

PROJECT PROFILE

<u>Sector</u>	Agriculture
<u>Sub-sector</u>	Fisheries
<u>Code</u>	AG 35(A & B)
<u>Title</u>	Water Hyacinth Programme
<u>Implementing Agency</u>	Ministry of Agriculture, Animal Industry & Fisheries
<u>Location</u>	Lakes Victoria, Kyoga, Albert, Nile Basin and Kagera river
<u>Total Plan Exp.</u>	US\$ 3.99m
<u>Funds Secured</u>	US\$ 3.99m
<u>Funding Gap</u>	Nil
<u>Start Date</u>	1992
<u>Completion Date</u>	2002

Background

Uganda is endowed with large water-bodies which have rich stocks of fish. During the late 1980s it was discovered that water hyacinth (*Eichhornia Crassipes*) had invaded and was fast colonising the water systems, especially lakes Victoria, Kyoga and River Nile. Water hyacinth is recognised as an environmental and socio-economic menace in our waterways. Infestation by water hyacinth is detrimental to water quality, aquatic biodiversity (life in water), fish production, water transportation, domestic water purification processes, hydro power generation, tourist and recreational attractions, public health etc. Formally rich near shore fishing grounds are being rendered unproductive due to the presence of massive mats of the water weed. The rapid spread of water hyacinth may be accompanied by a resurgence of disease such as schistosomiasis whose vectors may flourish in shallow water environments similar to those infested by the weed.

Objectives

- i) Exterminate water hyacinth from Ugandan waters.
- ii) Track and document the spread of water hyacinth in currently infested environments and to new areas.
- iii) Assess the impact of the spread of water hyacinth on aquatic resources and on socio-economic activities in the affected areas.
- iv) Rear large numbers of proven biological control agents and systematically release them into infested environments.
- v) Monitor and evaluate the biological control process.
- vi) Locate and study native biological agents which feed on/damage water hyacinth and assess their control capability.

Expected Outputs

- Improved knowledge base on ecological impacts of water hyacinth proliferation, technology packages and policy recommendations on control of the weed and management of the fisheries resources in the presence of water hyacinth.
- Water body freed from the water hyacinth.

Performance Indicators

- Acreage of water body freed of water hyacinth
- Improved quality of water for the shoreline communities.
- Increased yield of fish from inshore grounds
- Reduced cost of hydropower generation due to reduction in fouling of power generation infrastructure by water hyacinth.
- Improvement in distribution range and diversity of aquatic biodiversity.

Technical Description

The programme focuses on controlling further spread of the weed using an integrated approach of manual removal, mechanical, biological and chemical control options. Whereas application of the chemical control option is still a policy issue awaiting formal GoU clearance, and thus it is currently being tried on a test trial basis at selected sites in the country's

inland water bodies. the other control options are already firm on the ground and are showing positive results.

AG 35(A): Eradication of Water Hyacinth. Through the project harvesters for mechanical removal of the weed will be purchased. The Fisheries Department of MAAIF supervises the operation of removing and burning the weed on land. In addition, the RCs mobilise the fishing communities to collect the water hyacinth on a self-help basis.

AG 35(B): Water Hyacinth Research consists of two components:

- a) spread and environmental impact of this noxious weed; and
- b) biological control, research, monitoring and evaluation of the control process. This project is executed by both the Fisheries Research Institute (FIRI) and Namulonge Agricultural Research Institute (NARI). A 1991 FAO study favoured biological control as an effective method to reduce the spread of water hyacinth. It also recommended that the effectiveness of this method is likely to be enhanced by integrating it with site-specific mechanical or chemical methods. FIRI has since 1988 carried out limited surveillance of the distribution of the weed on Lakes Kyoga and Kwanja and since 1992, on Lake Victoria.

Feasibility Studies

FAO financed a study in 1991. The report highlighted the urgency of putting in place effective measures to control the weed. A pilot project to initiate biological control of the weed on Lake Kyoga was executed during 1992/93. The project was funded by IFAD/World Bank to the tune of US\$ 108,185 under the now ended Agricultural Development Project. AG 04(A).

Financing

For the past three years GoU has been funding the project. However, the Egyptian Government has now agreed to provide a grant of US\$ 13.9 million to cover activities of AG 35(A). GoU will continue to provide counterpart funding and will fund AG 35 (B).

Plan of Operation

The programme will execute the following activities:

AG 35(A):

- Continue distributing implements like forked hoes, wheelbarrows, boats, gumboots and gloves in the affected districts
- Receive and commission the harvesting equipment from Japan
- Intensify the manual/mechanical control activities.

AG 35(B):

- Development of capacity to mass rear and release biological control weevils on Uganda's inland water bodies.
- Monitor impact of biological control of water hyacinth on lake Kyoga
- Improve maintenance of the parent stock centre of biological control weevils at NAARI.
- Continue with chemical control research activities already initiated at Kajjansi.