

MANUAL 5

**HOW TO RUN
A SELF-SUFFICIENT
SCHOOL**



TEACH
A MAN TO FISH
Education that pays for itself

ABOUT THIS SERIES

The SCHOOL IN A BOX Guide Series is designed as a 'one-stop shop' for anyone interested in establishing their own financially self-sufficient school.

The series is made up of nine individual manuals which between them cover all of the key areas which will need to be considered in detail in the creation of any Self-Sufficient School.

Each manual offers a step-by-step guide to building your understanding of key concepts and mastering a range of planning and management tools, as well as providing a wealth of case studies and real-life examples to illustrate both best practice and easily avoided pitfalls.

The full listing of manuals in the series is as follows:

1. Getting Started: An Introduction to Financially Self-Sufficient Schools, 2. How To Evaluate Your Organization, 3. How To Organize Your School, 4. How To Generate School Income, 5. How To Run A Self-Sufficient School, 6. How to Educate Successful Rural Entrepreneurs, 7. How to Organize Student Life, 8. How to Write A Business Plan for a Self-Sufficient School, 9. How to Finance Your Plan

CREDITS

The SCHOOL IN A BOX Guide Series represents the knowledge, experience and hard work of a dedicated team of authors and editors at Teach A Man To Fish and the Fundacion Paraguaya.



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Visit www.teachamantofish.org.uk and www.fundacionparaguaya.org.py for more information

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Contents

1. Introduction	3
2. The administration	4
2. Accounting	13
3. Accounting and agricultural costs	20
4. Financial statements	27
5. Budget.....	33
6. Internal control	44
7. Accounting and management systems	53
8. Bibliography	60

1. INTRODUCTION

HOW CAN I RUN A SELF-SUFFICIENT AGRICULTURAL SCHOOL?

The answer, “through good management of the available resources”, is the goal of a good administration.

Administration is one of the most important human activities, in use ever since humans started forming groups in order to achieve goals that they could not achieve individually.

As societies have put more and more trust in group efforts, many organized groups have grown larger and the work of administrators has gained ever increasing importance.

The administration of a self-sufficient agricultural school may not be very different from that of a commercial or industrial enterprise, but it has very unique characteristics due to the fact that the school is working with students who are simultaneously the main figures of its success, since educational excellence is the final goal.

In this manual you will find valuable information that will help you in the task of running a self-sufficient agricultural school.

2. THE ADMINISTRATION

The objective of this chapter is to provide you with an overall view of what it means to run a self-sufficient agricultural school and the elements that are needed for effective and efficient administration.

When you finish reading this chapter you will be able to:

- 1. Clearly identify the elements necessary to run a self-sufficient agricultural school effectively.*
- 2. Make the best use of the elements already available within your organization - economic resources, human resources, technology, etc. - and identify those which are lacking.*

WHY IS ADMINISTRATION SO IMPORTANT?

1. In the realm of human activity there is always an administrative side to any planned effort.
2. Wherever a social institution exists, there will be administration.
3. Administration is the human element that directs the activities and strives to achieve the objectives of an organization. Good infrastructure, the best equipment, and the best location count for nothing without this direction.
4. Scientific and technological development is not possible without administration.
5. Administration is a universal process: it is found in every kind of society, from capitalist to socialist; and every kind of business, large and small alike.
6. Productivity and the standard of living in developing countries can be raised by means of administration.

7. Administration makes human effort effective. It helps obtain better staff, equipment, materials, finance and also encourages better interpersonal relations.
8. Administration keeps track of changing conditions and provides foresight and creativity.

WHAT IS ADMINISTRATION?

Administration is the process of ensuring that a group has:

- A plan of action to achieve their common goal
- Effective organization
- The sensible delegation of tasks
- A well-integrated staff
- Clear direction and control

Successful administration will create and maintain an environment in which the members of the group can:

- Perform enthusiastically
- Fulfil their potential
- Operate effectively and efficiently

In this way a good administration pushes the group to achieve its goal - in this case, the self-sufficiency of an agricultural school.

WHAT RISKS DOES THE ADMINISTRATOR FACE?

There are various areas of risk that you will deal with in the management of a self-sufficient agricultural school, which can be summarized in three main areas of administration: production, marketing and finances.

There are two ways to increase the return/risk quotient: increase the numerator, that is income, while trying to keep the denominator (expenditures) down, or, keep the numerator constant while causing the denominator to decrease. The efficient administrator must pursue this objective using one of these strategies.

There are many administrators who successfully manage all aspects of their school, but we are also convinced that many of them need to make a serious effort to keep up with the changing times, in order to be able to ensure the survival and growth of their institutions.

WHAT IS AN ADMINISTRATOR?

An administrator is someone who:
<ul style="list-style-type: none">• <i>Makes decisions that increase profits</i>
<ul style="list-style-type: none">• <i>Makes the best use of available resources</i>
<ul style="list-style-type: none">• <i>Manages to achieve stated objectives</i>

Therefore, the two main roles for the administrator are to:

1. Establish the objectives for the school
2. Identify how to get the best results from the available resources

1. ESTABLISH THE OBJECTIVES FOR THE SCHOOL

The objectives serve as a guide for the administrator and must be taken into account when each decision is being made, in order to consider whether the consequences of a given course of action will lead to the accomplishment of the objectives better than any other.

Any school that is run without taking into account what you want to achieve is like a boat without a rudder: you have no control over where it is heading.

When you establish objectives, it is very important to keep in mind the following points:

- **They should be written down:** This way everyone involved can review them and will be able to compare them with what happens in the future, to decide whether they have been achieved or not.
- **They should be specific:** “Increase income by \$5,000 a year” is better than “Increase income.”

- **They should be measurable:** The objective of increasing income by \$5,000 a year is measurable, thus each year the administrator can easily see the degree to which the objective was achieved.
- **They should have a time frame:** “Increase income by \$5,000 a year in the next two years” is better than not establishing a time frame for achieving the objective.

While it's true that every business seeks to earn money, there are different ways to express this. Furthermore, in agricultural activities we may also have additional objectives. Below we present a list of possible objectives:

- Self-sufficiency for the school
- Maximize profits, achieve the best possible return on investment
- Maintain or improve standard of living
- Increase net income
- Reduce debt or subsidies, work without debt or subsidies
- Maintain stable income, establish a minimum income for a given year
- Increase the size of the operation, add land
- Maintain soil fertility and water resources

Usually multiple objectives are established, making it necessary to establish priorities. Some objectives may be in conflict with others, making prioritizing even more important. Undoubtedly no school can survive over time without generating the resources necessary to be self-sufficient; this objective therefore becomes, directly or indirectly (as being necessary for the achievement of other objectives) the most important.

2. IDENTIFY HOW TO GET THE BEST RESULTS FROM THE AVAILABLE RESOURCES

You must consider the resources you have available to help you achieve your objectives. When it is time to establish objectives, the quantity of land, workers and capital available should be taken into account, so that the objectives are based on the reality of each specific school and are not just wishful thinking. Another resource that should be taken into account is the administrative capacity of the school.

Determining the existing resources and the possibilities for expanding these is one of the main responsibilities of the agricultural administrator. This is because the available resources could feasibly be put to a variety of uses. The administrator must concentrate all of his efforts on achieving the best combination of resource uses, so that all resources are effectively applied to the achievement of the objectives.

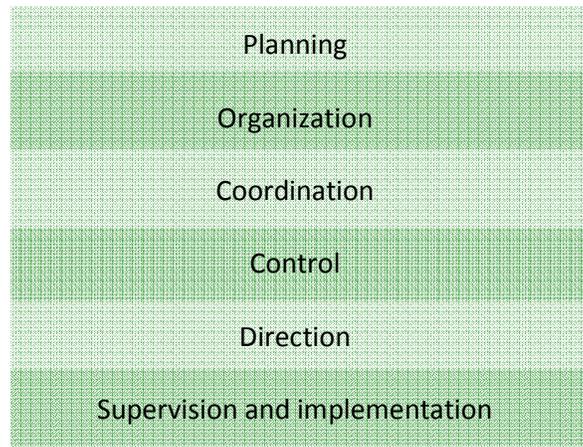
Questions such as the following should be considered:

- Whether to work in agriculture, livestock or a mix of both?
- What proportion of land will be dedicated to agriculture?
- What crops will you grow? What livestock will you work with?
- What technology will be used for production?
- What marketing strategy will be applied?
- How will the school's finances be structured?

Finding answers to these and the many other questions that come up at a school is undoubtedly a complex task, requiring that the administrator be familiar with the different tools that permit him to identify problems and make the best decisions when the moment arises.

WHAT ARE THE FUNCTIONS OF THE ADMINISTRATOR?

These are some of the functions of an administrator:



From this list we can extract an administrator's three basic functions:

PLANNING

This is the most important function, and refers to establishing the course of action to be followed. Not much can happen without a plan. We can consider organization to be included within this function.

IMPLEMENTATION

Once it has been developed, the plan must be carried out. This function includes acquiring the necessary resources and putting the planned process into action. We can include coordination, direction and supervision within this function.

REVIEW

This includes following up on results, generating new information and taking corrective measures. In this way we see if the consequences of our activities are in keeping with what had previously been planned, and can take whatever measures are necessary to correct any deviations that may have been detected.

WHAT HUMAN RESOURCES DOES THE ADMINISTRATOR NEED?

Human resources should have their abilities and mental energy focused on the institutional objectives. Human resources can be classified in the following categories: *academic*, *production* and *administrative*.

A. ACADEMIC HUMAN RESOURCES

Both the instructors and the academic employees should focus their efforts around the Educational-Productive Plan, in which the final objective of the self-sufficient agricultural school is to turn poor peasant farmers into citizens fully exercising their rights and conscious of their responsibilities.

B. PRODUCTION HUMAN RESOURCES

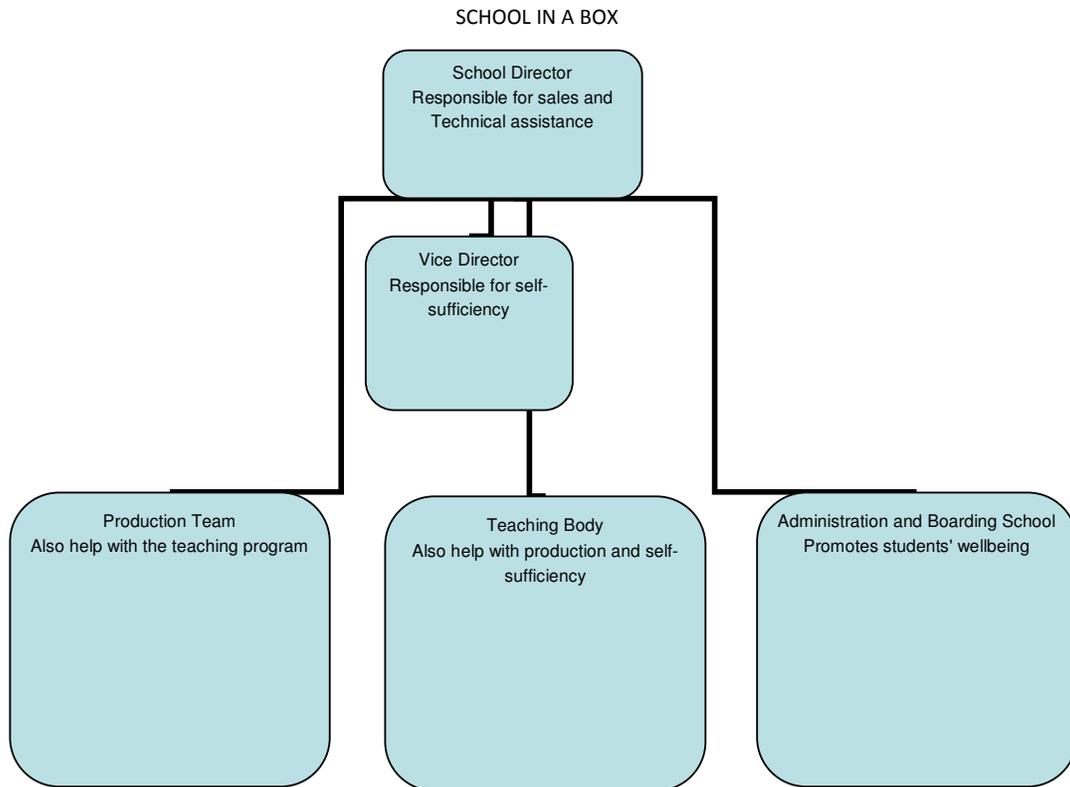
should have sufficient knowledge of the area in which they were hired to work and concentrate their efforts on production based on the marketing goals for each product. For example, if the school has a dairy, the person responsible for milk production should be oriented not just towards production but rather towards satisfying the internal demand (student dining room) and external demand (processing, raw milk sales), and moreover should understand that production and marketing function to achieve the goal of self-sufficiency for the school.

C. ADMINISTRATIVE HUMAN RESOURCES

are of fundamental importance, as they allow the school to function in an orderly fashion and make sure information is available when necessary and in the proper format. In order for administrative support to work adequately, it is also necessary to have the following :

- Personnel file
- Job descriptions
- Organization chart

Below we give an example of an organization chart in which you can see the emphasis on self-sufficiency as the goal of the self-sufficient agricultural school.



WHAT TYPE OF INFORMATION SYSTEM IS NEEDED?

It is important to have good accounting and management software. Your information system is the basis for decision-making, which is why it is important for the administrator to have a system which not only provides the information on time and properly formatted, but also serves as a tool to control the operations of the school.

Chapter 7 of this manual covers in detail all the information about the necessary characteristics of an information system that will be a useful tool for the administrator of a self-sufficient agricultural school

At Fundación Paraguaya's San Francisco Agricultural School we use an accounting and management software program called Agrowin 3.0; information about this program is available at: www.agrowin.com.

SELF EVALUATION

Based on what you read in this chapter, try to answer the following questions:

WHAT IS ADMINISTRATION?

WHAT ARE THE RISKS?

WHAT IS AN ADMINISTRATOR?

WHAT ARE THE FUNCTIONS OF THE ADMINISTRATOR?

WHAT HUMAN RESOURCES DOES THE ADMINISTRATOR NEED?

2. ACCOUNTING

The objective of this chapter is to provide you with the necessary information about accounting, its importance and the benefits of having an accounting system that allows you to obtain relevant information on time and properly formatted.

After reading this chapter you will be able to identify:

1. *What accounting is and why it is important*
2. *What agricultural accounting is*
3. *The difficulties of agricultural accounting*
4. *The objective of agricultural accounting*
5. *The factors of agricultural production*

WHAT IS ACCOUNTING?

Accounting is an economic science that aims to provide information on the past, present and future economic situation with the goal of facilitating financial decisions, planning and control.

The business world is currently advancing by huge steps and accounting must keep up in order to keep the business competitive.

WHY IS ACCOUNTING IMPORTANT?

Because in our day-to-day life we all need to have a certain amount of control over what our income and expenses are. We need to know what needs we must address and what resources we can use. Without this control, we would risk using up our resources by the middle of the month, or not knowing how much we owe on a loan the bank has given us and that we must pay back.

This task may be simple in the context of a family (it is enough to have a notebook to write down expenditures and calculate the money still available) but it depends largely on how many operations are going to be recorded.

Let us now imagine that you are the administrator of an agricultural school carrying out your duties: you will need to know, somehow, how your school is progressing financially.

While in the case of individuals this information can be generated relatively easily, in the case of a school this process can be extremely complicated. The school can move a large quantity of money in one day and carry out multiple operations that need to be recorded. Obviously, this recording can't be done haphazardly, it must be done in a clear, orderly and methodical way so that the director or anyone else can refer to it later without problems.

As administrator of the agricultural school, you will need a record-keeping system which allows you to:

- Know at any given moment the situation of the school and its business transactions
- Have information available which allows you to make decisions

WHAT ARE THE CHARACTERISTICS OF THE RECORDS?

Accounting records must:

- **Be exact.** Accounting records cannot have errors or omissions. If these occur, there should be a mechanism built into the system which makes it easy to locate and correct them.
- **Be simple.** The records should be created to be understandable and manageable by whoever is responsible for them and it should be possible to interpret them quickly. If the system is complicated, instead of making it easy to obtain data, it will demand an input of time and effort that is not justified.
- **Be complete.** If you forget to include a vital piece of data the records will lose all value since the information in them will not be useful for decision-making or may lead to errors in the management of the school.
- **Be designed ahead of time.** Before being put into use they should be carefully planned to avoid duplicating information. They should also be tested to ensure that they serve the intended purpose.

WHAT FACTORS ARE INVOLVED IN CREATING ACCOUNTING RECORDS?

The way you go about creating accounting records will depend heavily on:

- The education level of those responsible for the administration of the school
- The interest of the school's directors in having useful and reliable information to make decisions
- The size of the farm and its planned organization

The type of records could vary from the simplest (single-entry accounting) to the most complex (double-entry accounting).

WHAT IS AGRICULTURAL ACCOUNTING?

Agricultural accounting:

- Gives reliable information about the production process
- Helps establish financial controls
- Enables good decision-making through the provision of information
- Gives the information necessary to comply with tax requirements
- Helps the farmer to plan improvements to the infrastructure of his farm
- Allows greater knowledge of business management and the profitability of the business
- Allows comparisons between different periods and the opportunity to correct past errors
- Provides the information necessary when seeking credit

For these reasons, all agricultural businesses should use accounting methods, whatever the size of the operation.

WHAT ARE THE DIFFICULTIES OF AGRICULTURAL ACCOUNTING?

Applying accounting principles to agricultural activity generates a series of difficulties unique to this type of economic activity:

- The normal growth of animals, which implies a change in value, must be considered in terms of the final purpose of the animal. According to their final purpose, animals can be considered factors of production or products. If a calf is sold for meat it is a product, if it is kept and raised as a dairy cow, it is a factor of production. Animals can also serve a different purpose as they grow older. For example, after a useful life as a dairy cow, a cow could become a product such as an animal sold for rendering.
- There can be difficulty in distinguishing family income and expenditures from business income and expenditures.
- Agricultural activity depends on certain factors beyond human control, the weather for example.
- The assessment of production costs for crops that are growing or being processed depends on the crops' stage of development.
- Instead of receiving monetary compensation for their work, the owners of an agricultural business can consume their product directly.
- A combination of crop and livestock activities complicates the accounting process as each activity must be calculated separately.
- The presence of students as a source of labor is a unique factor that must be accounted for.

WHAT DOES AGRICULTURAL ACTIVITY CONSIST OF?

It encompasses all activities that involve the use of the land and includes cultivation of crops and livestock work, in all of their forms.

Agricultural activity continues to be a very important part of the national economy, for its contribution to the gross domestic product, as a generator of foreign currency and as a major source of employment.

WHAT IS THE OBJECTIVE OF AGRICULTURAL ACCOUNTING?

The administration of an agricultural school seeks answers to the following questions:

- What to produce
- How to produce it
- When to produce it

To develop an outlook regarding these three questions, directors need information that is accurate and timely, telling them how internal and external markets are moving in order to plan what should be produced and at what cost.

The administration gets this information through the agricultural accounting record, which it makes available to the director so that he can make correct and timely decisions.

Due to the fact that changes are frequent in the market for agricultural products, the producer should have techniques for investigation and making projections which allow him to make frequent changes in the production process. Knowing the respective costs of production, projection and diversification of new crops helps him make better decisions when the time comes to decide what it is most profitable to produce.

WHAT ARE THE FACTORS OF AGRICULTURAL PRODUCTION?

Agricultural activities depend upon four fundamental factors for production:

1. LAND

Land has a set value; it is the base factor of agricultural activity since all of the other factors of production — animals, material and minerals — depend upon it.

2. LABOR

- Human labor (hired or not)
- Animal labor
- Mechanical labor
- Investigative and technical labor

3. CAPITAL

Capital consists of the economic and financial resources which the agricultural school has available to carry out production. This could include money, property, machinery, equipment, etc.

4. ADMINISTRATOR

The administrator is responsible for efficiently combining the three previous elements to generate the production and income of the agricultural school.

WHAT IS AN AGRICULTURAL ADMINISTRATOR?

This is a person or institution that applies its financial and technical resources and infrastructure to generate agricultural production. The administrator always seeks to achieve better results with the final aim of self-sufficiency.

SELF EVALUATION

Based on what you read in this chapter, try to answer the following questions:

WHAT IS ACCOUNTING AND WHY IS IT IMPORTANT?

WHAT IS AGRICULTURAL ACCOUNTING?

WHAT ARE THE DIFFICULTIES OF AGRICULTURAL ACCOUNTING?

WHAT DOES AGRICULTURAL ACTIVITY CONSIST OF?

WHAT IS THE OBJECTIVE OF AGRICULTURAL ACCOUNTING?

WHAT ARE THE FACTORS INVOLVED IN AGRICULTURAL PRODUCTION?

3. ACCOUNTING AND AGRICULTURAL COSTS

The objective of this section is to inform you about the costs of production, the variety of agricultural activities and how to record them using accounting principles.

When you finish reading this chapter, you will be able to identify:

1. *The costs of agricultural production*
2. *How the costs are classified*
3. *How the costs are calculated*
4. *The use of accounting records in agriculture*

WHAT ARE THE COSTS OF PRODUCTION?

The costs of production are the expenses necessary to maintain a project (or operating unit), for example the dairy of a school. The difference between income (from sales and other sources) and the cost of production is called the gross income of an operating unit.

For example, the total cost of milk production includes the costs of cattle feed, sanitation and direct labor.

WHAT ARE AGRICULTURAL COSTS?

All agricultural schools need financial resources to acquire supplies and the means of production, such as seeds, herbicides, fertilizers, insecticides, animals and feed, machinery and equipment, facilities and structures, hired labor, etc.

The costs of agricultural schools can be grouped categorically as:

LAND

Cost of soil depletion or rent (when the producer does not own the farm).

LABOR

Payment to permanent or temporary laborers; value of labor provided by these laborers or by students of the agricultural school.

LONG-TERM MEANS OF PRODUCTION

Machinery and other equipment; facilities and structures.

CONSUMABLE MEANS OF PRODUCTION

Seeds, herbicides, fertilizers, insecticides and fungicides.

EXTERNALLY CONTRACTED SERVICES

Milling and mixing of grain to create animal fodder; transport of products and animals; mechanical services (plowing, raking).

OPERATING COSTS

- Electricity and communications (telephone, radio)
- Fuel and lubricants
- Materials (to repair roads, buildings, fences, etc.)
- Maintenance (facilities, machinery and equipment, etc.)
- Depreciation
- Insurance

It is extremely important to distinguish expenses from costs. Costs are resources used directly for production, while expenses are payments that can be applied to one or more periods of production and can also occur when production is not occurring.

For example, the following case illustrates a cost:

A school buys some new machinery which will aid production for many years.

There is an initial financial outlay when the machinery is acquired (the purchasing period), but no further payments while the machinery is being used (the production period).

However, each period of operation should be assigned a part of the cost of the machinery in order to calculate the true profit or loss of that period.

IMPORTANT NOTE ON LABOR COSTS AT AN AGRICULTURAL SCHOOL:

In the agricultural activity of small farmers, there is no established payment to family members who contribute to the work in the fields, nor does the producer earn a salary.

In this case we are dealing with a farm belonging to an agricultural school, in which students practice in the field the techniques they learn and therefore are not paid. If the farm did not have that source of labor, it would have to pay laborers to carry out the work.

Given this fact, in order to know the real cost of production, the school should take into account those unpaid salaries, otherwise, the resulting cost of the operation of the farm would be deceiving.

It is also true that on a conventional farm it would not be necessary to have so many laborers, because production can be carried out with only a few professional laborers.

Therefore we suggest you take the salaries of the technicians and faculty involved in each productive activity as the cost of labor. This will contribute to an accurate cost of the product.

HOW TO CLASSIFY YOUR COSTS

To have a reasonable idea of the profitability of a school, it is crucial to identify and be familiar with the behavior of each of the costs involved in its activities.

These costs can be classified as:

- Fixed or variable costs
- Direct or indirect costs
- Total and per-unit costs
- Fixed or variable costs

FIXED COSTS

Those that do not vary in relation to the volume of production.
Examples: depreciation, insurance.

VARIABLE COSTS

Those that are directly related to the volume of production, meaning that they increase as production increases.

Examples: animal fodder, fuel, fertilizers and labor.

DIRECT OR INDIRECT COSTS

DIRECT COSTS

When the cost is directly related to the production of a given product.

Examples: the value of seed and fertilizer is directly related to the production of corn.

INDIRECT COSTS

Those that have no relation to the production of a specific product; they are necessary for production but cannot be identified as a specific cost of any product.

Example: the cost of electricity is necessary for all productive activities, but it is difficult to say how much corresponds to each product.

TOTAL AND PER-UNIT COSTS

TOTAL COSTS

The total production cost of, for example, a hectare of sesame is important information, but it is not sufficient for evaluating the efficiency of production if the production level per hectare is not taken into account.

PER-UNIT COSTS

The total cost per kilo of sesame takes into account both the costs and the production level which results in better data for comparing the efficiency of production.

This is what we call per-unit cost, for example:

A farmer produces 4 000 kilos of sesame at a cost of \$2 500.

If we divide \$2 500 by the number of units produced (4 000) we get a per-unit cost of \$0.625.

This is the same as saying that each kilo cost us \$0.625.

The per-unit cost is extremely important information and enables us to:

- Fix a reasonable sale price
- Track changes in the cost of a product over time
- Compare the cost of a product with other products

- Compare our production level with other agriculture businesses involved in the same operation.

HOW TO CALCULATE THE COST OF A PRODUCT

When calculating the cost of a product you must take all of the expenditures necessary to create a marketable product into account. These costs will provide the administrator with information about the profitability of each product, which will then enable them to make decisions about how to market the product.

Remember to include the following costs in your calculations:

SUPPLIES

Refers to the costs of insecticides, fertilizers and fungicides applied to crops.

HUMAN LABOR

Includes the work of preparing the soil, planting and harvesting. Estimated hours of student labor should be differentiated, as this cost does not represent cash output.

DEPRECIATION

Calculated based on the expected useful life of each asset.

OTHER COSTS

Grouped in this category are those expenses whose value is so small it is not worthwhile to note it in detail, for example buying certain utensils or materials for the harvest such as bags, baskets, etc.

RENT

If the school does not own the machinery, the annual amount it pays to rent them should be included in this category.

INSURANCE

This category refers to the annual insurance premiums for certain assets such as buildings, agricultural machinery, facilities, equipment, etc. These assets are used for different activities, so the proportion which applies to each one should be estimated based on relative value and use.

MAINTENANCE OF ASSETS

This category includes the cost of repairs and maintenance of facilities, structures, machinery, equipment etc. to keep them in good working condition. Normally these costs are calculated based on a percentage of their initial value, or according to experience with using them.

ELECTRICITY, FUEL AND LUBRICANTS

The expense of these items should be the price the farm pays for them. In the case of fuel and lubricant, only what is used during the fiscal year in question is included.

INTEREST

The only interest that should be considered in the cost of production is that which is paid on credit obtained to finance the project. Interest should not be paid on the capital provided by the school, as this would form part of the profitability of the investment if it were included in the costs (the same as rent paid to use the land), therefore the resulting profitability of the project would diminish in the same proportion and would not provide a point of comparison for different types of investment.

INTERNAL TRANSPORTATION

The relative costs of transportation within the farm should be grouped in this category, whether the methods are owned or rented (trucks, tractors with trailers, etc.). If the transport is done by people without using any mechanized or animal-drawn vehicles, the work should be listed in the category of human labor.

SELF EVALUATION

Based on what you have read in this chapter, try to answer the following questions:

WHAT ARE AGRICULTURAL PRODUCTION COSTS?

HOW ARE COSTS CLASSIFIED?

HOW ARE COSTS CALCULATED?

4. FINANCIAL STATEMENTS

The objective of this chapter is to explain what financial statements are their importance in monitoring the progress of the agricultural school.

When you finish reading this chapter you will be able to identify:

1. *What financial statements are*
2. *Which documents are financial statements*
3. *What the objective of financial statements is*
4. *What a balance sheet is*
5. *What a profit and loss statement is*
6. *What a cash flow statement is*
7. *Why control over cash flow is important*
8. *What a cash flow tracking chart is and how it works*

WHAT ARE FINANCIAL STATEMENTS?

Financial statements are the final products of accounting. Basically they consist of charts and clarifying notes that summarize the economic and financial situation of an enterprise. This information is useful for administrators as well as other people such as shareholders, lenders and owners.

WHAT ARE THE OBJECTIVES OF A FINANCIAL STATEMENT?

A financial statement should give the following information about an entity:

- Its net worth on the date of the statement
- A summary of the causes leading to the financial situation at that point
- The development of net worth during the period covered

- The development of the financial situation during the same period
- Other facts which will help to evaluate the amounts, timing and uncertainties of future payments that investors and lenders will receive from the entity for various reasons.

WHAT IS A BALANCE SHEET OR A STATEMENT OF FINANCIAL CONDITION?

A balance sheet shows an entity's assets (the goods and duties that the company possesses) and its liabilities (its commitments and obligations to third parties). The difference between assets and liabilities is called the 'capital', or the net worth of the entity.

WHAT IS A PROFIT AND LOSS STATEMENT?

A profit and loss statement shows the variations in capital or net worth, measured over the period of one year. It takes into account income from sales of goods or services, and associated costs and expenses, including taxes.

The last line of the balance sheet shows the overall profit or loss. In spite of being the last line it is often the first to be read, and not infrequently the only line to be read.

The profit and loss statement provides information on the causes of the result for that period, whether it is profit or loss.

The profit and loss statement first lists the total income derived from the different productive activities of the agricultural school, for example sales of milk, eggs, vegetables, dairy products, etc., and then lists the costs of carrying out each activity. The difference in the figures gives the overall result.

WHAT IS A CASH FLOW STATEMENT?

One of the most important keys to keeping a school functioning is keeping an up-to-date cash flow tracking chart because if cash runs out you will have SERIOUS problems.

A cash flow statement is a profit and loss statement that covers *future* periods and has been modified to only show *cash* income and expenditure. It is an excellent tool, because it serves to predict future needs for cash before they arise.

You should estimate low, conservative numbers for income and high numbers for expenditures to make sure you will always have enough cash. The projection should be for the upcoming 12 months.

HOW TO STRUCTURE A CASH FLOW TRACKING CHART

Please follow our example in Table 1, below.

In the first part we have 'Income', in this example there is income from livestock, crop cultivation and hotel activity as well as income from academic activities.

Next, expenditures due to the operation of the school are noted. These include: salaries, electricity, telephone, insurance, etc. The result of subtracting the expenditures from the income is called 'cash flow from operations'.

Investment expenditures during the period in question, such as building work, repairs, equipment purchases, animal purchases, etc. are then subtracted from the cash flow from operations.

When the investments for the period have been subtracted we have the overall cash flow - a record of all of the cash coming in and going out during the period. The result shows the balance of cash resulting from the activities carried out over the period.

The 'starting balance' recorded in the second to last line of Table 1 is the amount of money available at the start of the period. In the first month you can manually enter the amount of your own capital which you have to start the enterprise, then add or subtract the overall cash flow for the period in question, which will give you the 'final balance' which is transferred to the next period as the starting balance and so on.

XXXX Agricultural School					
Table 1	Cash		Flow		(Dollars)
Income	2008	2009	2010	2011	2012
Dairy	9847	21330	26683	31857	39,000
Pigs	3168	4800	5600	7168	8,064
Henhouse	11808	14000	31492	42557	54,731
Beehives	1600	4000	6750	6750	6,750
Nursery	0	30055	60109	90164	120,219
Lodging and Food	8415	63910	86340	104760	155,790
Tuition and family donations	1200	2400	3600	3600	3,600
Income Subtotal (1)	36,038	140494	220574	286856	388,154
Expenditures (2)	184,175	229,839	273,882	308,377	356,021
Salaries	96,877	105,612	106,394	111,713	117,299
Electricity	8,603	9,033	9,485	9,959	10,457
Telephone and internet	600	630	662	695	729

Manual 5 - How To Run A Self-Sufficient School

Insurance	7515	7,891	8,285	8,700	9,135
Maintenance	4,700	4,935	5,182	5,441	5,713
Agricultural chemicals	0	15,027	30,055	45,082	60,109
Chemicals for livestock	2,600	3,220	4,340	4,710	5,580
Student food	8,486	8,910	9,356	9,823	10,314
Animal fodder	33,897	39,624	61,015	69,372	82,931
Fuel and oil	1,800	1,890	1,985	2,084	2,188
Office supplies	1,200	1,260	1,323	1,389	1,459
Housing costs	1,500	1,575	1,654	1,736	1,823
Taxes	1,500	1,575	1,654	1,736	1,823
Travel costs	1,500	1,575	1,654	1,736	1,823
Paper and printing costs	1,200	1,260	1,323	1,389	1,459
Photocopies and binding	600	630	662	695	729
Cleaning	1,000	1,050	1,103	1,158	1,216
Publicity	3,500	3,675	3,859	4,052	4,254
Transportation	1,500	1,575	1,654	1,736	1,823
Hotel costs	2,588	15,117	18,220	20,880	30,570
Banking costs	500	525	551	579	608
Rent for land	1,050	1,050	1,050	1,050	1,050
Other costs	2,000	2,200	2,420	2,662	2,928
Cash flow from operations (3) = (1) – (2)	- 148,677	-89,345	-53,308	-21,521	32,133
Investment in infrastructure (4)	175,900	97,900	18,700	26,000	5,000
New school building	29,000	58,000	0	0	0
School and laboratory equipment	10,000	15,000	0	0	0
Hotel building repairs	0	0	0	0	0
New cottages (hotel)	18,000	0	0	0	0
Hotel equipment	10,000	0	0	0	0
Dairy facilities	20,000	3,000	0	0	0
Dairy equipment	10,000	0	0	0	0
Henhouse facilities	0	12,500	12,500	12,500	0
Henhouse equipment	2,500	2,500	0	0	0
Pigpen facilities	0	0	0	0	0
Pigpen equipment	0	0	0	0	0
Animal purchases	0	4,500	6,200	1,500	5,000
Bee boxes	400	400	0	0	0
Vehicle	0	0	0	0	0
Tools and equipment	0	0	0	0	0
Library, internet	10,000				

SCHOOL IN A BOX

Information technology	0	0	0	12,000	0
Installation of plant nursery	5,000	0	0	0	0
Garden installation	2,500	0	0	0	0
Pasture	2,000	2,000	0	0	0
Purchase of land for pasture	10,500	0	0	0	0
Technical assistance	46,000	0	0	0	0
Cash flow for the period (5) = (3) – (4)	-324,577	-187,245	-72,008	-47,521	27,133
Initial balance	1,000,000	675,423	488,178	416,170	368,648
Final balance	675,423	488,178	416,170	368,648	395,781

SELF EVALUATION

Based on what you read in this chapter, try to answer the following questions:

WHAT IS A FINANCIAL STATEMENT?

WHAT IS THE GOAL OF A FINANCIAL STATEMENT?

WHAT IS A BALANCE SHEET?

WHAT IS A PROFIT AND LOSS STATEMENT?

WHAT IS A CASH FLOW STATEMENT?

WHY IS CONTROL OVER CASH FLOW IMPORTANT?

WHAT IS A CASH FLOW TRACKING CHART AND WHY IS IT IMPORTANT?

5. BUDGET

The goal of this section is help you use a budget to aid management planning and control.

When you finish reading this chapter, you will be able to clearly identify:

1. *What a budget is*
2. *The functions of a budget*
3. *The importance of a budget*
4. *The objectives of a budget*
5. *The objective of a budget at an agricultural school*
6. *Why you should make a budget*
7. *The factors that influence budget-making*
8. *How to budget different areas*
9. *How to predict income and expenditures*
10. *When to adjust the budget*
11. *How to control the implementation of the budget*

WHAT IS A BUDGET?

It is a plan of action aimed at achieving a predetermined goal, expressed in financial terms, that should be carried out in a certain time frame under certain predetermined conditions.

WHAT ARE THE ELEMENTS OF A BUDGET?

A budget is a plan for generating income and making expenditures. When a budget is being created, it is important to:

- Create your budget for a specific period of time

- Express the budget in financial terms
- Identify all income and expenditures

In order to create a budget, it is important to understand:

- The process of making a budget
- The benefits of a budget
- The factors which influence a budget
- How to budget a particular item
- How to review and make changes to the budget

WHY SHOULD I MAKE A BUDGET?

A budget is important to the success of any enterprise.

It identifies:

- The money that is available to cover operating costs. This is income.
- How much will be spent. This is expenditure.

Consider a budget to be a financial tool that will help you to:

- Set future goals
- Evaluate activities
- Decide how and when funds should be spent
- Measure results
- Identify problem areas that require attention

WHAT FACTORS INFLUENCE THE CREATION OF A BUDGET?

There are various elements that should be considered when you plan your budget.

- Past financial trends
- Changes in consumption of produce at the school
- Increases or decreases in student enrollment

- New production units being incorporated
- Change in income levels
- Changes in state support or any other subsidies you might have
- Operational and programmatic changes
- New tax laws that may cause an increase in costs
- Annual inflation
- Plans you may have to lower the cost of labor
- Increase or decrease in program costs
- Increase or decrease in the price of food, supplies or services
- Salary increases that may be scheduled
- Increased or additional benefits, for example life insurance for students or employees

HOW DO I BUDGET DIFFERENT AREAS?

Some areas, for example food, should be based on necessity. Labor costs, insurance, contracts and others can be adjusted depending upon fluctuations in price.

HOW DO I BEGIN CREATING A BUDGET?

In order for the budget to be a useful tool, it is important to:

1. Keep it realistic!
2. Review the budget with staff from each operating unit before finalizing it.
3. Make it clear to your staff that the budget will be used to evaluate the success of the program.

The key steps of the planning process are laid out below:

ESTABLISH LONG-TERM GOALS

Set goals for the next 3-5 years.

DEVELOP A BUDGET PLAN

1. Decide on budgetary categories for income and expenditures
2. Decide what information to use to create and analyze your budget
3. Decide how much to budget for each area or category

PREDICT INCOME BASED ON THESE FACTORS

- The amount of money available from local sources
- Determine how fluctuating interest rates would affect your income
- Identify other sources of income such as subsidies, discounts and the sale of equipment

CAREFULLY ESTIMATE EXPENDITURES

- The key to making a budget is estimating the year's expenses. Make every effort to be precise
- It will be very helpful to create a work chart with the details of each category of expenditure

BUDGET FOR THE WHOLE YEAR

- The best option is to make a detailed budget for each month, then add together all of the months to get the total annual budget.
- Remember that some months have more holidays than others.
- The time of year will have an effect on the cost of food.

HOW CAN I TELL IF I'M ON THE RIGHT PATH WHEN MAKING MY BUDGET?

You should check your budget and compare it to real monthly costs. Comparisons by category may show tendencies or changes.

For example:

SCHOOL IN A BOX

- Is the quantity of milk sold or the rate of enrolment what you expected?
- Was the actual cost of food higher or lower than you had budgeted for?
- Is energy consumption and telephone use what you predicted?

WHEN SHOULD I ADJUST MY BUDGET?

It's important to review and adjust your budget on a monthly basis. Do not wait until the end of the year. It is much better to identify a problem quickly so it can be resolved.

You should ask yourself the following questions:

- Did I check the costs of the program according to their category (costs of food, raw materials and supplies, equipment, labor costs)?
- Did I have all staff participate in creating the budget?
- Do they understand the importance of cost controls for the success of the operation?

An effective budget can make you a better administrator and will help you to improve and expand your program.

The budget table below shows the monthly production and sales of an operating unit (the dairy) in the livestock sector of an agricultural school; in it you can see the variables that affect the calculations of monthly production and income.

Animal Production	Jan 07	Feb 07	Mar 07	Apr 07
1. Dairy cows				
<u>Production</u>				
<u>Cows in production</u>	30	30	30	30
<u>Total daily production</u>				
Monthly milk production, high-producing cows	12,462	11,340	12,555	12,150
Monthly milk production, low-producing cows				
Daily milk production	402	405	405	405
Average milk production by low-producing cows				
Average milk production by high-producing cows	13	14	14	14
Days in the month	31	28	31	30

Manual 5 - How To Run A Self-Sufficient School

Total gross monthly production				
Production use				
Dining room consumption	1,240	1,120	1,240	1,200
Consumption by calves	930	840	930	900
Sale to industry	7,750	7,000	6,200	6,000
Sale to public per day				
Total sale to public	2,542	2,380	4,185	4,050
Net milk production per day				
Sale price	1,800	1,800	1,800	1,800
Income from sales to industry	13,950,000	12,600,000	11,160,000	10,800,000
Income from sales to public	4,575,600	4,284,000	7,533,000	7,290,000
Total income (industry + sales to public)	18,525,600	16,884,000	18,693,000	18,090,000

The next example compares the budget to the actual performance for a specified month. This comparison allows the administrator to observe the levels of production and sales for the month.

- Column 1 shows the areas included in the budget
- Column 2 shows the actual figures for the month. This information is taken from the accounting record
- Column 3 represents the estimates from the original budget
- Column 4 indicates the difference between what occurred and what was budgeted for as a percentage
- Column 5 shows the difference in monetary terms

Agricultural school	Budget comparison for:			30/09/2007
1	2	3	4	5
	30/09/2007	Budget Sept. 2007	%	Variation (+/-)
INCOME STATEMENT				
LIVESTOCK	15,975,349	9,506,700	168%	6,468,649
MILK	8,892,267	5,400,000	165%	3,492,267
BEEF	0	0	0%	0
PORK	2,238,09	0	0%	2,238,095
EGGS, CHICKENS	4,124,695	3,229,200	128%	895,495
GOAT MILK	639,966	877,500	0%	-237,534
RABBITS	57,143	0	0%	57,143
HONEY	23,183	0	0%	23,183

SCHOOL IN A BOX

CROPS	1,701,991	10,755,000	16%	-9,053,009
GARDEN CROPS	1,348,889	5,930,000	23%	-4,581,111
FIELD CROPS	353,102	4,825,000	7%	-4,471,898
HOTEL	49,818,281	41,189,545	121%	8,628,736
LODGING	49,818,281	41,189,545	121%	8,628,736
ACADEMIC	4,730,000	4,670,000	101%	60,000
TUITION	4,730,000	4,670,000	101%	60,000
ROADSIDE SHOP	464,145	8,892,314	5%	-8,428,168
MERCHANDISE	464,145	8,892,314	5%	-8,428,168
DAIRY PLANT	1,706,438	10,655,455	16%	-8,949,017
DAIRY PRODUCTS	1,706,438	10,655,455	16%	-8,949,017
TECHNICAL ASSISTANCE	19,585,772	10,733,333	182%	8,852,439
TECHNICAL ASSISTANCE	19,585,772	10,733,333	182%	8,852,439
OTHER INCOME	1,232,692	13,920,000	9%	-12,687,308
OTHER INCOME	741,419	1,620,000	46%	-878,581
SHED RENTAL	0	0	0%	0
CRAFTS	0	1,200,000	0%	-1,200,000
SOUVENIRS	127,273	1,100,000	12%	-972,727
ENGINES AND TOOLS	364,000	10,000,000	4%	-9,636,000
TOTAL INCOME	95,214,668	110,322,347	86%	-15,107,678

The next example compares the accumulated budget to actual performance through a specified month, again focusing on income.

This comparison allows the administrator to observe the performance of production and sales for the fiscal year so far.

- Column 1 shows the areas included in the budget
- Column 2 shows the details of the results so far, which come from the accounting record
- Column 3 contains the accumulated budget for the period as initially planned
- Column 4 shows the difference between performance so far and what was budgeted as a percentage
- Column 5 shows the difference in monetary terms
- Columns 6 and 7 present the total amount budgeted for the year and the percentage of that which has been reached

The period being represented should always be indicated, in this case 30/9/2007.

AGRICULTURAL SCHOOL	Budget comparison through:				30/09/2007	
1	2	3	4	5	6	7
	Cumulative income through 09/30/07	Cumulative budget Sept. 2007	%	Variation (+/-)	2007 Budget	%
INCOME STATEMENT						
LIVESTOCK	85,800,228	106,202,715	81%	-20,402,487	197,240,595	44%
MILK	39,764,612	43,585,281	91%	-3,820,669	60,145,281	66%
BEEF	1,500,000	1,500,000	100%	0	10,500,000	14%
PORK	14,379,746	16,827,146	85%	-2,447,400	31,227,146	46%
EGGS, CHICKENS	20,833,003	31,709,729	66%	-10,876,726	61,976,609	34%
GOAT MILK	5,716,427	6,083,014	94%	-366,587	8,774,014	65%
RABBITS	2,183,974	5,246,900	42%	-3,062,926	17,246,900	13%
HONEY	1,422,466	1,250,645	114%	171,821	7,370,645	19%
CROPS	16,428,777	29,120,238	56%	-12,691,461	52,515,238	31%
VEGETABLE CROPS	3,384,466	12,125,111	28%	-8,740,645	29,595,111	11%
FIELD CROPS	13,044,311	16,995,127	77%	-3,950,816	22,920,127	57%
HOTEL	173,887,575	220,743,838	79%	-46,856,263	389,486,565	45%
LODGING	173,887,575	220,743,838	79%	-46,856,263	389,486,565	45%
ACADEMIC	46,278,778	47,530,278	97%	-1,251,500	64,712,778	72%
TUITION	46,278,778	47,530,278	97%	-1,251,500	64,712,778	72%
ROADSIDE SHOP	6,365,378	38,092,234	17%	-31,726,857	70,449,175	9%
MERCHANDISE	6,365,378	38,092,234	17%	-31,726,857	70,449,175	9%
DAIRY PLANT	6,048,540	30,636,140	20%	-24,587,601	61,637,049	10%
DAIRY PRODUCTS	6,048,540	30,636,140	20%	-24,587,601	61,637,049	10%
TECHNICAL ASSISTANCE	39,019,105	40,899,999	95%	-1,880,894	73,099,998	53%
TECHNICAL ASSISTANCE	39,019,105	40,899,999	95%	-1,880,894	73,099,998	53%
OTHER INCOME	23,277,612	65,915,970	35%	-42,638,358	109,393,113	21%
OTHER INCOME	7,668,580	10,301,685	74%	-2,633,105	17,321,685	44%
SHED RENTAL	10,285,713	13,714,285	75%	-3,428,572	20,571,428	50%

SCHOOL IN A BOX

CRAFTS	0	3,600,000	0%	-3,600,000	6,000,000	0%
SOUVENIRS	381,819	3,300,000	12%	-2,918,181	5,500,000	7%
MOTORS AND TOOLS	4,941,500	35,000,000	14%	-30,058,500	60,000,000	8%
TOTAL INCOME	397,105,992	579,141,413	69%	-182,035,421	1,018,534,512	39%

SELF EVALUATION

Based on what you read in this chapter, try to answer the following questions:

WHAT IS A BUDGET?

WHAT ARE THE FUNCTIONS OF A BUDGET?

WHY IS A BUDGET IMPORTANT?

WHAT ARE THE OBJECTIVES OF A BUDGET?

WHY SHOULD YOU CREATE A BUDGET?

WHAT FACTORS INFLUENCE THE MAKING OF A BUDGET?

HOW DO YOU BUDGET FOR EACH AREA?

HOW DO YOU PREDICT INCOME AND EXPENDITURES?

WHEN SHOULD YOU ADJUST A BUDGET?

6. INTERNAL CONTROL

The goal of this section is to show you the advantages of having a good system of internal control to protect the assets of the agricultural school, as well as minimize the unfortunate risks of employee corruption.

When you have finished reading this chapter, you will be able to clearly identify:

1. *What internal controls are*
2. *The importance of internal controls*
3. *What the goals of internal control are*
4. *How internal controls function in an educational/productive environment such as an agricultural school*
5. *How the productive activities of a self-sufficient agricultural school are recorded*
6. *What control charts are*
7. *What students should know about the importance of internal controls*

WHAT ARE INTERNAL CONTROLS?

Internal controls safeguard and preserve the school's possessions, minimize the risk of robbery, prevent improper use of funds and ensure that no obligations are taken on without due authorization.

INTERNAL CONTROL AT AN AGRICULTURAL SCHOOL

At an agricultural school, where a variety of productive activities take place and both employees and students are involved, it is particularly important to have internal controls in place so that the administrator can be sure that the goods are not mismanaged.

WHO CARRIES OUT INTERNAL CONTROL AND WHY?

Internal control is carried out by the board, managers, administrators and all employees of the institution. Its goals are to:

- Promote efficient and effective business operation
- Conform with relevant laws and regulations
- Protect the organization's assets by avoiding losses due to fraud or negligence
- Ensure the accuracy of accounting and other data used by the administration to make decisions
- Encourage compliance with the practices presented by the management
- Promote security, production quality and continual improvement

WHAT ARE THE ELEMENTS OF A GOOD INTERNAL CONTROL SYSTEM?

- An organizational plan that delegates authority and responsibility appropriately .
- An authorization plan, accounting record and the appropriate procedures necessary to maintain good accounting records of assets and liabilities, income and expenditures.
- Staff who are properly instructed on their rights and obligations, which should be proportional to their responsibilities.

WHAT SHOULD BE CONTROLLED?

Everything should be controlled, but primarily all things related to the production of the various productive units, because the income of the agricultural school and therefore its self-sufficiency depends on these.

The dining room is also an important cost center, and warrants meticulous control over the supplies used for making daily meals.

HOW ARE PRODUCTIVE ACTIVITIES RECORDED AND CONTROLLED?

SCHOOL IN A BOX

Charts should be the main element of internal control. These should list all the events occurring in each productive unit and record the quantity of supplies used and the quantity of items harvested or produced (vegetables, eggs, milk, etc.). It should also record who is responsible for each unit and be signed by those responsible for production and those responsible for storage.

These records should be generated every day without fail and turned in to the administration, where the information they contain will be processed and used by the school administrator.

WHAT ARE CONTROL CHARTS?

Control charts serve as a tool to document the controls carried out in the various activities that make up the operation of the agricultural school.

These charts should be adapted to the needs and characteristics of each of the activities.

Below are several examples of control charts for items that are produced at an agricultural school; they also serve as a basis for information provided to the administration and the data are entered into accounting software. These charts are filled out by the students of the agricultural school and checked by the person or people responsible for production.

EXAMPLES OF CONTROL CHARTS FOR ANIMAL PRODUCTION

In this chart you can see that the production of each cow is noted for each of the two milkings done in a day. This chart, like the others below it, is not only used for internal control but also provides useful information to the administration.

CHART 1: DAIRY UNIT

SECCIÓN TAMBO					
PRODUCCIÓN DIARIA DE LECHE					
FECHA:/ /					
Ord.	Vaca N°	Ordeñe			Observaciones
		Mañana	Tarde	Total	
1					
2					
3					
4					
5					
Producción total					
Consumo					
Entrega a Planta					

CHART 2: GARDEN UNIT

Planilla de Registro de Producción de la Huerta						
Fecha	Cultivo	Unid./ MAZO	PESO Kg.	Entregado o por:	Recibido por:	Destino

CHART 3: CROPS AND FRUIT UNIT

Planilla de Registro de los Productos de la Chacra					
RUBROS	Unid./ MAZO	PESO Kg.	Entregado por:	Recibido por:	Destino
Banana					
Batata					
Feijao					
Grosella					
Guayaba					
Kumanda Yvyra'i					
Limón					
Mamón					
Mandarina					
Mandioca					
Maní					
Mburukuja					

CHART 4: COW MILK USE

CONTROL DIARIO DE LECHE DE VACA												
Fecha	Cant.	Firmas		Comedor		Ventas		Dulce	Queso	Parador	Otros	Excedente
	Ord.	Alum.	Bodega	Int.	CCC	Cred.	Cont.					

CHART

CHART 5: GOAT MILK USE CHART

CONTROL DIARIO DE LECHE DE CABRA												
Fecha	Cant.	Firmas		Comedor		Ventas		Dulce	Queso	Parador	Otros	Excedente
	Ord.	Alum.	Bodega	Int.	CCC	Cred.	Cont.					

CHART 6: CHICKEN UNIT (EGGS)

CONTROL DIARIO DE HUEVOS												
Fecha	Cant.	Firmas		Comedor		Ventas		Dulce	Queso	Parador	Otros	Excedente
	Ord.	Alum.	Bodega	Int.	CCC	Cred.	Cont.					

EXAMPLES OF CONTROL CHARTS FOR KITCHEN AND DINING ROOM SUPPLIES

CHART 7: KITCHEN SUPPLIES

Manual 5 - How To Run A Self-Sufficient School
CONTROL DE USO DE INSUMOS DE COCINA

MERCADERÍA / PRODUCTO:

Fecha	Recibido	Consumo en Kg./Lt		Stock Kg / Lt	Observaciones
	Kg / Lt	Internado	Evento		

CHART 7: BREAD

CONTROL DE RECEPCIÓN DE PANIFICADOS

Semana del al de

Día	Kilos	Firmas
Lunes		
Martes		
Miércoles		
Jueves		
Viernes		
Sábado		
TOTAL SEMANA		

CHART 8: PRODUCTION AND DESTINATION OF DAIRY PRODUCTS

Planta Láctea
Planilla de control de recepcion e industrialización de la leche y destino de la producción láctea

Fecha	Recepcion			Entrega				Proceso				Yoghurt	Venta	Exedente en De leche	Enfriadora	Comentarios
	Recepcion TM	Recepcion TT	Total del dia	Parador	Cocina Matriz	Casa	Dulce de Leche	Queso Paraguay	Queso Quartirola	Queso Shedaer	Queso Mozzarella					

HOW MUCH DOES AN INTERNAL CONTROL SYSTEM COST?

An internal control system should be established after cost/benefit analysis. Obviously the benefit of internal control should outweigh the cost of implementation.

For internal controls to perform their mission they must be: timely, clear, simple, flexible, adaptable, efficient, objective and realistic. Internal accounting controls are the base that the reliability of the accounting system rests on.

Internal control within a business entity is oriented towards preventing or detecting unintentional 'errors' and deliberate 'irregularities'.

The internal control system should be designed to catch or prevent any irregularities such as falsification, fraud or collusion. It is important that these deliberate irregularities are detected, even if the amounts in question may not be significant or relevant to the financial statements, because of their implications for the proper management of the school.

Internal controls should provide reasonable confidence that the financial statements have been created within a framework of controls that diminish the likelihood of substantial errors.

Weaknesses in the internal control system should be identified by various supervisory activities and reported so that the appropriate changes can be made.

HOW DOES INTERNAL CONTROL WORK IN AN EDUCATIONAL/PRODUCTIVE ENVIRONMENT SUCH AS A SELF-SUFFICIENT AGRICULTURAL SCHOOL?

In a self-sufficient agricultural school, in addition to the business side of the school, there is the educational element. The internal controls in an educational/productive environment should be sufficiently reliable so as to achieve the goal of 'controlling' and 'educating' at the same time.

In an agricultural school the students are in charge of many of the operating functions of production, under the supervision of technical instructors, therefore the use of charts in all of the activities being carried out is extremely important.

WHAT SHOULD STUDENTS UNDERSTAND ABOUT THE CONTROLS?

The students should understand perfectly why the records they keep are useful; they should not think of it as just another task but rather understand that it is a tool that allows them, not only to work in an organized way, but also to know what the results of their work are.

This means that, in the future, whether they work as agricultural business owners or on someone else's farm, they will have basic record-keeping skills to use in their work.

SELF EVALUATION

Based on what you read in this chapter, try to answer the following questions:

WHAT ARE INTERNAL CONTROLS?

WHY ARE INTERNAL CONTROLS IMPORTANT?

WHAT DO INTERNAL CONTROLS SEEK TO DO?

HOW DO INTERNAL CONTROLS WORK IN A PRODUCTIVE/EDUCATIONAL ENVIRONMENT LIKE A SELF-SUFFICIENT AGRICULTURAL SCHOOL?

HOW ARE PRODUCTIVE ACTIVITIES RECORDED?

WHAT ARE CONTROL CHARTS?

7. ACCOUNTING AND MANAGEMENT SYSTEMS

The goal of this section is to give you a clear idea of the advantages of acquiring a good software program as a tool for information and decision-making.

When you finish reading this chapter you will be able to identify:

1. *What a software accounting program is*
2. *The importance of having a good software program at an agricultural school*
3. *How this program will help the school's administrator*
4. *What kind of reports the program will provide*
5. *What functions the software should have*

WHAT IS AN ACCOUNTING SOFTWARE PROGRAM?

Accounting software programs are designed to systematize and simplify accounting tasks.

The accounting program records and processes the financial transactions involved in a productive activity: purchases, sales, debts that are owed, debts to be paid, inventory control and the payroll, for example.

All the administrator needs to do is put in the financial information, such as income and expenditures, and instruct the program to make the necessary calculations.

These functions can be developed internally by the organization using the program, or can be acquired from a third party, or a combination of both.

WHY IS AN ACCOUNTING PROGRAM IMPORTANT?

Decision-making at an agricultural school is affected by physical, biological and natural issues that cannot be modified by the producer, which means operating in a more risky environment in comparison to some other businesses.

The unique structure and working environment of an agricultural school throws up all kinds of economic, financial and technical situations. This makes the collection of reliable information particularly important for an agricultural school.

An accounting program will record the operation of the school in a simple and orderly way and provide the administrator with reliable information; which, although not guaranteeing the success of decisions, keeps them from being made in a state of complete ignorance.

HOW WILL THIS SOFTWARE HELP THE ADMINISTRATOR?

The software will:

- Maintain a simple record of the financial information generated at the agricultural school
- Interpret the information and automatically transform it according to financial, statistical and accounting techniques
- Produce a broad range of financial and technical reports on the farm and its resources
- Allow you to track the production levels of the school over time and to compare statistical, technical and financial data

This will make it possible for administrators with little knowledge of topics such as accounting, inventory, budgets and statistics to use the advanced techniques of accountancy in their decision making without making an excessive time commitment.

WHAT KIND OF REPORTS WILL THE PROGRAM PRODUCE?

- Overall assets, cash availability and bank balances, clients, fixed assets
- Liabilities, suppliers, payments to be made, bank loans
- Forecasts and supplies
- Quantity of items in stock
- Per-unit costs and overall costs of inventory

- Movement of inventory in a given period
- Storage of products by each operating unit
- Production and sales
- Profit and loss statements for the farm as a whole or for one operating unit in particular
- Details for a particular crop or operating unit - income, expenditure, the value of crops 'in the ground'
- The work being carried out in an operating unit
- Payment for labor - detailing the payment to each laborer, the number of days worked, the type of work carried out

WHY IS THIS INFORMATION IMPORTANT FOR DECISION-MAKING?

Good information is crucial to good decision making and good decision making saves time, effort and energy. These are the six rules for effective decision-making:

1. Concentrate on what is truly important
2. Carry out the process in a logical and coherent way
3. Consider both objective and subjective elements and think both analytically and intuitively
4. Have the information necessary to make a choice
5. Gather the information, opinions, etc. that have arisen in relation to the choice being made
6. Be direct and flexible before, during and after the process.

WHAT FUNCTIONS SHOULD THE PROGRAM HAVE?

RECORDS

The program should keep records of:

- Crop cultivation. Including a record of all purchase and sale transactions, supplies used, and expenses. It should differentiate between pasture and planted land and

SCHOOL IN A BOX

provide information on the estimated and final production level of each lot, the price of what is produced, harvest losses and lot allocations

- Livestock management The various livestock activities should be recorded
- Livestock inventory. Including details of overhead costs, food costs, and livestock health
- Sales
- Purchases
- Other activities - to keep track of other intermediary agricultural activities in which transaction records are more simple
- Stock. Including products to be sold, supplies, seed, grain, food and other items. Can be used to check stocks or modify existing information
- Fixed assets. Including a description of each item with the purchase date, current value and remaining useful life

It should make it possible to record the organization and operation of the business and obtain information that shows you which elements help to achieve the goals of the agricultural school and which make it less efficient.

RESULTS

The program should generate the financial results. This is a completely automated calculation which will:

- Integrate the accounts from the balance sheets
- Recalculate the account balances based on the transactions that have been added to the accounts up to the day of processing.
- Calculate net worth for the fiscal year, with asset and liability account and sub-account administration
- Calculate variation in net worth
- Give results by possession
- Give overall results
- Generate indicators of profitability
- Show the gross margins for:

- Crop cultivation
- Livestock
- The administration
- The academic activities
- Housing
- The student dining room
- Any other business which the school has

These results are used to analyze the school's current situation and as a starting point for deciding what steps to take to improve that situation.

The program will also automatically transfer the data from the close of one fiscal year to another. This will make it possible to see the evolution of the establishment from one year to another. All the results generated should appear on screen and in printed form.

OTHER FUNCTIONS THAT THE PROGRAM SHOULD HAVE

HELP

The program should include a printed manual which describes the installation process and how to get the program started. Additionally, it should display information on screen that shows the user how to use each screen and the information that should be entered there.

FILE BACKUP

You should make an extra copy of the important files of the software

CLOSE OF FISCAL YEAR

A function that will finalize the current fiscal year, transferring records of livestock and products in storage, land value and fixed assets to the next fiscal year.

CHARTS

The program should include a series of charts that can be used to collect data on each of the activities carried out in each of the businesses or operating units of the agricultural school. The data from these charts will then be entered into the system to be processed. The charts for data-gathering could include the following:

LABOR

Records the tasks carried out in each productive activity

LIVESTOCK TRANSACTIONS

Registers livestock transactions during the fiscal year

MACHINERY

Records the machinery that the institution possesses, and their respective financial repayments

PRODUCTION COSTS

Records the supplies used for livestock and crop cultivation activities

MAINTENANCE OF ASSETS

Records the costs of the maintenance of assets

OVERHEAD

Records the overhead expenditure that occurs during the fiscal year.

INCOME AND EXPENDITURES

Records the income and expenditures that occur during the fiscal year.

STOCK

Keeps a record of supplies bought during the fiscal year

FIXED ASSETS AND IMPROVEMENTS

Records the fixed assets the institution possesses and their respective improvements.

WHO CAN RUN THIS ACCOUNTING SYSTEM?

Anyone! It should be a record-keeping system for accounts and non-accountants alike.

The system should include a recording method for users who are not accountants as well as a classic record-keeping system based on credit and debit entries for people with accounting knowledge.

SELF EVALUATION

Based on what you read in this chapter, try to answer the following questions:

WHAT IS AN ACCOUNTING SOFTWARE PROGRAM?

WHY IS A GOOD SOFTWARE PROGRAM IMPORTANT FOR AN AGRICULTURAL SCHOOL?

WHAT SHOULD THE SOFTWARE PROGRAM BE ABLE TO DO?

HOW WILL THIS SOFTWARE HELP THE ADMINISTRATOR OF AN AGRICULTURAL SCHOOL?

HOW CAN AN ACCOUNTING SOFTWARE PROGRAM HELP WITH DECISION-MAKING?

WHAT FUNCTIONS SHOULD THE SOFTWARE PROGRAM HAVE?

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