



MINISTRY OF FOOD AND AGRICULTURE DIRECTORATE OF AGRICULTURAL EXTENSION SERVICES

HANDBOOK ON AGRIBUSINESS AND FARM MANAGEMENT

MODULE 1

APRIL 2013



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FACT SHEET 1

Agribusiness and Farm Management

Topic 1: What is Agribusiness?

Agribusiness means operating a farm as a **business/company**. This means that crops and livestock are not grown only for domestic consumption but also to **be sold to make profit/money**.

If we **compare** a farm with a company, you will see that there is **no difference**, except in the **wording** used:

1. The boss of a company is called a **Manager or Director**; the boss of a farm is the **farmer**.
2. A company is selling **products** (such as Coca Cola, radios, soap, etc.) **or services** (such as repairing a car, driving passengers to Kumasi, etc.); a farm sells **crops** (such as maize, cassava, plantain, etc.).

Running a farm as a business means that the farmer should **NOT** grow crops because:

1. The family has always grown that crop.
2. Everyone in the community is growing that crop.
3. The family likes to eat that crop.

Instead, the farmer should take into consideration market demands:

1. **What** the market wants: Produce to meet the demand of consumers. Do they want high quality cassava flour (HQCF), gari or the unprocessed cassava?
2. **How** the market wants it: Do buyers want to buy a lot (bulk) or in small quantities (just one small bag).
3. **Where** the market is located: Do buyers want to buy at the farm gate, on the local market, or the market in the next community?
4. **When** consumers want it: Do buyers want to buy it all year round or only during a certain period?
5. **At what price**: How much are buyers willing to pay for the product/produce?

Steps in preparing a simple farm business plan

To run a farm as a business it is good to sit down and think carefully about what the farmer wants to do. There are **four components** that serve as a guide:

1. **What to produce**: includes crops to be produced, animals to raise, expected yields, the best way to use the land (soil quality, water management, conservation of environment), availability of water and labour, dealing with pests and diseases, etc.
2. **Marketing**: includes post-harvest handling, packaging, grading, local storage, transport, selling options, price of crops, etc.
3. **Finance and record keeping**: expenses to be incurred, when do expenses occur, price of crops compared to production costs (expected profit), expected revenues linked to a time frame (when is money coming in?).
4. **Risk management**: identification of the key risks and how to manage these risks.

FACT SHEET 2

Agribusiness and Farm Management

Topic 2: Being an Entrepreneur

A **farmer entrepreneur** is someone who:

1. Operates his/her farm as a **business**.
2. Grows to **sell** and not only to eat.
3. Recognizes business **opportunities** and is willing to take **risks**.
4. Willing to **invest** in his/her farm to meet market demands.

What does it take to be a successful farmer entrepreneur?

Taking calculated risk: Recognizing business opportunities, making the right decisions and putting in required efforts to succeed.

1. **Identifying opportunity and taking initiative:** Entrepreneurs are quick to identify and take advantage of opportunities. They do this by carefully thinking through what they intend to do.
2. **Persisting despite difficulties / challenges:** Entrepreneurs are not discouraged by difficulties and problems that come up in business. Once they are committed to a goal, they do not give up. They take personal responsibility for their actions.
3. **Seeking for information and the use of feedback:** Entrepreneurs constantly seek relevant information from their peers, customers, suppliers' competitors and others. They must be willing to learn new things which will help their business grow.
4. **Setting the right goal for the business:** Entrepreneurs set meaningful and (SMART) goals for themselves and the business. They do not do things irrationally.
5. **Commitment to work:** Entrepreneurs will work for long hours often into the night to keep a promise to their customers and to meet deadlines. They exhibit dynamic leadership and know how to make people work for them in order to achieve their set target.
6. **Demand for quality and efficiency:** Entrepreneurs are always competing with others to do things better, faster and at less cost. They strive to achieve excellence through efficient and effective use of resources.
7. **Hardworking:** Entrepreneurs are ready to commit all their energy, time and skills necessary for the business to succeed.
8. **Creativity and innovation:** Being creative means that the farmer is ready to come up with new ideas for the business and willing to adopt new ways of doing things.

*****It may be appropriate to role play an entrepreneur and one who is not.**

FACT SHEET 3

Agribusiness and Farm Management

Topic 3: Business Planning

Introduction

In recent times, farmers and farm managers are experiencing slowly rising food prices with more rapidly rising cost of production and marketing resulting in low net incomes. The problem of low income can be solved to a great extent by the intervention of good management.

Farming as a business unit is becoming increasingly complex because farms are getting bigger (or more intensively cultivated); agricultural inputs are increasingly expensive and often difficult to access; labour is becoming scarce and experienced managers are becoming competitive.

Amid such situations the good manager must appreciate the scope of management responsibilities and be familiar with the tools and principles of good management practices, developing the ability to take information from many sources, analyze the information and make decisions on a variety of problems.

What is Farm Management?

Farm management is the **active process of making decisions so that scarce human and material resources of the farm are effectively and efficiently used to achieve objectives. Those objectives may include one or more of the following:**

1. **to provide self-employment**
2. **to provide subsistence food supply**
3. **to supply raw material to industry**
4. **to make profit**

Farm management covers a wide range of activities that include:

1. **technical responsibility** for all production – what to produce, how to produce, how much, and when to produce
2. **commercial responsibility** – buying inputs and selling outputs, including storage, handling, forecasting sales/prices, contracting of services of others
3. **financial responsibility** – acquisition and use of financial resources, forecasting future investment needs and arranging for funds
4. **accounting** – keeping records of transactions

Effective farm management therefore utilizes a combination of agriculture, economics, accounting and management.

What is A Business Plan?

A **business plan** is a formal statement of a **set of business goals**, the reasons they are believed to be achievable, and the plan for reaching those goals.

What are the Components of a Business Plan?

Business plans typically cover five major content areas:

1. Background information
2. A marketing plan
3. An operational plan
4. A financial plan
5. A discussion of the decision making criteria that should be used to approve the plan.

NOTE: Make it a point to interactively engage participants in the discussion.

FACT SHEET 4

Agribusiness and Farm Management

Topic 4: Budgeting

What is a budget?

A **budget** is a **planning and control tool**. In other terms, a budget is an organizational plan stated in monetary terms.

A budget tends to:

1. Provide a forecast of revenues and expenditures.
2. Enable the actual financial operation of the business to be measured against the forecast.
3. Estimate the cost for a **project**, program, or **operation**.

In the case of a farmer, the developed schedule which catalogues a sequence of events that charts his/her course of action will combine non-financial as well as financial items which will include:

1. *Crop Calendar*
2. *Crop budget*
3. *Equipment budget*
4. *An enterprise Cash flow*

WHAT IS A CROP CALENDAR?

A crop calendar is the schedule of the maturing and harvesting of seasonal crops. It is a tool that provides timely information on planting, sowing and harvesting period of crops.

WHY A CROP CALENDAR?

The crop calendar helps the farmer to know when to start and finish any farming activity during a crop cycle (farming season) including sourcing for funding.

WHAT IS A CROP BUDGET?

A crop budget is a listing of all estimated income and expenses associated with a specific crop to provide an estimate of its profitability.

WHY THE CROP BUDGET?

Crop budgets give guidance to both the farmer (producer) and the lender (banker) as to farming operations which are profitable and those which are not.

*****Demonstrate how a crop budget is done.**

WHAT IS CASH FLOW?

Cash flow means inflow and outflow of cash. This determines the amount of cash at the disposal of a farmer.

WHY THE CASH FLOW?

The cash flow helps the farmer to determine:

1. How much cash to spend
2. When to spend
3. How much to pay back in terms of loans taken from the bank
4. Timing of repayments

FACT SHEET 5

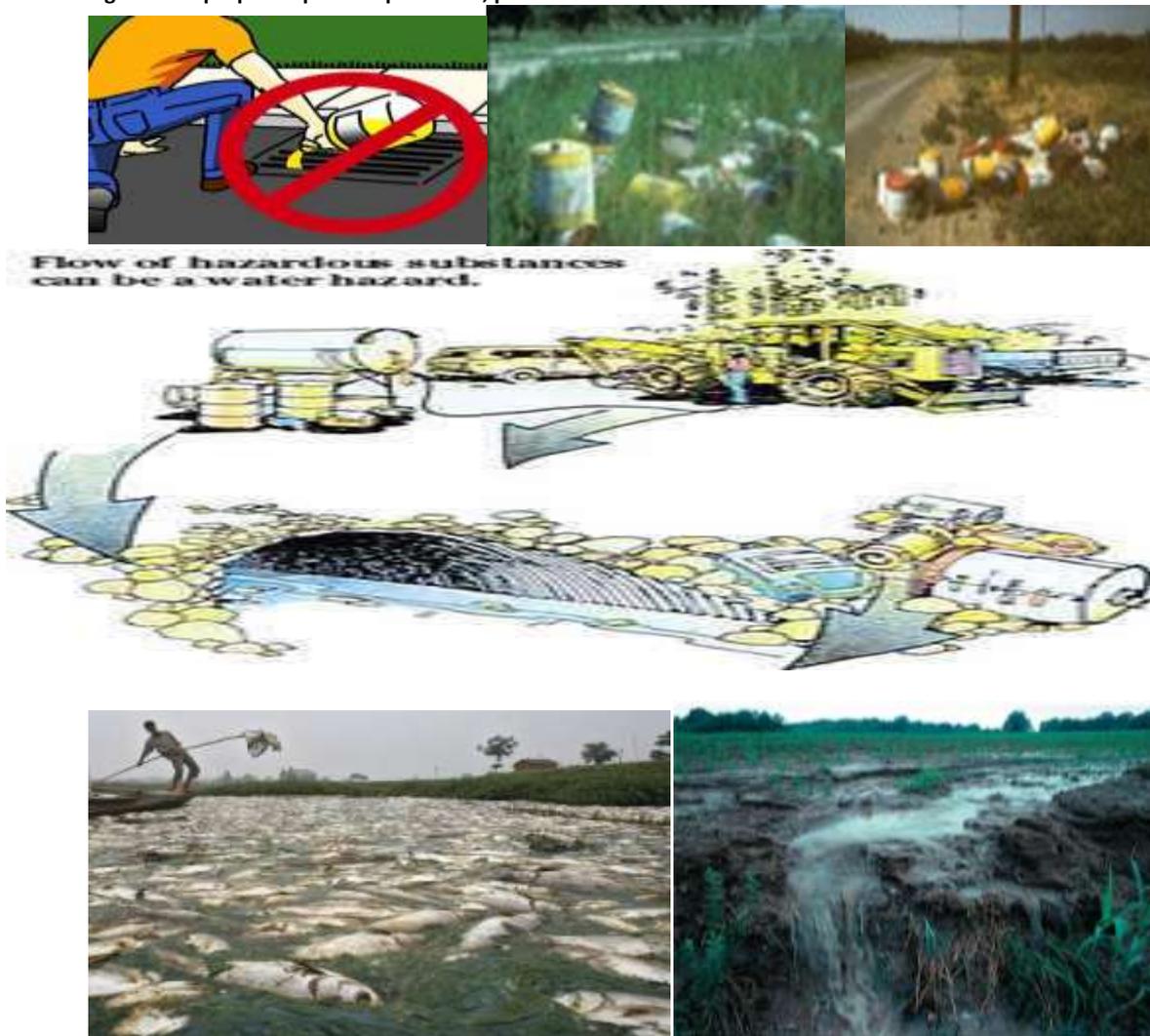
Agribusiness and Farm Management

Topic 5: Farm Production

A farmer entrepreneur will not just look at the crop to grow but will look at **all aspects** that will **influence production**, including:

1. **Water (quality) management:** Crops need water to grow. Therefore it is important to manage available water sources well. This means not throwing waste in the river, pond or lake and not cleaning dirty items (like empty pesticide bottles or spraying equipment) in the water source.

Figure 1: Improper disposal of pesticides, pesticide containers and their effects on the environment



Picture sources: <http://www.idahoforests.org/img/hazard01a.jpg>; <http://agr.wa.gov/PestFert/Pesticides/WastePhotoGallery/dumping.aspx>; <http://www.ipm.ucdavis.edu/WATER/U/storedispose.html>; <http://www.sustainingcommunities.org/wp-content/uploads/2011/12/deadfish.jpg>; <http://img.bhs4.com/http>

Most pesticide containers are legally considered to be hazardous until properly rinsed. Improper disposal of empty containers, poor container management all create hazards to humans, animals/fishes, water bodies and soils.

2. **Soil conservation:** This means that the farmer engages in good agricultural practices (**GAPs**) that prevent the top soil to be carried away by water or wind, since this part of the soil carries a lot of nutrients of the soil. An entrepreneur farmer therefore need to engage in practices such as plant trees, plant other crops between the growing crops that cover the soil or build wooden or stone barriers to keep water from washing the top soil away.
3. **Soil and nutrient management:** The soils on which crops grow contain nutrients that are used by the crop to grow. These nutrients do not last forever and the businesslike farmer needs to take steps to ensure that these nutrients do not deplete. Practices such as crop rotation, minimum/zero tillage, using natural (manure, leaves) or chemical fertilizers, planting leguminous plants (plants of the bean family) or planting trees will prevent unnecessary soil disturbance/erosion.
4. **Pest control and management:** Pest and diseases can destroy a whole crop which affects the farmer's profitability. Farmers must check the farm on a regular basis to see if there are any pests and diseases or remove infected crops and destroy them before the pest or disease spreads. Employ proper practices when applying pesticides.
5. **Waste management:** Waste like empty water sachets or pesticide bottles, can damage the soil and the environment. A farmer should take all waste from the farm and dispose it in a safe way. Waste from crops can be used to improve soil fertility for example by mulching.

FACT SHEET 6

Agribusiness and Farm Management

Topic 6: Marketing

Marketing: the activity or business of promoting and selling products or services, including market research and advertising.

Marketing deals with the following:

1. Buyers- (People) who are the consumers of the product or service
2. Products- (crops, service etc.)
3. Price
4. Promotion of the products-(advertising)
5. Place- (distribution channel) local or international market

1. Buyers

Buyers are customers who buy the crops. It is important to know:

- a. **Who** is going to buy the crops? Buyers can be consumers, processors, middlemen or exporters.
- b. **Why** do they want to buy the crop? A buyer can purchase for personal consumption, can resell the crop (middlemen), add value (processors) or use it as ingredient to produce something else. It is important to produce to meet the demands of the customer (buyer).
- c. **Where** are the buyers? Are they in the community, or in foreign markets?

2. Product

(Crop/livestock): Most farmers grow what their families have grown for generation, but a farmer entrepreneur looks at producing also to make profit (money).

3. Pricing

A price can only be set by taking into consideration the cost of producing the product, what are competitors price and what price are buyers willing to pay.

4. Place

The place deals with where the buyer can have access to the product.

The following factors can be considered in deciding on where to sell the produce:

- a. How will the crops get to the buyers?
- b. Where can buyers reach the farmer?
- c. Does the farmer want to sell in one market or various markets?

5. Promotion/Advertising

This is a marketing communication technique used in making customers/prospective customers to be aware of a product or service.

FACT SHEET 7

Agribusiness and Farm Management

Topic 7: Record Keeping

Record keeping involves the process and system of maintaining business documents so that such records can be easily and quickly accessed.

Why keep business records?

1. Serve as a quick reference point.
2. Enable the farmer to **plan towards future growth**.
3. Proof of financial records.
4. Enables the farmer to know how much money should be spent and how much would be needed for investment into the business.

Benefits of keeping business records:

1. It **prevents disagreement** between the farmer and customers.
2. The Farmer can provide **necessary information** whenever required.
3. It helps farmers to know their **external liabilities** and commitments.
4. It enables farmers to know how **well the business** is doing.

Types of Records Kept by Small Businesses:

1. Pro-forma invoice

A pro-forma invoice is used when a buyer wants to check the price from a farmer before actually buying the produce.

2. Invoice

A document that should be issued by the farmer to the buyer to accompany the products sold showing details of quantity, unit price and amount of the sale.

Example of an invoice:

Address of Seller/ Farmer:			
P.O. Box			
Town, _____, Ghana			
Date:			
INVOICE No. 001			
Sold To: _____			
Address of Buyer: P.O. Box			
Description of Goods	Qty	Unit Price GH¢	Amount GH¢
1.			
2.			
Total			
Amount in words:			
<i>Goods sold are not returnable</i>			
Received by:		Manager:	

3. Sales receipt

This receipt is used when the farmer is selling a product and the payment is made in cash or cheque. The farmer should give the buyer the original receipt and keep a copy.

Example of an official receipt:

	Address of Seller/ Farmer: _____
	P.O. Box _____
	Town _____, Ghana
	Tel: _____
OFFICIAL RECEIPT	No. _____
	Date: _____
Received from: _____	
The sum of: _____ Ghana Cedis Only	
Being Payment of invoice no. _____ dated ____:__:20_____	
Amount in figures: GH¢ _____.	
Cash/ Cheque No. _____	

Stamp/Signature	

4. Sales records

Sales records are to record **all sales** a farmer made.

Example of sales record:

Date	Invoice No.	Customer	Description	Qty	Amount GH¢
Total					

5. Purchases Records

Purchase records are to record **all items** that the farmer has bought.

Example of a purchase record:

Date	Invoice No.	Customer	Description	Qty	Unit Cost GH¢	Amount GH¢
Total						

6. Stock Movement Record

A record which shows harvested quantities of farm produce received into storeroom, quantities issued out and the balance left after each transaction. Each type of produce will have a separate stock movement card also called Tally Card.

Example of Stock Record/Tally Card

Name of Produce:					
Date	Goods Received note No. / Requisition No.	Description	In (Qty)	Out (Qty)	Balance (Qty)
Summary					

7. Cash Book

The cashbook is used for the recording of receipts and payments of cash and cheques.

When cash is received, record it under the cash column as CASH IN

When cash is paid out, record it under the cash column as CASH OUT

If you deposit money in the Bank, it should be recorded under the cash column as CASH OUT and also be recorded in the bank column as BANK IN.

When a cheque is received for payment, record it under the bank column of the cashbook as BANK IN.

When you make payment to somebody in cheque, it must be recorded under the bank column as BANK OUT.

Example of Cash Book

Date	Details	CASH COLUMN			BANK COLUMN		
		Cash In	Cash Out	Balance	Bank In	Bank Out	Balance

8. Debtors Ledger

An overview of all **debtors (customer owes money to you)** is given in the debtors ledger.

a. Debtors Ledger for each customer.

Examples of debtor's ledger:

Debtor (1)'s Name:

Date	Invoice No. / or Receipt No.	Description	In GH¢	Out GH¢	Balance GH¢

Debtor (2)'s Name:

Date	Invoice No. / or Receipt No.	Description	In GH¢	Out GH¢	Balance GH¢

Debtor (3)'s Name:

Date	Invoice No. / or Receipt No.	Description	In GH¢	Out GH¢	Balance GH¢

Debtor (4)'s Name:

Date	Invoice No. / or Receipt No.	Description	In GH¢	Out GH¢	Balance GH¢

9. Creditors Ledger

An overview of all **creditors (you owe money to)** is given in the creditor's ledger.

Examples of creditor's ledger:

Creditor (1)'s Name:

Date	Invoice No. / or Receipt No.	Description	In GH¢	Out GH¢	Balance GH¢

Creditor (2)'s Name:

Date	Invoice No. / or Receipt No.	Description	In GH¢	Out GH¢	Balance GH¢

FACT SHEET 8

Agribusiness and Farm Management

Topic 8: Contract Farming

Contract farming is an agreement between a farmer and a buyer to produce a certain amount of crops at an agreed price before the crops are harvested. This is usually done for **large quantities of a commodity**.

Buyers are interested in contract farming because it guarantees they can **buy** a certain quantity for a certain price at a particular time. Also for **farmers**, contract farming might be interesting because it guarantees they can **sell** a certain quantity for a certain price at a particular time.

Legal implications of contract farming

Contract farming means a **legal contract** is signed between the buyer and the farmer, which means that both have **obligations**.

Farmer obligations:

1. To **deliver** a stated commodity (the entire crop or a specified **quantity**) of specified **quality, grading and packaging** at specified **times** and for specified **prices**.
2. The contract could specify an obligation to produce any **loss** to a stated quantity the next farming season (e.g. farmer selling less than quantity stated, often referred to as side-selling or penalties (usually price reductions) for not making the required grades or timetable.

Buyer obligations:

1. To honour his/her obligation to **buy** specified **quantities** of a commodity at specified **prices** against required **grade** and **quality** standards and at specified **times**.
2. The buyer may be a market queen, merchant, exporter, supermarket, hotelier or input seller/supplier.
3. The contract could include a clause to periodically **review prices and quantity of produce to be supplied** in the event that market prices drop significantly or when natural disasters strike.

Things to consider when signing a contract:

1. **Yields can be lower** than expected because of bad weather, pests and diseases, etc. and this negatively affect yield. The farmer should endeavour in his/her capabilities to avoid such events by for example controlling pest and diseases.
2. **Market prices** may rise well above the agreed prices. The farmer must know that a contract is binding on both parties.
3. Buyers may **review prices** under certain conditions.

Things **NEVER** done after signing a contract:

1. **Sell his crops elsewhere.**
2. **Sell part of his crop elsewhere.**

FACT SHEET 9

Agribusiness and Farm Management

Topic 9: Making Profit from Farm Business

The essence of engaging in a business is to make profit/money. **Revenues or income** are all monies that **come into the business**.

Costs are all monies that **go out of the business**. These may include cost of land preparation, planting materials, labour, equipment, insecticides and weedicides etc.

Profit is the **money left over** from revenues after **all costs** have been deducted. Profit is important when running a farm as a business because this makes it necessary to improve a farm and to increase the potential of the business. This can be illustrated by the diagram below:

$$\boxed{\text{REVENUES FROM SALES}} - \boxed{\text{ALL COSTS}} = \boxed{\text{PROFIT}}$$

Actions that can increase Profit:

1. **Increasing the revenues** through:
 - a. Higher yields (for example by using good agricultural practices, using good quality seeds (improved variety), or avoiding and controlling pest and diseases)
 - b. Good prices for the produce
 - c. Adding value to produce
2. **Reducing costs:**
 - a. Cheaper and appropriate technologies
 - b. Making optimal use of labour e.g. using the 'noboa'

How does a farmer know if his/her farm has made profit?

The only way to know for sure is to keep records of all his/her operations on revenues and costs.

FACT SHEET 10

Agribusiness and Farm Management

Topic 10: Risk Management

Thinking of starting a new farm? One needs to set goals. It is important to know that setting goals require some time and thought in deciding on what one wants to do, resources needed, knowledge and management skills required, labour needs, markets, risks involved and how to mitigate these risks.

NOTE: that all responses to risk involve a cost. Also a risk management strategy is developed using a variety of the available responses to risk. Also these risks increase as firms get larger/bigger.

Risk management means **reducing** the chance that something can go wrong. In agribusiness risk management may focus on but not limited to the following:

1. Production Risk
2. Market Risk
3. Financial Risk

1. PRODUCTION RISKS: these are risks associated with the growing of crops and raising of livestock. These risks lead to production volatility (losses) and livestock morbidity (deaths).

Production risks include:

- a. Weather: not enough rain, too much rain, frost, floods, bushfires, windstorm, hurricane, high temperatures, low temperatures, etc.
- b. Diseases and Insects that can damage or destroy crops and livestock
- c. Weeds that compete with the nutrients of the crop
- d. Dramatic technological improvements, durable assets becoming obsolete eg. The rapid changes in personal computers and conservation (low/no) tillage.
- e. Also developments in the nonfarm sector can also affect farming eg. More sensitive instruments to detect residues may affect production practices.

Mitigating production risks:

A. Farm diversification

1. Try different production practices or practice (GAPs)
2. Grow different crops
3. Diversify by growing crops and breeding livestock
4. Grow different varieties of the same crop

B. Crop insurance

Insurance means **buying a guarantee or compensation** in case the crop is damaged or destroyed. The farmer pays an amount (called **premium**) to an insurance company to eliminate the consequences of a 'bad' event e.g. floods or fire.

C. Contract farming

Contract farming is an **agreement** between a farmer and a buyer on the supply/sale of crops **before** the crop is harvested. It is important that the farmer and the buyer respect the terms of the agreement.

D. New technology

There are some technologies that can reduce several risks, such as:

1. Improved seeds that is resistant to drought and insects.
2. Pesticides that can reduce weeds, and control pests (including insects) and diseases.
3. Harvesting Equipment for grains to minimize losses.

2. MARKETING RISKS

Marketing risks include fluctuations and uncertainty about the price of the crop, uncertainty on the demand for the crop, default risk and fluctuations of prices of inputs such as improved seed, fertilizers and pesticides.

Prices are affected by many factors such as:

1. **Weather:** favorable weather means the production of a crop is very high and prices will drop (because the supply is high), while prices will rise if production is low because of bad weather.
2. **Actions and regulations of foreign governments** in the case of export of products:
 - a. Ban on certain products.
 - b. Restrictions and certification requirements on exports.
 - c. Trade charges/tariffs
 - d. Subsidies on local production.
3. **Actions and regulations of local governments:**
 - a. Unfavorable policies, for example taxes on agricultural equipment or agro inputs.
 - b. Unnecessary police road blocks and check points that increase time of transport (and risk on loosing or damaging products especially perishable crops) and price of transport.
 - c. Imports that compete with local produce.

Reduce risk and avoid higher-risk ventures by:

- a. Knowing current market information.
- b. Using key business partners.
- c. Spreading out sales to different marketing centers.
- d. Using contract farming.
- e. Creating and following the business plan.

3. FINANCIAL RISKS

Financial risks are all risks that deal with **money issues** and cover almost every activity in an agribusiness. Farming has a particular risk over any other business and that is because most revenues come in at only few times per year. Other financial risks include:

- a. Selling on **credit**.
- b. **Late payment** by debtors.

- c. **Bad financial planning.**
- d. **Spending all profit/revenues**
- e. **Not paying loans on time.**

A farmer can **reduce financial risks** by:

- a. **Not** selling on **credit**.
- b. Depositing money in the bank after selling produce.
- c. Preparing a **budget and strictly following it**.
- d. Withdrawing a **fixed amount** per month to cover operational expenses.