

KENYA



Source: esri

General

Kenya - officially the Republic of Kenya - is bordered by Tanzania in the South and Southwest, Uganda in the West, South Sudan in the North-west, Ethiopia in the North and Somalia in the North-east. Kenya covers 58.1 Mha (million hectares) with, in 2024, a population of 56.4 million, or 0.97 persons per ha (Wikipedia and United Nations, 2024).

Climate and geography

Kenya has a warm and humid tropical climate on the Indian Ocean coastline. The climate is cooler in the savannah grasslands around Nairobi, and especially closer to Mount Kenya. Further inland are highlands in the Central and Rift Valley regions. In the West there is an equatorial, hot and dry climate which becomes humid around Lake Victoria. The north-eastern regions along the border with Somalia and Ethiopia are arid and semi-arid areas with near-desert landscapes (source: Wikipedia).

Kenya lies on the equator and overlies the East African Rift covering a diverse and expansive terrain that extends roughly from Lake Victoria to Lake Turkana and further south-east to the Indian Ocean (source: Wikipedia).

Existing polders

In the Kano Plain the Ahero Pilot Polder (800 ha) was developed for the cultivation of rice in the early 1960s. This was followed in 1970 by the Kano II Polder (1,000 ha) (Group Polder Development, 1982). The areas where these polders most probably are located are shown in Figure 1. At Google Earth other parcellations are shown that give the impression that there are more polders in this region. This still has to be verified.



Figure 1. Aerial view of the area where most probably the Ahero Pilot Polder and the Kano II Polder are located (source: Google Earth)

General characteristics of the polders in Kenya are shown in Table I.

Proposed polders

There have been plans to develop polders in the Yala Swamp (Group Polder Development, 1982). However, as far as can be traced no actual reclamation has taken place.

There has also been a plan for irrigated rice polders in the Delta of Tana River (Group Polder Development, 1982). Appel and Vierhout (1993) described that there has been a plan to develop 10,000 ha rice farm and that during 1981 and 1982 a detailed feasibility study has been carried out. However, as far as can be traced no actual reclamation has taken place (Figures 2 and 3).

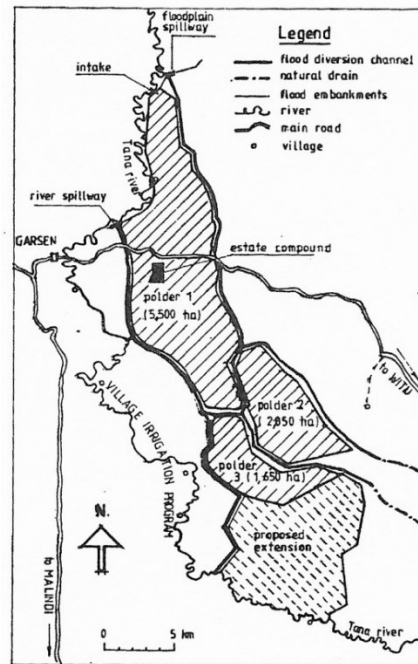


Figure 2. Schematic lay out of the proposed rice polders in Tana River Delta (Appel and Vierhout, 1993)

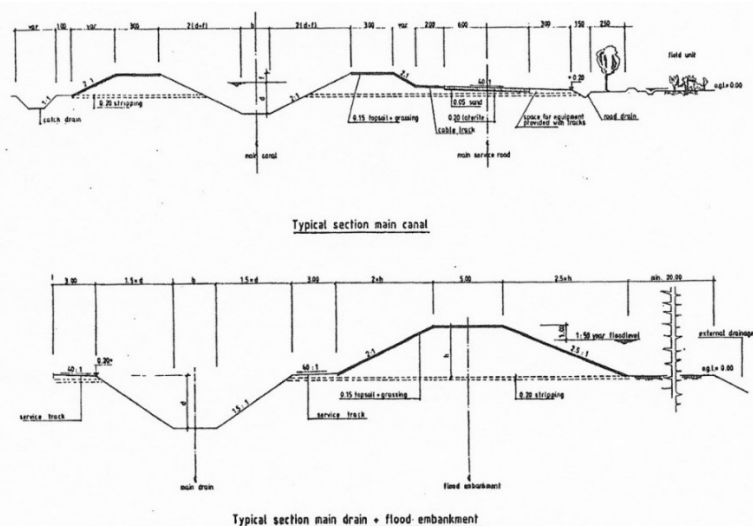


Figure 3. Typical cross-sections of the proposed rice polders in Tana River Delta (Appel and Vierhout, 1993)

In 2012 the report *Tana River Delta. Land Use Plan Framework 2012* was published (Ministry of Lands in collaboration with the Office of the Prime Minister, 2012). In 2014 the Tana River Delta land use plan was published (Odhengo *et al.*, 2014). Based on this plan it is unclear if really polders will be made in the Tana River Delta.

Location of the polders in Kenya as shown on the World polder map

The location of the polders at Ahero in Kenya is shown in Figure 4.

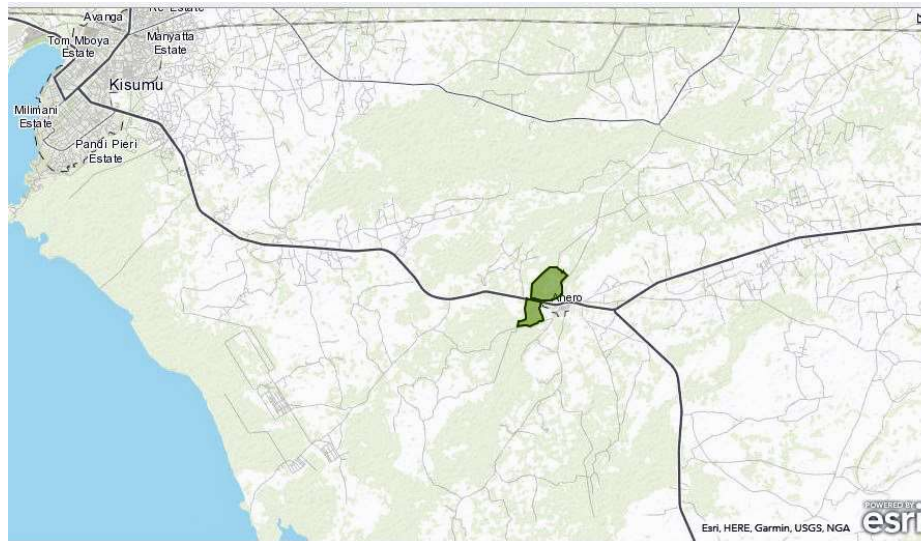


Figure 4. Location of the polders at Ahero in Kenya (source: esri – Batavialand)

References

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Table I. General characteristics of existing polders in Kenya

Name	Reclamation	Area in ha	Type *)	Latitudes	Longitudes	Elevation in m+MSL	Land use
<i>Existing polders</i>							
Ahero Pilot Polder	1960	800	RLL	0° 10' S	34° 54' E	1,152	Agriculture, rice
Kano II Polder	1970	1,000	RLL	0° 9' S	34° 54' E	1,155	Agriculture, rice
Sub-total		1,800					
<i>Proposed polders</i>							
Tana River Delta		10,000					Agriculture, rice
Sub-total		10,000					
Total		11,800					

*) RLL = reclaimed low-lying land; LGS = land gained on the sea; DL = drained lake

Table II. Characteristics of the water management and flood protection system

Name	Design criteria in chance of occurrence/year						
	Water management					Flood protection	
	Drainage				Irrigation	Rural	Urban
	Type	Design criterion	Percentage of open water	Discharge capacity			
m ³ /s				mm/day			
Ahero Pilot Polder	RLL						
Kano II Polder	RLL						