LAND RECLAMATION AND REHABILITATION.

1. a)

- Irrigating dry land.
- Draining of swamps
- Adding manure to infertile soils
- Introducing drought resistant crops
- Planting of trees/Afforestaion
- Tse-tse fly control
- Part of the low lying land covered by sea water is enclosed using strong walls/ ring dykes
- Ring canals are constructed to lead water to pumping station.
- The water is pumped out using windmills/diesel pumps/electricity pumps.
- Ditches are then dug to drain the excess water from the enclosed land
- Chemicals are added to the soil to reduce salinity /fresh water is pumped into the enclosed land to reduce sality.
- Oats, rye and sugar beets are planted to improve the PH of the soil and reduce the land salinity further.
- The land is dry and (ready for use)

2 a)

- Land reclamation is a process by which unproductive land such as deserts, mash or swamp is converted into a land fit for cultivation.
- Land rehabilitation is the restoration of land that has been ruined through man's negligence to its former reputation or good condition.

b)

- Control of soil erosion
- Afforestaion/ reforestation/agro-forestry
- Irrigation
- Draining of swamps and flood prone areas
- Introduction of drought resistant crops
- Control of pests e.g. tsetse flies
- Use of manure to improve soils

c)

- Construction of the ring dykes and ring canals
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- Construction of ditches within each polder leading water to a pumping station
- Water is pumped out into the canal
- Land is allowed to dry
- Desalination to improve the soil through flushing with fresh water and planting hardy plants
- Dividing the polder land into economic units
- Infrastructure is laid out
- People are settled in villages.
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- Farming activities began with spreading of soil to improve fertility
- Addition of fertilizers to the soil

d)

- Floods were controlled
- Pests/water borne diseases were controlled
- There was an increase in the land for agriculture
- Better farming methods were introduced
- There was an increased agricultural output/new crop introduced
- There was an increase in the employment opportunities.

3. b)

- The areas was sparsely populated hence less displacement of people
- Low rainfall received in the area made it suitable for irrigation
- The area had fertile soil suitable for rice farming
- The black cotton soils in the area has a high water retention, a condition required for rice cultivation
- Presence of rivers Nyamindi and thiba which provides irrigation water.

c)

- Stagnant pools of water have led to water borne diseases e.g bilharzias and malaria which weakens farmers hence lowering their productivity.
- Siltation of canals which calls for regular dredging which is expensive.
- High rates of evaporation has led to salinisation of soils.
- Pest like quelea destroy crop and reduce yield thereby reducing farmers income
- Mismanagement of funds has led to delayed payments to farmers.

d)

- It has helped resettle landless people
- The scheme has opened productivity in former wasteland

- Tenants generate income from horticultural farming which has helped raise their living standards
- Creation of employment for the local people.
- 2001
- There is insufficienat amount of water in River Perkerra and this limits expansion of the scheme.
- The harsh climate and high temperatures in the area hinders production of some variety of crops.
- The scheme is located in remote areas with sparse population limiting market for the produce
- Financial constraints which affects farmer activities.

4. Horticulture is the intensive cultivation of vegetables, fruits and flowers while market gardening is the intensive cultivation of vegetables and fruit for the nearest urban centre.

5.

- Price fluctuation due to over production
- High degree of perishability of the products
- Pests and diseases destroy crops and reduced yield.
- Lack of adequate capital to run the farms

6.

- Mwea Tebere irrigation scheme mitunguu/Ishaaira scheme
- Kibwezi scheme
- Kibirigwi scheme

- Taveta scheme
- Daula scheme
- Bura/Hola Gabole scheme
- Perkerra scheme
- Perkerra scheme
- Bunyala scheme
- A hero scheme

7. Hot and dump climate providing conducive physical conditions for the tsetsefly

   Bush vegetation in the area provides environment preferred by the tsetse fly.

8.

- Clearing of the bush
- Spraying of the bush area from flying aircraft.
- Sterilizing the male fly by curing it to some chemicals substances placed at strategic place
- Killing the host animal
- Creation of consolidated zones
- By using traps

9.

- Sparse population making it easy and cheap to resettle people
- Land availability due to low population tributaries of R. Tana (Thiba, Nyamidi)
- Black cotton soils which retain water longer
- Gently sloping topography enabling gravity flow of water
- Low, unreliable rainfall received in the area make irrigation necessary.

10.

- It causes sleeping sickness in humas
- It causes tryponosomiasis in cattle

11 a) Land reclamation is the process by which unproductive land e.g a desert or a swamp is converted into a useful agricultural land, while land rehabilitation is the restoration or bringing back to its former good condition a land that has been wasted through human negligence.

b)

- To settle thousands of hitherto landless people in central Kenya
- To provide some form of work or political detainees during the state of emergency
- To increase agricultural production aimed at attaining self-sufficiency in food production.
- To harness the rainy season

c)

- Stagnant pools of water have led to waterborne diseases e.g bilhazia and malaria weakens the farmers hence lowering their productivity.
- Siltation of canals which calls for regular dredging which is expensive
- High rates of evaporation which have led to salination of the soils.
- Pests e.g. quela birds attacks the crop thus lowering the yields and farmers income
- Mismanagement of funds has led to delayed payment to the farmers thus lowering their morale.

12.

- There is insufficient amount of water in River Perkerra and this limits the expansion of the scheme.
- The harsh climate and high temperatures in the area hinders the production of some crops.
- The scheme is located in a remote area with sparse population and poor transport and communication network. This limits the market for products.

13. a)

- The schemes have helped in boosting food production thus enhancing self sufficiency.
- Through irrigation farming, many people are employed
- It has helped to resettle landless prople
- Through irrigation, farmers have earned income. Through the direct sales of their produce thus raising their stands of living
- It has opened up remote areas for development by promoting the development of infrastructure and social amenities.

b)

- Siltation of canals
- High rates of evaporation
- Fluctuating regimes of rivers
- Inadequate capital
- Closing up of canals by water weeds
- Presence of waterborne diseases
- Presence of pests and diseases
- Delayed payments

- Low pricing of the crops

14. a)

- Draining in wet and low lying areas
- Planting of vegetation
- Tsetse fly control
- Planting of drought resistant crops in marginal lands

b)

- Draining wet and low lying areas
- Used to reclaim swampy and marshy lands
- Ditches and canals are dug to drain away excess water
- Trees with high water absorption capacity are planted
- River channels are straightened to improve the flow of water.

Planting of vegetation

- Reaforestation and Afforestation programmes are undertaken.
- Reforestation is the planting of trees where they have been cut while Afforestaion is the planting of trees where non existed.

Tsetse fly control

This is done by:

- Bush clearing
- Sterilizing the male fly
- Creation of consolidated zones
- Spraying of tsetse fly infested areas
- Killing of the hot animals

Planting of drought resistant crops in marginal areas

- Marginal areas are transition zones between high rainfall and very low rainfall areas. They receive low rainfall areas. They receive low rainfall.
- In these areas , research has been done in the drought resistant crop varieties e.g sorghum, millet and cassava
- These tend to withstand long spells of no rainfall and mature within the short cycle of rain.
- The marginal areas include Kitui, Turkana, Busia, Baringo etc

15

- It has led to the introduction of farming through irrigation
- It has helped in the control of floods in the area
- It has increased the amount of agricultural land
- Contributed to the improvement of transport systems
- It has increased the amount of agricultural land
- Contributed to the improvement of transport systems
- It has created employment opportunities

- Over 800 hectares of land have been rehabilited and are now being utilized for agriculture
- It has assisted in the control of floods
- The project has enhanced agricultural production

16. a) A low lying land reclaimed from the sea and enclosed by dykes in the Netherlands.

b) Construction of ring dykes and canals

- Construction of ring dykes and canals
- Construction of ditches within each polder which leads water into a pumping station
- Water is pumped out into the canals
- The land is allowed to dry
- The land is allowed to dry
- The soil is improved through desalinization by flushing in with fresh water, planting of hardy plants and additions of soil.
- The polder land is then divided into economic units
- Infrastructure is laid out and people are settled in villages
- Farming activities then commence.

c) Creation of fertile agricultural land

- Control of floods
- Contributed to urbanization
- Production of horticultural products for export has earned foreign exchange
- Provision of fresh water through Lake Yssel.
- Improvement of road transport between
- North Holland and Friesland.

17.

- Methods employed in Kenya are less capital intensive as compared to those Netherlands which is capital intensive.
- More varied methods of reclamation are employed in Kenya while in Netherlands mainly one method is used
- Reclamation is mainly due to insufficient moisture in Kenya while in Netherlands it is due to excess water.