

**AGRICULTURE ECONOMICS (V)**

1. a) the principle that govern the operations of farmers' co-operative societies
  - Open membership
  - Equal rights
  - Share limit
  - Neutrality
  - Non- profit motive
  - Loyalty
  - Withdrawal of membership
- b) the role of agricultural cooperatives in Kenya
  - Provide education/ technical information to members
  - Negotiate for higher prices for members products
  - Market farmers produce
  - Help to negotiate for loans for members without security
  - Provide inputs to members at lower prices
  - Invest and pay out returns to members in form of dividends
  - Provide transportation, storage and use of machinery to farmers
- c) various functions of agricultural marketing
  - Advertising: They advertise farm products in order to increase demand
  - Financing: Provide capital to carry out agricultural activities
  - Transportation: Provide transport to farm produce to the areas of consumption
  - Storage: store farm produce after harvest in order to minimize losses
  - Selling: Sell on behalf of the farmer
  - Packing: pack the farm produce to reduce storage space and make transportation easy
  - Processing: process the farm produce in order to provide a variety, increase value and prolongs shelf life
  - Grading: putting into grades to provide uniform standards
  - Assembling: gathering the farm produce for bulking and transportation
  - Insurance: Bearing risks by protecting farm damage
- d) Explain five problems farmers face in marketing agricultural products
  - Perishability: deterioration of quality
  - Seasonability: affect price and storage problems
  - Bulkiness: occupy large space hence problems of handling and storage
  - Storage: lack of storage facilities on farms
  - Poor transport system: Lead to spoilage of farm produce
  - Change in market demand: time between planning and actual production create lack of market

- Lack of market information: concerning prices, how much to produce, where to sell goods; farmers end up disposing of the surplus at throw away prices
  - Fluctuation in market price due to seasonality in nature of agricultural products
  - Poor marketing systems for some produce: Result in lack of market
2. a) four marketing functions (4mks)
- Buying and assembling
  - Transportation and distributing
  - Storage
  - Packing
  - Processing
  - Grading
  - Marketing research
  - Selling
  - Financing
  - Bearing risk
- (4x1=4mks)
- b) Outline four problems associated with marketing of agricultural products. (4mks)
- perishability
  - seasoning
  - bulkiness
  - poor storage facilities
  - poor transport system
  - lack of market information
  - limited elasticity of demand
3. Two roles of agricultural society of Kenya
- Promotes the agricultural industry
  - Organizes national ploughing competitions
  - Publish the Kenya farmer magazine
  - Improve useful indigenous animals
  - Publish a 'stud' book
  - Hold competitive shows
  - Hold trade fairs on livestock
  - Demonstration on how to use agricultural machinery
  - Encourage breeding and importation of pure breed stock
4. (a) Elasticity of demand for a commodity is the degree of responsiveness of demand to price
- OR - The sensitivity of demand to change in price (1mk) (mark as a whole)

(b) Calculation of the elasticity of demand:- ✓mk  
(4mks)

$$\text{Elasticity of demand} = \frac{\% \Delta \text{Quantity}}{\% \Delta \text{price}}$$

$$\begin{aligned} \% \Delta \text{Quantity} &= \frac{\text{Change in quantity}}{\text{Quantity}} \times 100 \\ &= \frac{(1000 - 800)}{800} \times 100 = 25\% \quad \checkmark \text{mk} \end{aligned}$$

$$\% \Delta \text{Price} = \frac{\text{Change in price}}{\text{price}} \times 100$$

$$= \frac{(20 - 22)}{22} \times 100 = 9\% \quad \checkmark \text{mk}$$

$$Ed = \frac{25}{9} = 2.8 \quad \checkmark \text{mk}$$

(c) Six problems of marketing maize as an agricultural product

- Bulkiness
- Poor storage
- Seasonality of crops hence demand
- Perishability of farm produce
- Poor transport system
- Delayed payments
- Competition from cheap imports ( 1mk x any6pts = 6mks)

(d) Nine principles governing cooperatives in Kenya

- Open membership- voluntarily joining on payment of membership fees
- Equal rights – One man one vote run democratically
- Share limit – A member buys shares up to a specific maximum limit.
- Interest on shares – Any money distributed according to shares
- Withdrawal form ownership – voluntarily
- Loyalty – Members to be faithful and loyal
- Education – continuously educating its members
- Co-operative principle- cooperative members joint cooperative movement
- Non-profit motive – cooperatives are non-profit making organizations

5. Four reasons why training is important in some crops

- Facilitate field practices of spraying and harvesting
- Improves crop quality by preventing solving
- Enable crop grow in the required direction
- Improve yield
- Control pest and diseases

- 6 . a) - Buying and assembling – acquisitions from small scale farmers and accumulate
- Transporting and distribution – from area of production to areas of consumption and retailers
  - Storage – kept to accumulate in amount before selling off or to wait for time of scarcity
  - Packing- to protect agent damage, theft
  - Processing – involve preparation of produce for consumption e.g. pasteurizing milk
  - Grading and sorting – placing in groups according to size, colour e.t.c.
  - Each group attracts different prices
  - Packaging – presentation of produce in a way to attract consumers e.g. labeling, good packing materials
  - Collecting marketing information – through media, on prices and demands of goods on markets
  - Selling – Final presentation of produce to consumer’s e.g. advertising, display e.t.c.
  - Financing – availing capital for marketing activities
  - Bearing risks – at each stage of marketing, apart is to bear the cost of uncertainties
- b) - Marketing problems of agri products
- Perishability – short life cycle
  - Seasonality – supply depends on the season/ vary with season
  - Bulkiness – demand for more space Vs value
  - Storage – need costly storage e.g. cold rooms, refrigeration
  - Poor transport system especially in rural areas
  - Changes in market demand – take long to produce hence cannot meet changes in market
  - Limited elasticity of demand – restrict supply
  - Lack of market information
7. Is the degree of responsiveness of supply to change in price
8. - Giving subsidies by reducing the cost of production inputs  
Fixes prices of the related products
- b) The role of Agricultural Co-operatives in Kenya
- Co-operators pool their resources together to buy expensive machinery e.g. tractor for use by the members
  - Provide education/ technical information to members
  - Provide loans to members in form of inputs and cash
  - Negotiate for higher prices for members
  - Reduce overhead costs e.g. transportation, storage and use of machinery
  - Bargain with supplier to give discount on seed, fertilizers and other farm inputs/ provide inputs at lower prices
  - Provide employment for their members
  - Benefit members from lower taxes charged

- Provide strong bargaining power for members on policy issues
  - Market farmers produce
  - Invest and pay out returns to members in form of dividends
  - Help to negotiate for loans for members without security
  - Some provide banking services to members
9. Law of demand – when the price of a good or service is low, many consumers are able and willing to buy it and vice versa
- Law of supply – when the price of commodity is high, many sellers are able to provide the commodity in market for sale. (mark as a whole )
10. (i) K.N.F.U – Kenya National Farmers Union  
(ii) H.C.D.A – Horticultural Crops Development Authority
11. a)- It is an organization of people who have joined together voluntarily with a common purpose for a mutual economic benefit
- b) Two functions of co-operatives
- Marketing farmers produce
  - Negotiating for fair prices for farmers produce and also for Inputs
  - Keeping records of the co-operative activities and informing the members accordingly
  - Paying dividends to the members
  - Giving loans in hand to the members
  - Educating the members on matters relevant to their co-operative through field days, seminars, workshops and demonstrations
- c) - Open and voluntary membership: Rights of anybody who fulfills the conditions set out by the laws of co-operative society
- Democratic control: All members have equal rights to say on the affairs of the co-operative
  - Each member is only allowed one vote regardless of shares possessed
  - Share limit: All members should have equal chances of buying shares
  - Distribution of dividends: Any profits should be distributed to members as dividends depending on their share contributions
  - Withdrawal of membership: Should be voluntary
  - Selling of produce: Only members can sell their produce through the co-operatives
  - Loyalty: members are bound to be loyal to their co-operative society
  - Non- profit motive: Co-operatives are not supposed to be profit motivated. They should sell their products to members at seasonable prices
  - Co-operative organization: The co-operative should join the co-operative movement from primary level to national or international level
  - Co-operative should sell on cash – goods sold on credit are sometimes not paid for
  - Continuous expansion: Co-operatives should aim at continuous expansion in terms of membership and physical facilities

- Neutrality: Co-operatives should be neutral in terms of religion, politics or language
12. Four factors which influenced the demand of tomatoes in the market
- Quality of tomatoes
  - Price of tomatoes
  - Presence of other substitutes
  - Price of the substitute