

FARM RECORDS AND ACCOUNTS

By G.W. West, Area Horticulturist
Bubia Agricultural Research Station, Lae

INTRODUCTION

Records and accounts are often the most confusing and neglected part of managing a project or business. Usually they are done at the end of the day. After a good day at the market it is very easy for the farmer to forget to record the cash he has received! This is a pity, because RECORDS and ACCOUNTS will tell the farmer how much money is going in and out of his business. Keeping records of money coming in (SALES and RECEIPTS) and money going out (PURCHASES and EXPENSES) is the only way you can tell if your business is making a PROFIT or a LOSS.

In this article I would like to introduce the idea of simple record keeping and accounting for village farmers and small scale agriculture projects.

WHY KEEP RECORDS?

Farmers should keep records for the following reasons:

1. Records provide a history of what has happened on the farm over the time they have been kept. So the farmer can compare, say, one year with another.
2. Records can show the farmer exactly how much profit or loss he is making. This should help him to decide

how to spend his money so that he doesn't spend more than he has.

3. Records can help the farmer manage his business properly. They show exactly how much is spent on seeds, chemicals, fuel, labour and so on. Records show where there are problems, e.g. too much money spent on certain things. The farmer can correct the problems before the whole business is affected.
4. Records enable the farmer to plan for the future. They show what costs and income can be expected from which crops. The farmer can also compare his records with those of other farmers. This will show him how his business is going.
5. Records and accounts are essential if a farmer wishes to apply for a loan or a grant. The Government or Bank always ask for financial information before they will consider giving a loan or grant.

SIMPLE ACCOUNTS

A simple account book should contain the following information:

1. The time period over which the account is kept.

2. The exact date of each transaction. Every time the farmer spends or receives money (e.g. by selling produce), this is called a TRANSACTION.
3. The value of each transaction.
4. A description of each transaction.

An example of a clear and simple way to set out a record of accounts is shown below.

You can see that it will be easy to work out the profit (or loss!) from records like these:

<u>PROFIT</u>	
=	TOTAL SALES AND RECEIPTS
-	TOTAL PURCHASES AND EXPENSES

For an accurate record of accounts, it is important to record how much produce from the farm is used by the family. For the records we enter the value of the produce at the same rate as the farmer would pay to buy it in the market. An example of how to keep these records is shown on page 56.

At the end of the year the value of the produce used by the family should be included in the calculation of the farm profit for that year.

TOTAL SALES AND RECEIPTS	
+	TOTAL VALUE OF PRODUCE CONSUMED
=	TOTAL VALUE OF PRODUCTION
TOTAL VALUE OF PRODUCTION	
-	TOTAL PURCHASES AND EXPENSES
=	<u>FARM PROFIT</u>

<u>TIME PERIOD</u>							
1st JAN. 1984 — 1st JAN 1985							
SALES and RECEIPTS				PURCHASES and EXPENSES			
DATE	ITEM	K	t	DATE	ITEM	K	t
4/1/84	Sweet potato 40 kg	8	00	5/1/84	Diesel 20 l	6	40
6/1/84	Beans 20 kg	8	00	10/1/84	Seed: cabbage	5	00
10/1/84	Tomatoes 40 kg	16	00	"	cucumber	2	00
14/1/84	Betel nut 1 bag	50	00		capsicum	5	00
14/1/84	Capsicum 20 kg	10	00	"	Bush knife	3	00
1/1/85	TOTAL SALES & RECEIPTS			1/1/85	TOTAL PURCHASES & EXPENSES		

A simple way to set out a record of accounts

TIME PERIOD: 1st JANUARY 1984 - 1st JANUARY 1985			
DATE	ITEMS	K	t
10/1/84	Sweet Potato 10kg	2	00
12/1/84	Yam 5kg	2	00
12/1/84	Cabbage (Gift to Wantok) 6kg	6	00
1/1/85	TOTAL VALUE OF PRODUCE CONSUMED		

A record of produce used by the farmer and his family

With these records the farmer can compare the following:

- (A) The profits for previous years:

Example

Year:	1980	1981	1982	1983
Total value of production:	K2000	K6000	K6500	K7000
Total expenses:	K400	K5200	K4000	K3900
Profit:	K1600	K800	K2500	K3100

You can see from these records that the farmer's profits can vary a lot from year to year. In this example, the farmer at the beginning of 1981 spent all his savings and borrowed some money from the bank, in order to buy a rotary cultivator, a water pump, some irrigation pipe and a hand chemical sprayer.

With the new equipment, the farmer managed to greatly increase his total value of pro-

duction. The total expenses were also very much higher. So the profit for 1981 was very low because the farmer was learning to make better use of this new equipment. The total value of production continued to rise in 1982 and 1983.

Another important point is shown in this set of figures. You can see that the farmer's expenses became smaller in 1982 and 1983. One reason for this is that the depreciation of the value of the equipment is less each year. Equipment loses its value as it gets old. This loss in value is called DEPRECIATION. The biggest fall in value occurs in the first year after buying the new equipment. After that the equipment is valued each year at just a little bit less than it was the year before. All loss in value of equipment must be considered as an expense to the farmer.

In order to find out what the depreciation is each year for his equipment, the farmer should talk to the dealers who sold it to him.

The farmer must look for ways to improve his profit by better use of the equipment or land.

- (B) The farmer's profits can be compared with other similar types of farm. This will give an idea of how well his farm is doing.

Example

	FARMER A	FARMER B
Total value of production	K6500	K9000
Total expenses	K4000	K3000
Profit	K2500	K5500

To make this comparison, we must consider the amount of land each farmer has. For example if farmer A has 4 ha of land and Farmer B has 5 ha, then:

Profit per ha for farmer A is:

$$\frac{\text{K2500}}{4} = \text{K625/ha}$$

Profit per ha for farmer B is:

$$\frac{\text{K5500}}{5} = \text{K1100/ha}$$

We can see that farmer B is making more profitable use of the land. Now that the records have shown up this fact it is up to the farmers and extension officer to find out why there is such a difference. Then steps can be taken to try to help farmer A to improve his farm profit.

CROP RECORDS

Another very useful record to keep is an account of each crop planted. Crop records are most useful, and easiest, when farmers plant out blocks of land with different crops for sale.

Crop records would be much more difficult to keep for traditional interplanted gardens.

You should include the following points in a crop record book.

1. Name or number of the plot or field and area.
2. Name of the crop.
3. Notes on the physical condition of the ground.
4. Date of planting of the crop.
5. Amount of seed or planting material used.
6. Date of harvest or when the harvest started.
7. Yield.
8. Value of the yield or harvest.
9. Notes of the chemical sprays used, pests and diseases that occurred, applications of fertilizer or manure and irrigation.

A record such as this should be kept for each field or plot on the farmer's land.

The information can be used in many ways:

- It shows which crop gave the best yield.
- It shows which crop gave the best income.
- It shows which crop grew the best and at what time of year.
- It shows where there are any problems which could be avoided in future.
- It allows the farmer to decide about buying irrigation equipment.

FIELD: Riverside			SOIL : Light/silt			
AREA : 0.5 ha			DRAINAGE: Good			
CROP	PLANTING DATE	QUANTITY SEED/MATERIAL	HARVEST DATE	TOTAL YIELD	TOTAL SALES	SPRAYS/PESTS/DISEASES FLOOD/DROUGHT
Sweet potato	12/1/84	15,000	2/4/84	12 tonnes	K1200	Hand weeded for the first 3 weeks
Corn	10/4/84	6 kg	20/6/84	1 tonne	K100	Orthene spray 1 per wk for 4 weeks
Snake bean	10/7/84	7 kg	15/9/84	1 tonne	K400	Lanare spray 1 per week for 5 weeks
Too dry to plant	—	—	—	—	—	—

Your crop records could be laid out like this

- It gives a record of pests and diseases. Plans can then be made to fight these in the future.

Using crop records, other decisions can be made regarding the future of the farm or project. For example it may be worth the farmer growing just sweet potato as the income earned is the highest. On the other hand it may be decided that the project is not making enough money to support the family and that it would be better to use the land to raise pigs.

RECORDS MUST BE ACCURATE!

You can see from the points discussed above that records and accounts can help the farmer and extension officer manage a business or project well and plan for the future. But these records must be WELL KEPT AND ACCURATE.

The details that go into records and accounts MUST NOT BE GUESSED as this would make the information worse than useless! - It could result in the farmer and extension officer making the wrong decision.