and ask trainees to suggest what might be the rate in the forthcoming year in their country.

(Trainees should be aware of the inaccuracy of many Government produced inflation statistics, which often underestimate the rate of real price increases.)

Apart from inflation, however, there are many special factors which vary and which can substantially affect the results of a co-operative society. Go through the list of expense and income items one by one, asking trainees to suggest factors which may cause the cost of revenue to change even though the society itself is carrying on as before.

Their answers will reflect local circumstances and their own experience, but may include the factors listed beside the expense

<table>
<thead>
<tr>
<th>Predictability Rating</th>
<th>Item</th>
<th>Factors Likely to Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>C</td>
<td>Sale of crops</td>
<td>Volume, price, quality sold.</td>
</tr>
<tr>
<td>B</td>
<td>Interest received from money on deposit</td>
<td>Funds on deposit, interest rates.</td>
</tr>
<tr>
<td>C</td>
<td>Rent of premises to other organisations</td>
<td>Demand.</td>
</tr>
<tr>
<td>B</td>
<td>Sale of shares</td>
<td>New members recruited, investment minimum.</td>
</tr>
<tr>
<td>B</td>
<td>Membership fees</td>
<td>Total membership, fee level.</td>
</tr>
</tbody>
</table>
and income items above. These factors should not, of course, be listed until trainees suggest them.

3) Ask trainees whether they would feel more confident of the accuracy of the estimate of the society's insurance payments or overtime costs. Obviously insurance payments are predictable but overtime costs are not.

Clearly certain items can be forecast more easily than others. Ask trainees to copy the list of items of expenses and incomes from the chalkboard, and to mark each with an "A", "B" or "C":

A = Those items which can be predicted with some accuracy.

B = Those items where a manager can have some limited confidence.

C = Those items for which the manager can make no more than an intelligent guess.

Allow trainees up to ten minutes to complete this. Ask them to read out their lists, and compare and discuss different conclusions. One set of answers should however be added to the list as in "1" above but trainees should be able to justify any rating which is significantly different.

Ask trainees to comment on the implication of these ratings for the overall accuracy of budgets. They should note that there are unlikely to be any "A" ratings on income, and that most "A" items in the expenses are rather small. This means that the overall results are not easily predictable. Trainees may feel that this undermines the whole basis of budgets, but refer them to previous sessions and stress that budgets are all the more useful when certain major items are very variable. It is necessary in these circumstances quickly and accurately to assess the effects of unexpected changes on operating results.

4) Distribute the exercise and allow trainees up to 45 minutes to complete it. If calculators are generally available to trainees at work, they should use them in this exercise.
Ask trainees to go through their answers. They will clearly differ according to their interpretation of the case study, and, stress that the budget is not "right" or "wrong". It is a basis for planning, and will inevitably reflect the attitude and prejudices of whoever prepared them.

Trainees should note that all figures should be rounded to the nearest $10. Ask them why this is advisable:

- Budgets are no more than guesses about the future. Nobody can be sure that they are accurate to within a small margin of error, and if very precise looking figures are used it may make the calculations longer to prepare and, more importantly, give a false impression of accuracy.

A possible set of figures in answer to the exercise is as follows:

<table>
<thead>
<tr>
<th>Item</th>
<th>Budget for 1982</th>
<th>Estimated 1981 Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pay to Members (4% more members, 5% volume increase, 546 tonnes at $220)</td>
<td>$120,120</td>
<td>$100,000</td>
</tr>
<tr>
<td>Salaries (plus 10%)</td>
<td>4,620</td>
<td>4,200</td>
</tr>
<tr>
<td>Wages (plus 15%)</td>
<td>2,300</td>
<td>2,000</td>
</tr>
<tr>
<td>Casual Labour (plus 15%)</td>
<td>370</td>
<td>320</td>
</tr>
<tr>
<td>Housing Allowance (plus 15%)</td>
<td>920</td>
<td>800</td>
</tr>
<tr>
<td>Overtime (plus 15%)</td>
<td>230</td>
<td>200</td>
</tr>
<tr>
<td>Superannuation (plus 10%)</td>
<td>440</td>
<td>400</td>
</tr>
<tr>
<td>Transport Hire (plus 20%)</td>
<td>1,200</td>
<td>1,000</td>
</tr>
<tr>
<td>Rent (no change)</td>
<td>200</td>
<td>200</td>
</tr>
<tr>
<td>Insurance (plus 15%)</td>
<td>460</td>
<td>400</td>
</tr>
<tr>
<td>Bags (plus 15%)</td>
<td>520</td>
<td>450</td>
</tr>
<tr>
<td>Licences (no change)</td>
<td>100</td>
<td>100</td>
</tr>
<tr>
<td>Repairs to Furniture and Equipment (plus 20%)</td>
<td>120</td>
<td>100</td>
</tr>
<tr>
<td>Office Furniture (to await decision)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Committee Members' Fees (plus 10%)</td>
<td>440</td>
<td>400</td>
</tr>
</tbody>
</table>

Sub-total                                              | $132,040        |
Trainees should copy down these figures for use during the next and following sessions. Alternatively the budget may be typed and reproduced for subsequent distribution.

Ask trainees for their views on the dividend. They should notice the dividend for 1981 has not been decided in November, and it is not necessary to decide on or even estimate the figure for 1982 until the results of 1981 and the first half of 1982 are known.

The furniture decision can similarly be delayed. It is not an urgent requirement, and can be dealt with when the results are clearer.

5) In some countries the budget must by law be submitted to and approved by members and this may in any case be a useful way of involving members in the management of their own society. It can also help to ensure continuity if there is a change of management. Stress the following points to trainees who may want to present budgets to the members:

<table>
<thead>
<tr>
<th>Item</th>
<th>Budget for 1982</th>
<th>Estimated 1981 Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sub Total</td>
<td>$132,040</td>
<td>$</td>
</tr>
<tr>
<td>Electricity (plus 20%)</td>
<td>240</td>
<td>200</td>
</tr>
<tr>
<td>Education (plus 15%)</td>
<td>230</td>
<td>200</td>
</tr>
<tr>
<td>Printing and Stationery (plus 15%)</td>
<td>370</td>
<td>320</td>
</tr>
<tr>
<td>Postage (plus 15%)</td>
<td>230</td>
<td>200</td>
</tr>
<tr>
<td>Telephone (plus 15%)</td>
<td>280</td>
<td>240</td>
</tr>
<tr>
<td>Bank Charges (plus 15%)</td>
<td>280</td>
<td>240</td>
</tr>
<tr>
<td>Dividend (to be decided)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Donations (no change)</td>
<td>100</td>
<td>100</td>
</tr>
<tr>
<td>Depreciation</td>
<td>800</td>
<td>800</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>$134,570</strong></td>
<td></td>
</tr>
</tbody>
</table>

| Income                                         |                 |                      |
| Sale of Crops (loss reduced to 3%, price increased, 530 tonnes @ $270) | $143,100        | $118,750             |
| Rent Received (no change)                      | 50              | 50                   |
| Membership Fees                                | 530             | 500                  |
| **Total**                                      | **$143,680**    |                      |

| Budgeted Surplus                               | $9,110          |
- Figures must not be "dressed up" to present an inaccurately optimistic view.

- The budget must be clearly explained to members, using techniques covered in Session 4.2.

- Members must be made aware of those items which are their responsibility, such as crop deliveries.

Stress that trainees have so far prepared a revenue and expense budget. This is the beginning of a useful management tool, but needs to be further developed and used, before the exercise can be shown to be worthwhile. This will be the purpose of the following sessions.
It is mid November 1981, and the manager of the Controlled Co-operative Society has to set the budget for 1982. He had the figures for the nine months to September 30th, 1981, to which he had added his best estimates of the results for October, November and December.

The Co-operative purchased members' surplus maize between February and April each year, and held it in their store until the committee decided to sell, usually some time between August and October. No stocks were retained after the sale.

Apart from the manager and his secretary, the society employed a storekeeper, two labourers and an accounts clerk. During the harvest they would employ three or four casual labourers. The society did not own its own vehicles but hired private sub-contractors to collect members' crops from their farms at harvest time, and then to deliver the crops to the National Marketing Board later in the year.

They rented their store from a local landowner, but they owned their own office building. The figures for the first nine months of 1981 were as follows:

<table>
<thead>
<tr>
<th>Item</th>
<th>January to September Actual</th>
<th>October to December Estimate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Paid to Members (500 tonnes @$200)</td>
<td>$100,000</td>
<td>$nil</td>
</tr>
<tr>
<td>Salaries for Permanent Staff</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Manager</td>
<td>1,500</td>
<td>500</td>
</tr>
<tr>
<td>Accounts Clerk</td>
<td>900</td>
<td>300</td>
</tr>
<tr>
<td>Secretary</td>
<td>750</td>
<td>250</td>
</tr>
<tr>
<td>Wages</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Storekeeper</td>
<td>600</td>
<td>200</td>
</tr>
<tr>
<td>2 Labourers</td>
<td>900</td>
<td>300</td>
</tr>
<tr>
<td>Casual Labour (4 for 2 months @$40 per month)</td>
<td>320</td>
<td>nil</td>
</tr>
<tr>
<td>Sub Totals</td>
<td>$104,970</td>
<td>$1,550</td>
</tr>
</tbody>
</table>
### Itemized Expenses

<table>
<thead>
<tr>
<th>Item</th>
<th>January to September Actual</th>
<th>October to December Estimate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sub Totals</td>
<td>$104,970</td>
<td>$1,550</td>
</tr>
<tr>
<td>Housing Allowance</td>
<td>600</td>
<td>200</td>
</tr>
<tr>
<td>Overtime Payment</td>
<td>200</td>
<td>nil</td>
</tr>
<tr>
<td>Pensions</td>
<td>300</td>
<td>100</td>
</tr>
<tr>
<td>Transport Hire</td>
<td>1,000</td>
<td>nil</td>
</tr>
<tr>
<td>Rent</td>
<td>150</td>
<td>50</td>
</tr>
<tr>
<td>Insurance</td>
<td>300</td>
<td>100</td>
</tr>
<tr>
<td>Bags</td>
<td>450</td>
<td>nil</td>
</tr>
<tr>
<td>Licences</td>
<td>100</td>
<td>nil</td>
</tr>
<tr>
<td>Repairs to Furniture and Equipment</td>
<td>100</td>
<td>nil</td>
</tr>
<tr>
<td>Office Furniture</td>
<td>nil</td>
<td>nil</td>
</tr>
<tr>
<td>Committee Members' Subsistence and Travel (10 Members, quarterly meetings)</td>
<td>300</td>
<td>100</td>
</tr>
<tr>
<td>Electricity</td>
<td>150</td>
<td>50</td>
</tr>
<tr>
<td>Education</td>
<td>nil</td>
<td>200</td>
</tr>
<tr>
<td>Printing and Stationery</td>
<td>240</td>
<td>80</td>
</tr>
<tr>
<td>Postage</td>
<td>150</td>
<td>50</td>
</tr>
<tr>
<td>Telephone</td>
<td>180</td>
<td>60</td>
</tr>
<tr>
<td>Bank Charges</td>
<td>180</td>
<td>60</td>
</tr>
<tr>
<td>Dividend</td>
<td>nil</td>
<td>?</td>
</tr>
<tr>
<td>Donations</td>
<td>nil</td>
<td>100</td>
</tr>
<tr>
<td>Depreciation</td>
<td>600</td>
<td>200</td>
</tr>
<tr>
<td>Totals</td>
<td>$109,970</td>
<td>$2,900</td>
</tr>
</tbody>
</table>

### Income

<table>
<thead>
<tr>
<th>Item</th>
<th>January to September Actual</th>
<th>October to December Estimate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sale of Crops (475 tonnes @ $250)</td>
<td>$118,750</td>
<td>$nil</td>
</tr>
<tr>
<td>Rent of Premises</td>
<td>50</td>
<td>nil</td>
</tr>
<tr>
<td>Membership Fees (250 members @ $2)</td>
<td>500</td>
<td>nil</td>
</tr>
<tr>
<td>Totals</td>
<td>$119,300</td>
<td>$nil</td>
</tr>
</tbody>
</table>

**Estimated Total Income for 1981** = $119,300  
**Estimated Total Costs for 1981** = $112,870  
**Estimated Total Surplus for 1981** = $6,430
The society had no major plans for change in 1982. They hoped to conduct a membership drive and to recruit about 15 more members, increasing the numbers by 6%, and they hoped, as they always did, that members would grow and market more of their surplus through the society.

The manager realised that they would probably achieve a 5% increase in crop production per member, and he hoped that the improved storage procedure that they had adopted would reduce the storage losses from 5% to 3%. It was rumoured that the Government was going to increase the farm-gate price of maize to $220 a tonne, which would not necessarily cover inflation which was running at 15% a year. If the farm-gate price did rise by $20, the Maize Board's buying price would also go up by $20. This would not be a proportionate increase and would not cover all cost increases, but would be better than nothing.

The Government's policy of improving income distribution was particularly hard on Government controlled organisations such as the Controlled Co-operative. Salaries were likely to go up more than 10% while wages would increase by at least 15%.

Committee members' expense allowances were not to be allowed to go up more than 10%, in spite of the fact that real costs would go up more than this.

Electricity costs were expected to go up by 20% next year, because of the high costs of imported oil.

Transport costs were fixed by competitive bidding each year, but there was little real competition and since fuel and imported vehicle and spares prices rose faster than most things in price, the manager thought that they should allow for at least a 20% increase next year.

The manager could not think of any other factors which might make next year's results any better or worse than this one and as he looked at the notes on his desk, he reflected that the office furniture was getting old. A new set of desks and chairs might cost $1,000, but they would cheer everyone up.
Assignment

(1) Prepare a budget for 1982 for the Controlled Co-operative Society, based on the actual figures for January to September and the estimates for October to December 1981, and on the various factors covered in the case study.

(2) What will be the budgeted surplus for the society in 1982? What should be the dividend in 1982? Should the manager budget for the purchase of new office furniture next year?
SESSION 6.3

CASH BUDGETING

Objective: To enable trainees to prepare cash budgets.

Time: 2 to 3 hours.

Material: Budget from Session 6.2.

Session Guide:

1) Ensure that all trainees have copies of the draft budget given in the previous session as an answer to the exercise.

Ask whether the manager of the Controlled Co-operative Society can be confident that all will be well next year, providing his estimates turn out to be more or less accurate. Is there anything else he needs to know?

If trainees are unable to suggest what is missing, remind them of Session 3.6, and ask whether the Controlled Co-operative Society might still go bankrupt in 1982 even if the budget was completely achieved.

Trainees may refer to losses, or costs exceeding revenue. Stress that losses alone do not necessarily lead to failure, and elicit the answer that a society fails when it runs out of money to pay its bills. This may be because the costs have exceeded the revenues for so long that all the money is exhausted, but is more likely to be for more immediate reasons. Ask trainees to suggest examples, and elicit the following among others:

- A major customer, such as a Government Marketing Board or private wholesaler, fails to pay their account when due. The society is thus unable to pay for its workers, its transport contractors or some other service which if withdrawn means that the society ceases to offer any worthwhile service.
- A large and unexpected bill has to be paid earlier than expected, so that cash is not available for essential services, or for members' crop deliveries. The members are forced to sell elsewhere and the society collapses.

- The society's bank loan application is not submitted or processed in time and the funds are therefore not available when they are needed to pay members for their crops or some other service.

Stress that these problems arise not from the fact that the society is losing money. All three situations could in fact arise in a profitable as well as loss making co-operative.

Refer back to Session 3.6 and ensure that trainees appreciate that the **timing** of cash flows is what causes failure. A society must have a surplus of income over expenditure in order to be able to survive and grow over the long term. It must also, in the short term, ensure that there is at all times enough money available to pay for wages, crops and other accounts as they fall due.

2) Ask trainees whether it is possible for a co-operative society to have too much money available. Why is it wrong to have more money than is needed in cash, or in a bank account?

- Cash may be stolen.

- Current accounts at the bank generally earn no interest.

- A deposit account earns some interest, but any well managed co-operative society should have more profitable opportunities for investment than a deposit account, if the surplus cash is to be available over a period.

- Most societies owe money, and they pay interest at a higher rate than can be earned on deposit. If spare cash is available, it should be used to reduce the amount outstanding on bank loans.

- Inflation is general, and almost always higher than bank interest paid to a society. Money on deposit is therefore losing value every day, but when it is invested in equipment, stocks
or other items the value will be maintained and the investments should earn a profit as well.

3) Ask trainees to refer to the draft budgets for the Controlled Co-operative Society. What additional information is needed before they can prepare a cash flow budget for this society?
- The timing of the in-flows and out-flows of money.
- The bank balance of the society at the beginning of the period.

Ask trainees to examine the expense and incomes items in the budget for the society. What items would they expect to be paid or received on a regular monthly basis, and which would they expect to come into or go out of the society only at particular seasons?

Trainees should identify at least the following items as being seasonal:

<table>
<thead>
<tr>
<th>Expenses</th>
<th>Income</th>
</tr>
</thead>
<tbody>
<tr>
<td>- Payment to Members</td>
<td>- Sale of Crops</td>
</tr>
<tr>
<td>- Casual Labour</td>
<td>- Membership Fees.</td>
</tr>
<tr>
<td>- Overtime</td>
<td>- Interest Received</td>
</tr>
<tr>
<td>- Transport Hire</td>
<td></td>
</tr>
<tr>
<td>- Bags</td>
<td></td>
</tr>
<tr>
<td>- Education</td>
<td></td>
</tr>
<tr>
<td>- Interest Charges</td>
<td></td>
</tr>
<tr>
<td>- Dividend</td>
<td></td>
</tr>
</tbody>
</table>

Refer back to the case study on which the budget is based, and either ask trainees to note down the following months during which the seasonal cash flows will occur, summarise the data on the chalkboard/OHP, or distribute the information on a handout:

<table>
<thead>
<tr>
<th>Expenses</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>- Payment to Members</td>
<td>50% March 50% April</td>
</tr>
<tr>
<td>- Casual Labour</td>
<td>60% April 40% October</td>
</tr>
<tr>
<td>- Overtime</td>
<td>50% April 50% September</td>
</tr>
<tr>
<td>- Transport Hire Charges</td>
<td>20% March 20% April 60% October</td>
</tr>
<tr>
<td>- Bags</td>
<td>February</td>
</tr>
<tr>
<td>- Education</td>
<td>July</td>
</tr>
<tr>
<td>- Dividend</td>
<td>December</td>
</tr>
</tbody>
</table>
**Income:**

- Sale of Crops November
- Interest Received Monthly November to March
- Rent Received June
- Membership Fees January

Trainees should assume that all other items are evenly divided over the 12 months of the year. The opening cash balance of the society is $21,000.

4) Ask trainees to prepare a monthly cash flow budget for 1982 for the Controlled Society. Examine trainees' efforts as they are working in order to ensure that they all understand the principles involved. Assist any who appear to be in need of help.

Remind trainees, if necessary, that depreciation should **not** be included in the cash budget, because no money is actually involved.

5) The appropriate layout should be presented and explained to trainees on a flip-chart, OHP or chalkboard, but no figures should be inserted until trainees have completed the exercise. If trainees appear unable even to start, however, it may be necessary to go through the month of January with them, before allowing them to complete the exercise.

Allow trainees up to one hour for this. Ask one trainee to read out his or her figures. The example given on the following page is one solution. Stress that because of rounding, and different ways in which trainees may have chosen to combine the figures to simplify the calculations, no two answers are likely to be exactly the same. The layout should not at this stage include the space for the interest charges, since trainees should be encouraged to conclude for themselves that money will have to be borrowed, and that this will require the payment of interest.
<table>
<thead>
<tr>
<th>Expenses</th>
<th>January</th>
<th>February</th>
<th>March</th>
<th>April</th>
<th>May</th>
<th>June</th>
<th>July</th>
<th>August</th>
<th>September</th>
<th>October</th>
<th>November</th>
<th>December</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Paid to Members</td>
<td>-</td>
<td>-</td>
<td>60,060</td>
<td>60,060</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>120,120</td>
</tr>
<tr>
<td>Casual Labour</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>220</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>150</td>
<td>-</td>
<td>-</td>
<td>370</td>
</tr>
<tr>
<td>Overtime</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>110</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>120</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>230</td>
</tr>
<tr>
<td>Transport</td>
<td>-</td>
<td>-</td>
<td>240</td>
<td>240</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>720</td>
<td>-</td>
<td>1,200</td>
</tr>
<tr>
<td>Bags</td>
<td>-</td>
<td>520</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>520</td>
</tr>
<tr>
<td>Education</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>230</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>230</td>
</tr>
<tr>
<td>Salaries, Wages, Housing, Pensions, Rent, Insurance, Licences, Repairs, Committee, Electricity, Promotion, Postage, Telephone, Bank Charges, Donations)</td>
<td>920</td>
<td>920</td>
<td>920</td>
<td>920</td>
<td>920</td>
<td>920</td>
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<td>$ 61,550</td>
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<td>$ 920</td>
<td>$ 1,150</td>
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<td>$ 1,040</td>
<td>$ 1,790</td>
<td>$ 920</td>
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<td>$ 133,710</td>
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<table>
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<tr>
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<th></th>
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<tbody>
<tr>
<td>Sale of Crops</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
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<td>143,100</td>
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<tr>
<td>Rent</td>
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<td>$ nil</td>
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<td>$ nil</td>
<td>$ 143,100</td>
<td>$ nil</td>
<td>$ nil</td>
<td>$ 141,680</td>
</tr>
</tbody>
</table>

| Net for Month    | $( 390) | $( 1,440) | $( 61,220) | $( 61,550) | $( 920) | $( 870) | $( 1,150) | $( 920) | $( 1,040) | $( 1,790) | $( 142,180) | $( 920) |
| Cumulative Balance (Start $ 21,000) | $ 20,610 | $ 19,170 | $( 42,050) | $( 103,600) | $( 104,520) | $( 105,390) | $( 106,540) | $( 107,460) | $( 108,500) | $( 110,290) | $( 31,890) | $ 30,970 |

| Borrowing       | -       | -        | $ 50,000 | $ 50,000 | -   | -    | -    | -      | -         | -       | -        | -        | $(150,000) |
| Total Borrowed  | -       | -        | $ 50,000 | $ 150,000 | $ 150,000 | $ 150,000 | $ 150,000 | $ 150,000 | $ 150,000 | -        | -        | -        |
| Interest Payable| -       | -        | 800     | 1,800   | 1,200 | 1,200 | 1,200 | 1,200 | 1,200 | 1,200 | -        | -        |
| New Balance     | -       | -        | $ 7,450 | $ 14,700 | $ 15,680 | $ 10,510 | $ 8,160 | $ 6,040 | $ 3,800 | $ 810 | $ 22,980 | $ 22,070 |
It may be appropriate to distribute a copy of the solution, still without the interest lines. In any case, it is important that trainees should appreciate:

- Figures in estimates of this sort should not be expressed except as round numbers. They are based on estimates, which, as shown in Session 6.2, are very approximate. Figures which are not rounded give a dangerous impression of accuracy.
- Managers are often unwilling to spend the time necessary to prepare detailed cash budgets of this sort, and the budgets are often useless because of simple arithmetic mistakes. Both problems can be reduced by combining figures to save calculations. Many trainees will have calculated the monthly costs of each of the 15 expense items which do not vary by dividing each annual total by 12. Elicit the suggestion that it is far quicker to add all the 15 annual figures together, and to divide the total by 12.

Ensure that all trainees appreciate the meaning of every figure and that the calculations can be checked by comparing the total of the right-hand column with the totals of the individual columns added horizontally. The figures will not be exactly the same because of rounding but they should be approximately similar.

Ensure that all trainees appreciate that the calculations show the following:

- The society will have a cash deficit around $42,000 in March, rising to $105,000 in April and increasing to $115,000 by the end of October.
- The cash deficit will disappear in November and the society will be able to deposit around $20,000 between November and March next year.
- The increase in cash, $9,970 ($30,970 - $21,000) is virtually the same as the budgeted profit, plus depreciation ($9,110 + $800), or $9,910, the difference is because of rounding.

6) Remind trainees that the purpose of a cash flow budget, or any other analysis, is to identify possible problems and provide a
basis for action. What problems (and opportunities) does this budget reveal, and what should the manager do?

- Ensure that all trainees realise that the profitability budget, which was produced in Session 6.2, showed that the society would make a profit in 1982, but did not show that the society would run out of cash in March, and be in a negative cash position until November, unless something was done. What do they suggest?

  - It may be possible to delay payments to members, or to sell the crop earlier. Discuss the problems involved in these solutions. It may be possible to "bridge" part of the eight month financial "gap" in this way, but not all.

Ask trainees to assume that the money will all have to be borrowed from the bank. How much should be borrowed, when, and how will this affect the surplus, assuming an interest rate of 10%.

Allow trainees up to 15 minutes to work out the amount of interest that will be paid, and elicit a set of figures similar to those given in the example. Stress that interest payments of this magnitude will in turn effect the amount that has to be borrowed, and so on..

- Stress the need for a margin of safety. Trainees may feel that it is unwise to budget for so low a cash balance as $810. The margin will depend on the accuracy of the forecasts and the possibility of borrowing more money at short notice.

- Ask trainees what the positive balances in January, February, November and December tell the manager. Elicit the suggestion that any cash beyond what is needed for day-to-day payments should be placed on deposit, to earn money for the society.

- Ask trainees what the surplus will now be. Show that interest charges of $8,900 will reduce the surplus to $210 ($9,110 - $8,900).

7) Stress that the figures are only an indication. Every society needs a cash balance for day-to-day purchases, and the objective of producing a budget is not to calculate the figures exactly but
to give an indication of the orders of magnitude of funds that will be required to be borrowed or will be able to be deposited.

Trainees have in the two previous sessions prepared a useful operating tool which has provided the following information:

- It showed what the likely final result of the society would be in 1982, so that basic corrective action could be taken if necessary.

- It enabled the manager to make decisions, when necessary, about certain discretionary items which the society might or might not afford depending on whether the money was available.

- It indicated the likely loan requirement and surplus cash position for the coming year, so that the manager could arrange the necessary facility with the society's bankers and, if appropriate, investigate alternative short term deposit possibilities to make the best use of the society's surplus funds when they were available.

Trainees may still feel that budgets of this sort are somewhat deceptive, because circumstances always change and estimates are proved inaccurate. Stress that the main purpose of budgeting is to enable managers to respond more effectively to unexpected change. This will be demonstrated in the following session.
SESSION 6.4

DEALING WITH CHANGE

Objective: To enable trainees to use an operating and a cash budget as an aid to dealing with unexpected events.

Time: 12 to 2 hours.

Material: (1) Operating and Cash Budgets for the Controlled Co-operative Society from the previous two sessions.

(2) If adequate chalkboard, OHP or flip-chart space is not available, it may be appropriate to summarise each "event" on a separate handout, and to give them to the groups as each is announced.

Session Guide:

1) Ensure that all trainees have completed copies of the Operating Budget and Cash Budget for the Controlled Co-operative Society. Divide them into groups of no more than three members. They are to act as the Management Committee of the Controlled Society. The session will simulate the 12 months following the time at which the case study in Session 6.2 was written, and trainees will be faced with a number of decisions which they have to make. The budgets they have previously prepared will enable them to see the implications of the changes that are announced, to identify various ways of solving the resulting problems and to decide which is best.

2) Write a list of months from November 1981 to December 1982 on the chalkboard/OHP. As each of the incidents listed below is presented, indicate by marking the month which has been reached. Remind trainees that the interest rate is 1% a month.

The sequence of dealing with each incident should be as follows:

(a) Present the incident and note salient data if necessary on the chalkboard/OHP.
(b) Allow groups up to ten minutes to decide what changes, if any, they will make in response to the incident.

(c) Selected groups should then present their answers, which should be discussed and compared with others.

(d) Briefly present the "class solution". This should be noted by trainees, since it will be assumed for the remainder of the exercise that this solution has been followed by all groups.

(e) Proceed to the next incident.

3) **Incident One - November 1981**

The Controlled Society adopted a new method of grain storage for the 1981 crop, in the hope that grain storage losses would be reduced from the present rate of 5% to 3%. The 1982 budget is based on 3%, but the advisers who recommended the change now say that they can only expect a reduction to 4%. This is of course an improvement over last year but less than expected.

How will this affect the surplus budgeted for 1982, and what, if anything, should the manager do about it?

- The surplus will be reduced by $1,620.
- The manager need take no immediate action, but should definitely decide not to purchase new office furniture.

4) **Incident Two - January 1982**

Because of unusual weather conditions, members' maize is ready one month earlier than usual, and should be harvested in February rather than in March. If the crop is not taken into storage until March, it will lose around 1% of its value. The bank has agreed to the necessary budgeted overdraft for March, but any borrowing in February will have to bear a penalty of 1/12 per month interest over the 12% per annum rate because of the short notice.

What options are open to the manager, and which should he choose?

- The manager can refuse to take the maize until March, he can take it in February but pay in March and April as budgeted or
he can take it in and pay for it in February, bearing the penalty interest charge.

- The manager should take the members' maize into storage and pay for it in February. The loan of $50,000 will be required for one extra month, but the interest charge of 1%, or $500, is a cheap price to be paid for the benefits of accepting and paying for the maize. If members deliver but are not paid for a month, they will lose faith in the society, and if deliveries are refused until March the loss in value will lead to a reduction of about $230 in the society's surplus, quite apart from the $1,200 reduction in members' income. It is worth paying the interest for member goodwill.

5) Incident Three - April 1982

The society has taken members' crops in storage and paid for them. An opportunity has arisen for immediate purchase of the store that they have rented for many years. The owner is willing to sell it to the society for $10,000. They would have to pay in cash in June.

Should the manager recommend purchase of the store?

- It will cost an extra $100 a month to borrow the extra $10,000 needed for the store. The total cost will therefore be $700, instead of the present rent of $200 a year. The society should not buy the store, unless the present tenure is insecure or the rent is likely to be enormously increased.

6) Incident Four - June 1982

The Maize Board has an urgent and unexpected need for extra grain to meet a sudden export order. They have offered to take the Controlled Society's complete stock of 515 tonnes for $230 per tonne. This is $40 a tonne less than they will be paying in November but as they normally take no maize into stock at all until September they argue that this is a major concession.

Should the society sell its stock or not?

- The society will lose $20,600 but will gain about $4,800 in reduced interest payments. In addition, they would avoid the
risk of any further storage losses. They should nevertheless **not** accept the offer, unless storage losses are expected to cost more than $20,600 minus $4,800, that is $15,800, during the forthcoming five months. This is most unlikely.

7) **Incident Five - August 1982**

A neighbouring society is in difficulties and the Registrar of Co-operative Societies has asked the Controlled Society to take over the remaining membership of 30 farmers. Each of them farms on a similar scale to the present members of the Controlled Society and is likely to produce a similar amount of maize. There are no tangible assets to take over, but $20,000 must be invested in a new collection centre by whichever society takes over the membership.

Should the Controlled Society take on these new members, in return for building the new collection centre?

- The society gains a gross profit of $50 per tonne. Thirty new members who produce two tonnes each, if they do the same as the existing members, would increase the surplus by $3,000, before interest charges or storage losses, or any extra transport, storage or casual labour costs. They cannot be sure that the new members would remain with the Controlled Society, and their farms will tend to be more distant and their crops will therefore cost more to collect. The $20,000 would not be a good investment, the Controlled Society should only agree to take on the new members if a larger number can be persuaded to join from the same area, or if the new members can be persuaded to construct the new collection centre themselves.

8) **Incident Six - October 1982**

The four casual labourers employed to load the society's stocks for delivery to the Grain Board have refused to work for their usual wage of $45 a month. They are demanding $60 and have stopped work until this is paid. The vehicles are half loaded, and extra hire charges, as well as penalties for missing their scheduled delivery date to the Grain Board, will amount to more than the 4 x $15 extra payment being demanded. The high payment would however exceed the full time labour wage rate, and would in-
evitably be treated as a precedent by the Controlled Society's workers, and, in turn, other societies.

Should the manager agree to pay them at the higher rate?

- The members should be asked to volunteer to replace the striking workers. Wages may be increased later, but not under duress.

9) **Incident Seven – December 1982**

The crops have been sold and the society has $25,000 in the bank. A new foreign bank has recently been established and its manager has approached the Controlled Society offering 15% interest for two months firmly committed deposits of a minimum of $20,000.

Should the society deposit its money with the new bank?

- The interest earned will be $500 for two months deposit of $20,000. The money could not be withdrawn if members had to be paid early again next year, and the existing banking relationship will be disturbed. The manager should however mention the offer to the society's present bankers, and attempt to negotiate a higher interest rate to match the competition.

10) Further incidents may be included if time allows. Groups should have appreciated that decisions of this sort, which are about future actions, are far more easily, quickly and profitably made if the manager can refer to a budget which shows what will happen if no change occurs.

Ask trainees how they would have answered the questions without a budget to refer to. They would clearly have been able to do no more than to make a guess, and would have had to make a number of calculations especially for each decision, whilst the budget provided a firm basis for every decision.

Stress that all decisions need judgement. Calculations must be made to expose the hard facts underlying the decision. A manager can then weigh the intangible factors such as risk, member goodwill or similar issues, in order to make a decision. The answers
given above are only suggestions, and trainees may have good reasons for quite different conclusions.

Trainees may have found it difficult to make the necessary calculations, because they forget that data such as membership numbers were available in the case study. Stress that managers must search for information. The necessary data is never conveniently presented on one piece of paper, like a school exercise.

Budgets are also used as a control device to ensure that performance is going according to plan, to apportion responsibility for divergence from plan and to motivate corrective action. The next session will cover this use of budgets.
SESSION 6.5

BUDGETED AND ACTUAL RESULTS

Objective: To enable trainees to use budgets effectively as a measure of management performance.

Time: 2 to 3 hours.

Material: Tape Dialogue (which should have been recorded in advance with appropriate local modifications) and Handout "The Controlled Society - 1982 Results".

Session Guide:

1) Distribute copies of the handout showing the 1982 results for the Controlled Society, compared with the 1981 budget. Trainees should imagine that they are the Ministry of Co-operatives Inspector whose job it is to appraise every society's accounts and to ensure that managers have been doing their job properly. Allow trainees up to 15 minutes to examine the figures and to identify those items which are most in need of investigation. Remind trainees that under-spending can be as much of a problem as over-spending.

Ask trainees which items they would choose to ask the manager about. Stress that they should be concerned to examine, and if appropriate congratulate the manager for money saved by reduced expenditure or increased receipts, as well as asking him to explain results which were worse than expected. Elicit a generally agreed list of priority items, which should include the following:

- Sum Paid to Members for their Crops
- Sale of Crops
- Payment of Bags
- Salaries
- Transport Hire
- Interest Payments
- Overtime Payments
- Education
- Electricity
- Telephone
2) Warn trainees that they are about to hear a dialogue between the Co-operative Inspector and the Manager. Trainees will have an opportunity to comment on the inspector's questions. They will then hear the manager respond and will be asked to suggest how satisfactory it is, and what else might have been said in explanation of the variance.

Play the dialogue, or if a tape recorder is not available ask two trainees to play the respective roles. Do not hand out the transcript of the dialogue to the trainees. In any case, the dialogue should be stopped for comment and discussion after each question by the Co-operative Inspector and after the subsequent answer by the manager.

3) After each question by the inspector, elicit comment on the validity of his view and suggestions as to how the manager might respond either in order to correct any misapprehension or, possibly, to conceal any inefficiencies which the budget might indicate.

After the manager's answer, ask trainees whether they would have suggested any better answer, and whether they as the inspector would have been satisfied with what they heard. Trainees should also be asked to suggest how the budgets might be improved in order to be a more effective indicator of performance.

4) **Dialogue Item A**

The inspector is obviously wrong to criticise the extra money paid out to members without first inquiring whether this was a result of higher volume or of higher prices or of some combination of the two.

The budget should have shown both the volume and the price and any resulting variance should be analysed in order to show which factor was responsible for the change.

**Dialogue Item B**

The inspector is again incorrect to congratulate the manager for reduced salary expenditure without first inquiring why this has occurred. The manager should in fact be blamed for failing to re-
place the accountant and this simple example indicates the danger of looking at budgeted figures without any understanding of the facts underlying them.

**Dialogue Item C**

The excess overtime paid was more than double what was budgeted, and this cannot be explained by the reduction in casual labour alone. The inspector should have been satisfied by the manager's response and should have demanded further information as to why the overtime costs were so high.

**Dialogue Item D**

The volume purchased has increased by 22% and transport expenditure by 10%. The change is the result of greater volume of work and higher prices, or some misuse of transport due to inefficiency or other causes, and the inspector should not accept the manager's answer.

**Dialogue Item E**

This may be a reasonable experiment but is the type of item for which a supplementary budget should have been raised, and if procedures allowed approved, before making the purchase. When excess expenditures of this kind are analysed after the event it is difficult to know whether they are being used to conceal extravagance or waste.

**Dialogue Item F**

The inspector's congratulations for reduced electricity consumption are obviously misplaced and the manager is perhaps to be congratulated for admitting the real cause of the saving. Here again, the figures should have been annotated with some indication of the cause in this case.

**Dialogue Item G**

Here again, saving is not an indication of good management but of failure to undertake necessary activities. Education expenditure can indeed be undertaken without any useful results and it may be better to save the money rather than to spend it in order to show that the budget has been adhered to, but education is an item
whose quality can really in no way be assessed by reference to budgets.

Dialogue Item H

The same comments apply to this as to the electricity.

Dialogue Item I

The manager's explanation is not acceptable. In an item of this size the budget should have been corrected even if the mistake or change was appreciated after the initial annual budget was approved.

Dialogue Item J

Here again, the inspector should demand that the manager show exactly how the reduced sale proceeds were caused by reduced quality or reduced price in spite of the increased production. The manager's reply is not satisfactory.

5) Ensure that trainees fully understand how to analyse variations from budget in order to determine their causes.

Set the following exercise on the chalkboard/OHP and allow trainees up to ten minutes to attempt this on their own:

Three co-operative societies have budgeted for sales of 100 tonnes of grain at $50 a tonne. Their actual results are as follows:

Society A = 110 tonnes at $52
Society B = 140 tonnes at $32
Society C = 85 tonnes at $59

Calculate the actual sales achieved by each society and work out how much of the variation from budget was the result of the price difference and how much was caused by the volume difference.

6) Ask a selected trainee who appears to have successfully completed the exercise to explain his results and ensure that all trainees appreciate the method of analysing variations from budget. The correct answers are as follows:
Society A

Total Sales $5,720

Price Difference 100 tonnes x $ 2 $ 200
Volume Difference 10 tonnes x $52 $ 520
Total Difference $ 720

Or

Price Difference $2 x 110 tonnes $ 220
Volume Difference 10 tonnes x $50 $ 500
Total $ 720

Stress that it does not matter which way the calculation is done. The technique shows approximately how much of the difference is due to price and how much to volume changes.

Society B

Total Sales $4,480

Price Difference 100 tonnes x $18 - $ 1,800
Volume Difference 40 tonnes x $32 + $ 1,280
Total Difference - $ 520

Society C

Total Sales $5,015

Price Difference $9 x 100 + $ 900
Less Volume Difference 15 tonnes x $59 - $ 885
Net Difference + $ 15

Stress that figures which are very close to or actually the same as the budget may conceal serious management failures because one uncontrollable factor has compensated for some inefficiency. Major items should always therefore be analysed in volume and price terms.

Ask trainees what other types of income or expense should be analysed in terms of their volume and their price.

Clearly minor items need not be analysed in this way, but any sort of significant supply, wages, interest payments and other items where both the quantity and the price can vary should if they are significant be analysed in this way. Stress once more that the fact that the figures are close to or the same as the budget does
not necessarily mean that management has performed up to budget in every way.

7) This item should have made trainees aware that analysis of budgets, and of variances from them can be carried out in very great detail. Conclude the session by stressing that quantitative analysis, either of initial budgets or of actual results when compared with them, is no substitute for effective day to day management of people who actually perform the tasks whose results are reflected in the figures.

Budgets should mainly be used at all levels themselves to monitor and improve their performance, rather than as a blunt and largely ineffective tool which deludes senior managers into believing that they can inspire and motivate their subordinate staff purely by looking at figures rather than working with them and monitoring their day-to-day performance on the ground.

The most effective financial manager is the person who is familiar with what is actually happening, as well as with the figures. He will be able to identify problems well before they are revealed in the accounts.
## The Controlled Society - 1982 Results

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### Income

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<th>Variance</th>
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<td>(970)</td>
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<td>Rent Received</td>
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<td>10</td>
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<td><strong>Total Income</strong></td>
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<td><strong>Surplus</strong></td>
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Good afternoon, I have examined the Statement of Expenses and Income for the Controlled Society for 1982, and I have compared these figures with the budget which my office approved in November 1981. The results are not wholly unsatisfactory, but it is obviously disappointing to see the budgeted surplus turned into a loss. Before going into details, perhaps you could very briefly explain some of the more obvious variances which have contributed to the difference.

Of course, not everything has gone according to plan, but we are reasonably satisfied that thanks to everyone's hard work and loyalty the results have been as good as could have been expected.

First of all, I note that you have spent $3,080 more than planned on members' crops. This is the single most important variation from the budget, what went wrong?

Nothing at all went wrong, in fact our members produced 22% more crops than were expected. Naturally we paid them the full price, and we considered this satisfactory for the members and the society.

Yes indeed, it is a pity that the final result is not similarly improved. You appear to have saved $200 on salaries. When there is such pressure for increases this represents a very considerable restraint. Congratulations!

Well, it was not quite like that. In fact, the accountant left in October and we have not been able to replace him.
Inspector: I see. What about the overtime payments for labourers? They seem to have been more than double what we expected. This can scarcely be justified by 22% greater than expected deliveries, and wage rates in the country at large have not doubled. What is the cause of this?

Manager: Well, we had some labour trouble with the casual workers at the loading time, and rather than pay the outrageous sums they demanded I decided to ask our permanent labour to do overtime instead in order to get the crops loaded in time. They responded magnificently, and the extra payments are a small enough reward for all they did.

Inspector: Transport hire charges are more than 10% over budget, although we already allowed 20% increase over last year's to all societies, in view of high fuel and vehicle costs. How can you explain this?

Manager: Well, we did have to collect 14 tonnes more grain than we budgeted for, and this costs money. We did go out to tender to the usual local contractors and these are the best prices we had.

Inspector: I see, what happened to the bags? Did they get burnt up, did members sell them and demand more or what?

Manager: No, we had expected to replace the normal 20% or so of the old jute bags, but a salesman came along with a new
type of bag which costs 50% more but are said to last twice as long. We bought a thousand of them, and we shall monitor their performance carefully. If they do what the supplier said, we shall gradually replace all bags with the new kind.

Inspector: I hope it works out well. Your electricity consumption is most commendable. Your staff have obviously taken the Government's call for economy very seriously, and I propose to publicise your success as widely as possible. If every society in the country did the same, we would have thousands of tonnes of fuel, and significantly reduce the load on the generating plant. It's a splendid effort.

Manager: It's nice of you to be so complimentary, but the reasons are rather different. The electricity was cut off nearly every day and most evenings, so we could not use the air conditioning or the fans or lighting in the store. I wish we had been able to spend what we budgeted or more.

Inspector: Oh, well I understand. You seem to have saved a fair bit of money from your education budget too. Education is important, but it need not cost money, and it is admirable to see how you have managed to avoid any specific expenditure on this at all.

Manager: Thank you. We were very busy last year, we had hoped to send the accountant on a course at the end of the year, but then he left the society, and the members seem to get on very well without any formal courses. We are always advising them whenever we meet them, and formal courses seem rather difficult to fit in.
Inspector: I see. The telephone has been another big saving too. In our Ministry we spend thousands on the thing, mostly secretaries chatting to their boyfriends I'm sure. You have controlled it very well.

Manager: Rather like the electricity I'm afraid. The telephone was out of order for six months, and after a great deal of arguing we managed to get the telephone company to withdraw the rental charges.

Inspector: I suppose things are a bit primitive up here. Interest charges seem to have gone way up though, $1,800 extra has a far more important impact than a few savings on the telephone or electricity charges. What's gone wrong there?

Manager: The higher interest rates really hit us I'm afraid. We all know how much more we have to pay on housing loans, and the society is just as badly off.

Inspector: Yes, it was a problem for all of us. What about the $970 shortfall in the sale of crops to the Maize Board? That's a nasty blow, after all the high expectations and the higher prices that were offered. What went wrong there?

Manager: After we had set the budget, we found that we would not succeed in getting the storage loss down to 3% from 5%
by using the new storage method. We did get it down to 4%, which was something, and we'll try to do better than that this year. We were just too optimistic I suppose.

PAUSE J2

**Inspector:** I see, well you seem to have explained all the problems fairly well. Please let me have a summary of what you have told me in writing, and let me have a report as soon as possible. All in all, you seem to have done very well.
action commitment

Session 7.1  Action Commitment
SESSION 7.1

ACTION COMMITMENT

Objective: To enable trainees to apply what they have learned to their own situation, to develop a solution to a specific problem with the assistance of the group and to commit themselves to its implementation by a given time.

Time: Up to one day.

Session Guide:

1) Remind trainees of 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.

2) It is very helpful to have a "bridge" between the classroom and the societies. Remind trainees of their obligation to make an "action commitment" at the end of the course, by describing some thing they are going to do as a result of the course and by committing themselves to have reached a certain stage in its implementation by a certain date.

During the course trainees should have been continually reminded of their responsibility to make this action commitment. This final day gives them the opportunity to develop a solution to this problem, using what they have learned during the course and in consultation with a number of other trainees, and then to present the solution to the whole group for criticism and comment.

3) The time available should be divided into two periods – the consultancy period and the presentation period. During the consultancy period the trainees should be divided into groups of three to four people. The groups should not contain trainees of the same co-operative and ideally should include trainees from different
backgrounds. In this period each trainee should be allowed about 30 minutes to present his problem and proposed solution to the other members of the group, who are expected to comment and help develop a solution to the problem, together with a timetable for its implementation.

During the presentation period each trainee should have at least ten minutes to present his problem and solution to the whole group, and to hear and react to at least a few of their comments. In this brief period the trainee must:

- Describe the problem.
- Describe the solution.
- Describe how the solution will be "sold" to whoever is involved.
- State a specific date by which the plan will be completed.

Trainees who are in a position of authority in a co-operative may feel that it is unnecessary to "sell" their idea to their subordinates or to committee members. Such trainees should be warned that subordinate staff will contribute more efficiently to the work of the co-operative if they believe what they are doing is useful rather than if they do it out of fear or simple obedience.

The actual timing of the "consultancy" period and the "presentation" period will depend on the number of participants in the course. In order to ensure that sufficient time is allowed to each trainee the normal session hours should be extended or some time should be allowed during the previous day. The session is important since it provides an effective "bridge" between the course material and the normal environment of the trainees. It also ensures that the trainees regard the completion of the course not as the end of training but as the beginning of personal improvement on the job.

The problems and their solutions will of course be unique to each trainee and his organisation, but typical examples might be as follows:
**Problem:** My society frequently runs out of money at the most inconvenient moments, with serious effects on member and supplier goodwill.

**Solution:** Before the end of November I shall have produced a cash budget for the forthcoming year in order to obtain advance warning of any problems, and latest 1 January I will present a plan to the committee on how the problems should be avoided next year.

**Problem:** Accounts receivable are steadily increasing and nothing seems to be achieved by our circular letters and reminders.

**Solution:** Immediately upon return home I shall "age" all the accounts, as I have been taught in this course. In this way I will identify the accounts which give the most cause for concern, and I will direct my recovery efforts to those accounts. In the next committee meeting I will present a plan for acceleration of payments, with a specified objective to be achieved by 1 March.

**Problem:** (of a Union Manager): Members, and co-operative inspectors, criticise all societies for bad management, but have few suggestions as to what is really wrong or what should be improved.

**Solution:** In January I will have a meeting with the managers of all the primary societies, when I will teach them to calculate certain financial ratios. We will then also work out a programme for regular follow-up of results and comparison of financial ratios between societies, with the aim of improving our activities up to the level of the best.

**Problem:** Members continually complain about the small pay out of the surplus and seem to be unaware of the improved services we are offering them every year.

**Solution:** I shall prepare a very simple statement of sources and application of funds for presentation in a picture form at the next annual meeting in order to show members where funds have come from, and how we are using them for their benefit.
Trainees should be encouraged to arrange to meet each other at work after the course for continued "group consultancies". The instructor should also undertake to visit or otherwise contact each trainee around the promised date of completion of the action plan, in order to ascertain whether or not it has been implemented. It must be stressed that this is not in order to evaluate the trainees, but the training course itself.

If possible a brief reunion should also be arranged, to take place after an appropriate interval. If this can be done, trainees should be asked to state in this session exactly what they plan to have achieved by the date chosen for the reunion, so that they can on that occasion compare progress with the stated intention. This is not only a useful evaluation device, but more importantly, the public commitment and knowledge of the forthcoming reunion will be a powerful incentive to actual implementation.