

Integrated Agriculture Training Program

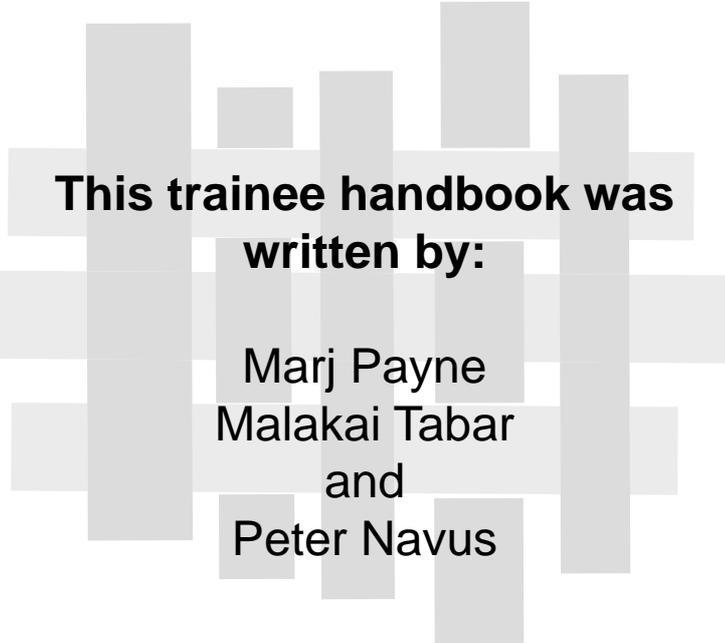
Trainee Workbook



Small Farm / Business Analysis

Module Six

Lukautim Ol Rekot Na Buk
Bilong Bisnis



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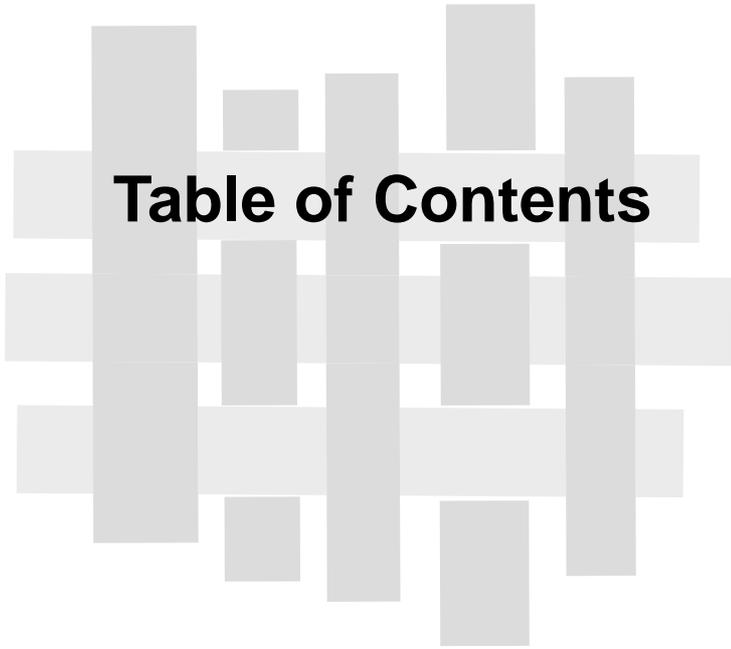


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Unit 1: Balance Sheet

The Balance sheet is a very important financial management tool. It is an inventory of Assets and Liabilities.

- **The Assets show the value of the business resources**
- **The Liabilities show what the business owes**
- **The Owner's Equity shows what is owned by the owner and is the difference between the total assets and the total liabilities.**

? What is an Asset?

An asset is something that adds value to the business or farm.

Assets can be grouped and it is common when keeping records to look at

1. Current Assets and
2. Fixed Assets.

Current Assets can be thought of as assets that come and go while Fixed Assets are more permanent parts of the farm or business.

Sometimes it is not easy to distinguish between these two. Sometimes it is necessary for the law to establish rules to help distinguish these. Eg a piece of machinery that is bolted to the ground may be considered a fixed assets while a similar piece of machinery operating from the back of a truck is not.

Current assets would include things like:

Cash, Money owing to you for goods you have sold) (cash to come – Debtors)

Products you have to use on your farm/business like chemicals, animal feed

Livestock – chickens, pigs, cattle etc

Stock to sell such as the groceries in a grocery store

Plant and Machinery – Vehicles, tractors, slashers, generators, refrigerators, office equipment, shop fittings, farm tools

Fixed Assets would include things like:

Land and things attached to the land.

These may include a house, sheds, shop, or even trees in the case of a cocoa farm

? What is a Liability?

Liabilities are the opposite of assets. They are things that the business or farm owe to other people, businesses or institutions. Again these can be short-term liabilities (also called current liabilities) or long-term liabilities depending on when the debts have to be repaid. Things that have to be paid for when purchased or shortly after are short-term liabilities. Debts that are taken over a long period of time (say more than a year) are Long-term liabilities. Long term liabilities are usually the money borrowed from a bank to buy the farm, business, new machinery and so on. The monthly or yearly repayments of these loans are considered to be short-term liabilities



Notes





Exercise 1

(a) Work through the following list and decide how you would classify each item. Follow the examples given.

Item	Classification
50 Chickens	Asset, Current, Livestock
Account from Agmart for Fertilizer	Liability, Current
Drying Shed	Asset, Fixed
Bank Loan	Liability, Long Term
Cash in bank	
Dried cocoa ready to be sold	
Farm Tractor	
Account for electricity	
Vanilla sold to buyer but not yet paid for	
House	
Loan from bank for new car	
Sewing needles and thread	
2 pigs	
Slasher	
100 litres Pesticide	
Loan on house from Credit Union	
Bank repayment on car	
Harvested vanilla	
50 5year old cocoa trees	
Account from Cocoa Board for registration	
Account for transport	
2 bags of chicken feed on hand	
Farm tools	



(b) Now write the items under the correct headings:

Asset - Current	Asset – Livestock
Asset –Plant and Machinery	Fixed Assets
Liabilities - Current	Liabilities - Long Term

? What is Owner's Equity?

The owner's equity is the difference between total assets and total liabilities. It tells how much of the farm/business is owned as opposed to owing to a bank or lending institution.

If you buy a business with a 10% deposit and borrow the remainder from a bank, then you are considered to be the owner of the business but you only own 10% and the bank or lending authority has 90%. On the other hand if you pay cash for your business and don't borrow any money, you are the owner and own 100% and we say the owner's equity is 100%. Compare this to only 10% in the first example.

Obviously many successful business people have started with only a small owner's equity that they have built up over the years. It can be difficult for the owner if the owner's equity is small. There is a bigger risk that if bad times come (bad weather or low prices for the farmer or competition for the trade store), the owner will not be able to meet the debts and might end up losing the farm or store. But we will talk more about this later.

To calculate the owner's equity you subtract the total liabilities from the total assets. The assets, liabilities and owner's equity appear in the Balance Sheet.



The Main Uses of the Balance Sheet include allowing you to:

- Estimate the present value of the farm/business for sale purposes
- Calculate the return on capital. To do this you will need the net profit from the Profit and Loss statement. (We will be doing this later)
- Calculate the return on equity. This will allow you to compare this enterprise with other investments.
- Identify changes that have occurred in the business over time
- Give information to other stakeholders e.g. banks, shareholders, taxation department, local government etc
- Analyse and find useful information about the viability of the business (see Unit 3)

Presentation of the Balance Sheet:

There are many ways a balance sheet can be presented: Below is an example of one way. This balance sheet has not been completed but gives you the headings to enable you to complete .

Balance Sheet for Wontok Traders as at 30/6/XX

Assets		
<i>Current</i>		
Cash	500	
Accounts owing	200	
Feed on hand	<u>100</u>	800
<i>Livestock</i>		
Cattle	1000	
Pigs	<u>750</u>	1750
<i>Plant and Machinery</i>		
Tractor	xxx	
Generator	<u>xxx</u>	xxx
<i>Fixed assets</i>		
Land	xxx	
House	xxx	
Shed	<u>xxx</u>	xxxx
Total Assets		<u>xxxxx</u>
Less		
Liabilities		
Current	xxxx	
Long Term	xxxx	
Total Liabilities		<u>xxxxx</u>
Owner's Equity (A-L)		xxxx



Exercise 2(a)

Use the following information to draw up a Balance Sheet for the farm – “Happy Valley Family Farm” as at 30.06.03
(Use your answers from Exercise 1 to help)

Cash in Bank 30.06.03	1250	Dried cocoa ready for market	750
Value of Farm Vehicle	3000	50 chickens	500
House	20000	Account to pay Agmart chemicals	370
Outstanding Account-transport	120	Money to come in for dressed chickens sold	120
Farm Loan	15000	Farm tractor	950
Slasher	560	Land planted	22000
Drying Shed	3600	Bank repayment	1800
Chicken feed on hand	250	Generator	200
Account to pay for replacement trees	740	Chicken Shed	1200
Farm Tools	250	Chemicals on hand	1400

Firstly, you might like to put each item in its correct place as you did in Exercise 1

Asset – Current	Asset – Plant and Machinery
Asset – Livestock	Fixed Assets
Liabilities – Current	Liabilities - Long Term Bank Loan



Balance Sheet
“Happy Valley Family Farm” as at 30.06.03





Exercise 2(b)

From your prepared Balance Sheet answer the following questions:

- a) What is the owner's equity in this farm? _____
- b) What is the value of the fixed assets? _____
- c) What is the value of the long-term liabilities? _____
- d) How much money is owing to the farmer? _____
- e) How much money does the farmer owe? _____
- f) What is the value of the livestock on this farm? _____
- g) If the farm was to be sold, suggest and discuss a selling price



Exercise 3

Now use this example as a guide to draw up a balance sheet for your own farm/business.

Firstly you will need to list and estimate a value for:

Current Assets

Livestock

Fixed Assets

Plant

Machinery

Office Equipment

Current Liabilities

Long term Liabilities

Now draw up a balance sheet for your farm/business/household.

Question 1. Suppose you are thinking of selling your farm. Use this Balance Sheet to give you an estimate of how much you might expect to receive for your farm/business.

Question 2. What is the owner's equity in your farm?



Notes





Unit 2: Profit and Loss Statement

Introduction:

A profit and loss statement looks at your farm/business over a set period (usually 1 year) to see if your business/farm has made a profit or loss and to show how much that profit or loss is.

Use:

Knowing this figure allows you to:

- Plan how you might continue your business.
- Compare your investment in this business with other investments.

Areas to consider:

In order to understand and calculate a Profit and Loss Statement, we will look at four very important areas.

1. Depreciation and how it is used
2. Terms that are used in the Profit and Loss Statement and that must be understood
3. How to calculate Profit and Loss for a business
4. Using the Profit and Loss Statement and the Balance Sheet to make decisions about businesses

1. Depreciation and How to use it

Depreciation is the loss in value of an asset caused by wear and tear or other loss in value such as the introduction of new technology. Buildings, machinery and equipment are things that last a long time. If, say, you bought a new truck this year, would it show a fair picture of your farm profit if you took the whole cost of that truck from your income for this year? No, it wouldn't. Somehow we have to be able to proportion that cost over the life of the truck. Suppose you expect that truck to last for five years. To be fair, each year for the next five years you should allow $\frac{1}{5}$ of the value of that truck as a cost of production.

Likewise you might build a new shed which you expect to last for 20 years. Again it would not be right to offset the whole cost of the building against one year's income so you would spread it over the whole 20 years. Here we are calculating the contribution that an asset makes each year and giving it a monetary figure. This contribution each year is called the depreciation. It is necessary to be able to calculate this and keep a record of it.

There are several ways to calculate depreciation, but the one used most is called *straight line* depreciation. This can be calculated in 3 simple steps:



To calculate depreciation:

- (i) estimate the life of the asset (say 20 years)
- (ii) know the value of the asset when you purchased it.(say K4000.00)
- (iii) divide (ii) the purchase price of the asset by (i) the estimated life of the asset ($4000 \div 20$) to get the yearly depreciation which in this case is K200.00



Exercise 1a

For each of the following, calculate the yearly depreciation and the depreciated value of the asset in 2003.

1. A tractor was purchased in 1999 for K10000 with an estimated life of 10 years
2. A new shed was built in 2000 for K8000.00 with an estimated life of 20 years
3. A cocoa dryer purchased in 2001 for K3000 with an estimated life of 15 years
4. A utility was purchased in 2002 for K6000.00 with an estimated life of 5 year



Notes and Calculations





Exercise 1b

Using the information from Exercise 1a, complete the Depreciation Schedule below:

Depreciation Schedule Happy Valley Farm from 30.06.02 to 30.06.03

Item	Year purchased	Purchase Value	Yearly Depreciation	Asset Value 2002	Asset Value 2003
Tractor	1999	10 000.00	1000.00	7000.00	6000.00
Packing/ Storage Shed					
Cocoa Dryer					
Farm Vehicle (ute)					
TOTAL					

Notes





2. Terms that are used in the Profit and Loss Statement

Before this Profit and Loss can be calculated, it is necessary to understand some terms used.

Income is the money you receive. It can be:

Operating income which in the case of a farm, is the income you receive from growing your crops or animals or produce to be sold. In the case of a grocery shop, it is the income from selling groceries.

Non-operating income is from the sale of something other than the produce grown or sold from the farm/business. It might be income from the sale of an old piece of equipment that you have replaced or have no further use for such as an old refrigerator, old tractor or some old shelving.

Expenses are the money you pay out. They can be:

Operating expenses or costs directly associated with the business of the farm or other business. These are cost involved in running your farm/business, growing the crops and getting your produce to market.

These operating costs and be divided into two groups:

Variable costs : The costs that vary depending on what you grow. Things like casual labour, chemicals, fertilizers, transport, cost of seed etc

Overhead or Fixed costs: The costs that are always there regardless of what you grow. These include costs such as rates and taxes, electricity, permanent labour, and depreciation of your fixed assets.

Non-operating cost is a cost not directly associated with producing the crop. An example of this is the interest paid on a farm loan or hire purchase agreement. These can be explained using the following flow chart for a trade store:

Notes





Exercise 2

Work through the following exercise and decide how you would classify each item. Follow the example given. Choose one of the following classifications:

- Operating Income
- Non-operating income
- Operating Cost – variable
- Operating Cost – fixed
- Non-operating cost/expense

Item	Classification
Income from chickens	Operating Income
Sale of old slasher	Non-operating Income
Electricity	Operating cost - fixed
Casual labour	Operating cost - variable
Day old chickens	
Vanilla cutting you buy	
Repairs to buildings and machinery	
Rates and taxes	
Income from vanilla	
Depreciation	
Transport costs	
Membership of Cocoa Growers	
Loan Repayment	
Permanent labour	
Chemicals to use on crops	
Cocoa bags	
Income from cocoa	

Notes





3. How to calculate Profit and Loss for a farm/business:

Again, this can be done in three steps.

1. First calculate your total income from the business. Here it may be necessary to separate household income from farm/business income, depending on the enterprise you are working with. A wage earned externally (working for a contractor in town) while partner worked the farm/business, could not be included in the income from the farm but could be included in the total household income.
2. From the total income you must subtract all the costs associated with making that income. As well as the obvious costs like chemicals, casual labour, hire of equipment, seeds etc, you must also consider the interest you are paying on loans associated with the farm/business and depreciation of the fixed assets. The total value of the fixed assets like the buildings/sheds and machinery can not be considered as a cost when calculating the Profit and Loss figure for one year because the fixed assets will last for many years. However they contribute to the income because without them you wouldn't be able to operate, so you make an allowance for them. This allowance is depreciation. You now know how to calculate this.
3. Once you have calculated all your expenses associated with making the income, you can take it away from the total income to find your profit or loss.



Exercise 3a

Using the following information from Happy Valley Family Farm, present a profit and loss statement for the year 30.06.02 – 30.06.03. Refer to Exercise 2 if you wish. You will find the headings for this exercise on the next page:

Total Income from sale of cocoa	K 18 358.00
Total Income from sale of vanilla	K 8 234.00
Total Income from sale of chickens	K 210.00
Day old chickens	50.00
Electricity	2 300.00
Vanilla cuttings	104.00
Transport	492.00
Depreciation	2 800.00
Sale of old slasher	200.00
Repairs to buildings and machinery	750.00
Rates and Taxes	1000.00
Membership of Cocoa Growers	150.00
Casual Labour costs	2 600.00
Loan Repayment	1 800.00
Permanent labour costs	6 000.00
Chemicals	1 230.00
Cocoa bags	120.00



If the farm has more than one enterprise and you want to show the profit from each, the profit and loss statement can be presented to show this by having different columns for each Activity/Enterprise.

Profit and Loss Statement for Happy Valley Family Farm for the year ending 30.06.03

	Cocoa Growing	Vanilla Growing	Total
Operating Income			
Less			
Operating Costs			
(1) Variable costs			
(2) Overhead costs			
Operating Profit			
* Add Non-operating Incomes			
**Less Non-operating Expenses			
Net Profit			

Notes





Notes





Profit and Loss Statement for a Small Trade Store

This is very similar to the exercise we did for Happy Valley Family Farm. The only difference is that first we have to calculate the cost of the goods sold.

To do this we must think about:

- (a) the stock we had on hand at the beginning of the period.... then
- (b) the stock we bought during the year.....and also
- (c) the stock we have left that we did not sell.

Suppose the value of the stock on hand at the beginning of the period was K355 and during the period we purchased another K5300 of goods. At the end of the period we still had stock that had cost us K740

Therefore the cost of the stock sold is

$$(a) + (b) - (c) = \text{Cost of stock sold}$$

In this case it is: $K355 + K5300 - K540 = K5115$

If we subtract the Cost of stock sold from the Operating Income, we have what we call the Gross Income. That is the income before any of the other costs associated with running a trade store are considered.

Warning!!

Many trade stores sell for cash and credit. There is big danger of not being paid if you give credit so..... be very careful when giving credit. Be sure the people you give credit to will pay you on time. If in doubt, say NO. Some Trade Stores have a policy of NO CREDIT.



Exercise 3b

Mrs Brown operates a small grocery shop in her village. She has asked you to help her present a profit and loss statement for last year as she is hoping to be able to increase her loan from the bank to make an extension. She has given you the following figures from her cashbook.

Stock on hand 30.06.02	K	426.00
Stock purchased during the year	K	7 500.00
Stock on hand 30.06.03	K	395.00
Total sales		K16 450.00
Casual labour		100.00
Transport costs		520.00
Fuel Costs		600.00
Repairs		400.00
Electricity		600.00
Depreciation		1 500.00
Permanent wages		--
Rates and Taxes		--
Sale of old refrigerator		100.00
Loan Repayment		400.00

Notes and Calculations





Notes





4. Using the Profit and Loss Statement and the Balance Sheet to make decisions

Remember, we said earlier that one of the uses of the Profit and Loss Statement was to use it, along with information from the Balance Sheet, to calculate the Return on Capital and the Return of Equity. This information allows us to evaluate the investment and to compare it with other investments that may be available. This information is also useful to have when you are applying for a bank loan or other financing.



Exercise 4a and 4b

Go back to Exercise 2 in Unit 1 and from the Balance Sheet for Happy Valley Family Farm, find the value of the Total Assets (Capital) and the Owner's Equity. Use these figures, along with your Net Profit from Exercise 3 in Unit 2 to calculate:

- 4a The Return on Capital for this investment and
- 4b The Return on Equity for this investment.

Remember this information allows you to compare this business with other businesses. This will allow you to make more decisions about how you can best invest your money.

Calculations

Question:

What return do you get if you put your money in a bank?



Unit 3: Analysis of Balance Sheet

The Balance Sheet is a powerful management tool because by studying it, you can find out a lot of information about the business/farm. This information can also allow you to make decisions and solve problems and plan – all things that will benefit your business.

If the farm/business is not able to meet its debts (pay the bills), it runs the risk of being taken over by the bank or other lending institution or the owner may have to declare bankruptcy and may lose that farm or business.

There can be many indicators that suggest how a business is going.

What are some of the things you have noticed?

Talk about this with your trainer and other trainees and make a list of things that have been spoken about.

Eg. If the business cannot pay the bills,

Notes





By the time you can see problems, it is often too late to fix them. It is very important for the manager to be aware of problems and to detect them early to be able to fix them before they cause too much damage.

By looking carefully at the figures in the balance sheet and thinking about them, you can find out a lot of valuable information about your farm or business and how well it is going.

The first indicator we are going to look at is the Equity Ratio

1. Equity Ratio = $\frac{\text{Owners Equity}}{\text{Total Assets}}$

This tells us the proportion of total assets that are actually **owned** by the farmer/business. It looks at how much is left for the farmer after all the debts have been paid, including any bank or hire purchase loans.

This figure will give an indication of the *long-term* viability of the farm/business.



Exercise 1a.

- (a) Look at the Balance Sheet from Unit 1 (It has been copied on p30) and calculate the Equity Ratio.
Use calculators if necessary.
- (b) Think about the answer. What does the equity ratio tell you about the farm/business?

Notes and Calculations





Exercise 1b

What should this figure be for the farm to be considered “safe”?



Exercise 1c

If you have calculated a Balance Sheet for your own farm or business, work out this Equity Ratio. What does it tell you about your farm/business? Should you make any changes?

Notes and Calculations





The second ratio we will examine is the Current Ratio and it is calculated like this:

$$\text{2. Current Ratio} = \frac{\text{Current Assets}}{\text{Current Liabilities}}$$

This ratio gives an indication of the ability of a farm/business to meet its short-term financial commitments. i.e. pay on time. In order for the farm/business to be able to pay its current debts, it must have either cash or assets that can readily be turned into cash. That means the farmer must be able to find the right amount of cash or more, to pay the bills when they fall due. Therefore the current ratio needs to be 1 or greater than 1. The clever farmer will not let this figure get too big. The funds should always be used in the most effective way. In some countries it is suggested that the Current Ratio should be between 1.8 and 2.0 in order for the business to be "safe" If this figure was too high e.g.5 or 10, the farmer would have to think about what should be done with this extra money.



Exercise 2

- Using the same balance sheet from Unit 1, calculate the Current Ratio.
- What does this figure tell you?

Notes and Calculations





The third and last ratio is:

**3. Liquidity Ratio = “liquid” assets
“quick” liabilities**

This is also an indication of how well a business can pay current accounts. It looks at the cash on hand and the cash that is owed to the business and due to be paid very shortly to pay outstanding accounts. It does not rely on having to sell any assets to pay outstanding accounts in the next couple of months as the current ratio does.

This ratio only considers the assets that can be quickly converted into cash without doing any harm to the business. Things like seeds on hand and crops in the ground may not be able to be converted into cash quickly enough to pay the bills immediately. Likewise it only considers those liabilities that have to be paid almost immediately. Bank repayments are usually not included. It is suggested that this figure should also be greater than 1, but again not too high. Values greater than 5 for either the Current Ratio or the Liquidity Ratio would be considered too high and the manager would have to consider how this extra money could be spent to improve the business.



Exercise 3a

Using the same balance sheet from Unit 1, calculate the Liquidity Ratio.

Calculations and Notes



Exercise 3b

What does this figure tell you?

Notes



Exercise 4

What is the difference between the Current Ratio and the Liquidity Ratio?

Notes



By looking at all these ratios from the Balance Sheet, the manager can better understand the business and should be able to detect and solve problems before it is too late. It also helps in the planning process that is so necessary in business today.



Balance Sheet from Unit 1

Balance Sheet for Happy Valley Family Farm as at 30/06/03

Assets

Current

Cash in bank	1250	
Money owing -cocoa	750	
- chickens	120	
Feed on hand	250	
<u>Chemicals on hand</u>	<u>1400</u>	<u>3770</u>

Livestock

Chickens 50 @ K10.00	<u>500</u>	<u>500</u>
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Plant and Machinery

Vehicle	3000	
Tractor	950	
Slasher	560	
Generator	200	
<u>Tools</u>	<u>250</u>	<u>4960</u>

Fixed assets

Land with trees	22000	
House	20000	
Chicken Shed	1200	
<u>Drying Shed</u>	<u>3600</u>	<u>46800</u>

Total Assets 56030

Less

Liabilities

Current

Account for transport	120	
Account for chemicals	370	
Account replacement trees	740	
<u>Bank Repaymen/Interest</u>	<u>1800</u>	<u>3030</u>

Long Term

<u>Bank Loan</u>	<u>15000</u>	<u>15000</u>
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Total Liabilities 18030

Owner's Equity (A-L) 38000



Notes





Unit 4: Using Gross Margins in Decisions Making

? What is a Gross Margin?

A gross margin for a crop is the difference between the gross income received from selling the crop and the variable costs of producing the crop. It is simply a guide to the earning potential of a particular crop in an average situation after the growing costs have been met.

Another name for Gross Margin is Gross Profit.

Remember:

Variable costs may include: casual labour, fertilizer, seeds/seedlings, pesticides, transport, marketing costs, administration, repair and maintenance etc

? How can a Gross Margin be used?

It can be used as a basis for **comparing** and assessing the profit margins of **different crops** or **different farming methods** used on the individual farm, or to provide data for the compilation of a more detailed budget. Using Gross Margins can help the farmer make better decisions about the management of the farm.

Remember:

Gross margins do not measure farm profit, as they do not take into account fixed or overhead expenses such as rates, taxes, insurance, interest and depreciation on machinery and buildings. (You may like to have another look at Unit 2 to refresh your memory about Farm Profit).

When calculating Gross Margins, fixed costs are not included because they are expenses that are incurred regardless of what crop you grow or how much of it you grow. Fixed Costs are cost associated with having a farm. They are part of your farm and do not change when you plant a different crop. Remember they are things like rates and taxes, insurance, depreciation on buildings and equipment. The fixed costs will change very little if at all over the time it takes to grow a crop.

Gross margins only look at the income from the crop and the actual cost of producing that crop. This then allows the farmer to compare all the crops that might be grown.

This allows the farmer to see how much each crop can contribute. By thinking about Gross Margins the farmer can make decisions about which crops to plant.

Another reason why fixed costs are not used to calculate Gross Margins is that the fixed costs per land area varies considerably between farms whereas the variable costs will not change very much from farm to farm. Think of one farm that has very new and expensive buildings and lots of equipment and compare it to the farm that has almost nothing.



The fixed costs of the first farm will be much greater than the fixed costs of the second farm. But to grow a small patch of cabbages, both will have to outlay about the same amount of money on labour, chemicals, seeds and transport, so the variable costs for both these farms will be about the same. Can you now see that if we only use the variable costs we can compare more accurately.

There are many publications available giving financial and technical information about the gross margins for different crops and these give the farmer a guide to what may be expected. They may not tell you exactly what will happen on your farm as prices change from one place to another and some crops grow better in different areas.

You know from experience that some crops are more difficult to grow on your farm than others. For example, these gross margins you read about in farming magazines or books do not consider the particular characteristics of your farm, your market, your climate, your soil, your transport costs and your area.

Another consideration has to be the time it takes to grow different crops. Tomatoes for example, take twice as long as some greens. Therefore you could harvest two crops of green vegetables in the time you get one crop of tomatoes. All these things are considered by the wise farmer before making decisions.

By reading about Gross Margins, the farmer can get some idea of what to expect from the different crops but by keeping records from your own farm, and doing some calculations, you can make wise decisions about what crops are best for you and your farm.

How do we calculate Gross Margins.

Gross Income		K
Less		
Variable Costs		
•	K	
•	K	
•	K	
•	K	K
Gross Margin		K

If you want to **compare** two crops, then you must divide each Gross (Margin) by the area of the crop you are growing.



Notes





(Work in groups)



Exercise 1

Suppose you are a farmer growing cabbages and corn. What variable costs would you expect when growing these two crops? Discuss this question with other members of your group and write up two lists:

Variable Costs

Variable costs for Cabbage	Variable costs for Corn

Remember: It is important that whatever costs you use to calculate the Gross Margin for one crop, you must be CONSISTANT and use similar costs over all your crops.

Notes





Exercise 2

The cabbages are growing in an area 10 metres by 5 metres and from this garden you harvested and sold 300 cabbages for 80 toea each.

Your costs associated with growing this crop of cabbages were as follows:

Seeds	K18.00
Transport	24.00
Casual labour	15.00
Fertilizer	26.00

The corn is growing in a garden measuring 10m x 10m and from this garden you harvest

- 100 cobs @ 50 toea ea.
- 200 cobs @ 60 toea ea
- 100 cobs @ 65 toea ea

The costs associated with growing this crop are:

Seeds	1kg @ K2.00/kg
Fertilizer	13kg @ K0.45/kg
Harvest and Sorting	K3.00
Market and Transport	K7.00
Labour	K8.00

Calculate:

1. The Total Income from Cabbages	The Total Income from Corn
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2.The Total Variable Costs for Cabbages	The Total Variable Costs for Corn
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The area of Cabbages	The area of Corn
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Exercise 3

Now calculate the Gross Margins for both these crops. Use the figures calculated in the previous exercises.

<p>Cabbage Gross (total) Income=</p> <p>Less Variable Costs</p> <p>Gross Margin Gross Margin/Area =</p>	<p>Corn Gross (total) income =</p> <p>Less Variable Costs</p> <p>Gross Margin Gross Margin/area =</p>
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Notes





Exercise 4

From your Gross Margin calculation, which crop appears to give you the greatest Gross Margin?



Exercise 5

Before deciding to grow this crop, are there any other considerations you should take into account?



Exercise 6

Suppose it takes 8 weeks to grow cabbages and 12 weeks to grow corn. Would the Gross Margins you calculated above be a good comparison? Why?



Exercise 7

How might you overcome this problem?
