

IRRIGATION STATUS

Irrigation Potential and Achievements

Kenya has an irrigation potential of 539,000 ha that can be increased substantially with water storage and exploitation of the ground water. Out of the total potential, 105,000 ha (19%) have been developed.

Table 1: Irrigation potential and development by basins

Basin	Potential (ha)	Development (ha)
1. Tana	205,000	68,700
2. Athi	40,000	11,000
3. Lake Basin	200,000	10,700
4. Kerio Valley	64,000	5,400
5. Ewaso Ngi'ro	30,000	10,000
Total	539,000	105,800

Compared to other countries, the rate of irrigation development in Kenya has been very low at about 0.5% p.a. Irrigation development for the years 1985, 1998 and 2005 was 52,000 ha, 87,350 ha and 105,800 ha respectively. There is therefore need to increase investment in irrigation development to ensure its accelerated growth and sustainable development.

Categories of Irrigation Systems in Kenya

1. **Private Schemes** comprise schemes that are developed, owned and managed by individual farmers or companies and are run as commercial enterprises.
2. **Public Schemes** are developed and centrally managed by government agencies that give farmers tenancy rights for use of the irrigation facilities for crop production activities.
3. **Smallholder community irrigation schemes** are owned, operated and managed by the farmers through their irrigation water users' associations. They are

developed on a cost-sharing basis between the government, communities and development partners.

By the year 2005, the private, public and smallholder categories accounted for 42,800 ha, 16,000 ha and 47,000 ha of the total irrigation development respectively.

Challenges and constraints in Irrigation development

Development of the irrigation sector in Kenya is still very low as indicated by the small percentage of the developed potential. In addition, a substantial proportion of the developed schemes are performing poorly due to poor system operation and maintenance and weak farmers' organizations. The major constraints and challenges to accelerated irrigation and drainage development include:

(i) Wrong Perception

Many people do not appreciate the potential of irrigation in ensuring increased and stable agricultural production. This has resulted in low prioritisation of the sector in the past.

(ii) Lack of a National Policy, Legal and Institutional Framework

The sector lacks a national policy to guide development and management. The existing irrigation Act that Cap 347 created the National Irrigation Board for the management and expansion of the existing national irrigation schemes.

(iii) Inadequate Public and Private sector Investment in the sector

Irrigation development is expensive with infrastructure development accounting for the major share of the investment cost. The average cost of irrigation development is about Ksh. 400,000 (US \$ 5,500) per hectare excluding water storage.

(iv) Inadequate development of irrigation infrastructure and water storage facilities

The national annual renewable fresh water resource is 20 billion M³ out of which only about 4.7 billion M³ is used annually with irrigation accounting for approximately 75%. Despite the high demand by irrigation relative to other uses, construction of water storage

facilities for the irrigation development has been negligible. Indeed, Kenya is classified among the poorest countries in terms of surface water storage.

(v) Weak Irrigation Water Users' Associations (IWUAs)

Strong and functional farmer-based institutions are a pre-requisite for sustainable management of the irrigation schemes. The weak irrigation water users' associations have contributed to the poor performance of the schemes.

(vi) Inadequate support services

Support services such as irrigation extension and marketing are necessary for profitable and sustainable irrigation development. Poor rural infrastructure has adversely affected the development and growth of the sector.

On-Going Water and Irrigation Sector Reforms

(i) National Irrigation Policy

At present, there is no national policy for irrigation development. There are however various Acts of Parliament that give various organizations mandate to undertake irrigation activities. These include Irrigation Act Cap 347, TARDA Act Cap 443, CDA Act Cap 449, ENNDA Act Cap 448, KVDA Act Cap 441, LBDA Act, and ENSDA Act and Agriculture Act Cap 318. This has resulted in uncoordinated irrigation development often with duplications and conflicts.

The Ministry of Water and Irrigation has initiated the policy formulation process and has come up with a draft policy document. The outstanding activities are:

- 1 Stakeholders' consultations,
- 2 Preparation and discussion in parliament of the Sessional paper on irrigation,
- 3 Development of strategies to implement the Sessional paper,
- 4 Development and enactment by Parliament of the legal framework to implement the proposed strategies,
- 5 Sensitisation of the stakeholders on the reforms in irrigation sector, and
- 6 Implementation of the proposed reforms in irrigation