

TESO COLLEGE ALOET
COVID-19 LEARNING PROGRAM

AGRICULTURAL ECONOMICS TEACHING & REVISION QUESTIONS 2020

TOPIC 1: AGRICULTURAL CREDIT

 What is agricultural credit?

Agricultural credit refers to financial assistance given to farmers in form of loans.

Note:

- (a) That loans can be in cash or in kind (In kind means giving things such as seeds, machinery, etc.)
- (b) Credit has to be paid back after some time. It is not free assistance.

What is the benefit of credit to farmers? (Why do farmers need credit?)

- ✓ It enables farmers to purchase long term assets, e.g. land, power source, etc.
- ✓ It gives farmers working capital to buy inputs for production, e.g. seeds, feeds, drugs, etc.
- ✓ It enables them overcome risks and uncertainties in farming
- ✓ To cope with seasonal patterns of production, e.g. credit allows farmers to hire more labour during peak labour demands.
- ✓ It helps farmers construct farm structures, e.g. fences, buildings, irrigation and drainage channels, soil conservation measures, etc.

But sometimes farmers fail to pay credit. Why may a farmer fail to pay credit?

- ✓ Some lending agencies charge high interest rates which makes loan payment difficult
- ✓ Some farmers misuse credit, i.e. use loan for wrong reasons, e.g. marrying more women
- ✓ Fall in prices of agricultural products makes farmers fail to raise money to pay back loans
- ✓ Short loan repayment periods
- ✓ High taxation of agricultural products which affects their income
- ✓ If the funds borrowed are stolen/insecurity
- ✓ Poor management of enterprises leads to failure of these enterprises
- ✓ Failure of farmers enterprises due to natural hazards
- ✓ Poor timing of credit (too late) which leads to failure of projects
- ✓ Fall in demand. When demand for a farmer's product falls, the farmer fails to pay back
- ✓ Poor marketability of products. This makes farmers to be exploited by middlemen
- ✓ Inflation which increases production costs and interest rates
- ✓ Death of farmer

What should a farmer do after acquiring (getting) a loan?

The farmer should:-

- ✓ Use the loan for the intended purpose, i.e. what he got the loan for.
- ✓ Use the loan for a project/enterprise that will earn him the highest income (most paying).
- ✓ Use the loan for the most reliable enterprise (i.e. one that is unlikely to fail).
- ✓ Plan a method of repayment which is convenient to him/her.
- ✓ Take insurance incase of risks.
- ✓ Deal fairly and honestly with the lender.

What should financial (lending) institutions do to make sure farmers use credit properly?

- ✓ Provide extension services to farmers to educate them on how to use loans
- ✓ Improve loan supervision by visiting farmers and their projects regularly
- ✓ Improve their loan recovery programs
- ✓ Improve training of their staff for effective coordination with farmers
- ✓ Give farmers loans in kind, i.e. instead of cash farmer can be given an asset or physical inputs
- ✓ Give farmers loans at the right time, e.g. crop loans should be given before the rains start
- ✓ Give farmers soft loans, i.e. loans with a reasonable grace period. But what is a grace period?
This is the time between getting the loan and start of payment of loan.
- ✓ Charge fair (reasonable) interest rates on agricultural loans. Why? This is because depends on many uncertainties, e.g. weather, pests and diseases, price fluctuations, etc.
- ✓ Help farmers identify viable projects, i.e. projects that can succeed and are profitable
- ✓ Help farmers choose agricultural projects that they can handle/manage successfully

TOPIC 2: RISKS AND UNCERTAINTIES IN FARMING

Every business or decision we make is associated with some risks or uncertainties. Farmers too face many risks and uncertainties when growing different crops and rearing different animals.

✚ So, what are these risks and uncertainties? Is there a difference between the two?

- ✓ Risks and uncertainties are unforeseeable circumstances (situations) or dangers which a farmer may face.

Difference between a risk and an uncertainty

A risk can be predicted with some degree of probability, therefore a farmer can insure against risks while,

An uncertainty cannot be predicted, therefore a farmer cannot insure against uncertainties.

Give examples of risks and uncertainties that farmers face in farming.

Examples of risks

- ✓ Fire outbreaks in the farm
- ✓ Pests and diseases (for crops and livestock)
- ✓ Theft of farm produce/property
- ✓ Health of the farmer/family
- ✓ Health of farm workers (employees)
- ✓ Accidents on the farm, e.g. to the farmer, workers, livestock, etc.

Examples of uncertainties

- ✓ Price fluctuations
- ✓ Change in demand for a product
- ✓ Change in technology used in farming
- ✓ Change in government policy (e.g. introduction of new taxes)
- ✓ Labour availability
- ✓ Breach of contract
- ✓ Availability of farm inputs (e.g. seeds, feeds, fertilizers), etc.

Explain how a farmer should guard against risks and uncertainties to ensure profitable production (i.e. explain how risks and uncertainties in farming can be minimized).

- ✓ Diversification of farm activities, i.e. setting up several enterprises to avoid total loss. In case one fails, the farmer may benefit from another.
- ✓ Selecting reliable enterprises, i.e. those that rarely fail. This increases chances of success.
- ✓ Selecting most liquid enterprises, i.e. those which can easily be converted to money.
- ✓ Flexibility in production. A farmer should be able to switch from one product or enterprise to another in case of failure or lack of market in one.
- ✓ Engage in contract farming. This ensures ready market for farmer's produce.
- ✓ Insurance. A farmer can insure his business to guarantee compensation in case of loss.
- ✓ Use drought resistant crops that are less affected by weather.
- ✓ Grow quick maturing crops that can escape drought.
- ✓ Input rationing. This helps to avoid total loss or minimize costs.
- ✓ Building own equity. Farmers should save to enable them meet unforeseen expenses or losses
- ✓ Credit worthiness, i.e. should have ability to borrow or access credit to meet unforeseen expenses resulting from risks or uncertainties
- ✓ Produce good quality products. These normally have high demand and fetch high prices.
- ✓ Join a farmer's organization, e.g. cooperative to ease marketing of produce, etc.

TOPIC 3: THE MARKET

A market is a place or an arrangement which allows buyers and sellers to buy and sell (exchange) a particular commodity. This means in a market, there are two groups of actors:-

- (a) **Producers (Suppliers).** These produce and *supply* goods and services to the market at a price.
- (b) **Consumers.** These *demand* for goods and services and are ready to buy them at a price.

Note: As you can notice, **price** is the link between sellers and buyers in a market.

What then is demand?

Demand is the quantity of a good which a consumer is willing and able to pay for (buy) at a particular price, time and place.

State the law of demand

Other factors held constant, the higher the price of a commodity, the lower the quantities of that commodity demanded.

Factors affecting demand for a commodity

- ✓ Price of the commodity. The lower the price, the higher the quantity demanded and vice-versa
- ✓ Price of substitutes. Substitutes are goods that serve the same purpose (one can be used in place of the other) e.g. Coffee and Tea. Give other examples. If the price of one substitute increases, the demand for the other increases.
- ✓ Price of complements. Complements are commodities that are used together, e.g. Cars and Petrol, Sugar and Tea, etc. Increase in the price of one complement increases the demand for the other.
- ✓ Income of consumer. Higher income normally leads to higher demand for a commodity.
- ✓ Population. The bigger the population, the higher the demand.

- ✓ Religion/customary beliefs. This can increase or reduce demand for commodity.
- ✓ Level of advertising. Advertising creates awareness and increases demand.
- ✓ Quality of commodity. High quality goods have a higher demand than low quality goods.
- ✓ Sex. Some commodities are demanded more by a certain sex.
- ✓ Age. Some commodities are preferred by youth thus increasing their demand among youth.
- ✓ Seasons. Demand for some goods increases during certain seasons, e.g. Turkeys during Christmas, etc.

Now, what is supply?

- ✓ Supply is the quantity of a commodity producers are willing to produce and offer for sale at various prices.

State the law of supply

- ✓ Other factors held constant, the higher the price of a commodity, the greater the quantities of the commodity supplied.

Factors affecting supply of a commodity

- ✓ Price of the commodity
- ✓ Price of substitutes
- ✓ Price of complements
- ✓ Cost of producing the good
- ✓ Techniques of production
- ✓ Aims/objectives of the farmer
- ✓ Prices of factors of production
- ✓ Number of sellers in the market
- ✓ Speculation, etc.

*(Try to explain these as we did for demand factors***).*

Finally, what is price?

Price is the value attached to a commodity in money terms at a particular time.

Explain the factors that affect the price of a commodity

- ✓ Change in demand. An increase in demand leads to an increase in price and vice versa.
- ✓ Change in supply. Increase in supply leads to a decrease in price and vice versa.
- ✓ Quality of commodity. High quality goods tend to fetch higher prices than low quality goods.
- ✓ Costs of production. Higher costs of production lead to an increase in prices and vice versa.
- ✓ Marketing costs. The higher the costs of marketing, the higher the price and vice versa.
- ✓ Seasons/festivities. Prices of some commodities rise during certain seasons and vice versa.
- ✓ Market structure. In a monopoly, price is determined by the producer while, in the competitive market structure prices depend on supply and demand forces.

Elasticity of demand

This is the percentage change in quantity demanded resulting from a percentage change in the price of the commodity.

$$\varepsilon_d = \frac{\% \text{ change in quantity demanded}}{\% \text{ change in price}} \text{ or}$$

$$\varepsilon_d = - \left(\frac{\Delta Q}{\Delta P} \times \frac{P}{Q} \right) \text{ Note: The -ve outside the bracket is added in order to get rid of negative answer.}$$

There are three major types of elasticity of demand depending on the calculation above, i.e.

- ✓ Elastic demand, if $\varepsilon_d > 1$
- ✓ Unitary elasticity of demand, if $\varepsilon_d = 1$
- ✓ Inelastic demand, if $\varepsilon_d < 1$

Factors affecting elasticity of demand

- ✓ Price of commodity
 - ✓ Income of consumer
 - ✓ Availability of substitutes
 - ✓ Whether the commodity is a luxury or necessity
 - ✓ Habits of consumer, etc.
- (Please try to explain these***)

Elasticity of supply

This refers to the percentage change in quantities supplied resulting from a percentage change in price of the commodity. (Calculations as in E_d ***)

CHECK YOURSELF

1. Define the following terms.
 - i. Demand
 - ii. Supply
 - iii. Price
 - iv. Elasticity of demand
2. Explain five factors affecting
 - i. the demand for a commodity
 - ii. the supply of a commodity
 - iii. the price of a commodity
 - iv. the elasticity of demand
3. Distinguish between a risk and an uncertainty.
4. Give five examples of agricultural risks and five uncertainties.
5. Explain five ways farmers can guard against risks and uncertainties and ensure profitable production.

TOPIC 4: AGRICULTURAL MARKETING

Agricultural marketing refers to all activities that are important in ensuring transfer of goods from the farmer (producer) to the final consumer. These activities are called Marketing functions. They include assembling (bulking), selling, transportation, storage, processing, grading, standardization, packaging, advertising, market information, financing, risk-bearing, etc. *(You have covered these in Commerce or Entrepreneurship classes. Please refer to your Commerce/Entrepreneurship notes to remind yourself of the importance of each).*

Characteristics of agricultural products

- ✓ Seasonal. Most agricultural products are seasonal in nature, i.e. they are abundant in some seasons and scarce in other seasons.
- ✓ Perishable. They are generally perishable, i.e. easily get spoilt.
- ✓ Bulky. Most are bulky, i.e. they occupy a lot of space.
- ✓ Small scale production. Most agricultural products are produced on small scale by peasants.
- ✓ Face competition from synthetic products. Some agricultural products have synthetic substitutes, e.g. Cotton vs. Polyesters, rubber vs. plastics.
- ✓ Inelastic demand. Their demand is not greatly affected by changes in their prices.

Problems faced in the marketing of agricultural products in Uganda

- ✓ Bulkiness. Most agricultural products are bulky which makes storage and transportation difficult.
- ✓ Perishability. Most lose their quality in a short time, e.g. rot, shrink, etc.
- ✓ Seasonal. They are produced seasonally, because they depend on natural factors, e.g. rainfall.
- ✓ Lack of processing. This reduces their value in the market and also leads to their spoilage.
- ✓ Inadequate/poor storage facilities. Good storage enables farmers to wait for good prices.
- ✓ Inadequate market information. Farmers do not know where to sell their products at good prices, or what crops, animal products are in high demand.
- ✓ Poor transport facilities, e.g. roads. This makes it difficult and expensive for farmers to transport their products to the markets.
- ✓ Face competition from synthetic substitutes. This reduces their demand and prices.
- ✓ Large number of small and independent producers. These produce in small quantities and sell independently and therefore cannot influence price in the market.
- ✓ Variable quality of same products. Farmers produce different qualities of the same product making marketing difficult because of time wasted on sorting, grading, etc.
- ✓ Inelastic demand. Demand for most agricultural products is inelastic, e.g. you cannot buy more than the milk you need to drink even if you have more money.
- ✓ Low income elasticity of demand. The proportion of income spent on agricultural products (food) is very low compared to that for industrial goods.

How to improve agricultural marketing in Uganda

- ✓ Construction of improved storage structures. This will help reduce spoilage and wastage. It also enables farmers wait for good prices.
- ✓ Processing. By encouraging more agro-processing industries. This lead to value addition, increases storage life.
- ✓ Improving transport network. A good transport network eases movement of products from the farm to the markets.

- ✓ Formation of farmers' organizations. This will help in storage, processing and marketing of farmers' produce.
- ✓ Provision of credit facilities. Loans enable farmers finance their production and marketing activities.
- ✓ Market diversification. Identify new markets locally, regionally and internationally to absorb excess production.
- ✓ Contract farming. Producing crops based on agreements between consumers and farmers.
- ✓ Improving extension services. To educate farmers on best practices to enable them produce high quality products which have high demand (ready market), etc.

Why prices of agricultural products fluctuate

- ✓ Difference between planned and actual output because agriculture is affected by natural factors some of which cannot be controlled by the farmers, e.g. weather, pests and diseases, etc.
- ✓ Long gestation period. The period between planting and harvesting is quite long for most crops. Therefore farmers cannot immediately respond to price changes.
- ✓ Seasonal production. This leads to excess supply and low prices during harvest periods and scarcity and high prices during off-seasons.
- ✓ Perishability. This makes it difficult to store them. Therefore, farmers are forced to sell them at low prices during harvest periods and become very expensive during off-seasons.
- ✓ Bulkiness. This makes it difficult and costly to move them to far markets where they would fetch good price.
- ✓ Form a small part of manufactured goods. This means the excess supply must be sold at low prices.
- ✓ Competition from synthetics. This reduces the demand for agricultural products and leads to low prices.
- ✓ Variable quality of agricultural products. This may lead to reduction in prices or rejection of some products in the market.
- ✓ It is difficult for a developing country to sell surplus to another because they produce almost the same commodities. This leads to selling cheaply within each country.
- ✓ Large number of small scale producers. These cannot individually influence the price of their products in the market. Each of these sells at a price they consider reasonable to them.
- ✓ Absence of effective commodity programs, e.g. buffer stocks and stabilization funds. Government does not subsidize farmers or buy off surpluses (excess) for selling during periods of shortages. Thus farmers sell at low prices when they have excess, etc.

Effects of price fluctuations

- ✓ Leads to fluctuation of farmers income and standards of living
- ✓ Leads to fluctuation of government revenue from agricultural sector
- ✓ Leads to fluctuation in foreign exchange earnings
- ✓ Leads to fluctuation in employment in agriculture sector
- ✓ Affects planning by both farmers and government
- ✓ Leads to Balance of Payment (BoP) problems when prices are low
- ✓ Modernization of agriculture becomes difficult because farmers have low incomes
- ✓ A country experiences unfavorable Terms of Trade (ToT) when prices are low, etc.

- ✓ Discourages savings
- ✓ Discourages investment in permanent assets
- ✓ Farmers may fail to pay back their loans
- ✓ May lead to rural-urban migration as farmers abandon farming to try to look for more paying jobs in urban centers.
- ✓ Farm production may drop if farmers get demoralized leading to shortages and famine, etc.

How to reduce effects of fluctuations of agricultural prices

- ✓ Improving the storage systems/facilities to stabilize supply and prices
- ✓ Processing of agricultural produce to reduce their bulkiness and add value
- ✓ Technology improvement, i.e. improving methods of production in order to get better quality products, e.g. use of fertilizers, irrigation, etc.
- ✓ Diversification. To reduce reliance on only one crop or animal enterprise
- ✓ Improve transport network. This eases transportation of produce from the farms to areas where they can be sold at high prices
- ✓ Encourage farmers to form their organizations, e.g. cooperatives. This will help in marketing and negotiating for better prices both locally and internationally
- ✓ Barter trade. To get rid of any excess produce.
- ✓ Insurance, e.g. crop insurance. Helps minimize losses due to unforeseen events
- ✓ Improving flow of market information. This enables both farmers to know where best to sell their products at a good price
- ✓ Use of buffer stocks. This is where government buys surpluses for storage during harvest periods and later sells them during periods of shortages.
- ✓ Contract farming. Producing crops or livestock products based on agreements between farmer and consumer or buyer.

CHECK YOURSELF

1. Outline the advantages of the following in the marketing of agricultural products.
 - i. Storage
 - ii. Packaging
 - iii. Grading
 - iv. Advertising
 - v. Standardization
 - vi. Assembling
 - vii. Transportation
 - viii. Market information
2. Explain five problems associated with the marketing of agricultural products
3. Explain five causes of fluctuation of agricultural product prices
4. Give five effects of fluctuation of agricultural prices
5. Explain five ways by which the effects of price fluctuations can be reduced

For any clarifications Whatsapp me on 070-2456-760.