

Module 6

PLANNING

Session 6.1 The planning process

Session 6.2 Farm performance analysis

Session 6.3 Planning for the market

Session 6.4 The farm plan

Planning

Market-oriented farming begins by determining what buyers want, in what form and when they want it. This module looks at what you need to know about the planning process, farm performance and the market. This will enable you to support farmers in preparing farm plans, increase profitability and income.

Planning

Note

This module is designed to give you an opportunity to practise a selection of tools and skills you have learned during the course of this programme.

Effectively you will conduct an in-depth plan of a 5 hectare farm.

Session 6.1

The planning process

Learning outcomes:
Understand the planning process and the
planning cycle

The planning process

In this session you will look at the process of farm planning. Typically farmers are concerned about the future and they determine on their own what enterprises to produce, but there is a role for you in assisting farmers in making planning decisions.

The planning process

Some of the decisions that farmers make when planning the enterprise and the farm for the future are:

What crop should I produce and what variety or breed?

What area of land do I need?

How much should I produce?

When should it be produced?

How much labour will I need?

Do I have enough cash to buy inputs and materials or will I need to get more?

The planning process

Planning is one of the stages in the farmer's decision-making process.

Some forward-looking planning decisions are immediate, others are more long-term.

Farmers often plan just for their next season or in some cases they plan for a number of years.

The planning process

Planning means working things out before they happen.

Helping farmers gain skills for better planning is a role for you.

The planning process

Farmers who keep track of their past farm performance are in a better position to make good plans.

Farmers need to identify the strengths and weaknesses in their farming methods.

Before making a change, farmers should estimate what the results of that change are likely to be.

The planning process

It can only be an estimate of the outcome, because we cannot see into the future. Nevertheless it is important that we try to imagine the expectation.

It would not be good management to change the farm system without having any idea of the possible or likely outcome.

The method of estimating the results of a farming plan is known as budgeting.

Budgets

Budgets are used to decide whether a proposed plan will effectively increase profits.

Similarly, a farmer can use budgets to decide between two or more alternative enterprises and even to make whole farm plans.

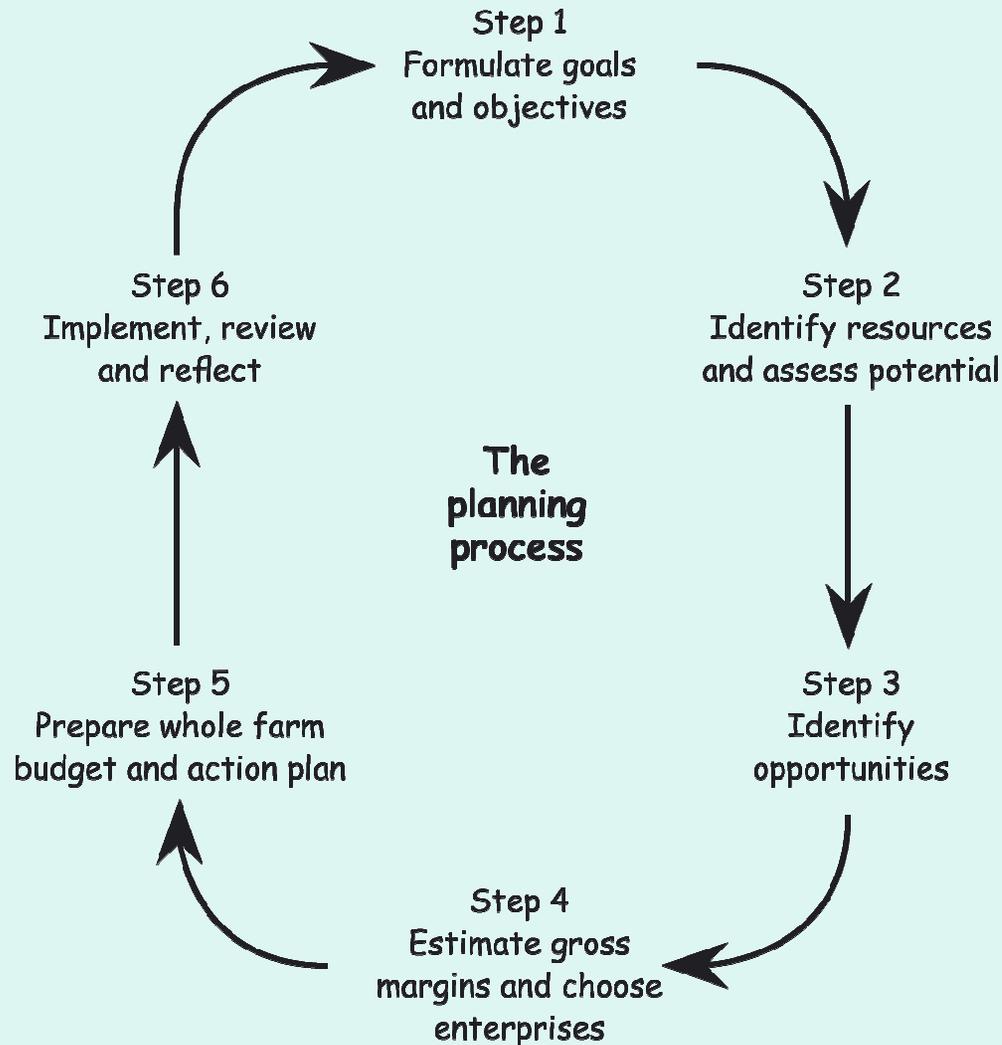
Budgets

Most farmers make some attempt at budgeting their farm plans, even though they may not work out their calculations on paper.

Farmers need to be encouraged to develop the habit of making more formal budgets.

By keeping some form of record it is less likely that some important information will be forgotten.

The planning process



Step 1: Formulate goals and objectives

This step typically begins with identification of the farm household goals and a listing of the priorities to the farmer and family.

This may simply consist of a single goal; maximization of profit or competing goals; increased profit and leisure.

The goals reflect the farm-family preferences.

Step 1: Formulate goals and objectives

Some basic questions for the farmer to ask might include:

What are my family's needs and what is the best way to provide for them?

What are some of the things my family wants to achieve?

Step 2: Identify resources and assess potential

Here the farmer draws up the resources available to the farm family.

You can provide guidance using the information studied in Module 2 of this programme.

Step 2: Identify resources and assess potential

In addition to a list of resources, the farmer should be encouraged to make a map of the farm.

The map should show the current crops and record the soil types and conditions for each plot on the farm. The farmer should do the same for common land for grazing, and forestry.

Step 2: Identify resources and assess potential

This record of the available land will serve as a guide as to what crops are suitable and what area may be grown.

It will also suggest what yields to expect.

At this stage the farmer needs to identify problems related to important resources such as land.

Step 2: Identify resources and assess potential

Farmers should also take stock of themselves as managers and objectively evaluate capacity and interest to manage certain crops and / or live-stock.

Farmers should identify weaknesses in management of the business, for example, excessive debt, high variable costs, depreciation and the use of labour.

Step 2: Identify resources and assess potential

The resources available set a limit on the plans which are possible.

It is important that any proposed plan must fit in with the available land, labour and financial capital, and with the farmer's ability as a manager.

It is no good trying to make a change which requires more of these resources than the farmer can acquire.

Step 3: Identify opportunities

A careful assessment of market and consumer demand is required.

The market appraisal should include an assessment of the demand for the product, the marketing arrangements and probable prices that can be attained, availability, cost and quality of purchased inputs and transportation and storage of the final product.

Step 3: Identify opportunities

Even if the resource inventory shows that certain crop and livestock enterprises are technically possible, choosing an enterprise must also take into account market opportunities.

Step 3: Identify opportunities

For many farmers the decision on what enterprises to include in a farm plan is based on personal experience and preference, together with considerations of comparative advantages of the different activities.

Some ideas and suggestions for activities can come from discussions held with family members, other farmers or with you, all of which could provide important sources of new information.

Step 3: Identify opportunities

The range of potential opportunities identified and evaluated could be broad and would need to be reduced through a process of 'short listing' or shortening the list to include the most likely opportunities.

Step 4 : Estimate gross margins and choose enterprises

Estimates are made of the income and variable costs for each of the possible alternative plans.

These estimates are used to calculate gross margins.

Based on the gross margins and other factors, the most profitable and viable enterprises should be selected.

Step 4 : Estimate gross margins and choose enterprises

Note

The gross income is made by multiplying the farm gate price with yield.

By looking at the market as the final destination of produce, it is important to take into account what we have called the marketing margin.

By taking the market price and deducting the costs, such as transport or handling, the farmer can arrive at the farmgate price.

Step 4 : Estimate gross margins and choose enterprises

Note

The gross margin for each potential enterprise should be calculated on a per unit basis (hectare, person-day).

The gross margins should be prepared on the basis of the most limiting resource.

If land is limited, the enterprises giving the highest gross margin per hectare would be best.

If labour is limiting, the enterprises giving the highest gross margin per person-day would be the best.

If capital is identified as the limiting resource the plan giving the highest gross margin per \$100 of capital would be the best.

Step 4 : Estimate gross margins and choose enterprises

Usually a farm plan is for one year, and costs related to land, family labour, and machinery are considered fixed.

Therefore, in the short-run, maximizing gross margin is similar to maximizing profit (or minimizing losses) because the fixed costs are constant.

Step 5: Prepare whole farm budget and action plan

After the enterprise profitability is calculated, comparisons of profitability between alternative business ideas can be made.

Some farmers may even prepare different farm plans to analyse the best options and combinations of enterprises.

Step 5: Prepare whole farm budget and action plan

A whole farm budget checks the effect of changes in the cropping pattern and the introduction of new enterprises on the economic viability of the entire farm.

The gross margin for each enterprise will help the farmer make sure there is a match between amount of physical resources available to the farmer and the decisions taken as to the most viable enterprise for each land parcel on the farm.

Step 5: Prepare whole farm budget and action plan

The decision would require that there is agreement among the following aspects:

The physical characteristics of the resource base

Market opportunities

Use of other resources (labour and capital) available to the farmer

Individual preferences of the farm family

Step 5: Prepare whole farm budget and action plan

This often involves a process of trial and error.

Once the enterprise combination has been selected, the farmer then assesses the overall gross margin and whole farm net income.

The latter would require the preparation of an inventory of the fixed asset costs.

The difference between the overall gross margin and the fixed costs provides an estimate of whole farm net income.

Step 5: Prepare whole farm budget and action plan

An action plan is then prepared taking into account physical and financial aspects of the plan.

The plan could include an assessment of;

- Land suitability
- Enterprise selection
- Planned crop rotations
- A calendar of operations
- Schedules of supplies required
- An assessment of farm investments
- Labour profiles
- Cash flow projections
- Enterprise budgets

Step 5: Prepare whole farm budget and action plan

One of the simplest ways to do this is with a seasonal calendar. This will give the farmer a visual picture of the plan, showing when inputs, labour and finance are needed, and when various activities need to take place.

Step 5: Prepare whole farm budget and action plan

For a new farm, or a large-scale change in an existing farm system, a complete budget is necessary.

For smaller changes in the farm system only variable costs are affected and a partial budget may be a sufficient guide.

Step 6: Implement, review and reflect; putting the plan into action

Once the best plan for the farm has been selected, it has to be put into operation.

If tree crops and livestock are included in the plan, this may take a long time, since these enterprises do not reach full production for several years.

If the farmer introduces new enterprises, farmers have to learn new skills and working methods to manage the enterprise effectively.

Step 6: Implement, review and reflect; putting the plan into action

Once the new plan is fully established it should run smoothly without too many management problems.

The period during which the plan is put into operation is usually the most difficult and requires very careful management.

Step 6: Implement, review and reflect; review and reflection

While the plan is being implemented and after it has been fully implemented, farmers will need to reflect on;

The outcomes of the plan

Evaluate it in terms of the goals set at the beginning of the planning process.

To what degree did the plan meet those objectives?

What adjustments can be made to correct new-found weaknesses or to build on new-found strengths and opportunities?

Session 6.2

Farm performance analysis

Learning outcomes:

Understand the purpose of performance analysis and its potential value in extension

Understand how to do a performance analysis

Farm performance analysis

In this session, you will focus on the concept of benchmarking; you will first identify a benchmark farm in your area and then you will practice analysing performance variations to highlight problems and possible solutions.

What is farm performance analysis?

Farm performance analysis is a way to assess how farms and their enterprises are performing in comparison with other farms in the vicinity.

Comparative analysis is an analysis of past results, but it gives useful guidelines for the future.

The analysis will help farmers understand where weaknesses occur in their farms and identify ways of addressing them through better planning for profits.

What is farm performance analysis?

Many factors affect the performance of the farm and the individual enterprises; level of production, productivity, input costs and product prices as well as the management skills and ability of the farmer.

In order to assess these factors it is often useful to divide the farm into its separate enterprises and to compare each one both separately and in combination.

What is farm performance analysis?

Farm performance can be carried out through three methods:

1. Comparing the performance of enterprises on a single farm over time
2. Comparing the performance of groups of farms
3. Comparing the performance of a farm with a more successful farm

The tools of constraints analysis and gross margin analysis can be used for the analysis.

Benchmarking

Farm performance analysis through making farm comparisons is based on the idea of benchmarking.

Benchmarking is a practice of identifying those farmers who are the best at doing something and understanding how they do it in order to learn from them and improve farm performance.

Their performance is set as a standard or benchmark for other farmers.

Benchmarking

Benchmarking involves studying the actual performance of the selected farm and comparing other farms of similar size and farming system for detailed financial and technical analysis.

The intention is to identify strengths and weaknesses and steps to improve the performance of the individual enterprise or the farm as a whole.

Benchmarking

You need to be able to calculate benchmarks for both average and better-managed farms.

There are several alternatives available for setting performance standards or benchmarks.

Benchmarking

Generally, benchmarks for farms are made up by averaging the actual performance data from a large group of farms.

The high profit benchmarks are typically derived by selecting the one-third of the farms in that large group that are the most profitable and averaging the performance measures from those farms.

Benchmarking can also be conducted by comparing individual farms.

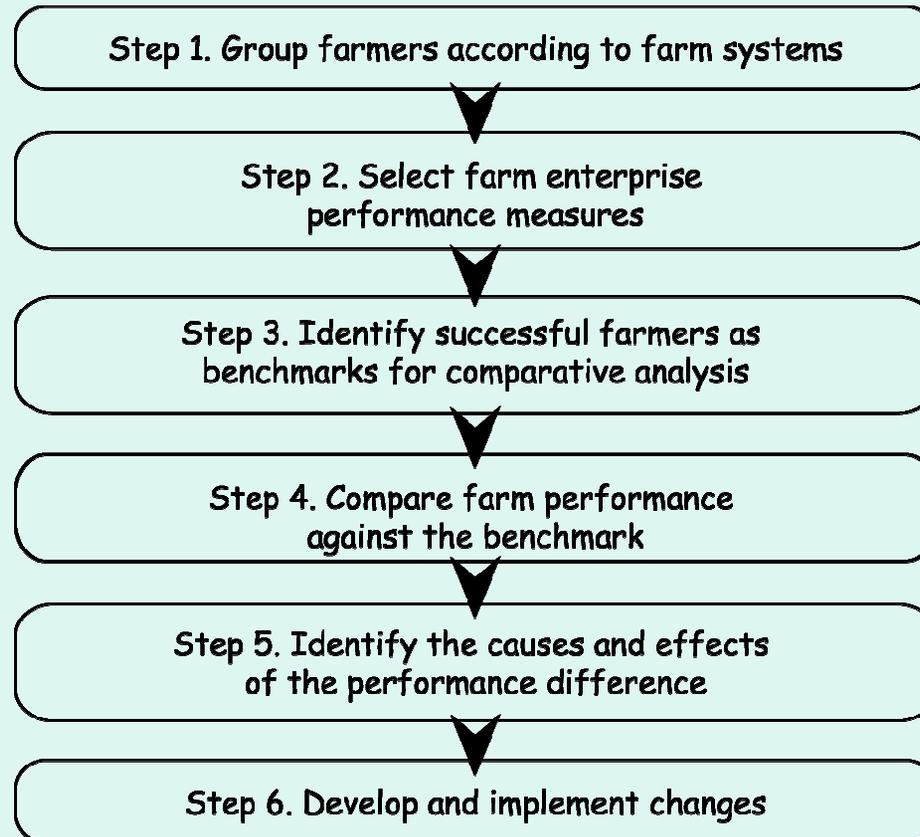
How is a performance analysis carried out?

The approach taken shows the basic steps of comparative farm performance analysis.

This analysis is conducted by you in collaboration with farmers.

The results of the analysis can be used as a useful extension tool for dissemination of feedback information to farmers.

How is a performance analysis carried out?



Step 1. Group farmers according to farming system

Look for a common factor upon which farmers can be grouped. This should be a factor that is relevant to the group of farmers with whom you work. This might be land size, agro-ecological zone, or technological package.

Step 2. Select farm enterprise performance measures

Select the farm enterprise that you want to study and identify key performance indicators that reflect farm performance.

Step 2. Select farm enterprise performance measures

- **Market related measures**
 - Final market price achieved
 - Quality of harvested produce
 - Marketing costs
 - Prices attained after taking into account marketing costs
- **Output-input related measures**
 - Yield per hectare
 - Cost per tonne of packaging
 - Milk produced per kilogram of feed
 - Cost of hired labour

Step 2. Select farm enterprise performance measures

A decision should be taken whether to use the overall indicator of gross margin per hectare, per person-day or per \$100 of capital.

The indicator should be the most limiting factor. This is to make sure the farms are compared on the same basis.

Step 3. Identify successful farmers as benchmarks for comparative analysis

Identify which of the farmers are performing well and who can be used to set the benchmark for performance.

Step 4. Compare farm performance against the benchmark

Once the performance measures are established, data about the farm(s) to be compared needs to be collected. Such data should come from farm records. If these are not available, then the farmer's memory will have to suffice.

When the data is available, use appropriate tools to analyze the farm in terms of the key performance measures.

Step 4. Compare farm performance against the benchmark

This stage requires making comparisons of the performance of the farm with the benchmark, including such factors as:

Overall profitability of the farm

Gross margin performance of the enterprises

Yields and selling prices

Quantities of variable inputs used

Total fixed costs

Various physical and financial performance measures identified as relevant to the farm or to the group of farms

Step 5. Identify the cause and effects of the performance difference

Using tools like constraints analysis, you can assist farmers to identify what is causing the difference between their farms' performance and the benchmark.

Step 6. Develop and implement changes

Work should now be done to develop changes in the farm that can be implemented. This would include looking at all aspects of the farm in terms of the decision-making boundary.

Farmers should look at changes in input, production and marketing which are relevant to the root cause of the performance difference.

Example; performance analysis

Three farm situations show low productivity, low intensity and high fixed costs.

The farmers have 5 ha each on which they produce rice, coffee, beans and maize. They have recently learned that the benchmark whole farm gross income for a similar farm is \$613.

Example; performance analysis

When they discussed this situation with their extension officer, the extension officer used the gross margin tool to analyse the performance of their farms.

The extension officer created a benchmark based on knowledge of the best performing farmers in similar situations. Then the three farms were compared to the benchmark.

Example; performance analysis

The results were as follows :

	Benchmark	Farmer 1	Farmer 2	Farmer 3
Profit	613	224	526	513
Cause		Low Productivity	Low Intensity	High Fixed Costs

Example; performance analysis

The details of the gross margin analysis

Enterprise	Benchmark	Low Productivity (Farmer 1)	Low Intensity (Farmer 2)	High Fixed Costs (Farmer 3)
Rice	2.5 ha x \$220/ha = \$550	2.5 ha x \$110/ha = \$275	3.0 ha x \$180/ha = \$540	2.5 ha x \$220/ha = \$550
Coffee	0.8 ha x \$350/ha = \$280	0.8 ha x \$300/ha = \$240	0.8 ha x \$300/ha = \$240	0.8 ha x \$350/ha = \$280
Bean	0.5 ha x \$170/ha = \$ 85	0.5 ha x \$70/ha = \$ 35	0.5 ha x \$150/ha = \$ 75	0.5 ha x \$170/ha = \$ 85
Maize	1.2 ha x \$40/ha = \$ 48	1.2 ha x 20/ha = \$ 24	0.7 ha x \$30/ha = \$ 21	1.2 ha x \$40/ha = \$ 48
Gross Margin	5.0ha = \$963	5.0 ha = \$574	5.0 ha = \$876	5.0 ha = \$963
Fixed Costs	5.0 ha x \$70/ha = \$350	5.0 ha x \$70/ha = \$350	5.0 ha x 70/ha = \$350	5.0 ha x \$90/ha = \$450
Profit	= \$613	= \$224	= \$526	= \$513

Example; performance analysis

The extension officer then did a constraints analysis which examined the root cause of low profits compared to the benchmark.

The results were as follows:

Example; performance analysis

Farmer 1:

Here it was found that the yields of rice, beans and maize (and to a lesser extent coffee) were lower than the benchmark. The cause of low yields; poor soil fertility, pests, etc.

This resulted in a low gross margin which resulted in low profits.

Example; performance analysis

Farmer 2:

Here it was also found that the yields of rice, beans and maize (and to a lesser extent coffee) were lower than the benchmark. The cause was more the farming system including technology choices, production systems, etc.

This resulted in a low gross margin which resulted in low profits.

Example; performance analysis

Farmer 3:

Here it was found that yields were comparable to the benchmark, but that fixed costs were much higher than the benchmark.

This resulted in the eroding of a sound gross margin resulting in low profits.

Example; performance analysis

The analysis gave a number of possible strategies;

Cause of low profits	Possible action
Low productivity (Farmer 1)	<input type="checkbox"/> Increase crop yields by improving soil fertility, addressing problems of drainage, reducing the incidence of crop diseases <input type="checkbox"/> Try to get better market prices by using better harvest and post-harvest handling
Low intensity (Farmer 2)	<input type="checkbox"/> Introduce new technologies and improved farm practices aimed at intensifying the farming system <input type="checkbox"/> Introduce new rural enterprises as part of a diversification process aimed at increasing on-farm income
High fixed costs (Farmer 3)	<input type="checkbox"/> Reduce fixed costs through better management

Example; performance analysis

Very often the problems of a farm may have more than a single cause in which case a combination of solutions may be needed.

There should be a realistic relationship between the gross margin and fixed costs.

Example; performance analysis

High fixed costs associated with labour, machinery, rent of land should be matched by intensive farming (a high gross margin).

Farming with low intensity systems i.e. a low gross margin, can only increase their profits if they lower their fixed costs.

The results of the gross margin calculations of enterprises from different farms need to be compared very carefully; the gross margin only covers the variable costs from total costs.

Example; performance analysis

It should be noted that valid comparisons can only be made in terms of a production unit common to all of the farms or activities being compared.

This unit can be land area, if the land used by each enterprise is equally suitable.

It could also be per unit of labour per \$100 of capital invested, or per head of livestock.

Session 6.3

Planning for the market

Learning outcomes:

Understand that the farmer can plan for the market

Understand how to develop a market strategy/plan

Understand how to identify opportunities for enterprise diversification

Planning for the market

In this session you will work on developing a realistic marketing plan. This will entail a visit to the market and relative development of a marketing plan.

Planning for the market

Marketing is the key to successful farm profit making.

Farmers can improve their skills in marketing by understanding how the market functions, collecting market information, formulating a marketing strategy and preparing a market plan.

Planning for the market

Marketing can be quite complex for the individual farmer and it is often more useful if farmers market their produce as a group.

Likewise, it is often more useful for farmers to prepare a market plan as a group.

You can be useful in assisting farmers in formulating strategies and preparing a marketing plan and in facilitating group and individual farmer marketing.

The essential principals of marketing

Farmers producing for the market should be in the position to answer six questions that marketing specialists pose that all begin with the letter "P";

People
Plan
Product
Price
Place
Promotion

People

People need the farmer to be friendly, efficient and knowledgeable about the product.

Who are the people we market to?

Who buys the product?

What are their wants and needs?

Who are the people marketing the product?

Plan

What is the plan for marketing?

What are the steps that need to be taken to market the product?

In what way will the farmer market the product to customers?

Product

What is the nature of the product that will be sold in the market? (This includes the taste of the product and other characteristics that consumers prefer)

Is the product what the customer wants?

Are the quantity, packaging and size what the consumer wants?

Is the appearance of the product appealing? Are the products labeled?

Product

Are the labels clear?

Can they be seen?

Are they attractive?

Does the product have a brand name?

Place

Where is the marketplace?

How far is it from the farm?

How should the produce be sold?

What form of transport is proposed?

What are the benefits of working with different types of distributors?

Place

How can distributors be supplied?

What are the requirements of the different distributors in terms of quantity, delivery and price?

What are the costs involved in the different distribution options?

Price

What price or how much is the farmer going to charge for their products?

Is the farmer a 'price taker' or a price maker?

Who are the main competitors?

What are the prices that they sell for?

Price

How are competitors likely to respond with respect to price if a new product is introduced to the market?

What are the price variations that exist between consumers in different locations?

How can I take advantage of these differences?

Promotion

How can I promote my product?

How can I inform people about my product?

Do I need to advertise?

Can I afford to do so by myself?

Promotion

What other ways can I promote the product?

How much will it cost me if I promote them?

How should I set my price?

What do most customers really want?

-
- Quality
 - Low price
 - Uniformity of produce
 - Sufficient quantity
 - Consistency
 - Freshness
 - Nutritious food
 - Health promoting food
 - Attractive products
 - Good taste
 - No pest damage
 - Good packaging
 - A wide selection
 - Good labeling
 - Knowledge of who produced it
 - Receiving the produce on time
 - Clean produce
 - Accessible produce
 - A list of ingredients
 - Instructions on how to prepare it.

The marketing plan

The purpose of the marketing plan is to identify customers and competitors and outline a strategy for attracting and keeping customers.

This takes careful planning and a good understanding of the market in order to develop a strategy that ensures success.

The marketing plan

A marketing plan for a product or group of similar type products should answer the following questions:

Who is the customer?

What does the customer want?

Is this product in demand?

How many competitors are providing the same product?

How can demand for the product be created?

Can the farmer effectively compete in price, quality and delivery?

The marketing plan

A good marketing plan begins with thorough knowledge of the products to be produced and of potential customers.

Knowing who buys and why, are the first steps in understanding how best to sell.

A marketing plan should cover the following topics:

The current market situation

The general background on the market in which the product will be sold.

It begins with a general idea of who the buyers are and what they want followed by anything else that describes the market in which the products would be sold (e.g. existing supplies, packaging preferences, etc.).

Constraints and opportunities analysis

Based on an assessment of the market opportunities, the farmer identifies the opportunities and constraints that the farmer faces and realistically evaluates the farm's internal strengths and weaknesses of dealing with the market situation.

The marketing strategy

Based on the analysis carried out above, the farmer draws up a plan to address the marketing objectives of the farm.

The strategy should include a clear definition of consumers, customer needs and the prices attained for produce sold.

The marketing strategy

The next slide shows a constraints, solutions, opportunities and actions matrix.

It is one way of assisting the farmer in analysing what possible strategies to formulate.

This enables the farmer, with your help, to appraise rapidly whether it is worthwhile producing a farm enterprise, provide possible solutions to problems, and identify opportunities to enter a market and make profits.

Example; constraints, opportunities , solutions and actions matrix

Constraints	Opportunities
No Local market Poor transport services	Potential exists for early crop production when supplies are short
Solutions	Actions
Organize a local farmers' market Encourage buyers to use their own transport	Encourage growing early crops and develop appropriate production techniques

Analysis of constraints and opportunities

Solutions to marketing problems are often relatively simple and should not require major changes to be made in production or new technologies to be introduced.

When the marketing plans become complex they are more likely to fail.

Analysis of constraints and opportunities

In the marketing plan, the farmer looks for the right combination of factors that will satisfy the needs of consumers and increase farm profits.

The plan, once prepared, should be assessed, to see whether it is realistic and likely to improve the overall competitiveness of the farm.

Usefulness of the marketing plan

The marketing plan directs the farmer towards trying to understand what the customer wants.

Why are consumers so important?

The answer is simple. They are, ultimately the source of income for the farm to cover the cost of daily operations, to repay debts and to make a profit.

Usefulness of the marketing plan

A marketing plan is necessary for any successful farming activity.

Marketing offers the farmer the information that, if applied correctly, will allow them to generate greater profit.

A good marketing plan may boost sales and increase profit margins.

Usefulness of the marketing plan

The farmer must be able to convince customers that they have the best product for them at the lowest possible price.

If the farmer cannot convince potential customers of this, then they will be wasting time and money.

This is where the marketing plan comes into play and why it is useful.

The market plan should help the farmer:

Know how much produce can be sold

Plan production and have enough to sell

Do what is needed to make a profit

Identify competitors and what they are good at by comparison to other farmers

The market plan should help the farmer:

Identify new crops to grow

Identify new and/or potential customers

Identify weaknesses in the farmer's management skills

Identify weaknesses in the overall business plan

What does a marketing plan contain?

Product information

Input supply and financing

Local marketing system

Product requirement by market

Under-utilized local resources

The farming community

Session 6.4

The farm plan

Learning outcomes:

- Understand how to prepare a farm plan
- Understand the changes on the farm (before and after) and implications on resource allocation
- Understand the enterprise combination and implications that lead to higher farm income
- Understand the iterative process of planning and the need to satisfy more than a single objective

The farm plan

This session is the melting pot of the entire programme; here you have to develop a farm plan through a step-by-step process integrating the key skills and tools learned in this programme.

The farm plan

Objective

To develop a farm plan which generates the greatest profits within the constraints of such factors as labour, land, access to credit, mechanization.

The farm plan

- Step 1. Resource capital analysis
- Step 2. Food production
- Step 3. Choosing your cash crops
- Step 4. Choosing your livestock enterprise
- Step 5. Testing labour availability
- Step 6. Sustainability check
- Step 7. Farm map
- Step 8. Estimate whole farm gross income
- Step 9. Estimate the whole farm net income or profit
- Step 10. Household cash flow
- Step 11. Written report of your farm

Module 6:Review

- Do you believe that the overall purpose of the module has been achieved ?
- You should have a good understanding of the planning process, farm performance analysis, planning for market and the farm plan