# **Uganda Martyrs University**

#### **FACULTY OF AGRICULTURE**

# BACHELOR'S DEGREE IN AGRICULTURE

# MODULE: AG/14 AGRICULTURE MARKET CHAIN MANAGEMENT

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## **Course Overview**

The proposed course of study will comprise of the following:-

Topic	Unit No.	Sub- Unit No.	Unit Topic / Short Description of Subject to be Covered	Recommen ded Week No.
Introduction and explanation of the course of study. Introduction to agri-marketing			What is Market Chain Management and Agri-Business Market Orientation ?	1
Focusing my Business Efforts - Where do I sell my produce -		1.1	Export Challenges and Options	2
the 3 option-choices	1.	1.2	Domestic Market Challenges & Nature of	3
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Commodity Price Issues & Business Financial Analysis		2.1	Business Financial Analysis – Profit and Loss Analysis and Planning	5
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Knowledgeable Manner	3.	3.2	Calculating the most profitable crops	8
Exporting and Marketing Logistics and Transportation	4	4.1 4.2 4.3	Fresh or Processed Produce Decisions Transportation, Refrigeration and Packaging Issues	9
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Market Theory and Research Methods	5	5.1 & 5.2	Market Tastes and Market Research Trade Shows	10
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### **UNIT 1**

## INTRODUCTION TO AGRI- MARKETING AND MARKET CHAIN MANAGEMENT

Agricultural Market Chain Management is essentially the process of planning and managing what is produced in the field and getting efficiently to the place of sale (market), and as a result obtaining a maximum profit. It involves managing a range of aspects such as:-

- Orientating what you produce to the highest possible profit
- Production quality
- Production quantities
- Consistency of quality and quantities
- Market-taste knowledge and orientation
- Harvesting and packaging management
- processing management
- product development management
- value adding management
- Transportation management
- management of receiving payment

In summary, Market Chain Management is composed of two main areas, namely:-

- Production Planning and Management ensuring you have market orientated and profitable quantities and qualities of agro products
- Market Orientation and Product Marketing

### Study Skills and Activities

The following detail a number of study skills or activities that are useful for you to focus in on. Probably the most important skill to have in managing the above is being a good business manager. This module will constantly refer to business skills you will be taught. Where ever you see the word **Business Skill:** this will be an important business skill you need to take particular note of, For example.

#### Business Skill A:

#### The Fundamental Issues Affecting an Agri-Business

A number of basic issues affect the profitability of your business. Basically you want to receive the most money from your land (per acre) with the most effective levels of input. The issues affecting the profit per acre are those that include:-

• The range of most suitable crops you can grow on the type of soils you have climate you are in. The range of crops you grow may be limited.

- The demands of the local market at the farm-gate.
- The price being paid at that time (see below more information on the gauging of prices).
- The yield of the crop
- The cost of inputs and
- The amount of growing seasons per year
- Knowledge, experience and access to information

**Assignment:** this is a task that you will generally be set at the end of each unit as homework and will include an activity that encourages you to realise in a practical manner, the learning-objective of the topic being studied. For example:-

#### **Assignment:**

#### **Example Assignment**

Visit a producer near where you stay and interview this person and describe ......

Case Study: this will often be an example of such a situation illustrative of the subject being explained, however real names will often not be used for the sake of confidentiality.

#### Case Study:

#### **Example Case Study**

Mr A. was producing .... and .....

# 1. Where Do I Sell My Produce? – The 3 Basic Options

Some challenges reap better rewards than others but are harder to reach or attain. You can apply such a concept to many aspects in life such as your education, journeys or even relationships. Do you want to be?

- Ambitious and achieve your goals?
- Over-ambitious and not achieve these goals that are too big?
- Not set goals and achieve little?

The key to setting your sights is having sufficient knowledge and experience to know how much you can achieve. The following 3 sections explain the challenges of various market options.

#### Case Study 1.

#### **Example Case Study**

Given issues explained in the 'Business Skills' box on a previous page, Mr A had invested in 1000 acres of land and planned to developed a rough plan (would change his plan if he felt it necessary during the years to come).

1<sup>st</sup> Stage was to grow maize and other low-value crops on a large scale using

cultivation machinery (e.g. tractors etc.) and to sell this to large scale wholesalers such as Uganda Grain Traders who would probably export this to other parts of Africa where there are food shortages. He would go to an exporter and do the exporting as an intermediary to begin with, so that he can concentrate on production issues.

2<sup>nd</sup> Stage was to start to export his produce himself as the quantities were fairly large.

3<sup>rd</sup> Stage was to start move into higher value crops such as fruit trees or groundnuts etc.

#### 1.1 EXPORT CHALLENGES AND OPTIONS

Whilst producer-direct exporting (producer is the same company as the exporter) it can sometimes gain you higher prices and profits; however, it is probably the most difficult of all the options. Whilst there are less complicated ways of building yourself-up to become an exporter, some of the challenges in exporting include the following:-

- Passing Photo sanitary inspections (perhaps the lecturer would like to explain the latest standards for Uganda in this area UNBS maybe able to advise this a standard that in 2004 & 05 is under significant development).
- Passing European Retailer Produce Good Agricultural Practice (EUREPGAP) standards if you are exporting to Europe (perhaps the lecturer would like to explain the latest standards for Uganda in this area UNBS maybe able to advise this a standard that in 2004 & 05 that is under significant development).
- Hazard Analysis Critical Control Point (HACCP) certificate is also required. HACCP
  is a certificate to state that a certain set of preventative procedures has been adhered to
  at certain points of risk, to prevent contamination etc.
- Certificate of Origin
- Manifest of what is on board
- Bill of Lading
- If you decide to be organically certified by EcoCert, IMO, KRAV or British Soil Association this will be extra work and if you wish to export to USA or Japan you will need NOP or JAP certificates respectively also. Organic certification and practice involves and a great deal of paper work and additional field work (soil fertility and soil conservation practices) and especially extension if you have outgrowers.

#### Case Study 2.

#### The Story of a Fledgling Organic Producer

Mr A. has been producing organic pineapples for the last few years and based on links from a variety of small buyers in Europe he has been developing his supply ability based him learning the characteristics of the demand of the market. However, is proving to be a long, slow and difficult process, yet he perseveres. With only 4 acres of pineapples his supply quantity remains small and he does not yet have organic certification for his own farm. He has in recent years been able to put in place the following:-

- Some irrigation equipment so that he can produce and harvest pineapples at all times of the year
- Started to provide extension services (especially in organic production) to some neighbouring farmers so that his supply quantities will be larger if he becomes a link person / trader.
- Supply to a small fresh organic produce shop in Kampala where he receives and slightly higher price than on the 'open' market
- Attended a number of donor-sponsored international trade fairs so that he learns more about the nature of the demands of the market.
- Begun to invest and experiment in drying equipment (see Case Study ... for more details on the investment in agri-processing plants).

The fundamentals of his organic production include :-

- No use of chemicals (no chemical herbicides, pesticides or chemical fertilizers or any other source e.g. soap powder from drains or contaminated water from a nearby factory.
- Where the above are needed, natural pesticides such as chilli, African violet flowers, Neem, tobacco or
  other repellent natural products are often ground-up, mixed with water and sprayed on the infested crop.
- Soil preservation where anti-leaching and water conservation methods are practiced such as the use of
  certain plants to hold soil together and prevent erosion as well as terracing or the digging of trenches to
  conserve soil from eroding or water being lost.
- Soil fertility is also improved through the production of compost, use of leguminous crops or crop rotation methods. The integration of animals such as the use of earthworms in soil aeration and humus production, and use of animal manure in general. The use of mulch also helps to conserve soil moisture and adds to vegetative matter in it.

However, he sometimes wonders if it is worth all the effort especially when he will have to pay 3 - 5000 to get the actual certificate of which he calculates will give him an additional income of around 4000!

- A number of other certificates and documentation such as possibly ISO's and packaging and labelling requirements<sup>1</sup>
- A lot more capital to invest in the above certificates, training of staff, administering paper work, not being paid for many months after the delivery. (perhaps the lecturer would like to explain more on actually companies and their challenges)
- Finding a market can take many years even if you are fully prepared for that market (perhaps the lecturer may like to describe situations of such s/he has seen)
- Attaining the demands of that market may take even longer. For example the market is demanding a quality that may take you many seasons and trials of growing the crop before the quality is reached let alone the quantity.
- Quantities for many customers often are far greater than the amount actually supplied and this reflects that many producers (especially fairly new producers or those in developing countries do not have the capital or experience to supply sufficient quantities).

The following illustrates the challenges of production and how precise the specifications of crop often have to be to suit a market demand. This description is bases on a producer's advertisement of a crop for sale in a specialist agri-produce publication.

#### Business Skill 1.

#### Getting Your Crop Specifications Right

- a description of someone wanting to sell garlic on the world market

"2003 new crop garlic will be coming soon. this year, for new garlic detail as following: 1. Quantity: less about 30% than last year. 2. Quality: better than last year( garlic skin, colour... all good, only size have a big trouble, too small) 3. Size: this year, Chinese garlic size so small, for export standard garlic, the proportion quantity as below: 4.5cm--5.5cm about 50% (last year about 5%) 5.5cm--6cm about 25% (last year about 25%) 6cm--6.5cm about 20% (last year about 55%) 6.5cm and up about 5% (last year about 15%) Price: FOB QINGDAO 10KGS/CTN 5cm and up USD170/MT 5.5cm and up USD180/MT 6cm and up USD230/MT our offer valid date before June 15 2003"

The following illustrates some of the challenges exporters often face especially when first trying to get into this area of agri-marketing.

#### Case Study 3.

#### **Exporting Challenges and Nature of**

Company B. in Ghana has specialised over the last 7 years in producing fresh organic papaya for the European market. In order to produce quantity 200 acres have been used that have eventually produced 20 refrigerated containers. The European market has certain 'taste' demands that include papaya of 8 - 10 inches (10 - 12 cm)

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<sup>&</sup>lt;sup>1</sup> See www tropical Wholefoods website / NRI Website

in length and a variety that gives a strong taste with a dark red colour of the internal fruit. The company has invested over a million dollars in planting, crop management (including an irrigation system), learning and staff training, a pack-house (where crop cleaning, selection and packing into specialised boxes occurs, a working capital which includes money with which to operate on when payment for a crop is often late in arriving, and a number of administrative and operational equipment which includes an office and transportation on and off farm.

The original business plan, consequent operations and investments were based on the attainment of an organic market and the additional 4 - 12% expected premium price paid for organic produce.

However, after 4 years of looking for an organic market and (BioFAch – the world organic trade show in Germany and other marketing methods) and receiving only conventional prices (no organic premium prices) during this period did the company finally find a customer for this organic crop. It cost the company 4 years of previously unrealised and unplanned for costs. This is a typical situation in terms of marketing and un-expected costs.

In terms of other frequent challenges, the following explains a regulation that has recently coming into effect.

#### Case Study 4.

#### **EUREPGAP Standards**

Among the many other standards you will be required to often adhere to, the EUREPGAP standards is a new mandatory standard as from 31<sup>st</sup> March 2005 that comes into force as result of a set of standards set by mainly supermarkets and where the industry as a whole has also followed. The most significant demands of this set of standards are a) Minimal Residue Levels (MRLs) left by pesticides inside the crop which is measured by chemical analysis in a laboratory or estimated based on low chemical use methods, or b) traceability records where if a problem such as chemical contamination in a food-crop consignment occurs, the origin of the crop in terms of the originating farmer or even field can be traced back to. Both of theses additional tasks and other similar tasks by producers will result in an enormous increased cost to producers. Some say it is European home industry protection and is designed to make importing into Europe more difficult. To find more information on EURPGAPS visit website <a href="http://www.eurep.org/Languages/English/index\_html">http://www.eurep.org/Languages/English/index\_html</a>

The following assignment aims to help you see how complex the challenges for an exporter and if this road is a chosen one, how often long and hard it is to attain.

#### Assignment 1.

#### **Agri-Exporter Mini-Study**

Visit an agri-exporter near where you stay and write a short study (2-4 pages) on the challenges they face. Summarise with at-least one short sentence saying if they find exporting easy or difficult. You are welcome to show the exporter the list of bullet-point challenges above and ask if they agree with these. Try to list the challenges they say they face.

Measure the length, size and colour of whatever they are exporting and describe the differences in consistency, especially between the grades they are exporting (usually first grade) and the grades they are selling on the local market (usually 2nd grade).

#### 1.2 DOMESTIC MARKET CHALLENGES AND

### **NATURE OF**

The nature of a domestic market often is characterised by the following:-

- Local traders buying small amounts, bulking these together and gaining a higher price per kilo once delivered to a central buyer with whom a relationship has often been built up based on the ability to deliver to quantities and qualities.
- Farmers producing and selling relatively small amounts
- Any value-adding and processing is often conducted to limited amount in a centralised site and where usually a significant amount of capital has been invested to the extent it matches that of the amount of supply
- Limited levels of processing often occur in developing countries with often the higher levels of processing occurs in developed countries.

If you are a small-scale farmer and producing relatively small amounts, whilst the price you are getting is probably low, it is probably better to be supplying such than to be over ambitious and fail in accessing a market at all.

For example some farmers in trying to be over ambitious in supplying a market have failed, such as that explained in Case Study 4.

#### Case Study 5.

#### Supply Challenges

Company B. invested approximately \$ 600,000 in a fruit drying factory in an East African country recently. This company specialised in production only and had a reliable contract to sell the product to a local exporter with whom both parties had a long-term proven successful business relationship. The plant was a modern plant using a mixture of solar energy and coal from Southern Africa. The output was to be 2 tonnes per day of dried fruit and the plant was expected to operate 360 days a year. In order to get 2 tonnes of dried fruit, 40 tonnes of fresh fruit (includes the exterior fruit-peel) was to be required thus making the total yearly supply of fresh fruit 14,400 tonnes per year and with an average yield of fruit of 10 tonnes per hectare, 1440 hectares of fruit were estimated to be sufficient. Although the company found sufficient hectarage of supply, this was found to be insufficient as supply was sporadic and mixed with numerous other problems. As result, the average output of the plant was 1 tonne a day which resulted in half the income and only half the covering of costs which in turn became a loss making enterprise and a loss of the contract to another supplier from South East Asia.

However, in terms of improving the profitability of production for a domestic market, the following illustrates a case where the income for maize was doubled for small-scale farmers as a result of some basic activities.

#### Business Skill 3.

#### **An Improved Local Market**

Uganda Grain Traders during the buying seasons of 2004 were paying 330/= and above, per kilo for maize; however this maize had to be :-

- Below 14% moisture
- No weevils, be fumigated, be completely clean and undamaged
- Be delivered the UGT store in Kampala.

Many farmers at the time were receiving 150/= per kilo for their maize when bought from them at their farms by traders. Because many small scale farmers were un-organised, traders who were organised were taking advantage of this and paying this small amount for the maize. However, some farmers calculated that the per kilo costs of organising themselves would be:-

- 10 /= per kilo to transport
- 5 /= per kilo to clean and get to the required moisture content
- 15 /= for other costs if necessary

As a result, some farmers got themselves organised in groups to bulk their produce and to borrow the capital required to hire transport and machinery to conduct such value adding. As a result the net income per kilo for their maize became 300 /= instead of the previous 150 /= per kilo.

As a result small producers may like to focus on the following in the short-term. A term sometimes used for when a producer is producing for another local processor is contract farming<sup>2</sup> where the producer, produces to some standards set by the contractor and also often some assistance and extension advice is given by the contractor. More information is given on this subject in the document which can be found in the website link given on at the footnote below.

#### Business Skill 4.

#### Improving the Supplying of a Domestic Market as a Small-scale Farmer

If you are a small producer and you want to gain a higher price for your products and better manage your marketing chain, you could try the following:-

- Develop a marketing group where members bulk their produce and sell together to gain a higher price
- Negotiate with a buyer for this larger amount and develop a relationship based on pleasing results for both parties
- Hire transport if suitable to deliver to the buyer
- Concentrate on developing the quality of your produce to suit the market
- Use high-quality varieties and seed that will produce higher yields
- Concentrate on ensuring your customer / buyer is getting what s/he wants.



The following assignment aims to help you analyse which is the most suitable choice of a market for a crop or product you may have in mind.

<sup>&</sup>lt;sup>2</sup> http://www.fao.org/ag/ags/AGSM/contract/cfmain.pdf

#### Assignment 2.

#### A Positive and Negative Analysis of Supplying a Domestic Market

List the positive and negative aspects of supplying a domestic market against the positive and negative aspects of supplying an export market for a given product (try to choose a product you know a lot about and if possible have had significant experience producing for a market). If you conclude that an export market is the most suitable, try to devise a strategy or plan detailing the level of production and profit you will get and how you will get to that level over a period of time. Also calculate the profits from producing for a domestic market i.e. the income received less the costs of production. The results of your analysis and resulting strategy should be discussed in the flowing class.

# 1.3 INTERMEDIARY EXPORTING CHALLENGES AND NATURE OF

Producing as an Intermediary for an export market, for a period of time, will often give a producer a period of time and learning so that they can focus on getting up to standard the following:-

- A consistent supply in terms of quantity (e.g. containers per month, every month)
- A consistent supply in terms of quality (size and colour in wet seasons and dry seasons)
- Practice in some processing that maybe required
- Experience to choose which is the most effective specialist activity to focus upon in future.

Is it strongly recommended that anyone investing in such, does so one step at a time. It is hoped that the results of your analysis and strategy development in Assignment 2. have come to such a conclusion:-

#### Case Study 6.

#### **Two Organic Intermediary-Exporting Dried Fruit Companies**

There are at least 2 well known Organic Dried Fruit Exporting Companies in Uganda who have out growers and themselves do the bulking, quality control, client management and research and also give technical advice to the out growers. To out growers who individually often cannot produce enough to export themselves, such an arrangement has the following advantages where they:-

- receive a reasonably high price for this export, processed high-value crop as a result of their own work in conducting simple drying practices.
- can concentrate on production at a basic level only and perfect this first
- they do not have to deal with exporting and client complications
- have to invest less per Kg of production than if they were exporting directly
- they receive usually free technical advice from the 'bulking company' However, there are the following disadvantages:-
  - They receive a price per Kg lower than that if they were exporting themselves.

The following (Business Skill 5.) explains some of the costs that however, are still often incurred in exporting especially when some significant intermediary trading will be incurred.

#### Business Skill 5.

#### **Price Layers in the Exporting of an Agri-Commodity**

Given the challenges of exporting, the following explains typical costs, profit margins, purchase and sales prices for a given export product. Note the difference where the price paid to farmers is \$ 0.10 cents but the retail price in UK is \$ 2.70. per Kg.

**Prices Layers of an Agri-Commodity** - Example of approximate costs and markups of a kilo of Matooke from farmer to UK supermarket shelf.

Seller		Process / Value- E adding Pr						
Retailer	consume	Presenting to consumers, promoting product, packaging			\$ .25	5	\$.	05
Importer	exporter importation (docume		ng	\$ 2.40	\$ .25		\$ .05	
Exporte produce country process	er- arranging and administrating			\$ 2.10	\$ 1.80 air-freig costs (\$1 per kg + \$ other handling certificate	ht .45 .35	\$ .05	
	Trader	Time to buy an sell, transportation		\$ 0.35	\$.015	\$	0.5	
	Farmer	Agri-produ	ction	n	\$ 0.510			

As shown above, the process is very complicated and costly. One can not assume that the price a selling-county-importer is buying at is the price a farmer can sell at, especially if an export process is to be conducted. Also note Uganda has one of the highest costs for air-freight to Europe of African countries due to the low quantities and distance to Europe compared to some West African countries for example such as Ghana whose cost of air-freight is approximately \$ .80 cents per Kg total.

Experience and lessons learnt in terms of technical and production matters help a great deal, however, the calculating and learning of the accuracy of these calculations is equally if not more important. If you are not covering your costs, making a loss or not making some money which motivates you to stay in business, why stay in such a business? Subsistence farming gives people food with which to have barely enough to eat. We want you to do better than this, therefore the next few units and sub units will focus on the calculating of such costs and incomes as it is such an important aspect.

#### Business Skill 6. -

#### Spotting and Creating an Idea!

#### - and Carefully Thinking-out and Planning Your Business Idea / Plan

An entrepreneur is often described someone who can creative in defining a business opportunity idea and making it happen. Although making it happen takes a lot of experience to know what the challenges are and the idea part takes a visionary mind or perhaps something of a psychologist to know what people will spend their money on. A well known entrepreneur, for example, is Richard Branson and more details can be found at

http://www.virgin.com/aboutvirgin/allaboutvirgin/whosrichardbranson/default.asp However, calculating the business idea is a particularly important activity to conduct. So many businesses have experienced problems at a planning level due to miscalculations at this level. Practicing planning and the calculating of costs and profits is a very useful exercise in business. One can never be too careful and it is generally considered that it is very difficult to get these projections accurate especially in terms of predicting profit. Following are some common pieces of advice given in this challenge:-

- a business plan plan, plan and plan again with expectations at every level that things can go wrong and calculation mistakes can be made.
  - Many persons in financial planning create and best case and worst case scenario and then many apply the "Pye Rule" - where they divide their worst case scenario by 3.142 and if it is still profit making, only then do they invest in it.
- Research and know your subject well and know to what extent there are risks.
   Risks can destroy the whole business idea so quickly and cause you the investor to loose a lot of money.
- Be experienced especially in all the things that can go wrong e.g. disease in production, calculating yields and the costs of producing items.
- If it can go wrong, it often will things take longer to produce and are therefore more costly, losses occur at higher rate than expected or items cost more than expected be prepared for these problems!
- These calculations can be very complex and therefore mistakes can often be made and therefore you should check, check and check again your calculations.

The more carefully you have thought -out and researched your business, the more

- > Successful it is likely to be in terms of overall profitability
- > The more confidence and interest in the job workers will have
- The more confidence others will have in you (donors, bankers etc.)
- > Success of the business is a marketing tool in itself

When calculating the profitability of a business the usual and basic method used includes calculating many of the following:-

- a. the expected yields of the crop
- b. the amount of crop available to the processing factory
- c. the cost of processing the crop
- d. the income for the crop less (subtract) the above costs = gross profit
- e. if you would like to calculate when you are likely to receive money back on the original investment you made, then divide this original sum by the gross profit. The net profit is often determined by the annual reduction of the expected rate of return on investment and by subtracting this from the gross profit (see Business Skill 7. For more details on Return-On-Investment)

#### Assignment 3.

#### **Calculating Profit and Factoring in Risks**

Using the above basic mathematical formula (amount of crop x cost of buying per unit - (less) cost of processing + income for final sale of crop = gross profit), make up a number of scenarios for different agri-products. Use scenarios where you, if possible, know the costs and incomes as accurately as possible. Do this simple calculation for at least 6 different agri-products.

In the following module (2.1), more detail will be paid to financial calculations and estimations as this has proven to be a particularly important and challenging aspect of business and agri-market chain management.

#### **REVIEW QUESTIONS**

- 1. What are the main criteria for produce to be certified organic?
- 2. What does Organic Certified precisely mean what processes have has been undertaken to attain the certification?
- 3. What does HACCP mean and what processes have been undertaken?
- 4. What are the benefits of exporting
- 5. what are the risks, extra work and extra costs you will have to go through to export?
- 6. a) List the costs of any workable irrigation scheme for a specified area e.g. pump, piping, water delivery methods and (operating on a daily basis keep these operational costs separate from the capital costs)
  - b) List the economic benefits that you will receive from being able to produce the crop that you have stated you are growing during the dry season. State the additional amount of months you are producing, the price per Kg you are able to sell at and the amount per acre / hectare.

Ensure you produce 2 clear total figures i.e. - Total cost of the irrigation system - Total additional income during dry season months

- 7.If you were an exporter and had just found a market for maize of 5000 tonnes and you are just planning to supply this market opportunity. What do you think would be your 3 greatest challenges?
- 8. How can you improve as a small-scale farmer in terms of developing the profitability of supplying a local market? List at least 5 various methods or approaches you can take
- 9.Decide on a single investment you can make to improve your situation and list and detail the costs and benefits in terms money and include a % each for a loan from a bank for the cost (interest on the loan form the bank)
- 10. What do you think are the 3 main advantages of firstly aiming at exporting intermediary through an intermediary
- 11. What do you think are the main disadvantages?
- 12.Based on companies you know are exporting from the country in which you live, what crops do you think you could focus on to produce and export though these intermediaries?

Name at least 3 different crops and 3 exporting companies that involved in exporting in your country

### **UNIT 2**

# COMMODITY PRICE ISSUES & BUSINESS FINANCIAL ANALYSIS

The following 2 sub-units (classes) look more closely at financial calculations and critical issues such as price changes that illustrate in planning the potential profit of your proposed business and its marketing activities or the actual profit margins once in business. These calculations can never be underestimated in their value, especially during a planning process.

# 2.1 BUSINESS FINANCIAL ANALYSIS CONTINUED – PROFIT AND LOSS ANALYSIS AND PLANNING

The following table gives an example of 2 scenarios of differing possible variations of the following:-

- 1. yields of the crop
- 2. amount of crop available for processing
- 3. the cost of processing
- 4. calculated corresponding gross profit
- 5. capital costs (items such as machinery, additional land or equipment that you will keep and use year after year).
- 6. the rate of return on investment

This example also includes a calculation of the size of a processing plant that is planned to be invested in.

However, you will notice that at :-

#### Stage 1. (light green) there are expected differing variations in :-

- a) the amount of fruits per plant between best case scenario and lesser case scenario
- b) the total amount of fruit each plant produces
- c) the amount of plants per hectare planted

#### Stage 2. (yellow) expected differing variations in :-

- a) the number of farmers who agree to plant this crop and the amount of land planted
- b) resulting in the total amount of plants
- c) resulting in a big difference in the annual total amount of production in these 2 scenarios

#### Stage 3. (orange) expected differing variations in :-

- a) a difference in the cost of the raw fruit where in one situation there could easy be such a rise in cost due to crop failure, less of a supply and an increase in demand and price.
- b) the cost to rent the building was more than expected
- c) certification costs were more than expected
- d) labour costs were more than expected
- e) transportation costs were more than expected e.g. the price in fuel went suddenly up!

#### Stage 4. (red ) expected differing variations in :-

- a) the amount of fruit processed and then a corresponding lower total income
- b) also not the expected price of \$ 1.6 per Kg was achieved due to poor quality or a range of other reasons. This factor alone has caused the business to go into loss. If the price had not dropped to \$ 1.5 then the business in this lesser case scenario would not have been loss making and instead been making a profit of \$ 3200 for the year.
- c) resulting gross profits that are a result of subtracting *Stage 4 Total* from *Stage 3 Total*.

#### Stage 5. (light blue ) expected differing variations in :-

a) the appropriate size of the processing plant – on this occasion since the crop turned out to be less, less money was spent on developing the processing plant but still it was unprofitable in this first year of operation.

The following table of calculations was originally produced on an 'Excel' spreadsheet which has automatic calculation abilities. If you can get access to such it is useful as it ensures accuracy and changes to be easily made.

Figure 1.
Two Comparative Summary Calculations of a Business and Its Projected Incomes, Costs, Profits and Returns on Investment

1 wo Comparative Sum	imai y Calculati	ions of a Dusiness	s and its i roje	incomes, Costs, Proms	and Keturns	on mvestment				
a	a. Lesser Case S	Scenario		b. Better Case Scenario						
1a. Yield Calculations				1b. Yield Calculations	S					
20 - 400 fruits per Kg	•	lant produces .5 K	~ .	40 - 50 fruits per Kg		plant produces 1 K	~ .			
2 harvesting seas	sons	2,000 plants	s per hectare	2 harvesting sea	sons	3,000 plan	ts per hectare			
2a. Production to Supp	ply Factory			2b. Production to Sup	ply Factory		T-4-1			
Number of	Dlanta Va/s	То4о1 Г	ua du ati an	Namel on of Forms one	No Dlanta		Total			
Farmers No	o. Plants Kg / y 10,000	ear Total P	Production	Number of Farmers 150	No. Plants	Kg / year 2	Production 4.500,000			
	· · · · · · · · · · · · · · · · · · ·	1 . 1 kg of processes	1,000,000		15,000		4,500,000			
IND TO KG O	oj unprocessea –	1 kg of processed	ı	IVD 10 Kg (	oj unprocessea	= 1 kg of processe	a			
3a. Cost of				3b. Cost of						
Processing	Cost each	Amt /months	Total Cost	Processing Processing	Cost each	Amt /months	Amt /months			
Cost of Material	0.13	1,000,000	130,000	Cost of Material	0.1	4,500,000	450,000			
Building Rental	200	9	1800	Building Rental	150	9	1,350			
Certification costs		ŕ	10,000	Certification costs			7000			
Salary Manager	1000	12	12,000	Salary Manager	700	12	8,400			
Processing labour (6)	300	4	1200	Processing labour (6)	300	4	1200			
Vehicle use	200	9	1800	Vehicle use	150	9	1800			
<b>Total Overhead Costs</b>	for First Year		156800	Total Overhead Costs for First Year 40						
4a. Income Less Produ	uction Income			4b. Income Less Prod	uction Income					
	Amt	Value			Amt	Value				
Processed Crop	100,000	1.5	150000	Processed Crop	450,000	1.6	720000			
	Gross I	Profit for Year	-6800		Gross	Profit for Year	250250			
5a. Capital Costs	Cost Each	Amt		5b. Capital Costs	Cost Each	Amt				
Per processing unit	500	1000	500000	Per processing unit	200	4500	900000			
Administration equip &			35,000	Administration equip &	vehicles		25,000			
		Fotal Capital Cos	sts 535,000			Total Capital Co	osts 925,000			

Nick Shirra Consultancy

6a. Return on Investment	6b. Return on Investment
Loss	25% or return on investment in 4 years

The following is another important calculation / management tool you should be aware of :-

#### Business Skill 7.

#### Keeping a 'feel' or an 'eye' on the Influences on Profit of Your Business

Most business people know the profitability of their business every moment of any change on performance of every day. For example :-

- ➤ A day of good sales can be a positive effect
- ➤ If the market value / price goes down it can be a bad effect
- ➤ However, most business people know how far the price can go down before they will start to loose money
- > If the production amount goes down the overall profit amount will go down

These calculations can be based on the following as single methods or all together:-

- Experience of having felt the effects
- ❖ Having an accounting system in place that will often automatically tell you if you are having such problems. Examples of these accounting systems can be 'Peachtree', Quicken, Mind Your Own Business, Quick Books, etc.
- ❖ Doing frequent calculations see 'Case Study 7.' As an example of a very complex situation that required such careful calculations.

#### Business Skill 8.

#### 'Return on Investment'

This is term that describes the overall profitability of a business. As a general rule of thumb a 'successful' business is expected to gain a return on investment in 5 years, whereas 10 years is generally still quite acceptable. Some very successful businesses have gained a return-on- investment in a year or even less whereas a business that will provide a long-term income for which a family intends to live and survive from, gaining a return-on-investment is not always such an issue.

#### Business Skill 9.

#### **Know How Much it Costs to Produce**

The most important basis of calculations is the basic knowing of costs of your overall operation (Stage 3. in previous table) which basically is a list of figures that add up to the total cost. However, these figures change depending on whether you are operating at full capacity or half capacity. Some costs will often be fixed (such as building rent) whilst others will reflect the level of operation (electricity costs if

machines are just half used). It is also up to you whether or not you factor in your time costs. Certainly if you are paying out wages to employees you should factor these in but you may include your own wages as a part of the profit.

The following activity will also give interesting and useful information

#### Assignment 4.

#### The Difficulty of Predicting

This is just an informal task in this assignment, and you are not necessarily asked (unless the module lecturer asks you to) to produce any written results. However, if you spend time talking to persons who have in business and set-up in a formal manner where they calculated what their costs were projected to be, their projected income and the resulting profit. If you carry-out this exercise in a comprehensive manner and talk to a number of people you will be surprised how different they will say what their projections were compared to the reality during the coming years.

However, if you ask them if it was worth doing such calculations, you are likely to receive an interesting answer.

# 2.2 PRICE ISSUES AND MARKET PRICE FLUCTUATIONS

As you have seen in the previous sub-unit (2.1), even a slight change in price can cause a business to be experiencing an overall loss. Prices most often change because of changes in *Demand* and *Supply*.

#### Business Skill 10.

#### "Demand and Supply"

Demand and Supply is the amount that people want of a product at a given time.

- The amount of that product that is available. There is very little gold in the
  world and so many people want gold so prices have become high a high
  demand
- There is too much sand so the price per kilo is low an over supply

If you can produce something that few other people are producing and people want it, the price you should get should be good. However, if you are growing something that everyone else is also starting to grow, when the harvest time comes the price will probably be low although when you planted it was high. The following graph illustrates some price changes and fluctuations in Passion Fruits from Kenya on the UK market.

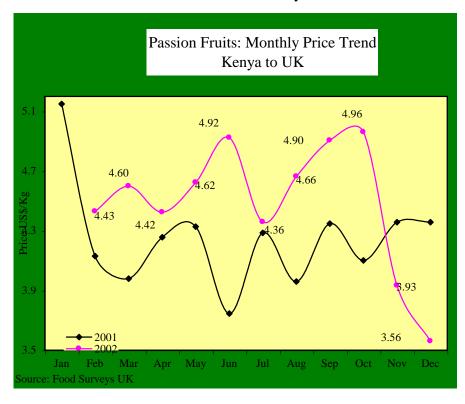


Figure 2. Price of Passion Fruit in the UK

In this illustration it is surprising that the times of change are for these opposite two years at the same time of year (i.e. in February & March for each year, one year there is a rise in price and the other year, there is drop - itis usually assumed that due to growing and weather seasons, these cause a drop or rise in production and

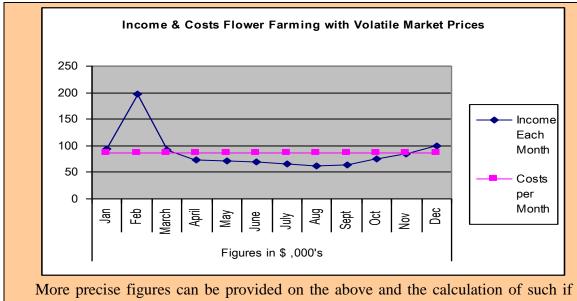
therefore a rise in price).

To overcome such challenges (such as seasons), where rainfall or the temperature is low, some growers invest in irrigation or greenhouse or heating systems where the 'weather' can be artificially controlled. However, these investments can cost a great deal of money and you again should conduct 'return on investment calculations'. The following case study provides such as example.

#### Case Study 7.

#### A 'Once-a-Year-Profit-Opportunity' Market

Numerous rose and flower farms in Uganda, Kenya, other parts of Africa, Central and South America have invested in greenhouses and irrigation systems in order that they supply European and American markets during particularly the winter and especially at times such as Valentines Day (14<sup>th</sup> February) when the price of red roses and other high demand flowers can be as much as 10 times the usual price. When integrating such price fluctuation elements into calculations, large extra costs and investments such as irrigation and greenhouses can be covered at a high rate for a few weeks of year but during the remainder of the year losses are being made. However, during this short 'high profit' period, the profit margins can be so high that they cover the losses during the remainder of the year. See the example below where most of the time the business is loosing money, but because of the one particular month where a high profit is made, due to a once-a-year high value market price, an overall profit is made.



More precise figures can be provided on the above and the calculation of such if you are intending to invest into such a situation, are highly recommended to be carefully calculated.

The predicting or knowing when is the most profitable time to grow and market a crop is a typical challenge for many producers and usually a method to overcome this challenge is to develop a strong base and network of knowledge – see Unit 3. for more information on this subject.

#### Assignment 5.

#### **Price Fluctuations**

List as many reasons as you can think of why there is generally an opposite change in the price during 2001 and 2002 in each month, in the graph shown in Figure 2., with passion fruit sold in the UK.

As you probably already know, as illustrated in Figure 3 (over page), a crop is often sold at a higher price when in shortage (just before a harvest) and at a lower price during the harvest when there is high supply. Figure 3. below shows how the price of beans is high just before the harvests in especially July and December. Many traders make a profit by storing the product for a period and then make a significant profit by just the activity of storing. Case Study 8, illustrates the profit that can be made by storing 100 tonnes of these beans in 2003. It can be seen in this example that there are clear and typically on an annual basis, an increase in price.

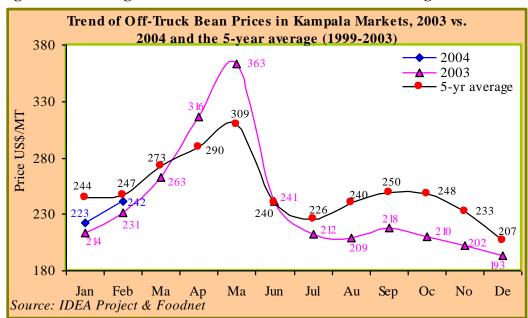


Figure 3. Differing Prices of Beans Due to Annual Price Changes

#### Case Study 8.

#### Making a Profit from Trading Beans Between Seasons

Mr K made a profit of \$ 14,100 (almost a 100% net market-up!) from simply buying beans during the harvest season and selling at peak price. He did not have the money at the time but took a loan from the bank and hired the equipment and all other items such as transport. His final profit calculations were :-

Income Selling Bulk in Kampala	Unit	Price	Unit cost	<b>Total</b> \$ 36,000			
May 2003	Tonne	360	100	φ 30,000			
Costs Cost Description	Unit	Cost	Unit cost	Total			
Buying at Farm Gate in December 2002	Tonne	140	100	\$ 14,000			
Storage per month	Warehouse	6	300	\$ 1,800			
Transport to Kampala per tonne	Tonne	100	15	\$ 1,500			
Handling and Packaging	Tonne	10	100	\$ 1,000			
Interest on 6 month loan  @ 10%			,	\$ 3,600			
Total Costs \$ 21,900							
Profit Overall \$ 14,100							

#### Assignment 6.

#### **Calculating Making a Profit**

Find the seasonal price fluctuation of a crop grown in your area and calculate how you may be able to make a profit from just storing it, using calculations similar to the above.

#### **REVIEW QUESTIONS**

- 1. What do the following mean? Give a definition of each use your own words
  - a) Capital Cost
  - b) Yield
  - c) Return on Investment
  - d) Gross profit
  - e) Net profit
- 2. How do calculate profit? i.e. deduct ..(What)... (From what)
- 3. List 3 things you can possibly do to increase your profit?

- 1. Why do you think there is such a price difference in the price of beans as shown in Figure 3. and in other crops in Uganda?
- 2. What do you think are the main risks Mr K has gone through to conduct his business activity as in Case Study 8.
- 3. Do think any costs have been missed out in the calculations?
- 4. How do think Mr K can decrease his costs and increase his profit?

# UNIT 3: ORIENTATING WHAT YOU GROW TO THE MARKET AND TO PROFIT OPPORTUNITIES

As explained above, the choice of crop and the time when you market it, can be a critical factor in whether or not you are making a profit. The following unit intends to explain and illustrate how the knowledge of what is in demand and the choice of crop can make a big difference on profit.

#### Business Skill 11.

#### **Seasonal Opportunities**

The following illustrates how a company (this example Eosta Company <a href="http://www.eosta.com">http://www.eosta.com</a>) buys products when the prices are low and the demand price is high. They also produce or support producers to supply crops when the price is high. Some producers only produce the product when the price is high and the following products (highlighted in yellow) are produced at these times for example short-term crops such as tomatoes and sweet-peppers are grown in the dry seasons or lesser dry-season, when prices are high, on the same land.

#### Kiwi, Chile, N Zealand Avocado, SA, Mexico Mango,SA, Braz, DomRep,Guin Ginger, Uganda, Vietnam, China

Grapes, RSA, Chile, Brazil, Egypt Peach, SA, Arg, Chil Nectarines, SA, Arge, Chil

Honey Dew Melon, Brazil

Plum, SA, Arg, Chil

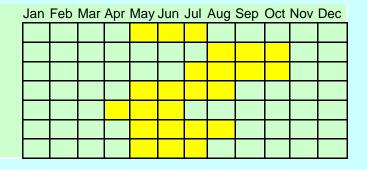
	Jan	гер	iviai	Apı	iviay	Juli	Jui	Aug	Sep	OCI	INOV	Dec
3												

Ion Ech Mar Apr May Jun Jul Aug Son Oct Ney Doc

#### **Citrus**

**Exotics** 

Navels, Arg, Uruguay Valencia's, Arg, Uruguay Midknights, SA Grapefruit Starruby Red,SA Grapefruit Marsh White, SA Lemon, SA, Urug, Chile Ellendales, Arg, Uruguay



### 3.1 Building a Market Knowledge Resource

The sources of information from which you could build your knowledge resource, on which you can then make well analysed decisions upon, could include the following:-

• Newspapers and magazines which are specialist to the type of crops or product you are growing – 'Fresh Info' is a useful UK magazine and information on where to get it can be gained from <a href="http://www.freshinfo.com">http://www.freshinfo.com</a> or <a href="www.hairyape.co.uk">www.hairyape.co.uk</a> is also a useful fresh and processed produce website. The local newspapers in Uganda of 'Monitor' and 'New Vision' often have weekly market prices however, remember the various levels of price as explained in 'Business Skills Box 5.' i.e. that there are generally at least 3 levels of price, as follows, and these do not often differentiate or explain between these or previous weeks or months prices.

Also remember that a crop is often sold at a higher price when in shortage just before a harvest and at a lower price during the harvest when there is high supply.

#### Business Skill 12.

#### **Market Price Levels**

These include at least the following 4 price-levels, but there are often numerous other price levels depending on the trading system of the crop

- Farm Gate The price the farmers sells at
- **Ex-trader price** the price sold after the trader has finished his trading and /or transporting
- Wholesale at the price the product is sold at often a large bulk
- Retail price the price often on a shop shelf after any processing and packaging
- Collection of websites through which you can get latest prices, news and predictions. Some of these include:-
  - http://albert.mannlib.cornell.edu:8080/USDAreports/activatePatron?patronid= 1456 where you can receive daily e-mails on fresh produce prices in various markets of the world
  - o <a href="http://www.freshinfo.com/index.php?s=r&ss=mpd">http://www.freshinfo.com/index.php?s=r&ss=mpd</a> which will information on prices fresh produce in UK markets
  - o <a href="http://www.ratins.net">http://www.ratins.net</a> which will information on cereals and other basic commodities in East Africa

There are also a number of trading websites such as <a href="https://www.alibaba.com">www.business.com</a> and <a href="https://www.kompas.com">www.kompas.com</a> that will allow you to :-

Secret for hypers and college of cortain products (remember most college will all

- > Search for buyers and sellers of certain products (remember most sellers will also be buyers but who do not often advertise themselves as buyers)
- Advertise yourself as a seller of a product
- Provide and range of other useful information

There are also numerous other websites of which some may be more specific to your information needs and using a 'search engine' such as in <a href="http://www.google.com">http://www.google.com</a>
<a href="http://www.google.com">http://www.google.com</a>
<a href="http://www.google.com">http://www.google.com</a>
<a href="http://www.google.com">http://www.google.com</a>
<a href="http://www.google.com">http://www.google.com</a>
<a href="http://www.google.com">http://www.google.com</a>
<a href="http://www.google.com">or of the many others will help if you enter the key words of the information you require.</a>

Perhaps the best method of gathering and analysing information is to develop a network of persons who specialise in the industry. Once you are supplying a buyer, s/he will often give you a lot if information and if you also develop a rapport with other buyers also you will a broader picture.

- Trade shows are also a useful source of information especially ones being held in the country or continent you wish to sell to.
- Associations are also a valuable source of information and will often help you to attend tradeshows if you are an actual producer.

#### Case Study 9.

#### **Benefits of Trade Shows**

Trade shows (even local district trade shows) can provide the following information:-

- Examples and information on quality produce and how it is best produced
- Provide an interface of companies buying certain agri-produce
- Prices and other marketing information or examples of marketing
- Processing methods and information
- Be a link to other places where further information can be gained

Some useful international Trade Shows include the following. These often include companies selling a product but who often want to buy ingredients especially if it being sold in a continent where the produce s mostly sold i.e. Europe or Japan.

A useful webpage is <a href="http://www.fas.usda.gov/agexport/TS\_WhatsHot.html">http://www.fas.usda.gov/agexport/TS\_WhatsHot.html</a>
The following provides the details of some relevant trade shows.

#### BioFach (Feb. 16-19, 2006) Nuremberg, Germany.

With 1,900 exhibitors and nearly 30,000 trade visitors from 67 countries, BioFach has become the world's leading **international** organic trade exhibition. 3 shows a year. For organic producers and markets all over the world

Visit www.biofach.de

**Germany** – February each year

Brazil - October / November each year

Japan – September / October each year

Washington USA – September each year

#### MIDDLE EAST INTRIQUE World Food Libya (Nov. 26-29, 2005) Tripoli.

This food show will focus on the retail and hospitality sectors and on high-end and imported food and beverage products. Best product prospects include meat and meat products, bakery, dairy, snack foods, beverages, seafood, poultry and poultry products, frozen food, nuts, and candy. For more information, contact <a href="http://www.gulfood.com/about/facts.html">http://www.gulfood.com/about/facts.html</a>

#### Gulfood 2006 (February 19-22, 2006) Dubai, United Arab Emirates.

The 2005 event attracted 27,000 trade-only visitors from 120 countries and generated over \$14 million in on-site sales. Best product prospects include fresh fruit (apples, pears, grapes, berries, and stone fruits), beef and poultry meat and their products, dried fruits and nuts (particularly almonds). Also in demand are breakfast cereals, food ingredients, jams, edible oils, rice, honey, health foods, condiments, sauces, chocolates, cookies, snack foods, juices and juice concentrates.

**Food Ingredients Asia (Sept. 27-29, 2005) Kuala Lumpur, Malaysia** is one of the Largest food and beverage and hospitality shows for European buyers and traders in Asia.

Visit www.fi-events.com

**Food & Hotel China (Nov. 15-17, 2005) Shanghai, China** is one of the largest food and beverage and hospitality shows in Asia, attracting buyers from the entire region. The Greater Shanghai region has over 200 million consumers and the highest

standard of living in China. Shanghai's ports are second worldwide in container traffic. New port facilities and better cold chain storage now make direct exports to Shanghai possible. This show provides an excellent opportunity to meet China's leading food and drink distributors.

Visit www.fhcchina.com

### Food & Hotel Vietnam (Dec. 1-3, 2005) Ho Chi Minh City, Vietnam

Visit http://www.foodnhotelvietnam.com/

#### Food Ingredients (Fi) Asia-China (Feb. 15-17, 2006) Shanghai, China

Fi Asia-China attracts over 14,000 food professionals of which 85 percent are Chinese. **Food Ingredients** 

At least 3 shows a year for buyers and sellers of agri-produce

**Europe** – November / December

**Asia** – September (Malaysia 2005)

Visit www.fi-events.com

**FOODEX** (March 14-17, 2006) Tokyo, Japan. FOODEX is the largest food and beverage show in Asia. In 2005, FOODEX attracted 92,442 trade only Visitors from 76 countries. Among the sectors with strongest growth sales in 2005 were processed fruits and vegetables, tree nuts, fruit and vegetable juices, and snack foods.

Visit http://www.jma.or.jp/FOODEX/

**Food & Hotel Korea, (March 21-23, 2006) Seoul, Korea.** Korea is the United States' fifth largest market for agriculture, fishery, and forestry products. Food & Hotel Korea provides access to major food importers, distributors, hoteliers, restaurateurs, and retailers. Food & Hotel Korea exhibits food and beverages, wines and spirits, hospitality and foodservice, and ingredients.

Visit <a href="http://www.fhko.com/eng/about/about.asp">http://www.fhko.com/eng/about/about.asp</a>

#### Americas Food & Beverage Show (Nov. 19-20, 2005) Miami, Florida.

Americas Food & Beverage is a unique hemispheric event that gives you exposure to U.S., Caribbean, Mexican, Central and South American buyers. Visit <a href="https://cmgexpo.com/shows\_wwfe.html">www.afbcmgexpo.com</a>. Or <a href="http://cmgexpo.com/shows\_wwfe.html">http://cmgexpo.com/shows\_wwfe.html</a>

#### Antad (March 15-18, 2006) Guadalajara, Mexico.

Antad is the largest show in Mexico for the retail sector. Best product prospects include fish and seafood products, processed fruits and vegetables, dairy products, snack foods, fresh and prepared red meats, poultry meat, eggs, soybean meal and oil, and wheat flour. For more information, contact Tobitha at 202-690-1182 or Tobitha.Jones@usda.gov

# A SMORGASBORG OF SHOWS IN EUROPE AND RUSSIA World Food Moscow (Sept. 20-23, 2005) Moscow.

This is an effective way to evaluate market potential and explore opportunities in St. Petersburg and NW Russia. If you are a meat, poultry, food, beverage, seafood, snack, or fresh fruit producer or exporter interested in learning more about this upcoming mission, please contact

www.worldfood-moscow.com/

ANUGA (October 8-12, 2005) Cologne, Germany. Only a handful of

booths remaining in the USA Pavilion at ANUGA, the world's largest food and beverage industry trade event! This biennial event welcomes over 5,000 exhibitors and 160,000 trade visitors from all over the world.

Visit www.koelnmessenafta.com/anuga/

**Ingredients Russia** (Nov. 8-11, 2005) Moscow, Russia. This event is the largest international show and conference for local food ingredient importers, wholesalers, and processors. Best product prospects include dried/frozen/processed fruits, nuts, soy protein/isolates/flour, lactose, whey powder, textured vegetable protein, food coloring, seasonings, spices, flavorings, beverage bases, emulsifiers, enzymes, preservatives, and certified organic/natural ingredients.

Visit <a href="http://www.ingredients-site.com/">http://www.ingredients-site.com/</a>

#### Food Ingredients (FI) Europe (Nov. 29-Dec. 1, 2005) Paris, France.

FI Europe 2005 is an exhibition and conference solely dedicated to the food ingredient industry.

Visit www.fi-events.com

#### Fruit Logistica (Feb. 2-4, 2006) Berlin, Germany.

Fruit Logistica is the largest trade show in the world for fresh produce, dried fruits, and tree nuts. In 2005 Fruit Logistica attracted 1,355 exhibitors from 64 countries and about 28,500 visitors from about 100 countries.

Visit http://www1.messe-

berlin.de/vip8\_1/website/MesseBerlin/htdocs/www.fruitlogistica.de/index\_e.html

#### Alimentaria (March 6-10, 2006) Barcelona, Spain.

Alimentaria is a food and beverage trade event held biennially in Barcelona, Spain, a city famous for its innovative Mediterranean inspired cuisine. Barcelona is an ideal place to launch new products or strengthen current business ties in the entire European-North African region. Alimentaria 2004 welcomed more than 4,000 exhibitors from every corner of the world and attracted some 145,000 professional buyers, nearly a third of which were from outside of Spain.

Visit http://www.alimentaria.com/es/global/portada.htm

#### Canadian Food & Beverage Show (February 19-21, 2006) Toronto.

Visit www.crfa.ca/tradeshows/fbshow.asp

#### Assignment 6.

Write down at least 5 sets of keywords of the type of information that interests you in agri-market information, for example 'prices maize uganda' and then put these into a search engine on the internet. You will be surprised by the amount of information you receive. Write a short description of the useful pieces of information you receive.

# 3.2 Calculating the Most Profitable Crops and Agri-Products to Produce

Again, careful calculations, research and planning will give you a better chance of making a profit. Even a certain mix of crops, with cropping periods at certain times of the year, could be the best solution for your situation, especially if you intend to make use of crop rotations with beneficial crops such as legumes etc. However, from a marketing and business point of view, the calculations of what makes the most money form the land resource you have per year, is the most important factor. To calculate this, the following basic formula can be used (amount of crop (yield per hectare / acre) x value of crop x growing seasons be year – (less) cost of producing crop = gross income per hectare / acre per year) – this then gives a comparative calculation of the crop per hectare / acre compared to other options. However, before you decide to grow a crop other factors will also have to be taken into account such as the suitability of your regional climate, soil suitability, access to market, risk due to disease or drought and any other relevant issue you can think of. The following table illustrates some of the issues and such a basic calculation and some comparisons between income of different products per hectare / acre.

**Figure 4. Example of a Comparative Table of Income From Selected Crops.** NB Please note that this is only an example and you should calculate the prices, costs, yields and climate for your own area at that particular time, as prices often change and your own situation will have its own specifics.

The 2<sup>nd</sup> and 3<sup>rd</sup> columns are purely for information and in this table not used in calculations. The yield per hectare (4<sup>th</sup> column), price (5<sup>th</sup>) and growing seasons per year are multiplied,

less the cost of inputs per hectare, give the income per hectare for that crop.

Crop	Productio n time days -from seed	Most Suitable Climate	Cost of Medium Level Inputs / Hectare	Yield / Hectare - Medium inputs - KG	Farm Gate Price Current	Growi ng Season s per year	Income / hectare / year
Beans	90	Medium rainfall	20,000	600	400	2	380,000
Cotton	190	Low rainfall	50,000	500	500	1	175,000
Groundnut	100	Low rainfall	30,000	2000	1000	2	3,540,000
Maize	90 – 200	Medium rainfall	25,000	1500	250	2	700,000
Pepper Hot	90	Medium rainfall	40,000	4000	900	2	7,100,000
Potatoes Sweet	110 -140	Medium rainfall	40,000	4000	190	2	1,520,000
Potatoes Irish	130 – 150	Medium rain / cold	60,000	15000	175	2	5,250,000
Soya	90	Medium rainfall	30,000	2000	350	2	1,400,000
Sesame / Sim-sim	105	Low rainfall	30,000	450	800	2	570,000
Sunflower	112 – 140	Medium		1800	280	2	

		rainfall	30,000				1,008,000
		Medium					
Sorghum	120	rainfall	30,000	1500	300	2	840,000
	4 1/2 – 6	Medium					
Palm Oil	years	rainfall	10,000	1000	400	1	30,000
		Medium					
Tomatoes	80 - 120	rainfall	100,000	2000	500	2	3,800,000
Tobacco	120		50,000	4500	1200	2	10,700,000
Vanilla	2 years +		50,000	1000	25,000	0.5	12,400,000

Each crop generally has its own characteristics; for instance :-

- Cotton is generally costly in inputs and yield is low, and therefore generally not a very high income per hectare/ acre crop
- Groundnuts have recently received a good price and yield is comparatively high
- Soya has recently received a good price and income is comparatively high
- Hot pepper is given as an example of a high-value crop but requires a lot of costly care
- Irish Potatoes are a high-income crop but require costly inputs and a cool climate of which few places in Uganda are.
- Palm Oil is a very slow maturing crop but however requires very few inputs as regards long-term care.
- Tomatoes are an easily grown and marketed (local markets especially) crop but require quite a lot in terms of fungal prevention and staking.
- Tobacco and vanilla are both high-value and potentially very profitable crops however tobacco requires a lot of input processing and vanilla takes at least 2 years to mature.

However, change of cropping systems can be a complex one. In the following case study some issues are illustrated:-

#### Case Study 10.

The following 3 stories illustrate some of the issues in changing or choosing to produce a new crop:-

**Producer A.** decided to change half of the 4 hectares of land he had from cotton production to sim-sim. He normally received an income per harvest of approximately Ug Shs 700,000 but in the first harvest of this change he received a total of Ug Shs 1,200,000. He sold again to traders who came to his village, as he did in previous years. He gained the information on the improved price for sim-sim from these traders and other farmers in the locality. Other farmers in the area had also grown sim-sim and he could see that sim-sim grew well and was affected by disease and was suitable for the climatic and soil conditions. He also saved some money as sim-sim used less pesticide than cotton.

**Producer B.** decided to cultivate some land that was not previously used for crop cultivation. He grew in the first season 40,000 cabbages. He had not researched a market opportunity and transported these to nearest city where he flooded the market at the time and as a result received a price very much lower than the usual value for cabbages. When he calculated his costs of cultivation compared to that of the final income he had made a loss of Ug Shs 1,000,000

**Producer C.** decided to try some trials of a new vegetable and expected to make a slow integration into the market with a slow raise in demand once consumers began to develop a taste for this vegetable. The price she was expecting to gain was quite good initially, however the price she getting per hectare after 2 years was Ug Shs 5,000,000 although it took time to develop a demand for this crop and to perfect some production problems such as pest control. She now is receiving some export enquiries since she has proven her ability to produce consistent quality and quantities.

#### Assignment 7.

What can you learn from the above 3 examples of changes in crops? Given your current work situation would you tend to go towards one of these strategies or would go to another? If you wish to share all or some parts of what you have so far learnt, write down what you have so far developed in terms of agrimarketing chain management. Note down some points you may have developed in the marketing of your crop or product.

The previous sections and units have aimed to provide you with the main issues and implications that surround basic agri-market chain management and have prepared you for the more advanced marketing activities, skills and techniques that will be explained more in the following units.

### **REVIEW QUESTIONS**

- 1. State at least one personal contact you have (even if it is a local market stall trader) and explain how this person can provide you market information
- 2. List at least 3 other people you can go to get market information as a personal contact and describe this information

- 3. Some traders say that they only make a net profit of \$ 1 a tonne but say that they still make \$ 10,000 profit dollars a year how can this be ?
- 4. Some say traders are exploitative.
  - a) How are traders exploitative?
  - b) How could others commercially, do a better job?
  - c) Do you think the costs per tonne, will be less for government or NGOs to conduct trading ?
  - d) How can the system be improved? Do you think competition can play a stronger role in this?

### **UNIT 4**

# EXPORT, MARKETING LOGISTICS AND TRANSPORTATION MANAGEMENT

If you are managing your own exporting or transporting large quantities of produce, there are a number of other useful pieces if information that can be gained and issues considered such as:-

- The advantages and disadvantages of supplying fresh produce or processed (dried etc.) product markets
- Transportation and preservations methods (packaging, refrigeration etc.)
- Contracting methods and issues (e.g. agreeing where to be delivered to and how to arrange to get paid etc.)

The following sections go into greater detail in this subject area.

# 4.1 FRESH OR PROCESSED PRODUCE DECISIONS

The following illustrates some of the advantages and disadvantages of concentrating on fresh produce or processed produce – you will need to decide which is the most suitable to your situation.

#### Fresh Produce

Advantages	Disadvantages	
• Less investment capital often	Some produce can easily deteriorate	
needed for processing equipment	• Production often needs to be	
and learning	relatively close to market place,	
<ul> <li>Often fewer processes and therefore</li> </ul>	processing centre or airport	
reduction of potential problems and	Refrigeration equipment sometimes	
fewer risks	needed	

#### **Processed Produce**

Advantages	Disadvantages
<ul> <li>Often has received more value-adding activities and therefore can receive a higher price</li> <li>Product is often more orientated to customer tastes (e.g. attractive packaging) and a higher price can be gained</li> <li>Less likely to deteriorate (e.g. if is dried etc.)</li> </ul>	<ul> <li>Larger amount of capital is required to be invested especially in skills to develop an effective product and market it.</li> <li>More processes and therefore more opportunities for problems (risks)</li> </ul>

#### Business Skill 13.

#### **Export Marketing Logistics**

There are numerous service companies in almost every county of the world that specialise in one or more of the following

• Completing and handling the relevant documents

Is often carried-out by small local companies of which you will often find numerous

Inspections of the type and quality of product

One of the many companies that specialises in this worldwide is SGS.

Visit www.sgs.com

• Containerised transport

One of the many companies that specialises in this worldwide is Maersk

Visit www.maersksealand.com

Packing materials of which there are numerous in most industrial areas

# 4.2 TRANSPORTATION, PACKAGING AND REFRIGERATION

Transportation and other related matters (refrigeration and packaging) are surrounded by such issues as:-

- Cost of transportation, refrigeration or packaging
- Transporting in a way in which the product is not damaged and is preserved. Also other intermediate-packaging issues also need to be considered.
- The various methods of packaging and other related issues.

To consider these more carefully and in depth, the cost of transportation is always a sensible analysis and especially if any product damage risks or actual levels of typical amounts of damage is factored into the calculations. For example if 10% of the product is damaged due to such causes as delays, overheating, bad handling or an ineffective choice of transportation such as a very damaged and rough road was used when a smooth railway line available at the time that only cost 5 % more. Refrigeration and effective packing methods can reduce damage and a return on investment calculation in these can help you decide if these are worthwhile.

#### Case Study11.

#### **A Return on Investment Calculation**

A return on investment calculation for the refrigeration and improved packaging was conducted by producer for the vegetables (tomatoes) she produced and transported 150 km to a market in the capital city.

If the total potential value of each shipment was worth \$1,500 but she was experiencing a loss of half (\$700 - 800 worth) of the crop due to heat damage and bruising. She had tried to consider a range of different methods of transportation and times of harvesting and transportation but to rent the use of a refrigerated truck than an un-refrigerated one and packaging seemed to be the only option. She started to research and calculate the cost of using these and it became apparent that refrigeration for each shipment would cost an extra \$200 a shipment and packaging \$150, however she would still loose 10% of the value of the crop (\$150) due to other factors. As it worked out she was now receiving \$1000 in payment for each delivery instead of the usual \$750. She also calculated that she could further reduce her costs if, when she had saved enough money, buy a truck with refrigeration rather than rent.

#### Business Skill 14.

#### **Containerised Transportation**

Containerised transportation is useful to know about if you are transporting long distances (to a neighbouring country or out of the continent). Containers come in 20 feet (6 metres) or 40 feet (12 metres) length with similar height and width dimensions of 3 metres. A 20 feet container will take approximately 50 cubic metres and 18 tonnes in weight. A container can be refrigerated if necessary. You will find that a full container load using the maximum amount of weight allowed is usually the most efficient way to transport goods.

To use this space and weight effectively you should fill the container as fully as you can. If you do not fill the container, (i.e. half full you are effectively paying twice the amount to use the container). Many exporters, if shipping a bulky but low weight product, will try to link with a shipper to the same port of a heavier and more dense product.

Alternatively you can send smaller amounts on a pallet (wooden frame lifted by a forklift truck), however, is often more costly per Kg.

### 4.3 CONTRACTING METHODS AND ISSUES

In order you do not experience problems of mis-understandings, ineffective agreements and un-satisfied relationships in the exporting process, contracts are vital in such a process and will probably involve and a lot of negotiation before – but it is better to get such a matter clearly and comprehensively agreed upon rather than you not getting paid as a result and losing a lot of money. The main elements of a contract include the following:-

- What form or place is the product to be delivered to. The following are common forms and abbreviations
  - **FOB Free on Board** which means that the exporter will deliver the goods on board a ship or aeroplane at a port in his country. He will pay delivery up to that point and the customer pays for the rest of the voyage. The person delivering (exporting) will pay any getting-out of the county costs such as inspection export certificates taxes etc.
  - **CIF Cost, Insurance and Freight** means you would pay for all the costs to the country requiring the product, including all insurance cost
- Payment Terms usually include total payment once the shipment has been received and been checked to of the agreed quality; and then the payment is then made within an agreed period of time. A letter of credit can often be issued which gives some reassurance that payment will occur within a reasonable amount of time.
- Each Party's Names and Addresses
- The product carefully defined especially in aspects of quality and packaging
- When to be delivered, how and where the when can be a vital issue to the recipient especially if they are to trade onto another party who will then process it or expect it on shelf to sell it.
- Whose responsibility is it to pay for additional packaging, refrigeration, loading or unloading.
- When payment will occur, how and where (which bank account is it to be paid into) and who will be responsible for any money transfer costs.

- Any potential penalties in terms of late payment, late delivery or quality if any penalties are pre-agreed then often such necessary actions occur with less disagreements.
- If arbitration or court has to happen where and how this will happen. This is a situation you want to avoid but if you agree on a place to your situation that can have impact in the country as you want it then it will help you. Many persons have agreed on a court or arbitration situation in a country where it costs them too much money to take them to court or where no effect can be results gained e.g. the ruling was made in Kenya but the company you are suing holds no money in Kenya.

However, to avoid any potential problems in the above form (that can cause a lot of stress, administrative time and costs), relationships based on win-win situations are the best to aim for to prevent such. If the buyer or recipient is dependant on the shipment as an ingredient as part of a larger collection of components or is to trade the shipment onto a customer who is dependant on the shipment as a vital component of having produce for sale on their shelves, then reliability is a heavily sought after. For the shipper, receiving payment is probably their main source of income and having a customer is a highly sought after aspect of their business. This inter-dependant relationship should be one that is carefully developed and built.

#### Assignment 8.

Make out a draft contract, completing the details in as detailed manner as you can. Try to foresee as many details as possible and complete these as you feel possible – just make up names and places if necessary – it is better to put something than nothing on this trial attempt.

#### **REVIEW QUESTIONS:**

- 1. If you have 5 tonnes per month of non-fresh produce that you want to get to Europe each month and it needs to be received with 21 days of shipping; what method do think is best to use for this situation
- 2. Do a return on investment calculation for transporting your produce 200 kms
  - a) the purchase and use of a truck to transport your produce
  - b) hiring of a truck on the occasions you need it

Compare these and state which is the most cost-beneficial for your needs. Write a few notes

## **UNIT 5**

# MARKETING THEORY AND RESEARCH

This section aims to give you a basic introduction in the following components of marketing

- Market Theory
- Market Research

## **5.1 MARKETING THEORY**

One of the most widely used definitions of marketing is defined as:

"Marketing is the management process which identifies, anticipates, and supplies customer requirements efficiently and profitably where consumer tastes and other important factors are taken into account" <sup>3</sup>

Consumer tastes and the fulfilling of these in a business-like manner is a large part of effective agri-market chain management. Also the creating of new demands and the persuasion of consumers (advertising etc.) to want certain items new items. Consumer 'tastes' is a term that describes what customers or consumers want and how these are often changing and can be influenced.

#### Business Skill 15.

#### Consumer 'Tastes'

Consumer 'Tastes' are a constantly changing quantity especially in very marketorientated countries.

Company P decided to use a market research method to anticipate how tastes and demands for clothing for teenagers was to change in the next 2 years. Company P contacted and held discussions fashion designer consultant as their market research method. After a time it was agreed the designer would invest 5% of new investment costs in a new product line but wanted 10% of profits. It resulted that the fashion designer was correct in predicting that denim would used a lot again and both Company P and the fashion designer made money as a result of their prediction and investment.

Company R in a small population (24 million) generally low income country wanted to start marketing organic fruit and vegetables and know how the demand for higher priced and higher quality vegetables is. Currently the population is 80% low income. However, 10% of the population have a higher income and 10% are high income foreigners. 100 questionnaires were used to determine how much and what sector of the population would buy higher value vegetables. The results were that the 80% majority of the population were not prepared to pay more for high-value vegetables especially since pesticides were often used on vegetable production anyhow. Half (5% of total population) of the high-income population said they would buy these fruit and vegetables and 8% of the total population of

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<sup>&</sup>lt;sup>3</sup> United Kingdom Chartered Institute of Marketing

foreigners said they would like to buy more of these higher value fruit and vegetables and a range of processed products. As a result of this picture of the tastes and potential demands the company developed and marketing plan that involved retailing of organic produce through supermarkets where high-income and foreigners did their shopping. As a result more money was received for these products especially the processed juices and jams that were produced where:-

- Mixes of different flavours e.g. organic orange and pineapple
- Attractive labelling and a brand name was produced (i.e. EcoProduce)
- A variety of packing options were tried and the most suitable selected.

European organic market demands and tastes, in the coming 2 years, were expected to rise by an estimated average of 8.2%. The following case study gives details.

#### Case Study 12.

#### **Organic Market Demands**

European organic market demands, in the coming 2 years, were expected to rise by an estimated average of 8.2% with an estimated growth in the world market value of US \$ 6 billion in the next 2 years  $(2003 - 2005)^4$ . The following table provides greater detail.

Country	Value of Market (US \$ millions)	Estimated % of Organic of Total Food Sales	% Estimated Annual Growth 2003 - 05
UK	1,550 –1,750	1.5 – 2	10 – 15
Germany	1,250 - 1,750	1.7 - 2.2	5 – 10
Italy	1,250 – 1,400	1 – 1.5	5 – 15
France	1,200 – 1,300	1 – 1.5	5 – 10
Switzerland	725 – 7750	3.2 - 3.7	5 – 10
Netherlands	425 - 475	1 – 1.5	5 – 10
Sweden	350 – 400	1.5 – 2	10 – 15
Denmark	325 - 375	2.2 - 2.7	0-5
Austria	325 - 375	2 - 2.5	5 – 10
Belgium	200 - 250	1 –1.5	5 – 10
Ireland	40 - 50	< .5	10 - 20
Other Europe	750 - 850		
Total Europe	10,000 – 11,000		
USA	11 – 13,000	2 - 2.5	15 – 20
Canada	850 – 1,000	1.5 – 2	10 – 20
Japan	350 – 450	< 0.5	
Oceania	75 – 100	< 0.5	
Total	23 – 25.000		

<sup>&</sup>lt;sup>4</sup> ITC 2002 Overview World Markets for Organic Food & Beverages

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This provides an example of how 'organic tastes' are developing and increasing in terms of value in certain countries.

Sometimes marketing is described as influencing and fulfilling the basic opportunities of the basic human senses of pleasure. The following 6 P's of marketing detail the components and activities of ways of achieving these:-

- Product in that the product should be an effective one and one that is in demand
- People *should be orientated to peoples tastes*
- Packaging the packaging should be attractive.
- Place the place sold should be effective where suitable customers can find the product
- Price the price should an attractive one but making as much profit as possible
- Promotion *should be attractive, dynamic and vibrant*

More on the techniques used for effective marketing strategies and approaches will be explained in section 6.2

### 5.2 MARKET RESEARCH

Market research aims to produce a picture that illustrates what the market demand will look like and even the type of people that would want to buy the product e.g. children and teenagers are 80% of the market for a new flavour of ice-cream. Market research can be conducted using a variety of methods including:-

- Questionnaires that ask people what they want but a certain amount imagination or project may often have to be added to this.
- Trials and observations on how consumers will respond to a product idea
- Statistical analysis such as school registration numbers etc.

This 'market picture' can then provide an illustration of what the market wants and where you can aim your marketing and product development efforts towards to compete against others to get a share of the market or create a new market opportunity or demand (see sections 6 & 7 for further market development skills and methods).

#### Assignment 9.

Conduct some market research and create at least a one page description of the market for a product. Describe the following:-

- a) Your product and what its attributes are how attractive it is
- b) The type of persons in the population you are aiming your product at & why
- c) How you see the market may change for this product during the next year or two
- d) What influence on the market do you intend to make and how for this product

# **REVIEW QUESTIONS**

- 1.. How can you measure a market demand?
- 2.List 3 other general ways in which you can influence the market
- 3.List 5 things that appeal to you personally in a food product
- 4..List 4 places where (position) you can sell a product e.g. side of street, hawker etc.
- 5.List 4 types of 'who' you can sell your product through e.g. supermarket, hawker etc.
- 6.List 3 methods of packaging you could use
- 7. Given a particular product, where is the best place to sell through and why?
- 8. Given a particular product, where is the best place to sell through and why?
- 9. Given a particular product, what is the best packaging to use and why?

# **UNIT6**

# PRODUCT DEVELOPMENT PACKAGING AND ADVERTISING - & TRADE SHOWS

Given the previously explained choices issues and implications, you may decide to process or package your produce as semi-finished or a fully finished product. Generally speaking, the profit margins for fully finished products that are sold to the end user (retail) with a high disposable income<sup>5</sup> who will often pay more for a nicely presented product that will satisfy 'pleasure' aspects of marketing (a term that is latter explained). However, it is not worth spending a great deal on the packaging of a product if you are going to sell wholesale through someone else who will then retail the product. It is worth asking them what type of packing they require at an early stage which may result in them finally selling in their own packing and under their own brand name.

This unit aims to develop your knowledge and skills in these particular areas of marketing. These areas can however, be broken-down into the following:-

- Product Development processed / semi processed
- Packaging
- Advertising and other interface marketing methods such as Trade Shows

### **6.1 PRODUCT DEVELOPMENT**

Product development can involve and assortment of value adding methods ranging from actions such as basic drying to using the product as an ingredient along with many others to make a variety of products that could range from cotton being part of a piece of clothing, to dried fruit as part of the ingredients of a chocolate biscuit. A large part of the subject of product development is often specific to the technical aspects of that product, however aspects such as the orientating to changing tastes, especially in visual attractiveness, is a basic and important principle across the subject. Often to develop such attractive attributes, a process (Design Process) of:-

- **Ideas Development** the brainstorming over various possible designs or solutions
- Analysis and Selection of which option will be the most suitable
- **Realisation** where models or trials are usually made of the best proposed option, are made
- Final Selection and Product Development and exposure to the actual market

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<sup>&</sup>lt;sup>5</sup> Disposable income is the portion of income that a household can spend on the more pleasurable type of items beyond basic food, housing and transportation, basic clothing, education and health, and is the amount that can spent on the more pleasurable portions such as more luxurious food, clothing or any other aspect beyond the basic.

The above explained 'Design Process' can be applied to a specific tangible product or (e.g. dried fruit, chocolate biscuit or any other food product or agri-product item) or packaging design or advertising approach, as this method encourages a variety of ideas to be created and then the best option be selected and then be tested and refined. Customers are often attracted to something new, brighter and more attractive or tastier. If you make your final products any of these, you may be able to sell more at a higher price.

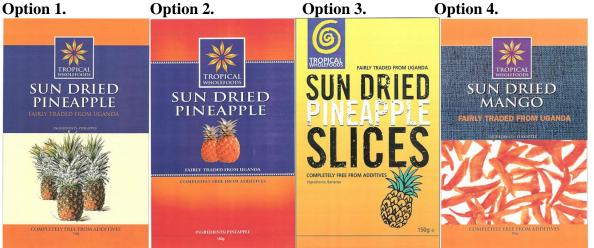
Branding and the development of a logo often assist in the development of label via which customers can more easily recognise and relate to your product. A brand name or a logo is a name or small picture which your product is remembered by. The following 4 designs illustrate those of some company logo designs and illustrate the first stage in a design process where 4 options are illustrated for a product



## **6.2 PACKAGING**

Again, packaging design can use elements of the design process in terms of thinking of a variety of attractive designs and selecting the most suitable design from a variety of different choices. However, doing research into the variety of options available and doing a return on investment calculation may also illustrate to you some implications or opportunities. Some analysis may result in a situation where consumers may well be often already be prepared to pay additional money for a well packed product and you investing in such may make you additional profit.

The following illustrates 4 designs for dried fruit packages



#### Case Study 13.

#### A Calculated Risk Was Taken

Company T did some research, calculations and projected that there was a possibility they could charge 20% more for their product if 15% more was spent on some more attractive packaging. A trial of 1000 new packets was tried. These sold very quickly and it was decided that this new packaging would be a success. In fact in turned out that their sales also increased by 25% and the new packaging had additional benefits.

#### Assignment 10.

Analyse each of the above 4 designs and list at least 2 attractive elements of each design and 2 disadvantages of the design. Then decide which design you feel is the most attractive and state why.

# 6.3 ADVERTISING AND EFFECTIVE MARKETING STRATEGIES

Advertising is another way of increasing sales and market share (see section 7 for more details on 'market share' etc.). Advertising methods can include methods and medium such as:-

- Radio
- TV
- Newspapers
- Bill-boards
- Promotions where entertaining street shows were held and / or free products / samples were given away
- Trial tastings etc.

However, whatever the medium used, again a return-on-investment calculation is recommended; for example :-

#### Business Skill 16.

#### **An Effective Advertising Campaign / Strategy**

You will notice that large and expensive advertising campaigns usually include the following:-

- Bright and attractive packaging
- An attractive and catchy brand name such as Sweetie!
- A song or catch phrase
- A colour scheme that can be easily recognised and linked to the product
- Emphasising of a Unique Selling Point (USP) see details in section 7.2
- A television advertisement that tells a story or creates an image of wonderful things happening in your life if you buy this product
- Back-up advertising in newspapers or radio, etc. that remind you of the television story
- An effective distribution system e.g. through hawkers or supermarkets or even sometimes on credit to an intermediary or end buyer.

Try to think of advising campaigns that have all of these elements (mobile phone companies, washing powder etc.)

The following explains the product development of 2 differing products

#### Case Study 14.

#### **Product Development of 2 Different Products**

**Product A** is a chocolate bar aimed at especially young people since it is believed that people often want a sweet tasting snack. The 'Brand-name' *Sweetie* is aimed to appeal to the romantic side of its young customers and the packaging is of bright colours with red love hearts on it. The taste was also sweet using a lot of sweet cashew nuts. An initial short-term at he beginning special offer price was given to get customers to buy at an attractive price. The product was sold mainly on display stands at the front of shops and supermarkets. An active or even aggressive marketing campaign was adopted using TV, radio and street shows to promote the product. The product has been relatively successful.

**Product B** is an organic product that has pesticide and fertilizer properties. The brand-name *Growmore* has been used and also explanations on the products labelling. It was believed that a great deal of 'quick' and 'flashy' marketing methods such as used with Product A were not suitable as these would not bring a return on investment. However, patient explanations at local tradeshows and a display stand for some shops proved to be very beneficial.

Whatever you do in terms of marketing it is well worth always considering the costs and the benefits compared to other activities you could undertake – remember you are in business! The next box explains an example

#### Case Study 15.

#### A Return on Investment Calculation on Advertising Methods Chosen.

Company E. is new to advertising and decided to make a trial with television advertising because of its visual values and the product looked good and tasted good. Since it was a new product on the market, the television marketing encouraged consumers to become aware of the new product because of the attractive packaging, attractive catchy name and a short song that was created to make consumers want to sing and remember the product. This proved to be an effective launch onto the market of the product, however due to the fact that the is a low cost product and bought by the majority of the population as an everyday product and the majority of the population do not have access to television, in the long-term, television as an advertising medium was not suitable and did not give a return on investment. The company spent \$ 2000 on this trial television promotion. However, the increase in sales in the short-term was only \$ 1800 and the profit realised to justify this spending was only \$ 600. Radio advertising was then adopted for a longer period where \$ 3000 was spent and an increase in sales of \$ 12,000 realised and \$4000 in profits in the period for radio advertising. However, a longer term increase in sales may also be felt as a result of the advertising but this was difficult to quantify.

# 6.4 TRADE SHOW PARTICIPATION (BEING AN EXHIBITOR)

Trade shows are a common method of marketing, especially meeting new and developing relationships with customers. Although often costly, they can often be of benefit in the long-term. The main points of recommendation are as follows:-

#### Business Skill 17. Trade Fair Skills

- Have an attractive display with pictures and interactive components such as tastings, leaflets that can be taken or samples. The photograph in the lower part (next page) of this box-description shows a photograph of a company's trade show booth who are selling basic un-processed grains, yet they still have an attractive booth where customers can walk-in.
- Try to come to a deal with any serious customers if possible (as shown in the photograph below).

All of the marketing methods described in this Section 6. require artistic creativity and the advice given here is mainly around using the design process where a period of time is given to coming-up with as many options of creative design as possible. Is often worth the cost of employing a professional designer.

#### Assignment 11.

Design an advertising scheme for your company and include a description of the method and what will attract people.

Include a Return on Investment calculation explaining when and how much money will be realised from the increase in sales.

Keep the elements of the designed scheme appropriate and in proportion to the nature and the possible returns to the product and increase in costs spent on the advertising.

# **Review questions**

- 1. Why is it worth developing a number of designs, when designing a packaging or poster?
- 2. Think of 3 catch phrases for any product you know of
- 3. Do you think that the use of 2 -4 specific callouts helps to sell a product? and why?
- 4. Think of 2 products you know of and their colour schemes
- 5. Do you think it is worth spending a lot of packaging if you are to export to a large supermarket?
- 6. State on advantage and one disadvantage for 3 different distribution methods you could use.

# **UNIT 7**

# MARKET SHARE, COMPETITION & OTHER FACTORS AFFECTING PROFIT SUCH AS PRICING

As the final section in this module, this section aims to consolidate on many of the skills and pieces of information so far learnt and make you as effective in business as possible. To do this the following areas of skill are further taught.

- Market Share
- Competing Against Others
- Pricing Issues
- Assessing Your Overall Business Effectiveness

#### 7.1 MARKET SHARE

A market share is the proportion of a market you have or you would like to develop as a new income opportunity as a result of sales to this area (e.g. the total annual national market for maize in a country is 10 million tonnes (- you cannot have much influence on the market or the market price), however you realise you can develop a new product (e.g. a particular flavoured chocolate) and you are the only local supplier and then you can then have more control over the price, the amount of influence you can have over the overall market and other factors).

#### Case Study 16. – Market Share and Competition

Company X decided to produce ice cream and in a country where there is currently no one else producing ice cream. Ice cream is a fairly new product and although many people in the country do not have the money to buy ice cream the total annual market for ice cream was estimated to be \$100,000. In the first year they sold only \$60,000 of ice cream but the second year \$90,000 and the 3<sup>rd</sup> year \$120,000 (2004). During these 3 years the company had learnt a lot about the skills in producing and marketing ice cream and this contributed a lot to their increase in sales.

Company Y in 2004 decided they would try to take ½ of the market for the same flavours of ice cream from company X and as a result expected in their first year of sales to get \$ 60,000. They also planned to introduce some new flavours and receive income for this section of the market also. However, as a result they only gained \$ 40,000 of the market for the traditional flavours and \$ 30,000 for their new flavours. Company Y due to the flowing perceived problems

- had not produced a traditional-flavour product as cheaply as Company X due to being not as efficient in production.
- Company Y did not sell through any new or a variety of marketing methods.

Company Y just sold through supermarkets. However, with the new flavours, Y conducted some advertising and as a result created a new demand based on the stimulation of tastes and their 'unique selling point (USP).

Many companies ensure their market share by always trying to stay ahead of designing new products such new mobile phone, car or food designs.

## 7.2 Competition

Competition is something that can easily push you out of the market. You can either try to do something new or do it better to counter competition.

A Unique Selling Point (USP) is something that gives your product an edge over others which could be one of many things, such as:-

- of a better quality than other products
- of a more attractive flavour
- a better price
- be sold in a better location
- be in more attractive packaging
- be better advertised
- or basically just compete well in a situation where there is a large enough market for you to have a share that is big enough for you be of the size of business that you need to be to justify the size of operation you are.

USP's are often emphasised and focused as much as possible to sell the product, for example of this type of car sold more than any other last year, companies often state this many time to emphasise that this is the best product – at least customers last year thought so!

#### Assignment 12.

The monthly costs of your business are \$ 2,000 including your salary. Your business sells tomatoes. Calculate the following:-

- what salary you would like to take each month as part of this \$ 2,000
- What your total monthly sales are as a minimum and a target.
- what your mark-up % is on sales (a mark-up % is similar to the profit % of each item sold).
- What your profits are as a current minimum and target

The total monthly market for tomatoes sales is expected to be \$ 8,000 in the current local district market in which you operate.

- What can you do to get a greater market share in this district.
- What can you do to increase your overall sales

#### 7.3 PRICING

Pricing is another matter that can have a significant effect on market and profits. Pricing is a complex balance between not over charging to the extent that the product is so expensive that customers will not buy and to the other extent that it is so cheap you are potentially or actually loosing money. The price can effect how much you sell (market ) and how much profit you make.

If you are selling a raw product, the price is usually set by the market value, however some room for negotiation can be available if you have a large quantity or high quality. However, if you are processing and selling as a final product, this is something you can play with a little more, in terms of price.

#### Case Study 17. – Under and Over Pricing

Company M is starting new in the market and started selling its product at 1600 /= each packet of 400 grams. For the months whilst the product was sold at this price, approximately 2000 packets were sold per month which were not enough to justify operational costs (see Business Skill 7.). The monthly income was 3,200,000 /=

However, it was decided that sales were too low because the product was too expensive. The price was reduced to 1200 /= and sales then increased per month approximately to 4000 packets and income to 4,800,000 because there was mainly an increase in material costs the company was still not making much profit although the situation was a bit better.

However, in the long-term the company decided to put the product in smaller 100 gram packets and charge 400 /=, where sales remained at 4000 a month. This was decided to be the best solution to the challenge where the general population was able to afford the smaller packets lower cost packets, although in the long-term they cost more for the consumer.

# 7.2 ASSESSING YOUR OVERALL BUSINESS AND MARKET CHAIN MANAGEMENT EFFECTIVENESS

The other key questions you need to ask relate to your business. They will affect your marketing, but are broad ranging questions, which are fundamental to your capacity to market

effectively. The best way to compile this is to prepare a **SWOT** analysis. (SWOT is an acronym for Strengths, Weaknesses, Opportunities and Threats). Strengths and weaknesses tend to relate to internal factors in your business.

This is a list of possible attributes of your business - both positive and negative.

#### **STRENGTHS** WEAKNESSES Might include: Might include: Low costs High costs Low overheads High overheads Good location Poor location Lack of flexibility Flexibility Good internal communications Poor internal communications Well-motivated staff Poorly motivated staff Poorly trained staff Highly skilled staff Over-dependence Good product expertise on certain Good market knowledge individual staff Broad customer base Limited product expertise Good reputation Poor market knowledge Sound finances Small customer base Up-to-date Poor reputation products and production equipment Limited financial resources Up-to-date internal systems and Out of date production computer technology. equipment Inadequate computer equipment.

OPPORTUNITIES	THREATS	
<ul> <li>Might include:</li> <li>Weak competition</li> <li>Competitor going out of business</li> <li>Expanding or new market</li> <li>New legislation good for the market</li> <li>Availability of grants</li> <li>New source of supply</li> <li>New people joining the business</li> <li>New technology.</li> </ul>	<ul> <li>Might include:</li> <li>Strong competition</li> <li>Shrinking market</li> <li>New legislation bad for the market</li> <li>Availability of grants for competitors</li> <li>Key supplier of essential inputs is going out of business</li> <li>Increase in price of raw materials</li> <li>Key staff leaving to join competitor.</li> </ul>	

#### Assignment 13.

Either based on a real business you are involved or the last assignment business

(Assignment 11. selling tomatoes), design a strategy of improvements you would like to make to your business. A basic list of improvements will be sufficient for this assignment, although a basic description of each action that will be taken would be good.

# **REVIEW QUESTIONS**

- 1. What 3 things can you do to make your business more competitive in each of the following areas ?
- a) marketing
- b) product development
- c) production cost reduction
- 2. How can you increase your market share? List 3 ways

#### **APPENDIX ONE**

#### 7.MODULE SUMMARY AND TEST

In an aim to consolidate the covered areas of issues, skills and knowledge, the following test covers the following areas.

#### 1. Export, Domestic or Intermediary Market Focuses

Choose one of the above and describe why you have chosen this focus for your business (an imaginary business or real business). Go into as much depth as you can as to why this market-focus is suitable to your business.

#### 2. Commodity Price Issues and Financial Analysis

Choose a particular type of agri-product and say how much you think a change % in price will cause a loss in overall profitability. Say whether you think this is a particularly volatile market-price crop or not.

#### 3. Orientating What You Grow to the Market and to Profit

- a) State the advantages of high value crop and what might be some of the disadvantages.
- b) State the advantages of a traditional high yielding crop and what might some of the disadvantages might be.

#### 4. Managing Transportation, Contracting and Other Logistical Matters

In your opinion, what are the 3 most important issues (or aspects that could cause you problems) to you that were covered in this section?

#### 5. Marketing Theory and Research

What 2 areas dealt with in this section could be useful to you in your future work?

#### 6. Product Development Packaging and Advertising - & Trade Shows

- a) What benefits do you think using the Design Process can have for you?
- b) What advantages can a very expensive advertising campaign have?

#### 7. Market Share, Competition and Other Factors Affecting Profit Such as Pricing

What 3 ways do think you could most easily improve an agri-market orientated business?

There are not any particular answers expected to the above. If a student selects a sensible answer and gives a rationale and fully explained answer, then this would deserve high marks.

#### **Notes to Lecturer / Trainer**

The following notes are provided:-

Please just feel adapt this resource of information as you feel comfortable. This is a
resource to help you teach and is not intended to constrain you. If you find there is too
much information for a particular lesson, feel free to cut pieces out or carry-on to
another week. Also, visa-versa, add information if you wish. This intends to give you
a basis of information.

- To convey this information to students you may find, putting this on CD that can be more cheaply read on a computer rather than printing out many copies.
- The essence of this resource has been aimed at stimulating thinking and application on business management particularly in agri-market chain management. For this reason many of the case study illustrations and assignments aim to stimulate some realistic analysis and application of a skill taught.