MATCOM

BASIC ECONOMICS OF AN AGRICULTURAL CO-OPERATIVE

a learning element for staff of agricultural cooperatives

international labour office, geneva

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.

BASIC ECONOMICS OF AN AGRICULTURAL CO-OPERATIVE

Contents

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PREREQUISITES

To benefit from this MATCOM Learning Element, you should be able to perform simple percentage calculations.

HOW TO LEARN

- Study the Element carefully. Give written answers to all the questions in the Element. This will help you not only to learn, but also to apply the knowledge in your work at a later stage.

- After studying the Element on your own, discuss it with your colleagues and your instructor, then take part in the group exercises organised by your instructor.

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AN AGRICULTURAL CO-OPERATIVE

A farmer needs to buy "inputs" for his farm, things like seeds and fertilisers. After harvest time he wants to sell his produce.

Many farmers believe that it would be better to buy their inputs together and to sell their total produce together, rather than each individual buying and selling as best he can. To do this they form agricultural co-operatives.

Such co-operatives are called marketing and supply co-operatives, because marketing means to find ways of selling, supply means to arrange for things that are needed.

Some agricultural co-operatives offer very good services to their members. Other co-operatives may do well at first but soon get into trouble. How is it that co-operatives develop so differently?

Of course, the economy of a co-operative must be in order; if not,it may soon find itself out of business. Marketing and supply services can function properly only if the co-operative leaders understand the "economics" of running a co-operative.

In this MATCOM Element we will study the basic economics of agricultural co-operatives. First, we will learn about the marketing business: how it works from an economic point of view. Then we will go on to the supply services. Finally, we will study the way several different co-operatives operate, in order to learn about some common problems. Check the list of contents on page 1 before you begin reading.

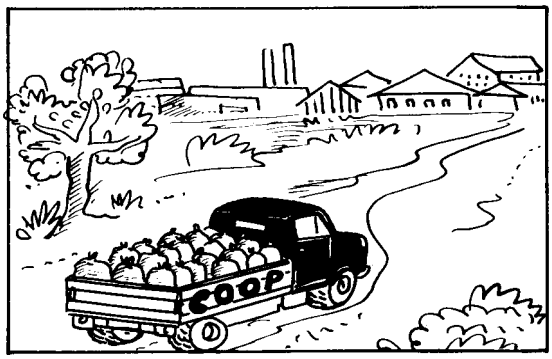
MARKETING

The marketing service of a co-operative is - in principle - very simple.

How it works:

- The members deliver their produce to the co-operative.

- The co-operative sells the produce "on the market" at the best possible price.



- The co-operative passes on the money to the members who have delivered the produce.

When we talk about "the market", we do not mean one specific market-place. Instead, we mean all possible buyers of the produce. It could be mills, factories, foodstores, a marketing board, and so on. The co-operative has to find the best buyer "on the market".

Let us compare a marketing co-operative with a private produce-dealer. What is the difference?

The private dealer:

A private dealer usually buys the produce from the farmer. He pays the farmer as little as the farmer will accept and then he sells it for as much as he can get. The profit goes into his own pocket.

The co-operative:

The aim of a co-operative is to make the best profit it can for its members, the farmers. The co-operative collects the produce and sells it - on behalf of the farmer - for as much as it can get. The entire income belongs then to the members themselves. There is no private dealer or other "middle man" to reduce the producers' profit.

We have said that the marketing aspect is - in principle - very simple. In practice, however, the actual procedures maybe rather complicated. To make sure that the produce is sold for the best prices and that their business affairs are properly handled, the members of the co-operative need to appoint a management committee and a manager.

The committee and the manager will have many "economic matters" to discuss. Here are some examples of such questions:

- What will it cost to run the co-operative society (wages, transport, etc.)? Who will pay these costs?

- When and how should we pay the members for the produce? (The problem is that members want payment already when they deliver the produce, but the co-operative may not have any money until it has sold the produce on the market later on.)
- How should we manage our business so that farmers really benefit from being members of a co-operative?

On the following pages we will take up these questions as we discuss "the basic economics" of a marketing co-operative.

Capital is crucial

Without a certain amount of money (CAPITAL), a marketing co-operative cannot help its members. Think about all the expenses involved in collecting, storing and marketing the produce:

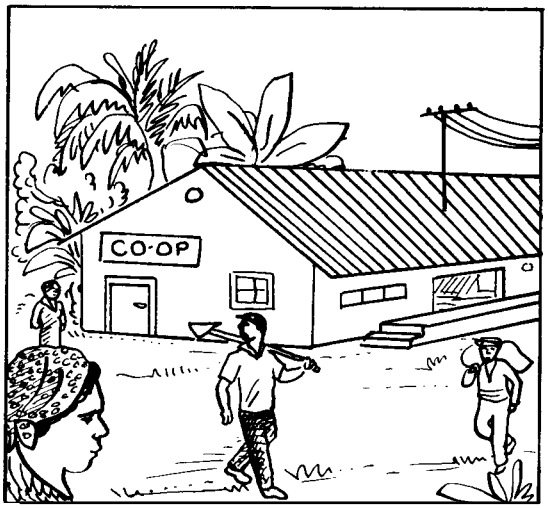
- A warehouse will have to be bought or rented so that members of the co-operative can bring all their produce together in one place.
- The co-operative will need equipment, such as a weighing machine, a safe to put cash in, a table and some chairs for the office.
- The co-operative will require cash to pay its members for their produce. (It will later be able to recoup this money when it sells the produce on the market, but farmers will want at least an "advance payment" on delivery.)

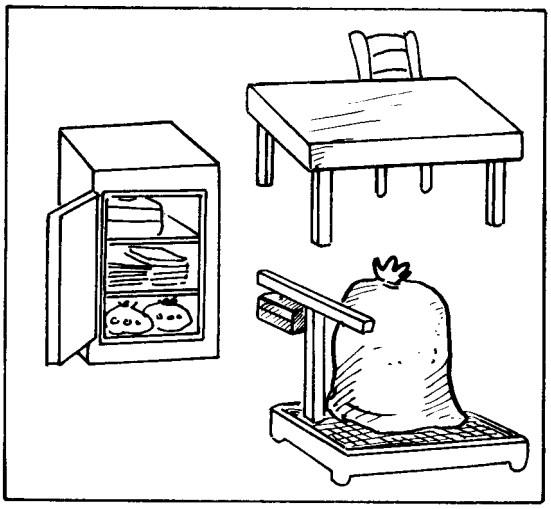
So, capital is needed for:

buildings

equipment

advance payments.





Raising the capital

The capital, or the money which must be raised to start a co-operative, may come from several sources:

- Share capital

  Members can each put in a small amount of money, which will give them a share in the co-operative. This is called "share capital".

- Loans

  Being, small farmers, the members may not be able to contribute all the money the co-operative needs to start business. Therefore, the co-operative may have to ask for loans or contributions from other sources, e.g.

development funds or banks. The lenders will probably require the co-operative to pay <u>interest</u> and to pay <u>back</u> part of the loan every year.

No matter where a co-operative obtains its capital, it is important that the co-operative have enough money to start up its business and to keep it going.

Let us study the case of the Valda Agricultural Co-operative, which started some years ago with marketing services for its members, who were maize-growers. Capital was raised as follows:

Share capital contributed by members	T$40,000*
Grant from the local government	10,000
Loan from the co-operative bank	40,000
TOTAL	T$90,000

The money was used as follows:

Construction of the warehouse	7$50,000
Warehouse and office equipment	5,000
Cash remaining	35,000
TOTAL	T$90,000

<u>Fixed assets</u>

The Valda Co-operative started with founding capital of T$90,000. The members spent T$55,000 on building a warehouse and buying equipment, including a weighing machine, wooden pallets to stack the bags of maize, some other store

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* *We use an imaginary currency here, because this booklet is used in many countries. We call it "Training dollars and cents" (T$ and c).*

equipment and office furniture. Without these things, the co-operative cannot operate. They are not for re-sale to anybody. They are FIXED ASSETS of the co-operative and will be used for several years in running the business.

Working capital

After paying for the warehouse and for essential equipment, the Valda Co-operative had T$35,000 remaining. Most of this money was used to pay members an "advance" when they delivered their maize. This was a cash payment towards the full price of their crop.

Later on, the maize was sold on the market. Buyers paid the Valda Co-operative much more than T$35,000, so the members were now given an extra "final payment". But the co-operative had to keep at least T$35,000 so that it would be able to pay an advance on the next crop.

This is how business works. The members are paid, the co-operative recoups the money from the buyers, some of this money is used to pay for the next crop, and so on ....

The T$35,000 was the Valda Co-operative's WORKING CAPITAL. It is the working capital that makes the trading possible. It must always be available, not only in the beginning, but for as long as we want the business to continue.

The Valda Co-operative was very careful with its working capital. Of course, sometimes it had little money left, but then the warehouse was full of produce. Once produce was sold, the co-operative had plenty of money again. The working capital represents the value of the available money, plus the stock of produce in the warehouse, at any one time.

A sure way for a co-operative to go out of business is for it to spend the working capital unwisely. It will then not have enough money to pay its members for their crop at the next harvest time.

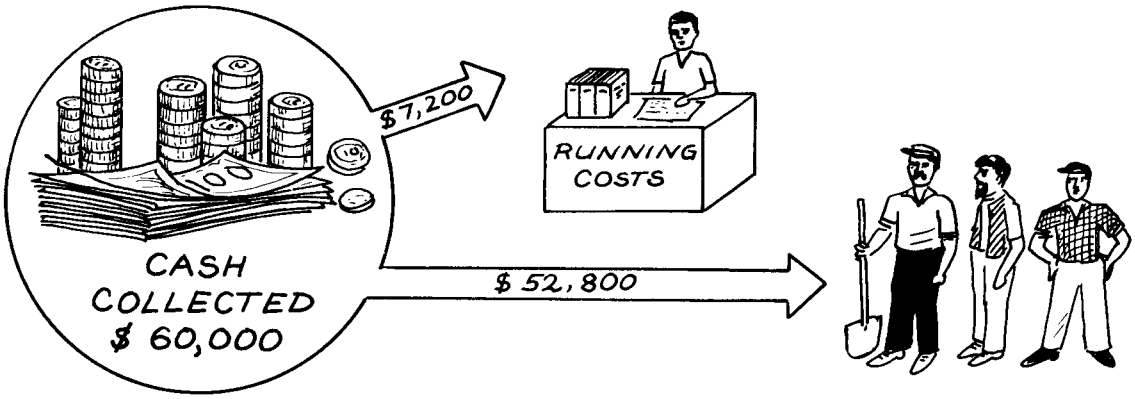
Running costs

It costs money to run a co-operative business. The staff must receive their wages, assets and stock must be insured, the crop must be transported from farmer to buyer, etc. Where might a co-operative find the money to pay for all these RUNNING COSTS? Let us take an example from the Valda Co-operative again.

One year the Valda Co-operative received a total of T$60,000 after selling the maize crop. It had already paid T$35,000 to its members in advance, and was now in a position to pay them another T$25,000. The co-operative would still be left with the T$35,000 working capital that it had from the beginning, and this would be set aside again to pay for the next maize crop.

But the co-operative cannot give the members all the money that has been received for the maize. The co-operative must keep some of it as a COMMISSION or LEVY in order to pay for the running costs. The running costs could be as high as T$7,200 this year. So before giving members their final payment, the co-operative must keen back a commission of T$7,200 from the income it will distribute.

T$60,000	-	T$7,200	=	T$52,800
SALES OF MAIZE	-	COMMISSION FOR THE CO-OPERATIVE	=	TOTAL PAYMENT TO MEMBERS



The commission or levy taken on the sales of produce in order to cover the running costs is often given as a percentage of total sales. This is calculated as follows:

$$\frac{\text{Running costs}}{\text{Total sales}} \times 100$$

For the Valda Co-operative this is:

$$\frac{\text{T\$7,200}}{\text{T\$60,000}} \times 100 = 12\%$$

So it can be seen that the Valda Co-operative was working on a commission of 12%.

Surplus

The sales and the running costs of a co-operative are difficult to predict exactly. But a wise co-operative manager always tries to plan and run the business so that there is some money left over at the end of the year, once all costs have been paid. This is what happened in the Valda Co-operative:

	COMMISSION	T$7,200
-	RUNNING COSTS	- 6,000
=	NET SURPLUS	T$1,200

The running costs were lower than the commission, so there was some money left over. This is called the NET SURPLUS. For a private dealer, this is the NET PROFIT. He puts it into his own pocket. But a co-operative is different. We said on page 5 that all the profit in a co-operative goes to the members, because they are the owners of the business.

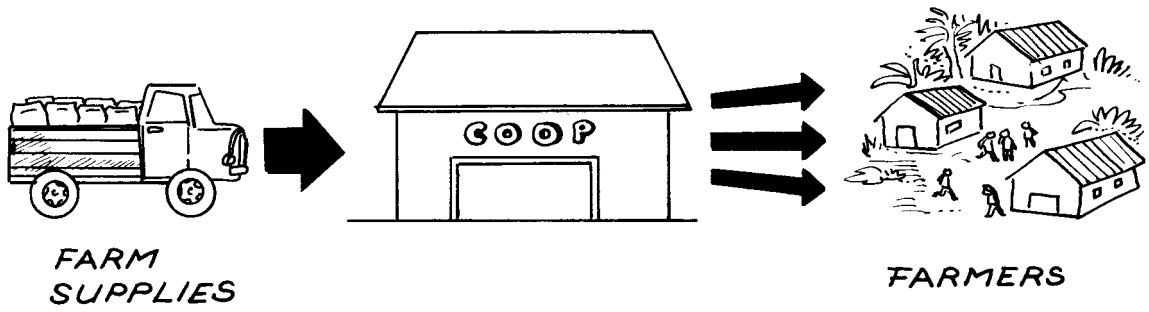
In a co-operative the net surplus belongs to the members. On page 20 we will discuss how the net surplus could most productively be used.

SUPPLY SERVICES

The Valda Co-operative was quite successful in its efforts to market the members' produce. After some years, it was suggested that they should also start to offer the members another service: supplying some "farm inputs".

How it works

Based on the necessary surveys and planning, it was decided that the co-operative should buy fertilisers and insecticides from suppliers. These should then be re-sold to the members of the co-operative.



Because the co-operative was buying supplies for all its members, it could buy in bulk, at a cheaper rate. In fact, it could buy at the same prices paid by private traders. But a private trader would tack his own profit onto this price before selling to the farmers. The co-operative, on the other hand, is made up of farmers, and any profit (surplus) it makes on the business belongs to them.

In the same way that it cost the Valda Co-operative money to provide a marketing service to its members, so it would also cost money to provide a supply service.

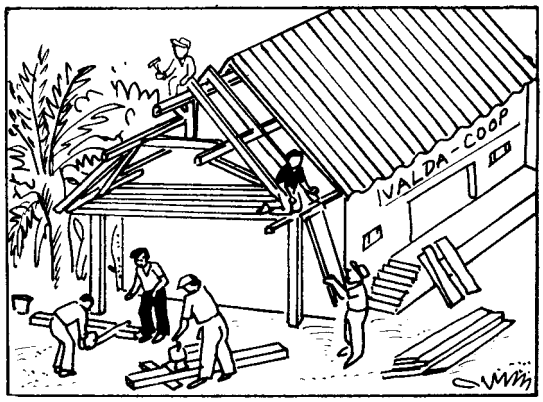
The management of the co-operative had to plan the new business carefully. In particular they had to think about the capital they would need to raise, and about how they would cover the extra running costs.

Capital

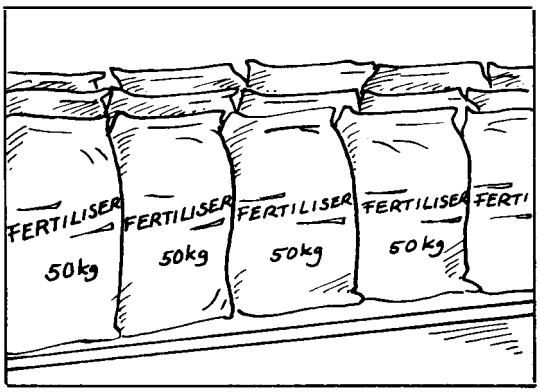
To start a supply service the Valda Co-operative needed more capital. First, they had to extend the warehouse to make room for a stock of farm supplies and second, they had to purchase the farm supplies.

The co-operative was able to raise a total of T$22,000. Part of this money came from resources which had been built up by the marketing business over a number of years. The rest of the money was provided by a bank loan.

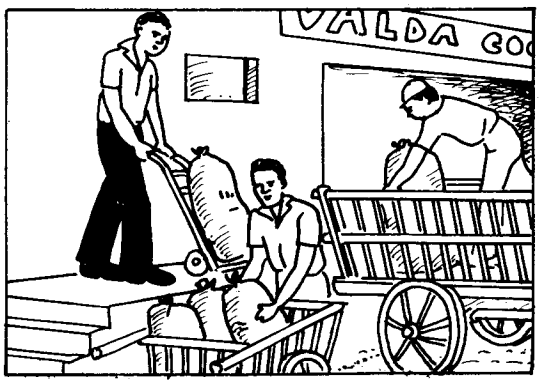
T$3,500 was used for the extension to the warehouse. The members of the co-operative did a lot of the work themselves, which kept the cost down.



Most of the remaining T$18,500 was used to buy a stock of fertilisers and insecticides.



These supplies were sold to the members. The sales provided money again to buy new stock. Trading continues ....



Running costs

Suppose that the co-operative buys a drum of insecticide at T$15, including the cost for delivery to the co-operative. This is what we call the COST PRICE. Suppose also that the co-operative sells the drum to a member at the same price, T$15. In this way the co-operative would get back its working capital and be able to buy a new drum of insecticide. The business can go on ....

But there are also running costs involved in providing a supply service. The marketing business paid its costs by taking a commission on the sales of maize. The supply business can do something similar by adding a MARK-UP to the cost price and in that way "earn a MARGIN" on the sales to cover the running costs.

For instance, if the co-operative adds a mark-up of T$2 on the drum of insecticide, it can sell it at T$17.

T$15 COST PRICE	+	T$2 MARK-UP	=	T$17 SELLING PRICE

The Valda Co-operative worked out that the total running costs for the supply services would be T$1,800. Thus, they must have a margin of $1,800 on the sales of supplies just to cover the running costs.

This equation shows how the Valda Co-operative planned its supply business:

T$18,000 EXPECTED SALES	-	T$16,200 COST OF SUPPLIES	=	T$1,800 MARGIN

The margin can also be expressed as a percentage of the sales. Valda's margin was T$1,800 out of the total sales of T$18,000. That is a margin of 10%.

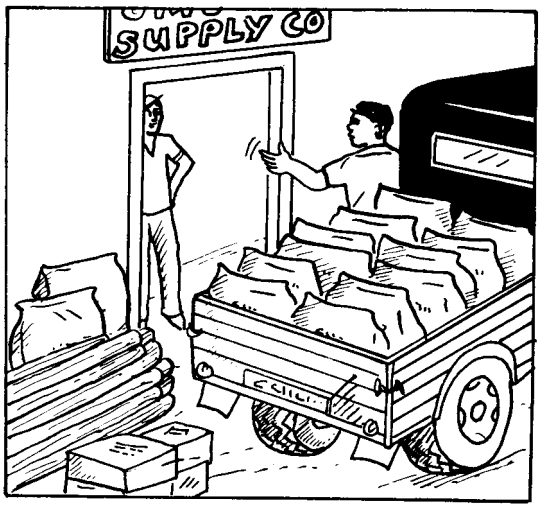
$$\frac{\text{T\$1,800}}{\text{T\$18,000}} \times 100 = 100$$

The management decided to have a bit lower margin on fertilisers, but a higher one on insecticides. On average, the margin was 10%, enough to cover the running costs.

Unfortunately, something nearly always happens to reduce the expected margin. Let us take an example:

The Valda Co-operative bought 100 bags of fertiliser. The cost price was T$15 each. The mark-up was T$1.30 on each bag, so a margin of 100 x T$1.30 = T$130 was expected for the whole lot.

But two bags were left behin when the truck was loaded. Nobody noticed it. This meant that the income from the sales of this lot was reduced. We say that they had a "leakage" of T$32.60.



Expected sales	100 x T$16.30	T$1,630.00
Actual sales	98 x T$16.30	T$1,597.40
Leakage		T$ 32.60

Very often, thanks to leakage and other losses, the actual margin is lower than the expected margin. It is important for a co-operative manager and his committee to remember this when they decide on their trade margins.

Surplus

We remember from page 11 that the Valda Co-operative made a surplus on their marketing business - there was some money left over when all expenses had been paid. It is equally important that the supply business give a surplus.

The Valda Co-operative had the following result from their supply services one year:

SALES OF SUPPLIES	T$26,000
COST OF SUPPLIES	- 23,400
GROSS SURPLUS (MARGIN)	T$ 2,600

What is left when the co-operative has paid the suppliers for all the goods is the margin, or GROSS SURPLUS. And we know what the gross surplus should be used for: to pay the running costs.

GROSS SURPLUS	T$2,600
RUNNING COSTS	- 1,800
NET SURPLUS	T$ 800

The amount of money left to the co-operative and its members after paying all the costs is the NET SURPLUS. On page 20 we will discuss what the net surplus should be used for.

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You have now examined some very basic principles affecting co-operative business. Everyone - members, committee and staff - should have a good understanding of these matters.

The manager, whose job it is to run the day-to-day business of the co-operative, must have a more thorough understanding of these commercial terms as well as the relationships between them.

Before answering the questions below, work through the summary on pages 18 - 19 to check that you have understood the basic principles.

?

1.1 Explain the basic functions of a marketing co-operative.

1.2 Will farmers make more profit by:
- selling their produce individually to private dealers, or
- joining a co-operative and selling all of their produce co-operatively?

Give reasons for your answer.

1.3 Explain the basic functions of a supply co-operative.

1.4 How much capital did your own co-operative start with?

1.5 How was the money raised?

1.6 Make a list of the fixed assets of your own co-operative and put an approximate value next to each item.

1.7 How much working capital does your own co-operative have?

1.8 How high were the running costs of your own co-operative last year?

1.9 How much commission (in per cent) did your co-operative deduct from the sales of produce last year?

1.10 What was the margin (in per cent) on the sales of farm supplies?

THE OPERATIONS – A SUMMARY

Marketing Business

	SALES	T$140,000	On behalf of the members, the co-operative sells the produce at the best poss ible price.
-	TOTAL PAYMENT TO MEMBERS	- 132,200	Most of the money received is given to the producers (they may have received some in advance).
=	COMMISSION	T$ 16,800	The co-operative keeps a fixed percentage (a com-mission) to cover running costs.
	COMMISSION	T$16,800	The commission must be high enough to pay for wages and other costs.
-	RUNNING COSTS	- 13,200	
=	NET SURPLUS	T$ 3,600	After the running costs are paid, there should still be a small amount left over.

Supply Business

	COST PRICE	T$15	When the co-operative buys farm supplies from the wholesalers, it pays the cost price.
+	MARK-UP	+ 2	To that price it adds the mark-up ...
=	SELLING PRICE	T$17	so that it gets a selling price, the price the members are expected to pay for the supplies.

	SALES	T$38,000	The sales will bring more money into the co-operative than it has paid for the goods ...
-	COST OF GOODS	- 34,200	
=	GROSS SURPLUS	T$ 3,800	so there will be a gross surplus.
			The income from the sales is used to buy a new stock of supplies ...
	GROSS SURPLUS	T$3,800	and the gross surplus should cover the cost of running the supply business.
-	RUNNING COSTS	- 2,600	
=	NET SURPLUS	T$1,200	After the running costs are paid, there should still be a small amount left over.

HOW TO USE THE NET SURPLUS

When a co-operative makes a net surplus on the marketing of produce, it means that the commission was higher than needed to cover running costs. The members could, in fact, have been paid a bit more for their produce....

Similarly, when the co-operative makes a net surplus on its supply services, it means that members were charged more for their farm supplies than was actually necessary!

Therefore, you might think that a co-operative should not make a net surplus. A co-operative should serve its members rather than seek to make surplus or "profits". In this chapter we will show, however, that in order to give good service a co-operative needs a net surplus.

The reasons are the following:

● Allow for the unexpected

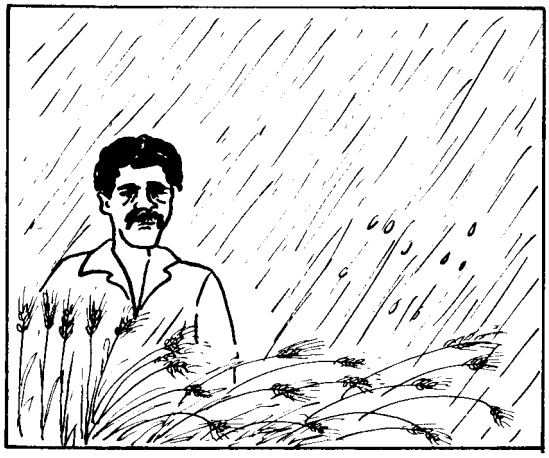
Business plans and forecasts are based on certain assumptions about the future. Because the future is uncertain, it is unusual to get exactly the result you planned for. If you plan for costs and gross surplus to be exactly equal to each other (which would give you neither a net surplus nor a loss), you may often end up with a loss.

Planned		Actual	
Gross surplus	T$5,000	Gross surplus	T$5,000
Running costs	5,000	Running costs	5,800
Net surplus	0	Net ~~surplus~~ Loss!!!	T$ 800

To aim for a small net surplus means to aim for a "safety margin" in case of unexpected events leading to a drop in sales or an increase in costs. Bad weather or a crop

disease may considerably reduce deliveries. This means less income from sales and therefore less commission. Or again, the cost of transport might go up and increase your running costs.

Aiming for a net surplus helps to avoid a loss.



- Improve the co-operative and its service

In many countries the co-operative law says that 25% of the net surplus must be placed in the co-operative's "reserve fund". This money becomes the co-operative's own capital. The money can, for instance, be used as working capital to increase the range or quantities of farm inputs. It can also be used for replacing or buying new fixed assets. In this way, the net surplus can be used to improve services to members.

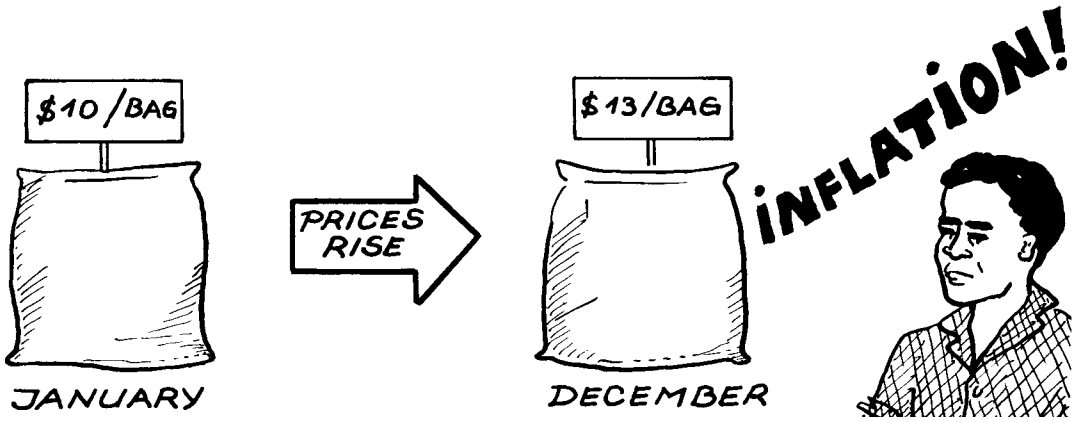
- Replace borrowed capital with the co-operative's own capital

The Valda Co-operative borrowed T$40,000 from the bank. This money must be paid back. Suppose Valda repays T$4,000 each year. What happens to the total capital of the co-operative? It decreases, unless it is replaced by new capital. The net surplus can be used to replace the capital borrowed from the bank with capital owned by the co-operative. Thus, the amount of capital available is maintained.

- Maintain stock levels

Extra working capital is needed to replace stock when prices are rising. If, for example, the co-operative has been buying 300 bags of fertiliser at a price of T$10 a bag, it would need T$3,000 to make this purchase. If the price goes up to T$ll a bag, the co-operative would need T$3,300 to buy

the same quantity. The working capital must go up by T$300 just to maintain the same stock level. This is possible if a net surplus is available. So, a net surplus can be used to maintain stock levels when cost prices are rising.



● Pay interest on shares

It is common to pay members INTEREST on their shares. For example, it might be decided to pay members T$0.05 each year for every T$1.00 they have contributed to the co-operative. A modest payment of interest recognises that members would have got interest on their money if they had put it in a savings account at the bank instead of buying shares in the co-operative. Interest, however, can only be paid if there is a net surplus.

● Pay bonus

When all the needs mentioned above have been considered, there may still be a surplus left over. The co-operative could then give this money to the members.

One important co-operative principle says that this surplus should then be distributed in strict proportion to the business each member has done with the co-operative. Members who have patronised the co-operative the most, receive more money than those who have had little business with the co-operative. This payment is called a BONUS or "patronage refund".

Distributing the net surplus - one example

One year the final accounts of the Valda Co-operative showed the following results:

MARKETING

(SALES OF PRODUCE T$273,000)

	COMMISSION ON SALES OF PRODUCE	T$32,760
-	RUNNING COSTS FOR MARKETING	- 11,260
=	NET SURPLUS ON MARKETING	T$21,500

SUPPLY SERVICES

(SALES OF SUPPLIES T$52,200)

	GROSS SURPLUS ON SUPPLY SERVICES	T$4,800
-	RUNNING COSTS FOR SUPPLY SERVICES	- 4,300
=	NET SURPLUS ON SUPPLY SERVICES	T $ 500

TOTAL NET SURPLUS = T$22,000

What should the co-operative do with this large net surplus? We can see that most of the surplus is coming from the sales of produce. Should the co-operative pay a big bonus to the maize-growers?

In discussions at the Annual General Meeting, members and leaders decided to use the net surplus in the following way:

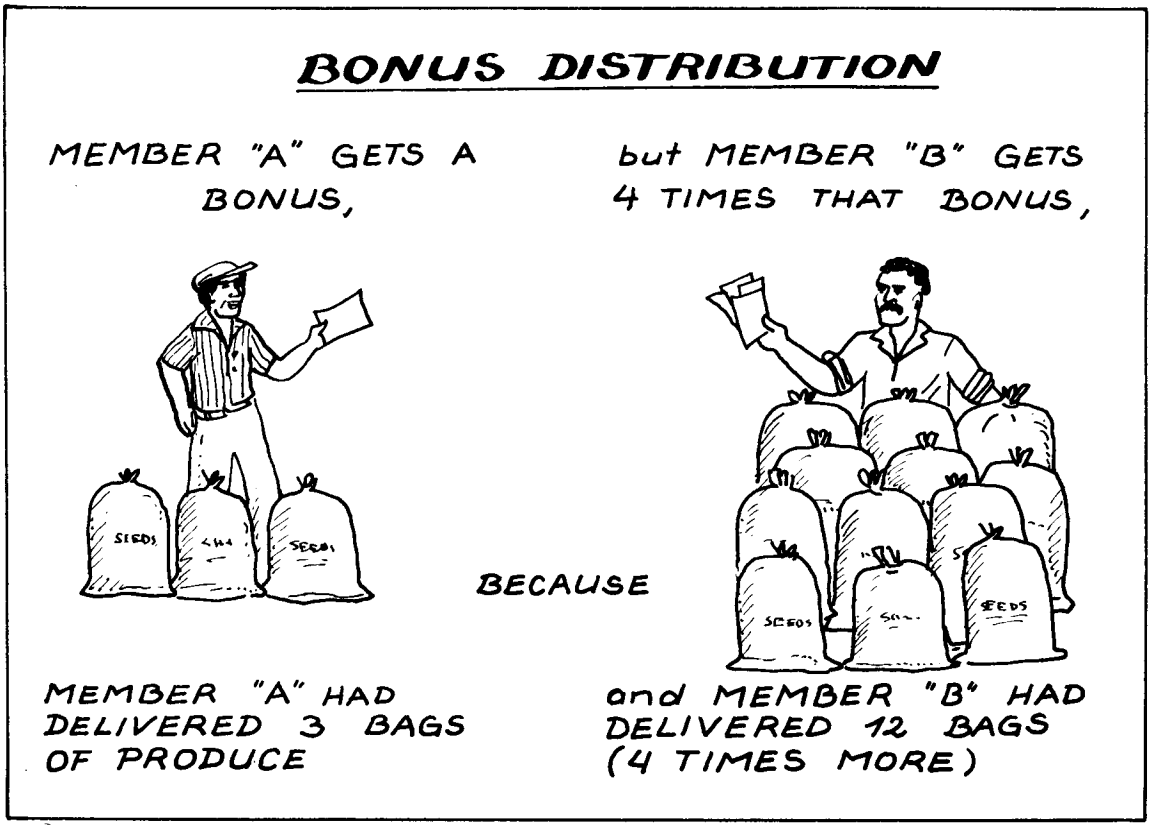
The co-operative law of the country required the placing of 25% in the Reserve Fund, which comes to T$5,500.

It was agreed to pay members 5% interest on their shares. Since the total value of shares is T$40,000, the amount to be paid out is T$2,000.

After the above decisions, T$14,500 still remained. The members wanted to build up the co-operative's own capital, so they agreed to put T$3,580 in a Special Reserve Fund.

The remaining T$10,920 allowed the payment of a bonus. This was calculated as a set amount of money for each kilogramme of maize delivered. This meant that farmers who had delivered more maize to the co-operative got a bigger bonus.

Reserve Fund (Statutory)	5,500
Interest on Shares	2,000
Reserve Fund (Special)	3,580
Bonus to Producers	10,920
Total	22,000



Let us now see what happened to the capital available to the co-operative. Before the net surplus was distributed, the Valda Co-operative had the following capital:

Own Capital	
Statutory Reserve Fund	T$ 4,000
Special Reserve Fund	10,000
Members' Capital	
Shares	40,000
Borrowed Capital	
Bank Loan	40,000
TOTAL	T$94,000

Because so much of the net surplus was invested in the co-operative (placed in reserve funds), the co-operative's own capital grew, and the amount of borrowed capital was reduced by a repayment of T$4,000 to the bank.

After the net surplus had been distributed, the Valda Co-operative had capital as follows:

Own Capital		
Statutory Reserve Fund	T$ 9,500	← 4,000 + 5,500
Special Reserve Fund	13,580	← 10,000 + 3,580
Members' Capital		
Shares	40,000	
Borrowed Capital		
Bank Loan	36,000	← 40,000 - 4,000
TOTAL	T$ 99,080	

Even after repaying T$4,000 on the bank loan, the total capital still went up by about T$5,000. Thus, the working capital of the co-operative could be increased, and services improved.

As we have seen, the Valda Co-operative had made a net surplus of T$22,000. The money would have come in handy if anything unexpected had happened. But that year everything went well. Even after payments to reserve funds and interest on share capital, almost T$11,000 was left over to be distributed to members as a bonus.

At the Annual General Meeting the members were able to discuss a number of issues relating to this net surplus and to the services of the co-operative in general:

Some members suggested that the co-operative should reduce its commission on the produce next year. In that way members would receive their money earlier, without having to wait a long time for a bonus.

- Other committee members said it would be safer to continue with the present policy and pay members a bonus at the end of the year, whenever possible.

- Still other members pointed out that the co-operative must obtain enough capital to enable farmers to be paid a larger amount in advance when they delivered their produce. They said that prices were going up so quickly that they could not accept just a small advance payment with a long wait for the main payment. By the time the main payment arrived, it would buy less than expected.

These are matters that each co-operative must decide for itself. Any co-operative will need to be careful about reducing its commission or margin on sales. It may be tempting to do this after a particularly good year's trading, but such a boom could be followed by a bad harvest, or a year when essential repairs have to be made to the warehouse. If a co-operative makes a good net surplus, it can always give more money to the members. But if it makes a net loss, it must ask its members or the bank for more money. The bank may decide that the lack of a net surplus shows the co-operative is not being managed very well, and refuse to lend it any more money. The members may grow discontented at having to pay extra money into the co-operative, and decide to leave it.

2.1 How did you use the net surplus in your co-operative last year? If there was no net surplus, state the reason.

2.2 Which policy do you prefer: to plan for a big or a small net surplus, bonus or no bonus, at the end of the year? Give reasons.

PROBLEMS

We have now described how a typical agricultural co-operative operates. As you have noticed, the economics of a co-operative are not very complicated. It is like any ordinary business except that the co-operative makes a surplus only to cover the running costs and to develop and improve the services given to members.

In spite of this, it often happens that co-operatives run into difficulties. What are the reasons? How can the problems be avoided or solved?

Let us look at a few examples of co-operatives that have got into trouble, and learn from their mistakes.

Lavini Co-operative

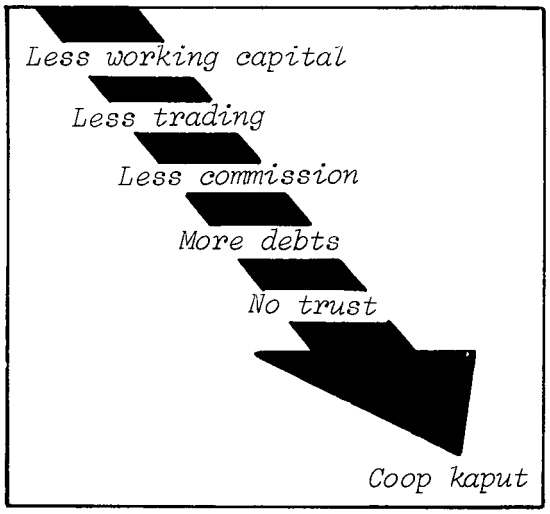
The Lavini Co-operative made a good start with their supply services. The first year they sold seeds and fertilisers for T$64,000, and all members were paid as planned when the co-operative received payment for their produce. Lavini's bank account was full. One of the committee members then said: "Let's buy a truck, we can afford it." Nobody on the committee objected, so they bought a used truck for T$25,000.

Then it was time to get a new stock of seeds and fertilisers for the coming sowing season. Only T$39,000 was left of the working capital, so they could not buy as much supplies as in the previous year. The stock was soon sold out, and members complained. "Why don't we use the maize-money for the time being...?" So they bought more supplies for the money that was supposed to be used to pay an advance for members' maize.

When members brought in their maize they were surprised to find that they were paid a smaller advance than in previous years. The reason was, of course, that some of the working capital had been used for supplies that were still not paid for by the members. When the members noticed that the co-operative paid so little advance for the maize, many of them preferred to sell to other dealers.

The result was that the co-operative could not "earn" as much in commission as was planned. The commission was not even enough to pay the wages of the staff. They had to dip into the "maize-money" again to be able to pay wages.

The co-operative was now in vicious circle. When the working capital was reduced, the trading decreased, the commission decreased and later on the debts increases The result was that the members lost confidence in the management, and the co-oper-



The mistake the Lavini Co-operative made was that it used working capital for an investment and to pay *running* costs. Without enough working capital, no co-operative can *continue* to *function* properly.

Cofaco Co-operative

Some co-operatives fail to make a net surplus. Instead, they end up with a loss! What can they do to turn the loss into a surplus?

Cofaco, a cotton farmers' co-operative, presented this report at the end of the financial year:

(Sales of cotton T$248,000)

Commission on cotton sales (8%)	T$19,840
Costs of runnina the co-operative	- 21.340
Net ~~surplus~~ loss!!	T$ 1,500

Cofaco did manage to earn a gross surplus of T$19,840, but this was not enough because the running costs of T$21,340 were higher. If Cofaco goes on like this,the co-operative will collapse.

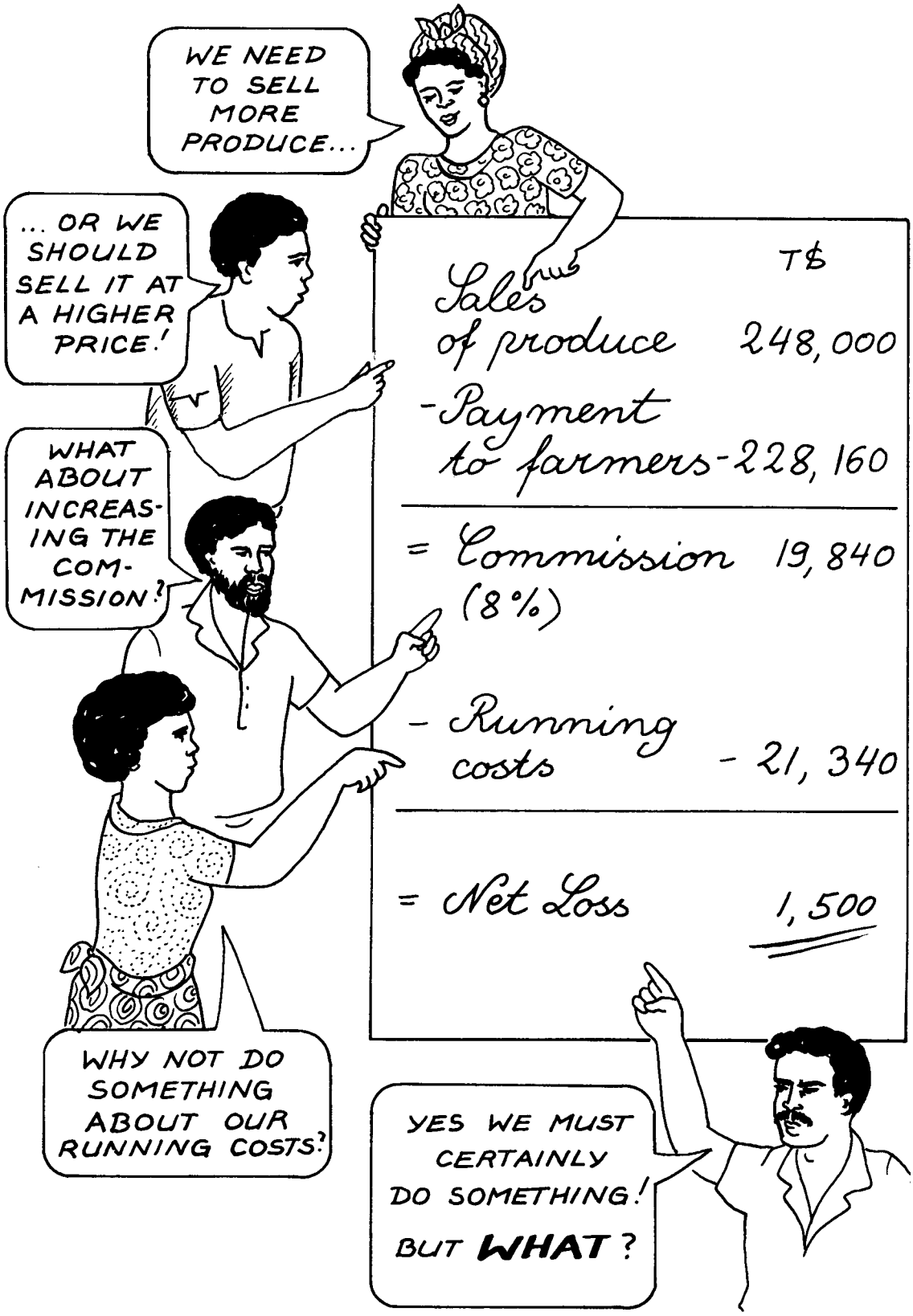
What can be done?

If the management of Cofaco had been aware of the problem a bit earlier, they could have solved it by taking a higher commission from the members. If they had taken 9% instead of 8%, they would have had enough money to cover the costs:

$$\frac{9 \times \text{T\$248,000}}{100} = \text{T\$22,320}$$

But Cofaco had planned that 8% commission should be enough, so something must have gone wrong. For the next year they had to put things right again by turning the loss into a surplus. Let us see how this might be done.

The problems of Cofaco Co-operative



One way to improve the result would be to increase the income (commission) in order to cover the running costs.

Basically, there are three ways of doing this, as you can see on the previous page:

(1) – Sell more cotton (more sales = more income = more commission)

(2) – Sell the cotton at a higher price (more income = more commission)

(3) – Raise the commission percentage.

But there is another way to improve the result, namely by reducing costs:

(4) – Lower the running costs of the co-operative.

The management committee of Cofaco discussed all these possibilities with the manager. This is what they said:

Chairman: We certainly had planned to sell more cotton than we actually did, and that is the main reason why we suffered a loss. But we had a crop failure. Who can foresee something like that?

Manager: We were too optimistic in our estimates. Let us plan for a lower income next year and raise the levy to 100, because this could happen again.

Committee-Member A: But having a bad harvest is very unusual here. On the contrary, I think that farmers are increasing their yields every year. And they must get some benefits from this. We must help them make a higher income. Therefore, we should not increase our commission! Eight percent should be enough!

Committee-Member B: We could increase both the sales and the commission if we had a larger membership. Suppose we get the farmers on West Plains to join us. I think they sell cotton for about T$30,000 a year. That would give us a commission of T$2,400.

Manager: But then we may need more labourers in the warehouse and the costs would increase ....

In this way the committee discussed all four possibilities mentioned on page 32. This is a summary of their meeting:

(1) Sell more cotton

Obviously the only reason for the decrease in cotton sales was the bad harvest. All members had been loval and sold their crop through the co-operative. Therefore, the committee was confident that sales would increase to T$290,000 next year.

However, it was agreed that two of the committee members should organise some meetings with the farmers in West Plains with the aim of enrolling them in the co-operative. This would strengthen the co-operative and possibly increase sales by as much as T$30,000.

(2) Sell the cotton at a higher price

Research had shown that they could be paid T$0.10 more per kilogramme for the cotton in a more distant market town, but they turned down this proposal, because freight costs would increase by T$0.12/kg.

(3) Raise the commission percentage

The committee said no. This would be used only as a last resort. The manager pointed out that a loo commission could be charged, just as a "security measure". The members would receive their bonus in any case if they managed to keep the costs from rising above 8%. They wouldn't lose anything. But the committee feared that the members would react negatively if the commission were increased.

(4) Lower the running costs

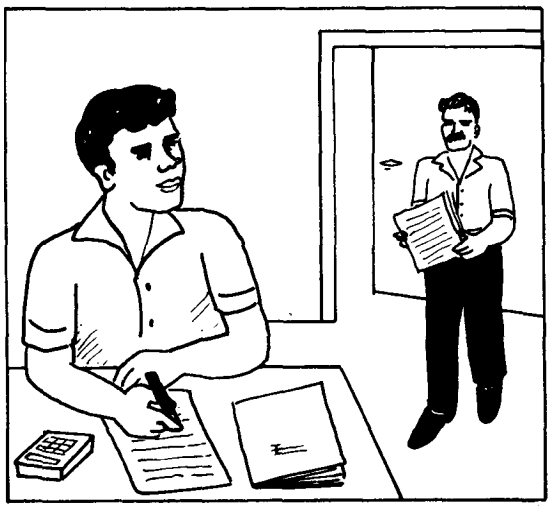
This possibility was discussed thoroughly. These were the yearly running costs of Cofaco:

a/	Wages and other staff costs	T$12,116
b/	Interest on loan	750
c/	Cost for building and equipment	2,050
d/	Transport costs	4,200
e/	Other costs	2,224
	TOTAL RUNNING COSTS	T$21,340

a/ Wages and other staff costs

As in most co-operatives, wages and other staff costs we the biggest item of the running costs. The committee mL therefore consider questions like:

- How many staff members are really needed?
- How high wages will a reasonable commission allow us to pay?



The manager was the only employee of Cofaco who was working full time. Labourers and a record keeper were employed part-time during the collection season. In total, the costs for wages were T$10,560. But wages were not the only staff costs. Cofaco also had to contribute to the national social security fund and take out workmen's compensation coverage for all employees. These social costs amounted to 100 of the wage bill.

Cofaco also allocated T$500 a year for the co-operative's education and training programme. This was to cover training for staff and committee members, as well as their member education programmes.

So the total wages and staff costs were:

Wages	T$10,560
Social costs (10%%)	1,056
Training	500
Total	T$12,116

It was suggested in the meeting that Cofaco ought to employ a full-time clerk in case the West Plains farmers joined the co-operative. The treasurer made some calculations:

Increased wages	T$ 2,600
Social costs (10%)	260
Total increase	T$ 2,860

Clearly, the cost of employing a clerk on a full-time basis would cost more than the anticipated additional commission of T$2,400. The committee rejected the proposal and decides to continue using part-time staff and, if necessary, extend their working hours.

b/ Interest on loan

The members of Cofaco had not contributed all the capital needed to start their business. They had borrowed money from a bank, and they still owed the bank a sum of T$12,500. They had to pay 7% interest on this loan, which is T$875 a year. This cost, of course, cannot be reduced unless the co-operative repays the loan. In fact, if they failed to pay the interest, the whole amount would be due for repayment immediately.

A bank not only charges interest, it also pays interest on money deposited. Sometimes the co-operative does not immediately spend what it makes from sales, but instead puts

it aside to be used for payments which are due later. Cofaco deposits such funds in a savings account at the bank. There they earned a yearly interest of T$125.

So the interest charges were reduced a little as follows:

Interest paid to the bank	T$875
- Interest received	- 125
= Net cost of interest	T$750

c/ Cost for building and equipment

Because Cofaco owned their warehouse, they paid no rent. This does not mean that the building was free. What were the costs each year?

Well, the building cost T$15,000 to construct. The annual costs depend on the number of years the building will be used. Thus the building would cost them T$7,500 a year if used for only two years, and T$1,000 a year if used for 15 years.

It is difficult to know in advance how long a building will be used. Therefore, it is a common practice to spread out the actual cost over a period of 20 years. The annual cost for Cofaco would then be:

$$\frac{\text{T\$15,000}}{20} = \text{T\$750}$$

It does not mean that the co-operative actually pays out this amount every year. It is the calculated annual cost of a building, and it is included among the other running costs. It is called DEPRECIATION.

Equipment and furniture are treated in the same way. But the "life-span" of these things is much shorter, so their cost is usually depreciated over a 5-year period. The weighing machine in the warehouse cost T$1,500. The yearly depreciation, consequently, is T$300.

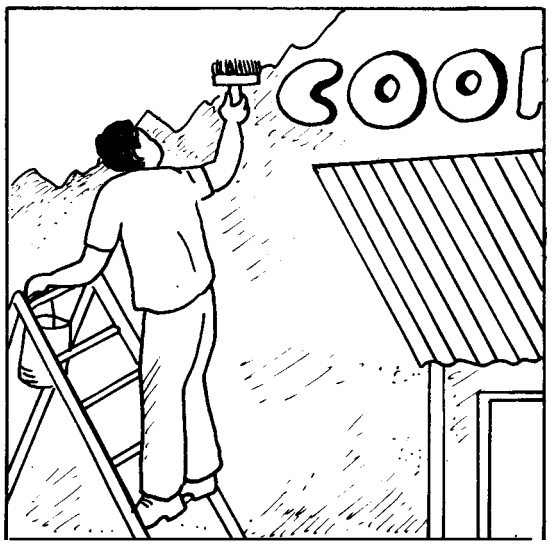
Costs for furniture and equipment that are expected to last for less than five years are not depreciated. Instead, the entire cost is included among the other running costs for the year in which the equipment is purchased.

In addition, there were of course maintenance costs. The total annual costs for Cofaco's building and equipment were thus:

Depreciation of building	T$ 750
Depreciation of equipment	300
Maintenance	1,000
Total	T$2,050

Is it possible to reduce these costs?

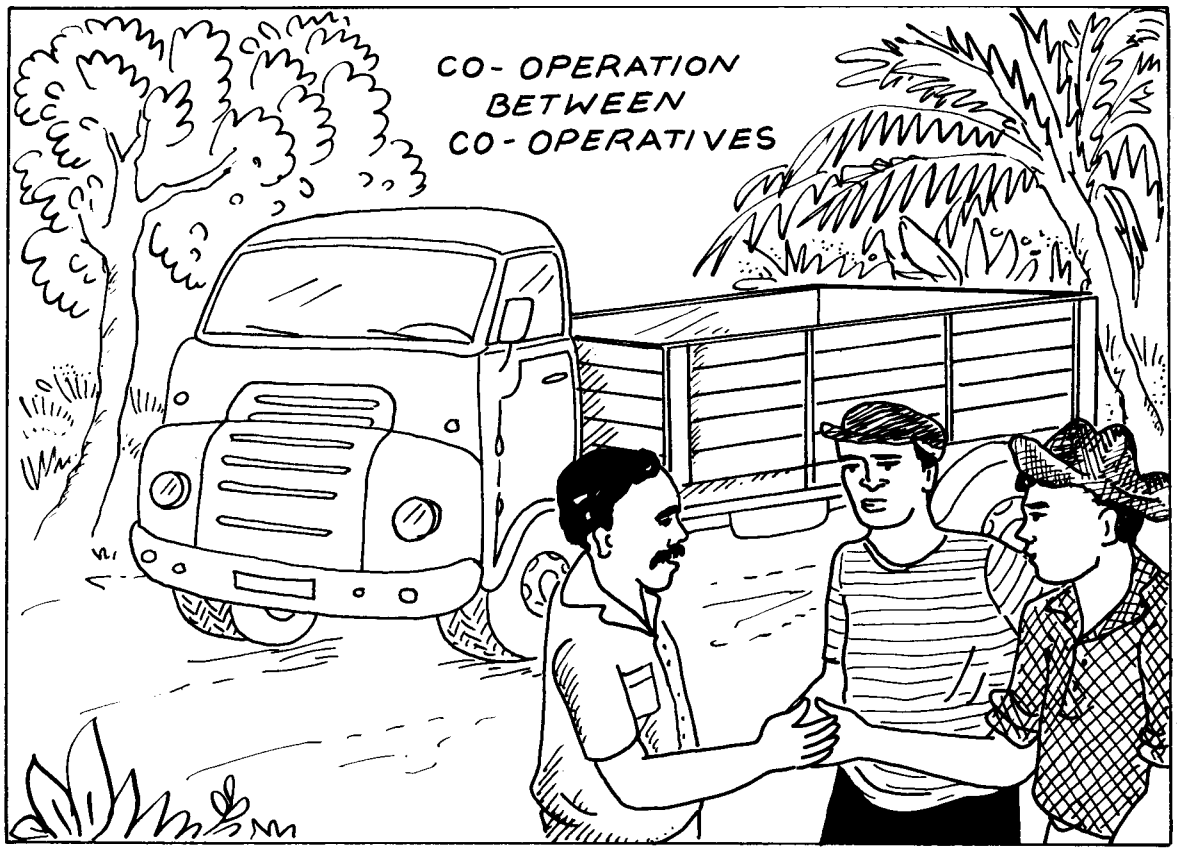
Maintenance and repairs may be postponed from one month to the next if the cash situation so requires. But it is not advisable to put off maintenance or repairs for too long. You will either shorten the life of the building or face higher repair costs later on.



Once they have been calculated, the depreciation costs cannot normally be changed. But a well-maintained building could last much longer than the depreciation period. After that, there will only be the maintenance costs without the cost of depreciation, so the overall cost of the building will be low.

d/ Cotton transport

The transport of cotton had presented a real problem for the committee in the past. It was important to have reliable transporters, but the costs must still be kept to a minimum. After the meeting, the chairman of Cofaco approached two other co-operatives, and they agreed to negotiate with a truck owner for a joint transport contract. The result of this "co-operation between co-operatives" was that Cofaco saved T$600 the following year, in spite of an increased volume of cotton.

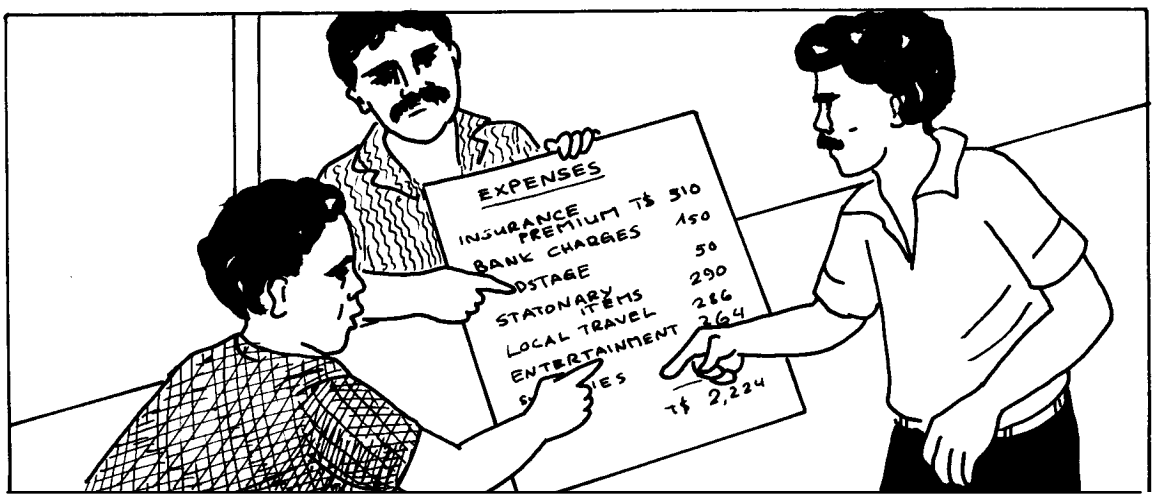


e/ Other costs

Here is a breakdown of the other costs the Cofaco Co-operative faced:

Insurance premium	T$ 510
Bank charges	150
Postage	50
Stationery items	290
Local travel	266
Entertainment	264
Sundries	674
Total	T$2,224

If a co-operative is running at a loss, every single cost must be carefully examined to see if it can be reduced or avoided altogether.



So this is what the committee of Cofaco did. They agreed that all kinds of entertainment should stop, thereby saving T$264. They also succeeded in reducing costs for travel and for stationery. Instead of printing their own produce receipts, they used the standard forms provided by the Co-operative Union. In all, Cofaco reduced its "other costs" by T$429 the following year.

Cofaco's success

By the following year, the management of Cofaco had turned the co-operative's loss into a net surplus. Here is a summary of how they did it:

	This year		Last year	
Sales of cotton		T$302,000		T$248,000
Payment to members		- 277,840		- 228,160
Commission (80)		T$ 24,160		T$ 19,840
Running costs:				
Wages	T$13,900		T$12,116	
Interest	750		750	
Building and Equipment	1,900		2,050	
Transport	3,600		4,200	
Other costs	1,795	- 21,945	2,224	- 21,340
Net surplus		T$ 2,215		T$ -1,500 (loss!)

As you can see, the sales increased. It was a normal harvest again, and some of the West Plain farmers did join the co-operative, which increased the total cotton sales.

The increased deliveries of cotton meant more work for the staff, so wages were increased. But the manager could keep the other costs down, as planned, and the very favourable transport agreement helped to create a net surplus. It was even enough to make up for the loss the previous year.

Stella Co-operative

The Stella Co-operative Society is a large agricultural co-operative, performing both marketing and supply services for its members.

Although the Stella Co-operative is a huge business organisation, the management takes the same approach to the various problems that arise as the small co-operatives we have been talking about before.

Here the manager is explaining the year's trading results to the committee members:

Manager: Today I can present some figures for the whole year. They won't surprise you, as you have followed the development in our monthly meet ings. On the whole, we have had a good year. There were some problems, but I think that we have overcome them already.

MARKETING DEPARTMENT		
Sales of produce	T$972,000	
Payment to farmers	- 826,200	
Commission	T$145,800	15%
Running costs/marketing	- 83,300	
Net surplus/marketing	T$ 62,500	6%
SUPPLY DEPARTMENT		
Sales of supplies	T$360,000	
Cost of supplies	- 331,200	
Gross surplus	T$ 28,800	8%
Running costs/supply	- 27,000	
Net surplus/supply	T$ 1,800	½%
TOTAL		
Net surplus/marketing	T$ 62,500	
Net surplus/supply	+ 1,800	
TOTAL NET SURPLUS	T$ 64,300	

Chairman: Thank you. Let us look at the marketing first. It looks very good. Some of this surplus should definitely be paid back to the producers. Maybe we can give them a bonus of 4 or 50. But the question is whether we can reduce the commission in the future. We have had a good surplus now for a number of years, and we have built up our reserves. Now it is time to let the members reap the fruits of their labour.

Committee-Member: I agree. The members will be very happy to hear that we can reduce the commission, thereby increasing their income. Also, I think we will attract more members if we do this.

Chairman: The net surplus in the supply department, however, is much lower than expected. In fact, it is very close to a loss there. We had planned for a 3% net surplus, but we have made only 0.5%.

Manager: There are several reasons for this. For one thing, we did not sell as much as we had planned, but the main reason is that we paid more for the fertilisers than we had expected.

Committee-Member: We cannot blame you for the sudden rise in fertiliser prices. Nobody was prepared for that.

Manager: We could of course have increased selling prices more, but I think we were wise to accept a lower margin on fertilisers. I think the members would have refused to buy if we had raised prices any higher.

Chairman: And then there was the mistake we made with the chicken feed.

Manager: Yes, we agreed to switch to the new brand when we were offered very low prices. But the farmers were suspicious and they didn't buy that stuff, as you know. So we had to sell off the whole stock of seven tonnes at reduced prices. That was a bad business.

Committee-Member: The running costs on the supply side are much higher this year. What can we do about that?

Manager: You know that we have separate accounts for the costs for marketing and the costs for supply services. Of course, when it comes to staff, transport and buildings, it is rather difficult to divide the costs. How much should be charged to the marketing department, how much to the supply department? We have studied these problems so that we can make a fair distribution of the costs. For instance, our staff now spends almost half its time with supply business, so we charge 40% of the total staff costs to the

supply department. And the transport manager has calculated from the log books that 20% of transport concerns supply. This is because we have increased trade and deal with many items. It takes a lot of time to handle purchases, storage and distribution of so many things: fertilisers, seeds, sprays, cement, pipes....

Chairman: Well, it is very good that you can report to us where all the costs are coming from. Otherwise it would be very difficult to do something about our problems. So, what do you suggest now...?

This is how the management of the Stella Co-operative analysed the report. Does it remind you of the discussions at Cofaco? The Cofaco committee talked about four different ways of improving the result of their marketing business (See pages 31-34). In the same way, the management of Stella has come up with four ways of improving their supply business. They can:

1. Sell more supplies (more sales = more income higher gross surplus).
2. Sell the supplies at higher prices (more income = higher gross surplus).
3. Buy supplies more cheaply (lower cost of supplies = higher gross surplus).
4. Lower the running costs.

From the discussions we also learn that each problem cannot be considered separately - we must check how each action affects the overall result.

For instance, it was suggested that the commission should be reduced. What would the effects be? One committee member was of the opinion that more farmers would join the co-operative. If he was right, the sales would increase and the co-operative's income from commissions would remain high. But by how much would the running costs increase? It is important to consider this effect, too.

Another example: The manager had bought chicken feed at a very low price, and he thought that he would save money in this way. But instead they lost money, because the quality was poor and members refused to buy the feed ....

3.1 Describe the four different ways of increasing the income of a co-operative business.

3.2 In the case of your own co-operative, which method would you prefer to use? Why?

3.3 Write down your ideas for how sales of produce and farm supplies could be increased in your co-operative next year.

3.4 Make a list of the different costs involved in running your co-operative. You need not state the amounts, just the headings, like "wages". Indicate which costs are the highest in your co-operative.

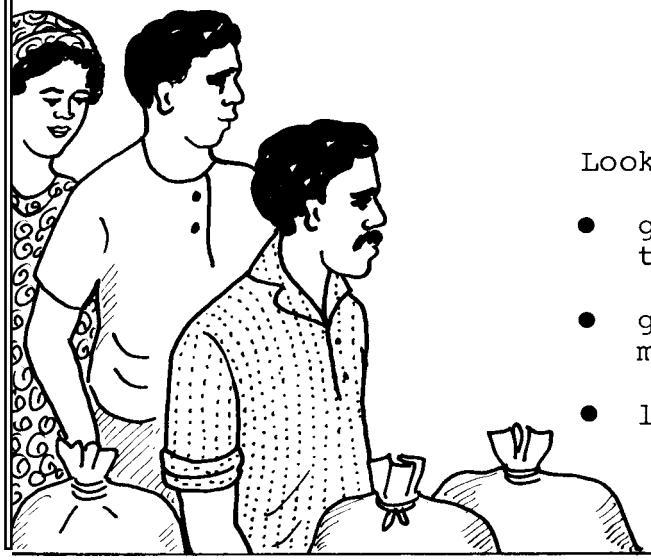
3.5 Suggest which costs could be reduced in your co-operative and give your reasons.

3.6 One co-operative was selling cotton for T$50,000 one year. The commission was 12% = T$6,000, but the costs amounted to T$6,540.
Suppose costs cannot be further reduced, and the commission percentage cannot be increased. By how much should the sales increase in order to avoid a loss?

PLAN FOR SUCCESS

You have now studied how some agricultural co-operatives function. You understand the basic economics of a co-operative business, and you know how results can be improved for maximum benefit to the members:

...you need a net surplus to serve members better!



MARKETING

Look for improvements to

- get more produce from the members
- get a better price for members' produce
- lower running costs

SUPPLY SERVICES

Look for improvements to

- increase sales of farm supplies
- buy farm supplies more cheaply
- lower running costs

"CHECK-OUT"

To prove to yourself that you have fully understood this Element, you should now go through the following questions. Mark what you think is the right answer to each question. If you have any problems with a particular question, go back and read the corresponding chapter again.

Key on page 48.

1 Which one is a "fixed asset"?

a The warehouse owned by the co-operative.
b The manager.
c The stock of produce in the warehouse.

2 What is "working capital"?

a The money used to pay workers' wages.
b The money used to build a store.
c The money used to buy produce and farm supplies.

3 What is the "commission"?

a The membership fee in a co-operative.
b The same as net surplus.
c The amount deducted by the co-operative from produc sales before paying the producers.

4 What is the "cost price" of farm supplies?

a The price the members pay for the supplies.
b The price the co-operative pays for the supplies plus possible freight costs.
c The price members pay minus possible discount.

5 What is the "selling price" of farm supplies?

a The cost price plus the "mark-up".
b The cost price plus the net surplus.
c The cost price plus sales tax.

6 Why does the co-operative need a "trade margin" on the sales of supplies?

a A margin is needed to purchase farm supplies.
b A margin is needed to pay running **costs.**
c A margin is not needed in co-operative business.

7 "The margin is 6%" What does it mean?

a The margin is 6% of the cost of the goods.
b The margin is 6% of the sales.
c The margin is 6% of the gross surplus.

8 A co-operative sold farm supplies for T$20,000 and its average trade margin was 12%. What was the gross surplus?

a T$8,000
b T$2,400
c T$1,667

9 What is "gross surplus"?

a The surplus left before the costs of running the co-operative have been deducted.
b The surplus left after the costs of running the co-operative have been deducted.
c The bonus paid to the members.

10 What is "net surplus"?

a Sales minus cost of goods.
b Sales minus running costs.
c Sales minus cost of goods minus running costs.

11 When will there be a loss?

a If the running costs are higher than the gross surplus.
b If the running costs are lower than the gross surplus.
c If the running costs are equal to the gross surplus.

12 How is a "bonus" in a co-operative distributed?

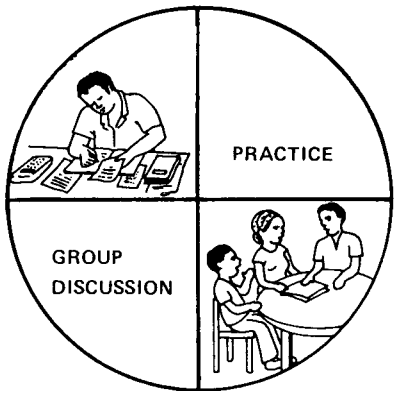
a In proportion to shares in the co-operative.
b In proportion to the business made with the co-operative.
c In proportion to total contributions to the co-operative.

13 A co-operative sold produce for T$972,000. They took 15% in commission. They also sold farm supplies to members for T$360,000. The cost of these supplies was T$331,200. The total running cost for the co-operative was T$110,300. What was the net surplus?

a T$174,600
b T$ 64,300
c T$ 6,430.

COMPLEMENTARY EXERCISES

To complete your studies of this topic you should take part in some of the following exercises.



GROUP ASSIGNMENTS

1 To raise capital

To raise capital many co-operatives have to borrow money in addition to the contributions from members. Discuss the most advantageous ways of raising money.

2 Working capital

Ask a few co-operative societies for balance sheets covering two consecutive years. Examine the balance sheets and calculate by how much the working capital has changed from one year to the next. Discuss whether the **trend** has been favourable or not.

3 Examine the trading result

Examine the trading accounts for the last year of some co-operatives, including your own. Discuss and answer the following questions:

a) Do you consider the net surplus sufficient? If not, suggest some ways of increasing it.

b) How should the net surplus be used for the maximum benefit of the members?

Key to the "Check-out".

Question	1	2	3	4	5	6	7	8	9	10	11	12	13
Correct answer	a	c	c	b	a	b	b	b	a	c	a	b	b
Ref. Page	8	9	10	14	14	14	15	15	16	16	20	22	