KENNEDY SEC.SCHOOL - KISUBI

INTRODUCTION TO LIVESTOCK HUSBANDRY

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WEEK 6

INTRODUCTION TO LIVESTOCK PRODUCTION

Livestock husbandry deals with the management of domesticated animals which are of economic benefit to man. It deals with looking after cattle, sheep pigs, goats, camels, donkeys, fish and poultry

USES OF LIVESTOCK

- i) They are producers of food, e.g. milk and meat and eggs
- ii) They are work animals e.g. ox ploughing, pulling carts
- iii) Hides and skins are used for clothing, particularly in nomadic communities
- iv) To some communities owing a large number of livestock is a sign of wealth and prestige
- v) They are pack animals e.g. the donkey
- vi) Bulls fights and horses and goat races have been used as a source of recreation
- vii) They have a social role in many communities in Africa, e.g. marriage transactions divination and setting disputes
- viii) They produce mature
- ix) Source of income to farmers who keep livestock for commercial purposes
- x) Source of foreign exchange i.e. when beef and butter are exported to European countries we earn foreign exchange
- xi) For payment of dowry i.e. many communities use livestock to pay bride price.
- xii) Source of employment i.e. livestock keeping has been a source of employment for long. As white collar jobs continue becoming scarce, many people turn to livestock industry as their source of employment.

FACTORS THAT AFFECT DISTRIBUTION OF LIVESTOCK IN UGANDA:

i) Presence of tsetse flies and other pests in the area that transmit diseases

- ii) Occurrence or prevalence of livestock diseases which cause death
- iii) Ethnic bias to live stock, i.e. some tribes don't keep sheep
- iv) Availability of land, in areas where there is shortage of land, more crops are grown than keeping animals
- v) Topography or terrain, in steep hilly areas, less livestock is kept
- vi) Availability of feeds and pasture, lower the number of livestock
- vii) Social factors attributed to livestock keeping e.g. many people keep cattle for prestige.
- viii) Religious belief i.e. moslems do not keep pigs
- ix) Climate i.e. rainfall and raiding, has reduced animals numbers in some areas e.g. in Teso

CONTRIBUTION OF LIVESTOCK TO ECONOMIC DEVELOPMENT IN EAST AFRICA:

- i) Source of food for the population.
- ii) Source of foreign exchange.
- iii) Diversification i.e. ranching and dairy farm are being encouraged as a diversification of the agricultural sector; these increase the farmers' income and also create employment.
- iv) Improvement of soil fertility animals produce mature which restore nutrients to the soil that supports plant life.

MAJOR PROBLEMS OF LIVESTOCK INDUSTRY IN EAST AFRICA

- i) Diseases and parasites
- ii) Lack of capital to purchase good grade animals and other in puts
- iii) In puts especially drugs are every expensive
- iv) In puts are not adequately available
- v) Lack of transport to send the products to the markets
- vi) Land is a limiting factor in some areas
- vii) Livestock installations like dips and spray races are expensive to install
- viii) Lack of veterinary services
- ix) Lack of plants (factories) to process livestock products.

CATTLE PRODUCTION:

Cattle are ruminant able to convert useless plant material into nutritious products for which they are reared that is milk and meat.

ROLES OF CATTLE IN THE LIVESTOCK OF UGANDAN FARMERS:

- i) Source of high value food. E.g. meat, milk, blood etc.
- ii) Used as a work animals i.e. oxen are used to pull carts as well as ploughing
- iii) They produce other useful bi-products e.g. hides, hooves, horns excreta for bio-gas.

- iv) Used for ritual and other religious functions e.g. for sacrifice and last funeral rites
- v) Source of income for the farmers
- vi) In many societies, it is an indicator of status and respectability of the person
- vii) Used in social and customary function e.g. marriages
- viii) When kept together with the growing of crops, their excreta may be used to fertilizer the soil.
- ix) Source of employment to the farmer
- x) It is a reserve of family wealth

TYPES AND BREEDS OF CATTLE:

There are very many varied cattle breeds in the world but they fall in two species groups:

- i) Bos indicus (the humped tropical zebu cattle)
- ii) Bos Taurus (the hump less temperate cattle)

Bos indicus:

These are humped or zebu cattle and they are of tropical origin

CHARACTERISTICS OF BOS INDICUS:

- i) They have a prominent hump
- ii) A well-developed dewlap and umbilical fold
- iii) Superior adaptation to high temperatures and resistance to intense solar heat.
- iv) They are late maturing animals with low fertility level
- v) They are resistant to many tick borne diseases
- vi) They are poor milk yielders

N.B the dewlap is used to cool the animal by fanning it.

EXAMPLES OF BOS- INDICUS BREEDS:

- i) Brahman, sahiwal, red sindhi (these are found in Asia)
- ii) The east African short horn zebu
- iii) The boran
- iv) The Sanga
- v) The Karamojong zebu and Nkedi

BOS TAURUS: These are temperate breeds, which are hump less. They were introduced in E Africa in early 1950

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CHARACTERISTICS OF BOS TAURUS:

- i) They are high yielding in terms of milk and beef production
- ii) Their dewlap and naval flap are not prominent
- iii) They are not adapted to high temperatures
- iv) They are highly susceptible to tropical diseases especially tick borne diseases
- v) They mature faster
- vi) Their skins and hair are quite attractive to most cattle ticks

Effects of high temperature on exotic cattle:

- i) A rise in the animal's rectal temperature
- ii) Decline in feed intake-the animals graze less during the day time and eat more at night i.e. depressed appetite
- iii) Increase in water intake
- iv) Decrease in production e.g. milk
- v) Changes in milk composition
- vi) Reduction in growth and loss in weight and higher mortality in especially new born.

PROBLEMS OF EXOTIC CATTLE IN UGANDA:

- i) They require stringent management in terms of feeding, disease control and hygiene which are often lacking
- ii) Poor nutrition, particularly in the case of calves
- iii) Internal parasites also is a big problem in calves
- iv) They have low resistance to tick born diseases
- v) Exotic cattle are very expensive to buy and even to maintain

PRE – REQUISITES TO INTRODUCTION OF EXOTIC CATTLE:

- i) The farm must be self-contained; it should be perimeter fenced and have sufficient grazing and adequate supply of water so that the animals do not move out of the farm.
- ii) Rendering the farm tick-free by using immune indigenous cattle as bait for a period of at least 3-6 months.
- iii) Spraying or dipping the bait regularly at least once a week
- iv) Regular spraying or dipping must continue after introduction of exotic animals, relaxation may lead to heavy mortality
- v) Introduce exotic cattle a few at time

CLASSIFICATION OF CATTLE BREEDS:

Cattle breeds have been classified basing on the functions for which they were bred e.g. dairy breed, beef breeds and dual-purpose breeds

DAIRY BREEDS:

These have been bred for milk production

Characteristic of a good dairy cow:

- i) The body conformation- they have a wedge or triangular body shape
- ii) They have a large body capacity
- iii) They have large udders, which have pronounced mammary veins
- iv) They have wide and well-set hindquarters, which give room for the large udder
- v) Most dairy cattle are docile and have a mild temperament
- vi) Fecundity, which is the ability to have many off-springs
- vii) Longevity, which is the ability to calve regularly and for many years in succession

EXAMPLE OF DAIRY BREEDS:

- i) Friesian
- ii) Guernsey
- iii) Ayrshire
- iv) Jersey

BREEF BREEDS:

These are breeds that have been bred for beef production

Characteristics of beef breeds:

- i) They mature early and reach slaughter weight early
- ii) They have a blocky, square body

- iii) They have short legs with long, broad backs
- iv) They breed regularly
- v) They convert herbage into meat easily i.e. their conversion ratio is quite high
- vi) Fecundity (fertility rate) which takes into account of calving interval and conception rates)
- vii) Fattening or marbling ability (i.e. fats are well distributed)
- viii) Carcass weight and expected dressing percentage should be high
- ix) Adaptability to the environmental conditions
- x) Resistance to disease to diseases.

Examples of beef breeds:

- i) Aberdeen Angus
- ii) High land
- iii) Lincoln red
- iv) Charolaise
- v) Galloway
- vi) Hereford
- vii) Beef short-horn

DUAL PURPOSE BREEDS:

These are breed kept for the production of both beef and milk. They have a well-developed frame and put on flesh readily when dry or when fattened at the end of their milking life.

Examples of dual- purpose breeds:

- i) Dexter
- ii) Red poll
- iii) Short horn
- iv) South Devon
- v) Welsh black