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The Development of Kenya's Land Resources for Agriculture through Irrigation and Drainage

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6. The Development of Kenya's Land Resources for Agriculture through Irrigation and Drainage

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(A) BACKGROUND.

Kenya occupies an area of approximately 582,000 square kilometres. Of this area, only about 13% (about 7.5 million hectares) can be defined as high and medium potential land. Forests cover an additional 1.15 million hectares. The good cultivable land is mainly limited to the western, central and to the eastern parts of the country. It is in these areas that 70% of the Kenyans live, and with the current rate of population growth of nearly 4% per year, there is now little if any, good unused agricultural land in these high potential areas. What this information implies then, is that,

- (1) Kenya's population growth will account for a major share of the growth in the demand for food for many years to come. Besides, unlike good agricultural land, this population growth will steadily increase.
- (2) the limited amount of good agricultural land will be required to meet the food, fibre, timber and paper demands of urban areas and domestic industries in addition to producing export crops and also to meet the needs of the rural population.

(B) THE NEED FOR IRRIGATION AND DRAINAGE PROGRAMMES.

In order to expand Kenya's agriculture, there is need to increase cultivable land for producing additional food and export crops, and for settling people in new land and for creating substantial employment through irrigation and drainage programmes. The following are

some of the arguments that may be easily advanced in support of a move in this direction.

(1) There is already a high constraint on the available good agricultural land while the population is continuing to rise at an alarming rate and thus causing an increase in demand for food.

Both in the short term and medium term, it is possible to raise production per unit area through such measures as improved crop production techniques, better producer prices timely supply of inputs and credit, efficient marketing systems etc. However, one important fact to note is that, all of Kenya's food grain production except rice, is totally dependent on natural rainfall. Therefore, any steady increase in agricultural production cannot be maintained both in the mid and long term if the boundaries of the currently cultivated lands are not expanded by drainage in the higher rainfall areas and if production is not somewhat stabilized and increased by an expansion of the irrigation schemes.

(2) There is a great potential for land reclamation by drainage and flood control in Kenya. It is estimated that there are about 800,000 hectares of land with impeded drainage in Nyanza and Western Provinces and some more in the Tana River delta.

Experience gained in other countries shows that such land can be brought under intensive cultivation by a combination of drainage and flood protection measures at usually less than one half the cost of conventional irrigation development.

Construction of drainage system normally proceeds much faster than irrigation systems and land reclamation usually has a low

foreign exchange component. Unfortunately, inspite of such clear advantages, less than one per cent of the land reclamation potential of Kenya has so far been developed. Therefore, both in the mid term and in the long term, land reclamation programme would be an attractive alternative for Kenya to expand her agricultural land.

(3) The third argument may be based on Kenyas irrigation potential estimates. In 1974 Kenyas irrigation potential was estimated at 200,000 hectares, in 1977, 250,000 hectares, and in 1979, 540,000 hectares. As it can be seen, the figure is likely to be revised upwards in future as more information on hydrology, soils and water potential becomes available.

With only about 26,000 hectares under irrigation, it means that less than 5% of Kenyas irrigation potential has so far been brought under agricultural production. Therefore with the present low level utilization of the available water resources and a high irrigation potential, Kenya has to accelerate her irrigation development programmes in order to open up new lands and increase and stabilize yields and production.

NOTE.

The accelerated irrigation and drainage programme covering the five Five-Year Plan periods, intends to develop 200,000 hectares by flood protection and drainage, and 200,000 hectares by irrigation.