

- A WORKERS' CO-OPERATIVE (BASIC ECONOMICS)  
a learning element for members of workers' cooperatives

international labour office, geneva

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

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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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# A WORKERS' CO-OPERATIVE

## - BASIC ECONOMICS -

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# WHAT YOUR CO-OPERATIVE NEEDS

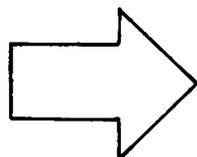
What is it that makes a workers' co-operative successful?

We know the important role of the members: they are the owners of the co-operative society; but at the same time they are the workers. It is, of course, very important that the members can work well together, and as owners they must organise the society properly. (Have you read the booklet "A Workers' Co-operative: Organisation"?)

But good co-operation and organisation is not enough. The aim of an industrial co-operative is to produce something that can be sold to customers so that members can make a living. To produce and sell something - that is the business of a workers' co-operative.

Therefore, a workers' co-operative cannot exist without:

- a market that buys what the co-operative produces;
- raw materials and other inputs needed in production;
- equipment and facilities that make production possible;
- capital to start and run the business;
- a surplus or profit to keep the business going;
- management that can effectively organise production and sales.

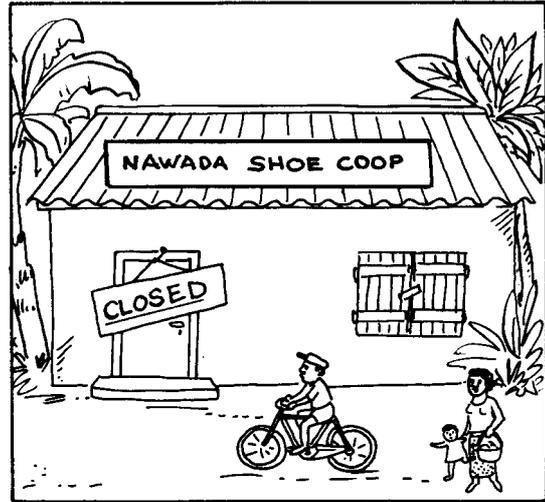


*This booklet deals with these business aspects of running a workers' co-operative.*

*(Compare them with the list of contents, page 1.)*

## YOU NEED A MARKET

The Nawada Shoe Co-operative started with five members. They produced 300 pairs of shoes every month. The first month they sold 250 pairs, the second month 140 and by the third month sales had dropped to only 60 pairs. In the fourth month they closed down ....



Why was the co-operative not able to sell all the shoes it made? Let us listen to some customers:

---

Lucy: "I'd like a pair of sandals please."

Salesman: "Sorry, Madam, we don't make sandals. We only sell shoes."

---

Mary: "Why do all your shoes have these square tips and heels? I don't really like them."

---

Maggie: "Oh, I see you have a new delivery of shoes."

Salesman: "Yes Madame, completely in leather and made in this country."

Maggie: "Not bad! I like them. How much do they cost?"

Salesman: "300 dollars, Madame."

Maggie: "Oh, I think my old ones will still do, thank you."

---

John: "Certainly they're nice shoes. But how long will they last? Thin soles like these wear out quickly. Rubber ones last much longer."

---

---

Anita: "It is more than four weeks since you promised me that this model would be available in my size. What's more, this is the third time I've come to your shop in vain."

---

It sounds as if they all had good reasons not to buy shoes from the co-operative. Could you describe why the co-operative was not able to sell shoes to them?

What about the products you produce in your group: do your customers have similar reasons not **to buy**? If so, you may soon be out of business.

RULE

1

*Make sure that you produce what customers want.*

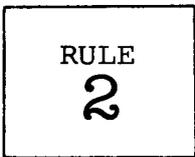
- Is the product the one customers really need?
- Do the design and style meet customers' tastes?
- Will customers be prepared to pay the **rice you** charge?
- Will customers accept the product's quality and durability?
- Can you deliver the product when **it is** wanted?

You will find that the underlined words correspond to the reasons why people did not *buy* any shoes from the Nawada Shoe Co-operative. If you want to continue to sell your product, keep the quality *of* your products and the prices fair - even in situations of shortage or no competition.

The size of the market

Assume that you are able to reply "yes" to all the questions listed under rule 1. In other words: there is a market for your product. But what kind of market is it - large or small?

Clearly, you must know approximately how much you can sell. This is extremely important, because it is the only way to determine how much you should produce. You do not want to produce too little, nor too much.

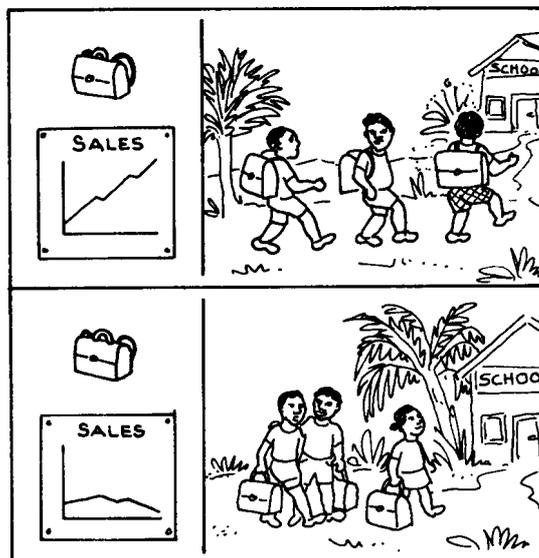


*Make sure that you have an idea about the size of your market.*

Market research

Rule 1 states that you must produce what the customers want and need. Rule 2 states that you ought to know how much they may want and need. How can you find the answers to these questions? For this you have to do some research on the market. The obvious thing to do is to ask your customers. Why not ask a few people and draw some conclusions on the basis of what they say?

Suppose you wanted to produce and sell a certain type of school-bag. You tested the market in your home town. The youngsters there liked the bag, there seemed to be great demand, so you start large-scale production. But after some time it is clear that it is very difficult to sell the bag in other towns in the country.



This shows the difficulties and the dangers of this type of market survey. If you ask only a few people you may get misleading information.

If you want to produce a completely new product which will require a large investment, it may be useful to look for assistance to carry out a thorough market survey. Specialists can do pretty reliable surveys through interviews with selected people, and using prepared questionnaires. This will reduce the risk of an investment, but of course you have to compare this with the cost of a survey.

The staff and offices of the Small Industries or Co-operative Development Organisations may be able to advise and assist you in carrying out market research for products and services for which you think there might be markets. Do not hesitate to contact them.



## YOU NEED INPUTS

People were very upset. For months the Wholewheat Co-operative Bakery had sold excellent bread, fresh every day. And now it had closed because it could not get anymore flour.

Why had it been able to get flour during all these months and now suddenly it could not?



A bakery needs not only flour but also yeast, water and wood, gas or electricity to heat an oven. If you lack one of these "inputs" you are likely to run into production difficulties. You may have to close your bakery, send your people home and disappoint both your customers and members. This was the case with the Wholewheat Co-operative Bakery and can apply to any type of manufacturing business: you are not a magician - without the necessary inputs you cannot produce.

**RULE**

**3**

*Make sure that you have dependable supplies of inputs and be prepared for emergency situations.*

In other words, you need to be aware of possible input supply problems that will hinder or even stop your production. Some supply problems may be completely outside your control and therefore very difficult to handle. In some situations, however, you may be able to do something.

### Lack of raw materials

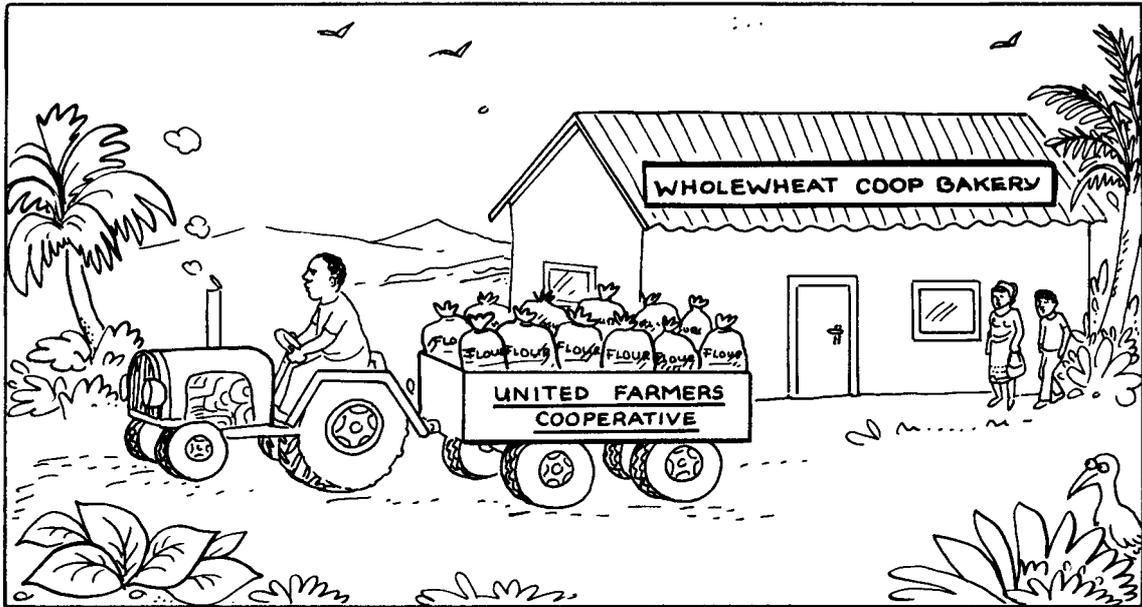
If we take the Wholewheat Co-operative Bakery as an example, again, what could have happened to stop the supply of flour?

Had the machinery in the flour mill broken down? It could take weeks before it was repaired and flour was available again. Or, even worse, was there a general shortage of flour because the mill did not receive enough wheat from the farmers? Whatever the reason was, the Wholewheat Bakery faced a serious problem: no raw material available.



What to do to avoid such a situation? One thing this bakery had not done was to prepare an emergency plan for any shortage of flour. The bakery in the neighbouring town had, however, made up such a plan and was able to provide bread to its customers for at least a bit longer than Wholewheat. It kept a "buffer stock" of flour which enabled it to continue provision for at least one week after its flour deliveries had stopped completely. It also rationed sale of bread and restricted it to its loyal customers. This consideration was appreciated. It encouraged their future loyalty.

What else could be done to solve this problem? Many co-operatives like to practice the co-operative principle "co-operation between co-operatives". For example, a co-operative bakery or restaurant could have agreements with agricultural co-operatives for reliable supplies of flour, vegetables etc. And these agreements would specifically mention how such co-operatives would rely on each other in times of shortage. In other words, mutual guarantees would be provided.



To be on the safe side, some workers' co-operatives go one step further and produce their own raw materials.

- A constructors' co-operative, for instance, could produce its own bricks and in that way secure its supplies. But this is possible only within certain fields of work. It is also only effective when the co-operative is sure it can produce its own raw materials better and cheaper than outside manufacturers and suppliers.

How big a stock?

As mentioned above, an emergency plan may require that a co-operative keeps buffer stocks (reserve stocks) of certain raw materials. To keep large stocks of materials requires more money, of course, but it helps carry you over longer periods of shortage. Therefore:

RULE  
4

*Make sure that you have an adequate stock of rare materials and other inputs.*

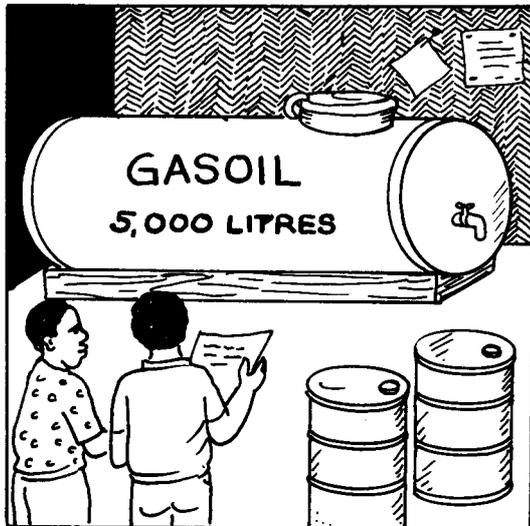
Make sure that you have enough capital to keep an adequate stock.

Enough capital - how much is that? You have to calculate how much **money you** need for your stock of inputs.

Certain items may always be available from the suppliers. If so, you need only stock enough for a rather short period, and order new supplies when your stock is close to zero. Work out how much one such delivery will cost you.



For other items you need buffer stocks, because of the risk of shortages. For example, you may need to order a supply that will last for four weeks for some items, while it could be eight weeks for others. Work out how much each stock will cost you.



After estimating how much money you need for a stock of each raw material and adding them together you get an estimate of how much **money** you need for your total stock of inputs.

## YOU NEED EQUIPMENT AND FACILITIES

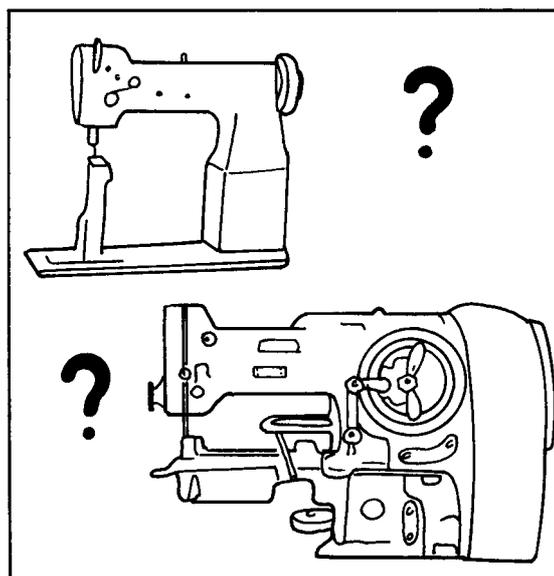
To be able to manufacture you will not only need a market and inputs but also equipment and facilities (machines, tools, workshop, office, storage room, transport). Many workers' co-operatives have failed - or have faced considerable difficulties - because they have the wrong equipment and facilities.

What equipment and facilities are right for your co-operative? Let us use some examples and see whether we can list some practical rules.

### The costs

Suppose you have decided to start a small shoe factory. You have made a market study that tells you that, as a start, you can probably sell between 1,200 and 1,500 pairs of shoes per month. This may increase to 2,500 pairs per month after one or two years when your shoes become known on the market.

You need some machines for this production. Should you buy some cheaper, handoperated punching-, eyeletting- and stitching machines, which are good for a production of 100 pairs a day? Or should you buy more expensive automatic power machines so that you can produce up to 400 pairs a day?



Making 100 pairs of shoes during 25 working days means that up to 2,500 pairs of shoes per month can be produced. This is somewhat more than you expect to sell during the first two or three years. But if everything goes well, sales of

2,500 pairs of shoes per month may become a fact in the not so distant future.

There is certainly no need to buy the more expensive models since they can produce up to 10,000 pairs of shoes per month, which is far above what you will be able to sell in the foreseeable future, according to your market study.

<p>RULE 5</p>
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*Make sure that the production capacity of your machines is in line with the amount you expect to sell.*

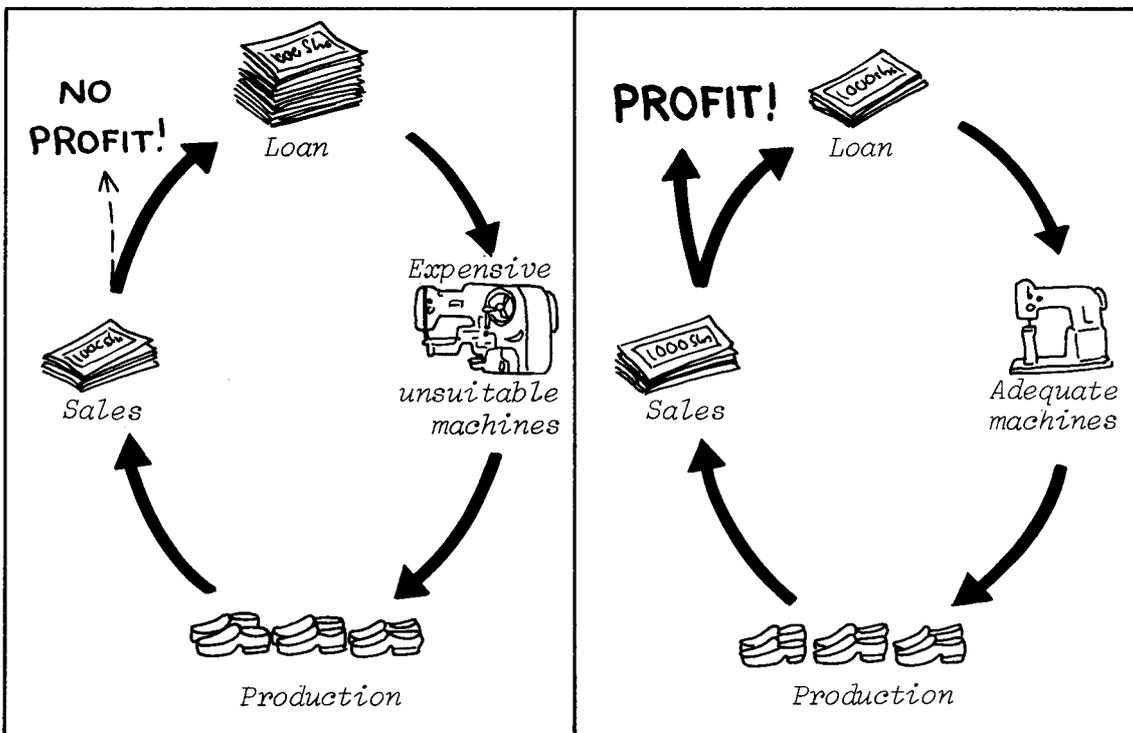
For some co-operatives, simple tools or handoperated machines may be all that is required. Unfortunately, members of many workers' co-operatives think that in order to be successful, the co-operative needs a lot of big and sophisticated machines and equipment.

"But what if the market study was wrong and our shoes sell much better than expected?" you may say. "For example, what happens if monthly orders reach 3,000 pairs? Then we will be stuck with a machine and a technology that do not produce what we could sell!"

The answer is that you can always work more than one shift on the machines. In addition to having the members stitching 2,500 pairs during 25 working days each month, some members can come in and work extra days and stitch an extra 500 pairs. Or some members can put in some overtime every day. There will then be more work for members without having to invest in any new machines or equipment. If orders continue to increase you still have the possibility of buying a second machine.

It is usually not a problem to acquire new and bigger machines and to expand production when business is going well. But it is impossible to reduce the production capacity of machines or facilities once you have got them.

They can only be under-utilised. Many workers' co-operatives, however, do go in for expensive machines and equipment because they can easily get loans to buy them. But every loan will have to be paid back, and the money for paying back the loans must be earned from what the machines will produce. Obviously, a machine with the right capacity will pay for itself much quicker than a more expensive machine that is under-utilised.



The big, expensive machine may cost the co-operative more than it can earn, whereas the small machine soon will become profitable.

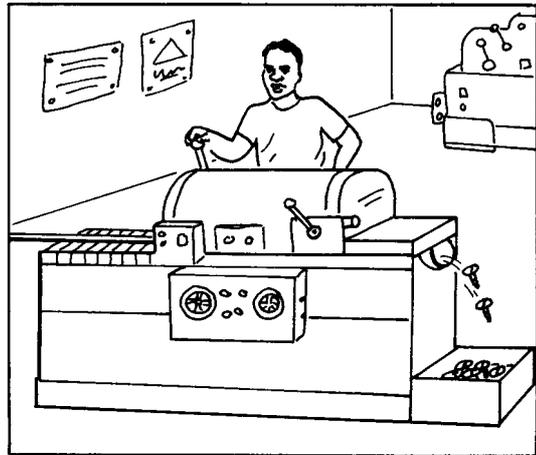
**RULE**  
**6**

*Make sure that your investments in machines and equipment are profitable.*

This is an easy thing to say, but maybe not so easy to calculate. We will come back to this important rule when we discuss surplus and profit, later in this booklet.

Operating the equipment

The Woodscrew Co-operative Society started off splendidly. It purchased a new screw-forming machine and the manufacturers agreed to pay for the training of one member on how to operate the machine.



Unfortunately, that member later became ill. So another member tried to work with the machine, using the little experience he had gained from working with his colleague. It did not take long, however, before several dies in the machine were damaged beyond repair, simply because the machine had not been used properly. It took both time and money before the damaged dies could be replaced. Production was lost and the co-operative's profitability was reduced.

A sad story. .What does it teach us?

RULE  
7

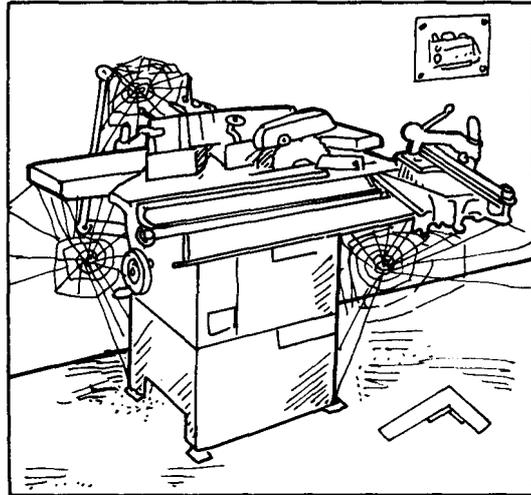
*Make sure that you have at least two trained operators for each machine and piece of equipment.*

RULE  
8

*Make sure that maintenance service and spare parts are available for your machines.*

Energy supply

The United Carpenters Co-operative wanted to increase production. It did its costings carefully and decided that it was possible to purchase a combined operations woodworking machine. The machine was all right but its economic operation was affected because of erratic electricity supplies. Power was not maintained at the level required.



**RULE**  
**9**

*Make sure that you have an appropriate and reliable energy supply for the equipment you want to install.*

Transport

Reliable transport is needed at certain times, usually to supply inputs to the co-operative, and sometimes to dispatch products from the co-operative to its customers.

Some co-operatives have their own vehicles, others prefer to hire transport services. But, whatever system is used, transport is often a problem due to high costs and unreliability.

Emergency-transport-plans

An interruption in transport services can have as severe an effect on the production as lack of raw materials. Therefore, you may also need to work out an emergency plan for your transport services.

List all the available and possible transport means. Consider the costs, reliability and time factors for each. Then list them in order of priority. If your regular transport breaks down, try to make use of the second alternative

on the list, then the third, and so on. Don't give up! Always try to find alternative solutions.

Cheaper-and-more-reliable-transport

Apart from emergency plans, also think of ways of improving your regular transport situation. The following examples may give you some ideas about how you can reduce the need for transport, or make transport cheaper and more reliable.

- The customers of the United Carpenters Co-operative collect their completed furniture orders themselves. The co-operative is always prepared to refer customers to transporters but it is the customer's responsibility, rather than the co-operative's, to organise the transport.
- Nawada Shoe Co-operative has to transport the shoes it produces to the co-operative's shop in town. But it makes sure that the little van it hires carries a full load every time. And because of that, it needs transport into town only twice a month.
- The Wholewheat Co-operative Bakery delivers a full load of bread loaves to a supermarket in town three times a week. On the way back the van stops at the flour mill and picks up flour for the bakery.
- The Perfect Fit Taylors Co-operative decided to continue to rent transport services. It figured out that with the present volume of business, owning a vehicle would cost twice as much.
- Because transport requirements in the United Builders Co-operative Society keep the co-operative's five-ton lorry busy during 80 per cent of the time, the group tries to rent out the lorry during the remaining 20 per cent of the time.
- Since it is often difficult to get spare parts when they are needed, United Builders has also purchased a small stock of common spare parts for **its lorry**. This required a small investment, but the co-operative is now able to avoid lengthy standstills.

- The Mahogany Carpenters Co-operative has an agreement with several other carpentry workshops in town to buy and transport their timber together. This makes both the timber and the transport cheaper. And it is usually easier to arrange transport for large loads of timber than for small ones.



- Whenever it needs any transport, the Printers Co-operative Society calls on the services of the Taxi Drivers Co-operative in town. Being a regular customer, it can count on a reliable and first class service at a fair price.

**RULE  
10**

*Make sure that your transport facilities are adequate and transport costs are minimal.*

## YOU NEED A SURPLUS

A workers' co-operative is in business to produce and sell something. These sales bring in an income. From this income the co-operative has to pay all its costs, such as wages to the members, raw materials, rent, transport etc. When all the costs have been paid there should be some money left over. This money is called the surplus or profit.

Here is an example:

Income from sales	T\$ 27,500*
- <u>Costs</u>	<u>25,500</u>
= Surplus (profit)	2,000

Clearly, if there was no money left over when all the wages and other costs had been paid, the co-operative could still survive. But if the income were not enough to pay for all the costs, the co-operative would make a loss instead of a surplus. We can imagine what that would mean to the members.

A **loss may** be the beginning of the end for the co-operative, but a surplus will help it develop and grow. The surplus money can be used to develop the business, and to pay better wages to the members.

Therefore, it is necessary to plan the business so that it makes a surplus every year.



*Make sure that you can make a surplus every year.*

---

*We use an imaginary currency here because this booklet is used in various countries. We call it "Training Dollars", T\$.*

In the following we will study how the five founding members (Tom, John, Ken, Ben and Peter) of the Joint Shoemakers Co-operative did their calculations.

### Sales volume

How much of your product can you expect to sell each month or in the course of a year? We discussed already on page 6 how the sales volume can be estimated.

Market research revealed that Joint Shoemakers could expect to sell between 250 and 300 pairs each month during the first two years. This might increase to 400-500 pairs per month after two years when its shoes would become known in the market.

However, Tom had warned his colleagues: "It is dangerous to be too optimistic. Better be on the safe side and estimate sales at 250 pairs per month only."

### How many members

When sales in a workers' co-operative are low, there will be work - and an income - for only a few members. If, on the contrary, sales are high and increasing, the group will be in a position to offer work and incomes to more members.

How can you estimate how many members a workers' co-operative can afford?

Tom and his friends worked out that with the tools and equipment they intended to acquire, each member could probably make up to 65 pairs of shoes per month if he spent all his time making shoes.

Tom said: "If we start the society with four members, we can produce 260 pairs of shoes a month, which is just over what we can expect to sell. But that will keep four people busy full time making shoes. We'll also need time, however, to attend to customers as well, maintain our tools and machines, keep the workshop tidy, order and fetch supplies, go

to the bank etc. Let's also not forget 250 pairs of shoes is probably the lowest sales volume we can expect. We will probably be able to sell more."

They therefore decided to start the Joint Shoemakers Co-operative with five members.

The next important question for the shoemakers was whether or not their production of 250 pairs per month would give them sufficient earnings.

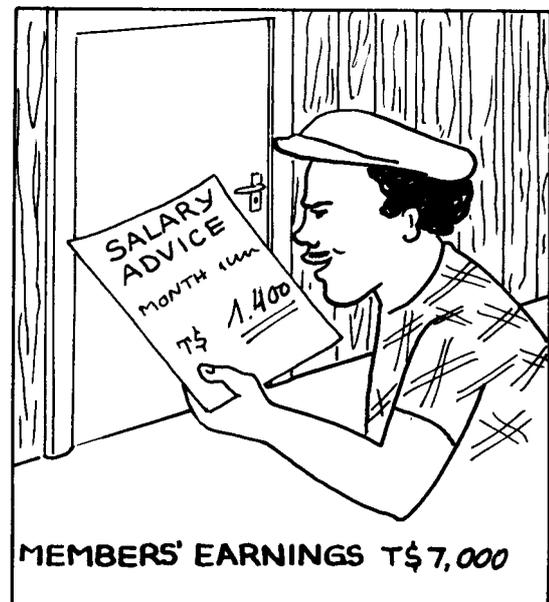
They had agreed that each member should have a wage of at least T\$1,400 per month which should give them a reasonable standard of living to start with. Otherwise there would be no point in starting the business at all.

In order to find out if they could afford to pay themselves that much, the five friends did a lot of calculations. They added up all the costs the co-operative would have to pay each month as follows:

### Costs

#### Members' -wages

Since they had agreed on T\$1,400 as monthly earnings per member, the co-operative would have to pay T\$1,400 times five, that is a total of T\$7,000 per month.



Raw material in2gt21

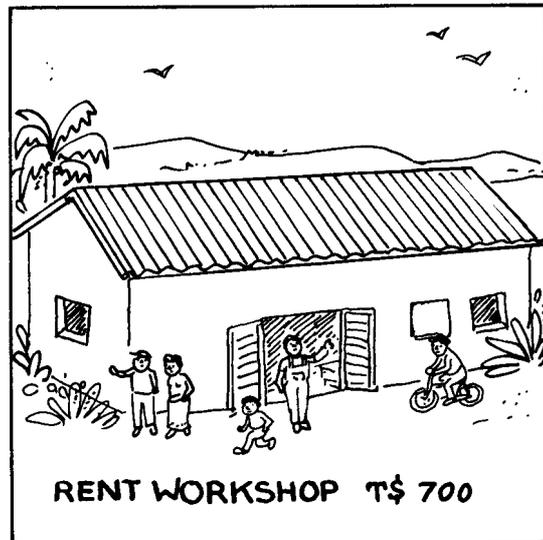
They had made a model pair of the shoes they planned to manufacture and had carefully listed every single item of material they had used, together with its cost.

This gave a total cost for materials of T\$65 per pair of shoes. With sales estimated at 250 pairs of shoes per month, the monthly cost for materials alone would amount to:  $250 \times T\$65 = T\$16,250$ .

<u>Material for one pair of shoes</u>	
	<u>shs</u>
Uppers	14.00
Soles and heels	37.50
Plastic linings	5.00
Thread, adhesives	5.00
Eyelets, laces	2.50
Polish	1.00
	<u>65.00</u>

Workshop - building:

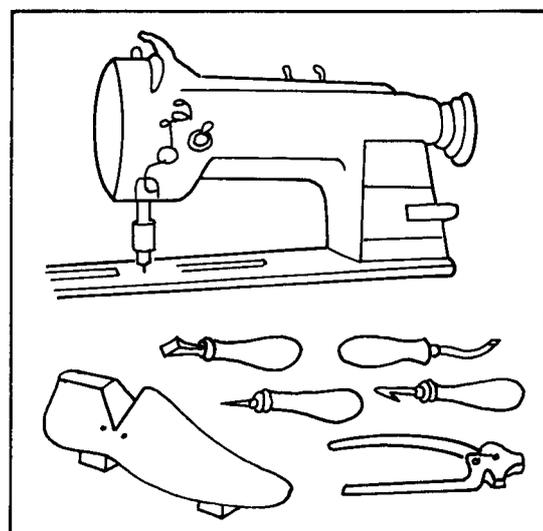
The shoemakers knew that renting the workshop would cost them T\$700 per month.



Machines - and - equipment:

The co-operative would need some machines and equipment for the workshop: handtools and knives, cobblers lasts and an uppers stitching machine.

Tom and his friends all possessed a set of basic tools of their own. They agreed to continue using



their own tools when working in the co-operative. But new equipment costing T\$36,000 had to be acquired to enable them to start production.

There were however, some problems in calculating the costs per month for the equipment. The equipment would last many years, and therefore the cost should also be spread out over a number of years. Another way of saying this is that the value of the equipment would decrease a little each year, until it would be worth nothing at the end. This is called depreciation and the number of years over which equipment costs are spread out is called the depreciation period.

Tom and his friends estimated the depreciation costs for the equipment as follows. They reckoned the equipment would probably last five years. The annual depreciation cost would therefore be:

$$\frac{\text{T\$36,000}}{5} = \text{T\$7,200}$$

And the monthly cost would be:

$$\frac{\text{T\$7,200}}{12} = \text{T\$600}$$

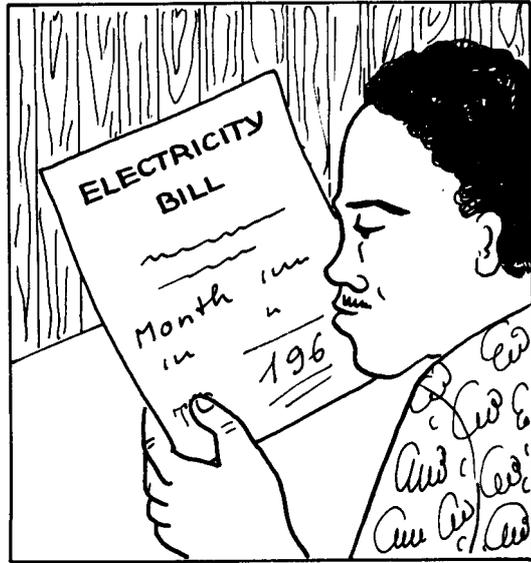
It is important to note here that we are talking about the depreciation cost, which is just the calculated cost every month. No cash is actually paid out, as the equipment will be paid when it is delivered during the first month.

Finally, they had decided to add T\$100 for repairs and maintenance. This brought the total monthly cost for machines and equipment to T\$700.

( In cases where a co-operative owns a building, the yearly cost of the building can be calculated in the same way. For buildings, however, it is normal to use a depreciation period of twenty years instead of five.)

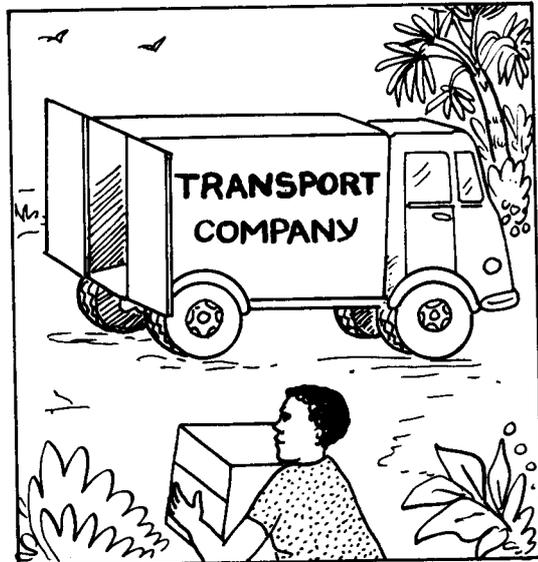
### Electricity

Tom and his friends had calculated that the stitching machine would be used for about 80 hours each month. Since they had only a few other electrical tools, they estimated that the monthly electricity bill would not be more than T\$200.



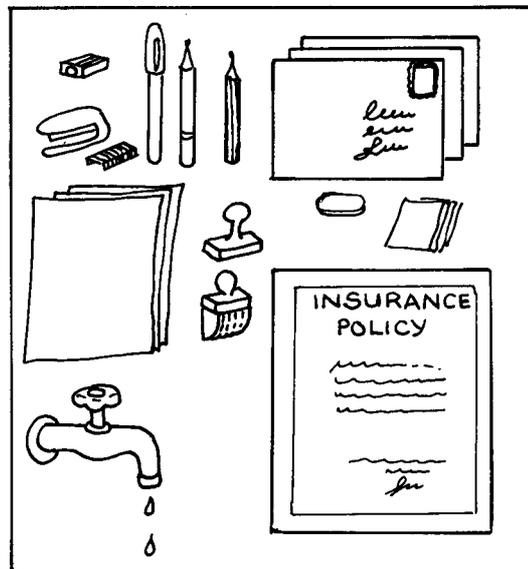
### Transport

The shoemakers had also realised that they would have to pay transport costs for collecting their raw materials and delivering their finished shoes. This was estimated at about T\$400 per month.



### Miscellaneous costs

Last but not least, they included an amount of T\$250 in their cost estimates to cover small miscellaneous items such as stationery, postage, water supply, insurance premiums etc.

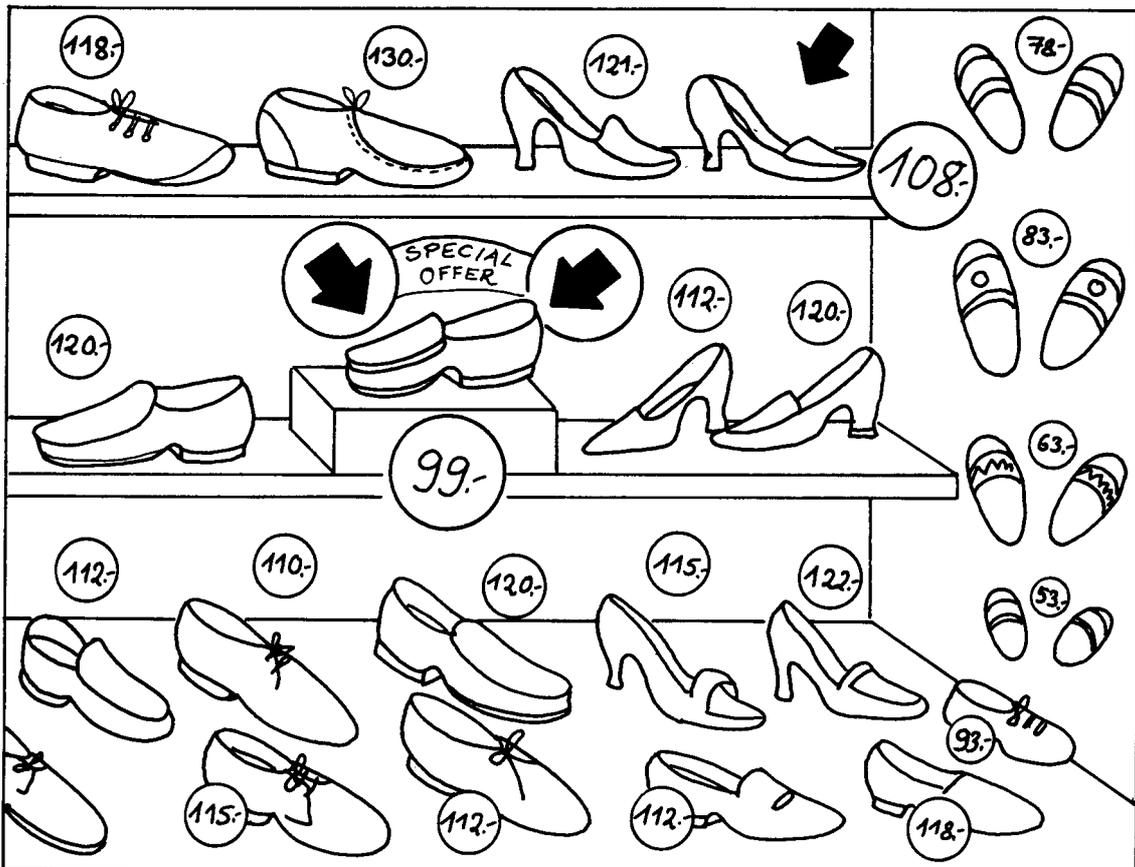


When they had added up all their estimates of the costs, they arrived at the following result:

	<u>T\$</u>
Members' wages	7,000
Raw material inputs	16,250
Workshop building, rent	700
Machines and equipment	700
Electricity	200
Transport	400
Miscellaneous	<u>250</u>
Total monthly costs	25,500 (or T\$102 per pair)

When the shoemakers had found that their costs for making 250 pairs of shoes every month would amount to T\$25,500, they were at first a bit worried. "Where do we get all that money from?" someone asked.

Well, of course they knew that the money must come from the sale of shoes .....



### Sales

The Joint Shoemakers had not decided the exact selling price for their shoes at the time they were making these calculations:

- They knew, however, that shoes similar to the ones they were going to produce, were presently sold to the retail shops at between T\$110 and T\$120.
- The market research report strongly advised against pricing the shoes above T\$110, since a high price would make it considerably more difficult to compete and get the new shoes accepted in the market.

"Let's assume we sell our shoes for T\$110 a pair" Peter suggested. "250 pairs a month at T\$110 - that means we can count on an income from sales every month of ....T\$27,500" John quickly worked out.

### Profit or loss

In that way the shoemakers had found out that they could make a surplus of T\$2,000 every month:

	<u>T\$</u>
Sales	27,500
- Costs	<u>25,500</u>
= Surplus	2,000

This surplus was about 7 per cent of the sales, as we can see from this calculation:

$$\frac{2,000 \times 100}{27,500} = 7.3\%$$

They could also calculate their surplus in this way:

One pair of shoes:

	<u>T\$</u>
Selling price	110
- Costs	<u>102</u>
= Surplus	8

$$250 \times T\$8 = T\$2,000$$

But Tom had warned his friends: "Remember that this is true only if we can sell 250 pairs of shoes, and if our costs turn out to be what we calculated them to be, not more."

Then they tried to calculate the surplus for a case where they could produce and sell only 200 pairs every month. "No problem," Ben said, "we will still make a surplus of T\$1,600". This is how he calculated:

Sales	200 pairs x T\$110 =	T\$22,000
- Costs	200 pairs x T\$102 =	
= Surplus		T\$ 1,600

But Ben's calculations were dangerous, they were wrong!

Let's take a closer look at them.

The first line is correct. The sales would bring in T\$22,000. But what about the costs?

Some of the costs will of course change when the production is reduced - like the cost of raw materials and electricity. Since they vary with production they are called variable costs. But other costs will not be lower. For instance, the wages and the building costs would be the same whether they made 200 or 250 pairs of shoes. They are fixed costs.

Let us add up all the costs for production of 200 pairs.

	<u>T\$</u>
- Members' wages (fixed cost)	7,000
- Raw materials (variable cost): for one pair of shoes the cost was T\$65 (see page 22). The cost for 200 pairs would be	13,000
- Building costs (fixed cost)	700
- Machines and equipment (fixed cost)	700
- Electricity (variable cost) as production would be reduced by 20%, the electricity bill would probably also be reduced by 20%	160
- Transport costs (could probably not be reduced - fixed cost)	400
- Miscellaneous (could probably not be reduced - fixed cost)	<u>250</u>
 Total cost for production of 200 pairs	 22,210

This is a completely different picture! With an income from sales of only T\$22,000 the co-operative would make a loss of T\$210 if they produced and sold only 200 pairs each month - quite a risk! The shoemakers therefore discussed the chances of having to face such a situation. But since they had based their calculations on the lowest sales figure forecast by the market researchers (250 pairs), they were pretty sure that they would manage to achieve this target.

Then there was the other risk, which Tom had pointed out: "If our costs turn out to be higher than we have estimated, then we may also make a loss. Suppose that we have underestimated our costs!"

No, the others were of the opinion that the estimates were realistic. But Tom had insisted: "Suppose that the price of plastic linings doubles tomorrow. What will then happen to our surplus, even if we sell 250 pairs per month?"

That was not so difficult to calculate. The present price for plastic linings was T\$5 per pair. The cost would then increase by  $250 \times T\$5 = T\$1,250$ . The surplus of T\$2,000 would then be reduced to T\$750.

"But if a price goes up like that, what else can you do but pay it?" Peter had asked. The others explained the various options open to them.

"We can always try to find suppliers with lower prices. But if that doesn't work we must take action. If a pair of shoes is going to cost us T\$5 more in terms of plastic linings, we must make sure that we get these T\$5 back from somewhere. Either we increase the selling price of our shoes, or we try to save T\$5 on some of our other costs. If we don't do that we'll pay it from our profit."

● *In the course of these discussions the shoemakers soon realised that these calculations were absolutely vital. They realised that their future depended on their sales and their costs.*

When they saw that the profit **could** quickly turn into a loss if sales dropped or the costs went up, they decided to keep a close eye on these figures in the future, and compare their estimates with the actual results every month.

### Summary

The shoemakers had the right approach. Before they started their co-operative, they wanted to be sure that their business should at least "break-even". That means that the income should be enough to cover the costs. They realised that it was necessary to plan this carefully, and they planned to make a small surplus.

All workers' co-operatives should do this before they start production. Here is a summary:

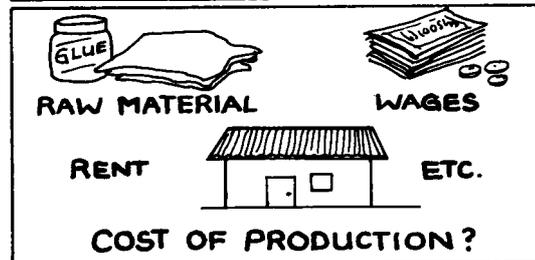
1. Estimate the sales volume for your product. Be careful not to overestimate it.



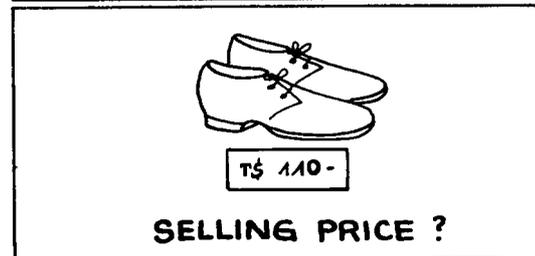
2. Find out how many workers, i.e. members, are needed to produce that volume. Do not start your co-operative with more members than that.



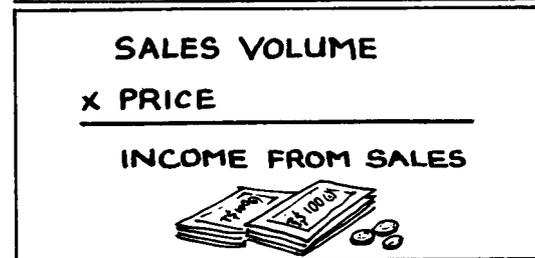
3. Calculate the true cost of producing the estimated volume.



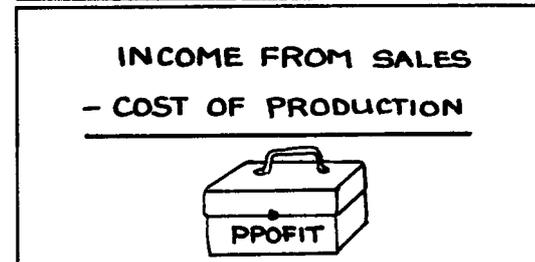
4. Decide a realistic price for your product.



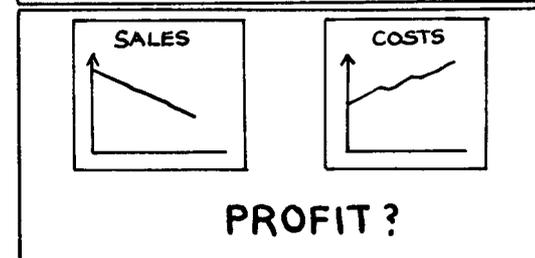
5. Calculate the income from sales.



6. Calculate the surplus (or loss).



7. To be really sure recalculate the results for cases where your income from sales will be lower than expected, and where costs are higher than expected.



# YOU NEED CAPITAL

You cannot start a workers' co-operative if you do not have enough capital. In most cases, therefore, the first questions members ask when they want to start this kind of co-operative are: "Do we have enough money?" or "Can we get enough money?"

We have waited till the last pages before we talk about the role of capital in a workers' co-operative. This was because we wanted to stress that all the other questions we discussed so far are equally important. Capital certainly plays an important role, but a workers' co-operative needs more than that. Remember:

Even if you can raise enough capital, do not start a workers' co-operative unless you have

- a reliable market;
- reliable sources of inputs (raw materials);
- possibilities of making a surplus.

Now, let us talk about capital. We will again use the Joint Shoemakers Co-operative as an example.

## How much capital is needed?

How much did our five friends need to start their co-operative? Let us list everything they required: a workshop, machines and other equipment, a stock of raw materials and cash for miscellaneous items.

### Equipment

They needed new equipment costing a total of T\$36,000 and this money would have to come from somewhere.

### Raw material

How much money did they need for raw materials? That depended, as we have seen, on how big a stock they wanted to keep. They wanted to buy a small stock of some items, because the supply was easy and reliable. Other items which were more difficult to obtain necessitated keeping a buffer stock, which would last two, three or more months. In all, the **stock would cost** them T\$32,500.

### Rent

They did not need much money for the workshop. They only had to make sure that there was enough cash to pay for the rent. That was T\$700.

But was that enough? With T\$700 they were able to pay their rent for the first month. But what about the second month, the third, and so on? Yes, T\$700 was enough. Remember, the shoemakers had planned to pay all their costs with the money they earned on their sales. So, in the following months they would have an income from the sales; in other words they needed to raise money only for the ~~first~~ month.

### Wages

The co-operative is supposed to pay the members' wages from the monthly income from sales. T\$7,000 will be needed already the first month. But the sales may be low the first month, so the amount need to be raised from some other source.

### Other expenses

It is also clear that a minimum of cash must be available from the beginning to cover transport costs and other bills that are common in any business. The shoemakers estimated that T\$2,000 would be needed.

The cash flow

Cash will flow in to the co-operative every month, through the sale of shoes, and there will also be a flow of cash out from the co-operative. Suppose that the society suddenly has to pay bills for raw material, electricity and transport at the same time as members expected their wages. There would certainly be a risk that they would be short of cash at such occasions, and maybe have too much at other occasions.

In other words, the amount of money needed by a workers' co-operative varies from day to day, from week to week and from month to month. Sometimes there will be too much, sometimes too little cash. Yes, "too much" cash can also be a problem. By leaving it too long in the cash box or in a current bank account, the co-operative will lose interest it could have earned from having it in a savings account, for instance.

It is possible to avoid many cash problems by making a plan for the cash flow. This is called a cash budget. Such a budget shows how much money is expected to come in to the co-operative month by month, and how much money will have to be paid out. In that way it is possible to foresee when cash shortages will occur, and to do something about it in time.

RULE

12

*Make sure that you always have a realistic cash budget.*

On the next page you can see the cash budget prepared by the Joint Shoemakers for the first four months. Note the following:

- Like in most budgets the figures are rounded off; it is impossible and not necessary to estimate the exact amounts.
- They have been careful not to include any income from sales in the first month. But the loans and the share

CASH BUDGET

	Month 1	Month 2	Month 3	Month 4
CASH COMING IN				
1 Sales		22,000	27,500	27,500
2 Other	78,000			
3 TOTAL	78,000	22,000	27,500	27,500

CASH GOING OUT				
4 Raw material	32,500		32,500	
5 Rent	700	700	700	700
6 Wages	7,000	7,000	7,000	7,000
7 Electricity			600	
8 Transport	400	400	400	400
9 Loan interest				2,000
10 Loan repayment				
11 Miscellaneous	37,000	250	250	250
12 TOTAL	77,600	8,350	41,450	10,350

13 NET FOR MONTH (Line 3 - Line 12)	400	13,650	- 13,950	17,150
14 CUMULATIVE NET		14,050	100	17,250

capital are received, T\$78,000. Almost all that money will be needed the first month. The amount on Line 11 comprises payment for the machines, an insurance premium and some miscellaneous expenses.

- The next month they expect to receive payment for at least 200 pairs of shoes, i.e. T\$22,000 so at the end of **the month** they will have about T\$14,000 in cash.
- During the third month sales of 250 pairs are expected, i.e. T\$27,500. Still the expenses will be higher than the income, as they have to buy more raw material. But they will manage, thanks to the sales in the previous month.
- The cash budget tells the shoemakers that they have to sell at least 450 pair of shoes, and receive the payment, i.e. T\$49,500, in the first three months. Should they not be able to achieve this, they will not be able to pay their expenses as planned.

Let us summarise. In total the Joint Shoemakers Co-operative had to raise T\$78,000. It was going to use these funds as follows:

	<u>T\$</u>
Equipment	36,000
Stock of raw material, inputs	32,500
Cash to pay wages, rent and miscellaneous expenses the first month	<u>9,500</u>
Total	78,000

The shoemakers had of course discussed the possibility of starting the co-operative with less money, but they realised that it was not possible:

- If they did not stock enough of raw materials, production might later be reduced.
- If they did not buy the stitching machine, they would not be able to produce 250 pairs of shoes every month.
- If they did not have any extra cash, they would perhaps not be able to pay all expenses.

Many workers' co-operatives have run into these kinds of problems because they try to run their business with too little capital.



*Make sure that you can raise enough capital to start and run your business.*

#### Sources of funds

The Joint Shoemakers needed a starting capital of T\$78,000. Where did our five founder members find that much money?

- The members agreed to contribute T\$20,000 (T\$4,000 each). This is called to "buy shares" in the co-operative.
- The Small Business Development Organisation agreed to give a loan of T\$30,000 to enable the co-operative to buy machines and equipment.
- The co-operative also managed to get a loan of T\$28,000 from the co-operative bank.

We know already how the co-operative will use T\$78,000. Now we also know from what sources they collected this money. The "financial picture" of the Joint Shoemakers Co-operative when it starts looks like this:

Joint Shoemakers Co-operative Society			
<u>Uses of funds</u>		<u>Sources of funds</u>	
	<u>T\$</u>		<u>T\$</u>
Machines and equipment	36,000	Share capital	20,000
Stock of raw material	32,500	Loan: Small Business Development Organisation	30,000
Cash	<u>9,500</u>	Loan: The Co-operative Bank	<u>28,000</u>
<b>Total</b>	<b>78,000</b>		<b>78,000</b>

This picture will change every day. For example, the stock of raw material will decrease when production of shoes starts. But the cash will increase when shoes are sold.

Such a picture of the financial situation is called a balance sheet. (You can see that there is a balance between the left and right hand sides, both amount to T\$78,000.) Every enterprise has to prepare balance sheets regularly. They contain a lot of useful information about the condition of the enterprise at a particular point of time.

## YOU NEED MANAGEMENT

To make a workers' co-operative succeed as an enterprise, you have learnt that it needs:

- a market for its products;
- inputs of raw materials and supplies;
- machines and equipment;
- a surplus (profit);
- capital.

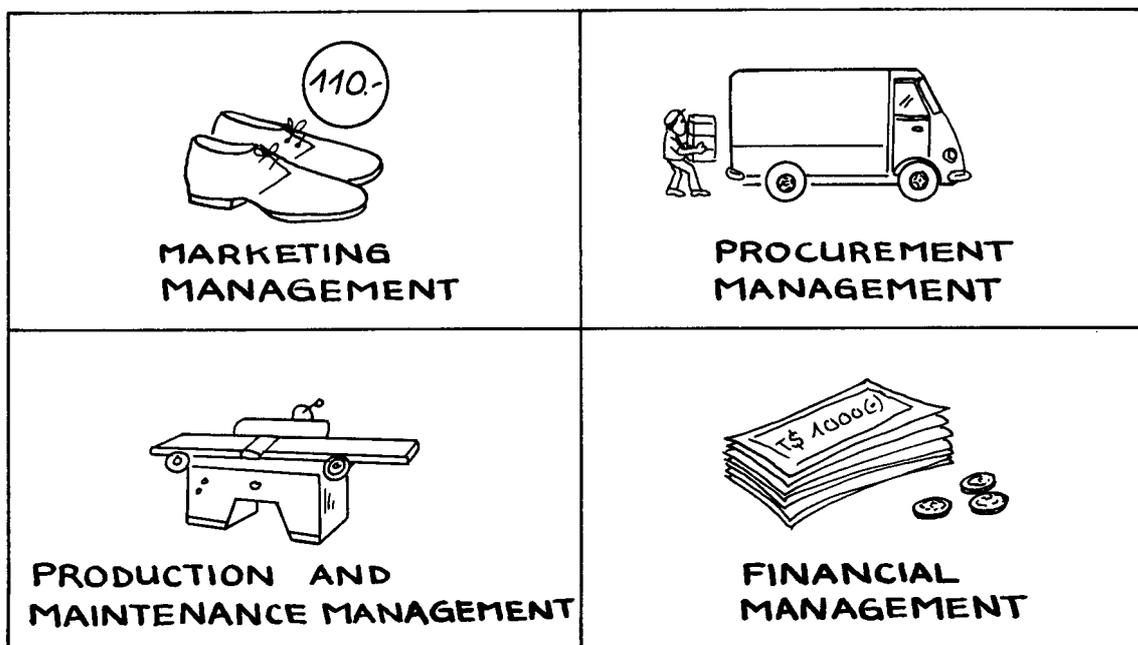
To obtain all this, a co-operative needs good leadership, good management.

The management of a small workers' co-operative may be undertaken by a committee elected from the members, or by just one of the committee members. A larger co-operative may have a committee plus one specialist manager to deal with all these matters. Whatever the situation is, it is extremely important that the management of the society knows its duties and is capable in the various fields of management:

- marketing management;
- procurement management;
- production and maintenance management;
- financial management.

In this booklet we have already dealt with several management matters at some length. However, managing a workers' co-operative is such an important and responsible job that we would like to conclude this booklet with a review of the management functions, as they are listed above.

You can use this last chapter as a check-list to show you how good is the management of your society.



Marketing management

A market for your co-operative's products may very well exist. But such a market will only buy and continue to buy your products when you succeed in winning it over to your products. This will to a large extent depend on the marketing management of your co-operative.

Good marketing management means producing a product that sells because it is needed, it has good quality, it has the right price and it is delivered in suitable packaging. Sales promotion i.e. information, advertising and other types of sales support may also be needed.



How is the marketing management in your co-operative? Tick off "yes" or "no" as you read through the following questions:

- |                                                                                                         |     |    |
|---------------------------------------------------------------------------------------------------------|-----|----|
| ● <u>Market research</u>                                                                                | YES | NO |
| Are you able to find out what kind of products your customers want?                                     |     |    |
| ● <u>Product -design</u>                                                                                | YES | NO |
| Are you able to improve your products so that they may cost you less and satisfy your customers better? |     |    |
| ● <u>Distribution, selling</u>                                                                          | YES | NO |
| Do you achieve your projected sales?                                                                    |     |    |
| ● <u>Pricing</u>                                                                                        | YES | NO |
| Are your prices competitive with other similar products on the market?                                  |     |    |
| ● <u>Sales_Promotion</u>                                                                                | YES | NO |
| Are you promoting the sales of your product as well as you can?                                         |     |    |

Procurement management

Raw materials and other inputs not only have to be available. They must also be bought at the best prevailing prices and conditions in the market. And they must be available when they are needed and in the right quantities and qualities.



● Choosing-and-negotiating

YES

NO

Are you able to compare and select suppliers and to negotiate with them?

● Ordering-Procedures

YES

NO

Through an effective ordering system, do you order the right quantities (not too much, not too little)?

● Receiving-Procedures

YES

NO

Do you properly control deliveries of the raw materials you have ordered?

● Storage-system

YES

NO

Have you organised safe and efficient storage of raw materials you keep in stock?

- Stock control YES NO  
Have you developed and put into practice an effective system for controlling and counting stocks?
  
- Issue-procedures YES NO  
Do you know how supplies should be issued and how to value both these supplies and the unused stocks?

Production and maintenance management

Machines and equipment are there to help members to produce the co-operative's products or services. The right machines and equipment must be selected.

Then, all resources must be used in an optimal way in the production process, and all machines must be kept going through proper maintenance.

Does your management understand this?

- Production -techniques YES NO  
Are you capable of comparing and assessing various production techniques and processes and then selecting and using the most suitable one taking into consideration your co-operative's financial resources, manpower and other relevant factors?

- Selection-of-machinery-and  
equipment YES NO  
Are you working with the right machines and equipment in your co-operative? Are they replaced at the right time?
  
- Production-Planning-and  
control YES NO  
Do you schedule your production efficiently and control the quality of what you produce?
  
- Maintenance-management YES NO  
Are you able to design, cost and implement an effective maintenance plan for the machinery, equipment and other facilities in your co-operative?

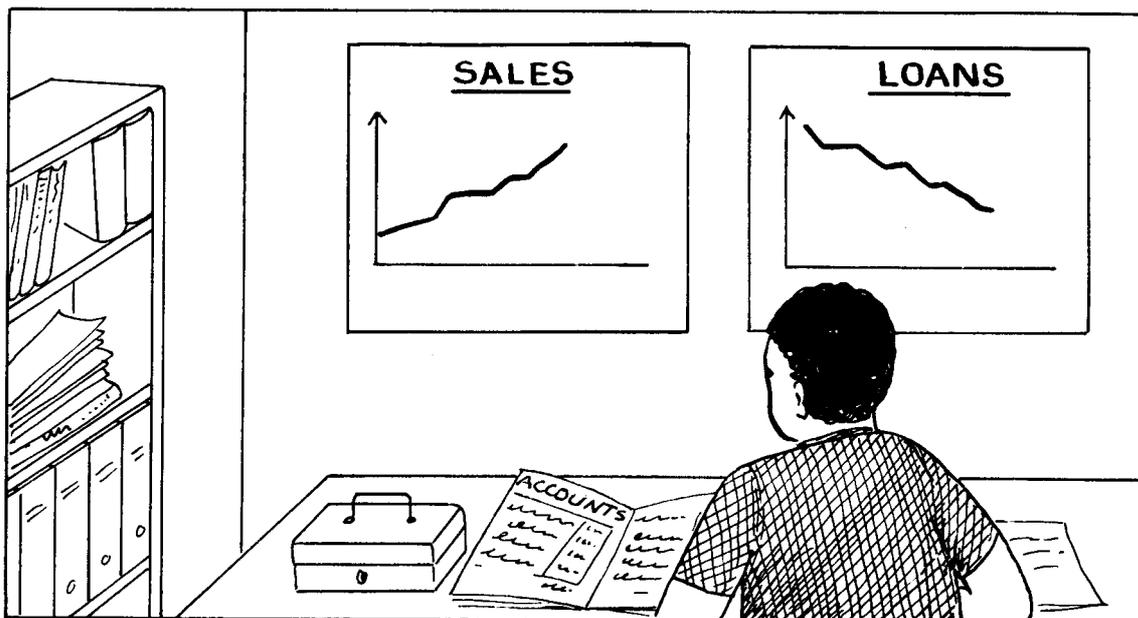
#### Financial management

A co-operative cannot wait until the end of the year to see whether or not it has made a profit. It must be able to know where it stands at any time. The management can then act quickly, if anything seems to go wrong.

Profit in a workers' co-operative results from a long and complicated chain of activities involving buying, transporting, storing, manufacturing, selling etc. To be able to carry out these activities, a co-operative needs capital, which is often scarce and expensive. The management must therefore be able to obtain the capital as cheaply as possible and use it as effectively as possible.

The activities undertaken by a workers' co-operative also

involve costs, which affect profits. The management must therefore be able to calculate and control all the costs.



● Planning, -budgeting- and  
controlling

YES

NO

Are you planning, budgeting and controlling all the activities your co-operative undertakes?

● Capital-management

YES

NO

Are you able to assess your capital requirements and to find the cheapest sources of funds? Do you use the available capital in a profitable way?

● Cost -accounting

YES

NO

Are you able to calculate the cost of any activity undertaken by your co-operative and relate costs to prices and profit?

- |                                                                                                                                                                                                   |     |    |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----|----|
| ● <u>Book-keeping-and-accounting</u>                                                                                                                                                              | YES | NO |
| <p>Are books of accounts well kept in your co-operative? Do you interpret and use the information contained in these books in order to improve the co-operative's management and performance?</p> |     |    |

Professional management

Workers' co-operatives may be set up by skilled craftsmen. But experienced as they may be in certain trades, they may lack the management knowledge and skills required to manage an industrial enterprise efficiently and productively.

This may be true also for your co-operative. However, the exercise in the previous pages should help you to identify the most important areas of management where your society lacks managerial capacity. What to do?

You may need to appoint a qualified manager in your co-operative, someone who has been trained in business management, accounting, and so on. Or you may still want to rely on your committee of elected members.

Committee members can run a small workers' co-operative very well, if they take time to study and learn about management. After reading this booklet, for instance, you should realise that there is a lot to learn about the management of a workers' co-operative. Enquire through your local Co-operative Development Officer or Small Business Development Organisation about the availability of courses which would be appropriate to your society's needs.



*Make sure that your co-operative has the management it needs.*

## CONCLUSION

Let us recall the main Rules which we have examined in this Element.

- Rule 1      Make sure that you produce what customers want.
- Rule 2      Make sure that you have an idea about the size of your market.
- Rule 3      Make sure that you have dependable supplies of inputs and be prepared for emergency situations.
- Rule 4      Make sure that you have an adequate stock of raw materials and other inputs.
- Rule 5      Make sure that the production capacity of your machines is in line with the amount you expect to sell.
- Rule 6      Make sure that your investments in machines and equipment are profitable.
- Rule 7      Make sure that you have at least two trained operators for each machine and piece of equipment.
- Rule 8      Make sure that maintenance service and spare parts are available for your machines.
- Rule 9      Make sure that you have an appropriate and reliable energy supply for the equipment you want to install.
- Rule 10     Make sure that your transport facilities are adequate and transport costs are minimal.
- Rule 11     Make sure that you can make a surplus every year.
- Rule 12     Make sure that you always have a realistic cash budget.
- Rule 13     Make sure that you can raise enough capital to start and run your business.
- Rule 14     Make sure that your co-operative has the management it needs.

Following these basic economic rules will help you to run your workers' co-operative successfully.

## "CHECK-OUT"

To prove to yourself that you have fully understood this Element, you should now answer the following questions. Then check your answers by referring to the pages indicated. If you have problems with a particular question, go back and read the corresponding chapter again.



	Ref. page
1 Mention six prerequisites for a successful workers' co-operative.	3
2 Mention five factors which determine whether the customers will buy your product or not.	5
3 Which is the safest way to find out how many items you can sell?	7
4 How can you avoid or reduce the problems in connection with raw material shortages?	9
5 When should you keep a buffer stock of raw material and other "inputs"?	11
6 What is the disadvantage of having under-utilised machines?	14
7 Mention three important prerequisites for successful operation of complicated machines.	15-16
8 Give some examples of how transport costs can be reduced.	17-18
9 What is meant by "surplus"?	19
10 When estimating the expected sales, why is it dangerous to be too optimistic?	20

	Ref. page
11 List all types of costs in your co-operative (or in a typical workers' co-operative).	21-25
12 Which costs are variable and which are fixed in your co-operative (or in a typical workers' co-operative)?	27
13 Explain how sales and costs will affect your profit.	28
14 Why is it necessary to estimate the income, the costs and the surplus in advance?	29-30
15 Why is it important to keep records of income and expenditures and regularly compare the estimates with the actual results of the business?	29
16 Describe the process (step-by-step) of planning the economy of a new workers' co-operative.	30
17 What is a "cash budget" and how is it used?	33
18 Describe what sources of funds are normally available to a workers' co-operative.	35-36
19 What information can the "Balance Sheet" give about the financial situation of an enterprise?	36
20 Which are the four most important functions of the management in a workers' co-operative?	37

# MATCOM TRAINING MATERIAL

Read also the Element:

<p>A Workers' Co-operative Organisation</p>
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MATCOM has also published a series of Learning Elements for staff of consumer co-operatives. Some of the topics included are important also for workers' co-operatives, e.g.

- Cash and stock management
- Ordering goods
- Receipt of goods
- Handling of cash
- Cash control without a cash register
- stock control records
- Stock-taking

Write to MATCOM for a complete list and sample copies.

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