

POLICY MAKING CASE STUDY AND GROUP EXERCISE

CONTEXT: FLOOD MANAGEMENT FOR LAKE VICTORIA BASIN, KENYA

1.0 BACKGROUND

1.1 Lake Victoria Basin

Lake Victoria has a total catchment area of 194,000 sq km shared between five countries- Uganda, Rwanda, Burundi, Kenya and Tanzania. The lake receives inflows from four major rivers: Nyando, Yale, Sondu and Nzoya and several other streams of Kenya with a total catchment of 12,700 sq km. The catchment areas are highly degraded due to cattle grazing, deforestation and other human activities. The area is also impacted by frequent droughts. As per the recent studies, it is projected that the area will be subjected to more extreme conditions, giving rise to more frequent and intense droughts and floods.

1.2 Resources

1.2.1 Livelihood Sources:

65 percent of the land in the basin is available which gets good rainfall. More than 4.2 million people are engaged in agriculture, 2.3 million in livestock farming and 21,500 in fishery in small ponds.

1.2.2 Water Availability and Requirement

There are no surface storages in the region. Present water availability in the region is 2.72 BCM and the requirements up to 2025 are of the order of 2.1 BCM. However, in order to address the seasonal variations in surface water availability, it would be necessary to adopt water storage (dams/reservoirs) and conservation measures together with demand management and economical use of water. The irrigation facilities are virtually non-existent.

1.2.3 Rural and Urban Development

There are no industrial or any other economic activity in the region to provide alternative livelihood opportunities on large scale. Rural poverty is high ranging from 53 percent to 69 percent. Rural over population is the main problem. Infrastructure and employment opportunities in urban areas are also not adequate to attract migration from rural areas. Electricity supply is limited to big towns. The road network in the area is inadequate and practically absent in rural areas.

1.2.4 Future Development Imperatives

The main focus areas of the Government are:

- Integrated water Resources Management (IWRM) as a key strategy for development of water
- Improving the physical and social infrastructure
- Cash crop development and promotion
- Expansion and modernization of livestock farming and fisheries

1.3 Floods and their Impact

Flooding of low lying areas is caused by over bank spills of the main rivers and other streams. The situation is aggravated by the back water effect of the rising lake level.

The flood impact ranges from loss of human lives and livestock to wide spread destruction of Crops, damage to houses and public utilities and disruption of various economic activities.

The worst affected are the poor who inhabit the flood plains and riverine lands and are engaged in agriculture, livestock farming and fishing. Because of poverty, lack of education and poor rural infrastructure, they are the most vulnerable to floods and post-flood consequences. In make shift relief camps, due to unhygienic conditions and lack of security they are exposed contagious and sexually transmitted diseases. Often women and young girls are the worst suffers.

Pollution of drinking water sources, displacement of wild life, cutting down of trees for fire wood around relief camps, silting of river beds are the major environmental impacts of floods.

Floods also cause financial impact in the form of direct annual damage of about US\$ 850,000 and relief expenditure of about US \$ 600,000

1.4 Existing legal instruments addressing related Flood Management issues

1.4.1 The Water Act-2002

It provides for

- Catchment Management Strategy
- Addressing the weaknesses in flood management system
- Land acquisition for state scheme

1.4.2 Forest Act

There is no specific provision to facilitate flood management

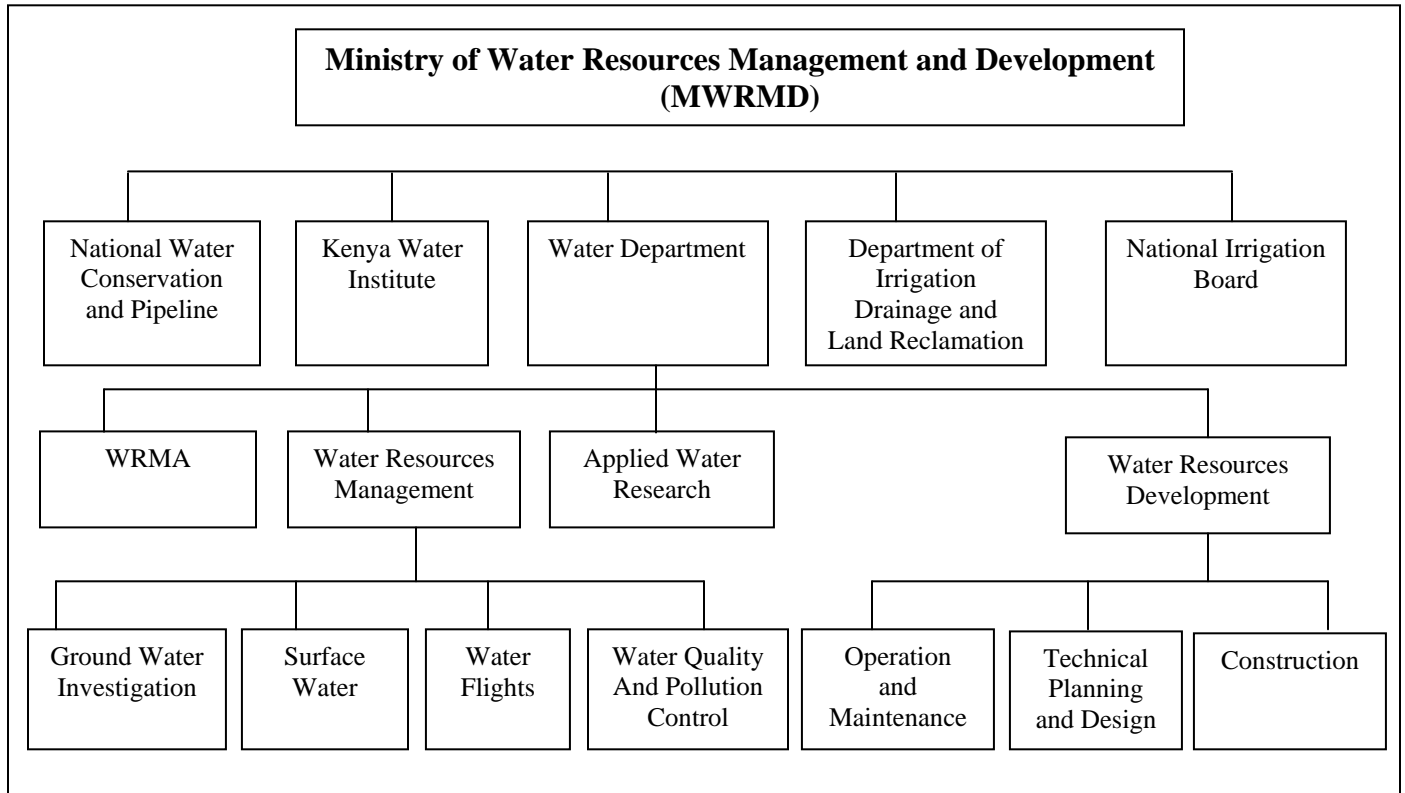
1.4.3 The agriculture Act

There is no specific provision of land development and crop production in flood prone area

14.4 Environmental management Act- 1999 (Part-V)

Has specific provision for protection and conservation of environment in respect of rivers, lakes and wetlands.

1.4.5 Institutional Arrangements



There is no dedicated unit to deal specifically with flood management

Other related Institutions

- (i) Ministry of Regional Development
- (ii) River Catchment Development Authorities
- (iii) Ministry of Energy
- (iv) Ministry of Agriculture
- (v) Ministry of Environment, Natural Resources and wildlife
- (vi) Disaster operations center – office of the president
- (vii) Kenya Meteorological Department (KMD)
- (viii) Drought Monitoring Centre – Nairobi
- (ix) No-governmental and Community organizations.

Problem areas: Though there are various institutions at the national, provincial, district and local levels, there are many problem areas such as the following, that need to be addressed:

- Farmers are poor as production is low and the prices of farm production are not remunerative due to open market mechanism
- Over population in flood plains
- Though the area affected by flooding is large there are only a few isolated flood protection works (levees) are in dilapidated condition as there is no institutional mechanism for their routine repair and maintenance
- Only rainfall warning system of KMD which has communication link with Disaster Operation Centre
- No organized system of O&M of hydrological observation stations and no flood forecasting system
- No River Basin organization for IWRM/IFM
- Weak linkage between MWRMD and Disaster Operation Centre which deals with rescue and relief operation during floods
- No mechanism for exchange of data between different stakeholders
- No mechanism for flood damage assessment
- No criteria/guidelines for planning and design of flood protection works
- Village Communities are not involved in rescue and relief operations
- No control/regulation of activities in flood plains or any kind of flood proofing measures in vogue

Exercise: Based on the above situation and the information provided,

1. Develop the flood management policy objectives,
2. Suggest an institutional (organizational) arrangement specifying roles and responsibilities.
3. Develop Flood Policy for the area including
 - a. various action points (at least 15) by the line department
 - b. actions points for the other related departments directly or indirectly associated with flood management, and

Please present your results in form of a **Power Point presentation** of no more than 15 minutes duration. **Suggested timing:** you may like to use the time up to the lunch break to discuss and proposed your result. After lunch maximum half an hour is available to finalize the Power point.

Note: The action points may be categorized under the five key elements of IFM as brought out in the IFM Concept Paper (P 18) available in your training package.