ETHIOPIA: INTEGRATED FLOOD MANAGEMENT

1. Location of the study: Ethiopia

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3. Brief description of flood management practice

Ethiopia has a land area of about 1,100,000 km2 and a population of 65 million. The country has an annual flow from its rivers amounting to 122 billion m3. All of this is generated within its borders and goes across to other countries. As the topography of the country is rather rugged with distinctly defined watercourses, large scale flooding is rare and limited to the lowland flat parts of the country. However, intense rainfall in the highlands causes flooding of settlements in a number of river basins. Finally, torrential floods are also produced in Addis Ababa and in another main city.

The main flood control and management activity being carried out is in the Awash River Basin, which has the largest level of development and has a surface area of about 113,000 km2. Close to 70% of the country’s large-scale irrigated agriculture is located along the Awash River. Before the construction of a dam in the late fifties, widespread flooding along the river was common. The construction of reservoirs and flood protection schemes during later years, in addition to the primary purpose of irrigation water and the production of electric energy, have provided flood protection to the upper and middle Awash areas.

The Ethiopian Water Resources Management Policy (WRMP) has been adopted by the government only recently. Master plans are being developed, and implementation will follow when these are completed. The WRMP gives priority to grass-root participation in integrated water resources development and management. Furthermore, that “water resources development shall be underpinned on rural centered, decentralized management, participatory approach as well as integrated framework, etc…”

The national Water Sector Development Program (WSDP), drawn up for a 15-year period, is primarily for the development of irrigated agriculture, hydropower generation and drinking water supply and sanitation. The question of flood management forms part of the integrated water resources development.

4. Key issues

In the context of the Ethiopian Water Resources Management Policy, flood management is viewed as an integral part of an Integrated Water Resources Management. However, it is not at an advanced stage, and flood management has not been treated separately on a sustainable manner in the country.

Any development such as large-scale irrigation, which takes up grazing land, has to provide alternative grazing area for the livestock displaced from the developed area. No development that ignores the local population should be expected to succeed.

5. Relevance to the concept of IFM

The study covers the following aspects of IFM to varying extents:

Integration of land and water management

Aspect 2 - Land and water management
Integrated river basin management approach to flood
Participatory approach

Aspect 7 - Community-based approach

Integrated hazards impact mitigation

Flood plain maps and zoning

6. Comments

(i) Potential strong points of the case study

- A good description of flood management schemes established

(ii) Potential for practices mentioned to be transferred/applied to other regions with geophysical and socio-economic characteristics

- The description of the steps taken for the preparation of the WSDP with input from regional representatives