

PROJECT PROFILE

<u>Sector:</u>	Agriculture
<u>Sub-sector:</u>	Research
<u>Code:</u>	0382 - AG28 (8)
<u>Title:</u>	Support for National Agricultural Research Organisation (NARO).
<u>Implementing Agency:</u>	NARO
<u>Location:</u>	Various
<u>Total Plan Exp.</u>	US\$25.5m
<u>Funds secured:</u>	US\$ 25.5m
<u>Funding Gap:</u>	Nil
<u>Start Date:</u>	2001
<u>Completion Date:</u>	Unknown

Background

NARO operates through 9 research institutes, 12 zonal Agricultural Research and Development Centres (ARDCs) and a Secretariat. Government of Uganda (GOU) and donor support will cover following activities: banana, potato, artemisia annua, cotton, coffee, livestock and capacity building.

Uganda is ranked as the world's second biggest banana producer after India, producing about 9.9 million tonnes per year (FAO, 1998). However, banana production is threatened by banana bacterial wilt (BBW) disease. Most of the recommendations that have been made on controlling the disease are based on information obtained from literature on banana wilt management in Latin America and Asia. There is need to evaluate their efficacy as well as develop new control measures and to generate knowledge on the epidemiology of the disease.

Currently, the per unit average production of potato (*Solanum tuberosum* L.) is 7 MT/Ha compared to 13 MT/Ha for the developing countries. Among the main constraints to potato production and utilisation in Uganda are, high costs, low quality seed, poor management of pests and diseases and insufficient supply of clean seed which has led to the current increased use of home-saved, unclean sprouted potato of low yielding traditional varieties. There is therefore need to enhance seed potato production.

Artemisia annua (sweet wormwood) is used in the production of Artemisinin-based treatments such as Coartem, which fight drug-resistant falciparum malaria, the deadliest form of the disease that causes as many as 400 million infections and at least a million deaths a year. The World Health Organisation (WHO) gauges demand for Artemisinin-based treatments at about 130 million treatments in 2006. In East Africa, there is potential for cultivating artemisia-annua due to the favourable weather and it is believed that produce in East Africa is of a higher quality than what is cultivated in China and Vietnam. A Swiss firm, Novartis, has established a close partnership with Kenya-based East African Botanicals Group to significantly boost cultivation of artemisia annua and extraction of artemisinin to more than 1,000 hectares in Kenya, Tanzania and Uganda. In Uganda, a factory is already in operation and efforts are under way cultivate herb. However, being a relatively new plant in the country, conducting extensive research on it is imperative.

Cotton production declined since 1960 due to economic mismanagement which interfered with its production, marketing and research. Subsequently, farmers have been substituting cotton with more paying crops, hence the need to revive cotton production.

Coffee is the most important economic crop in Uganda, directly sustaining the livelihoods of at least 10% of the Ugandan population. Production of coffee has declined in recent years mainly due to coffee wilt disease (CWD) that has destroyed 10 million trees (i.e. about 3%) since its appearance in 1993.

Livestock production has traditionally been confined to the smallholder sector whose production has been low because of poor husbandry practices, diseases and pests and low yielding livestock breeds.

Objectives

To generate and disseminate high-yielding and pest and disease resistant crop and livestock technologies

To develop and disseminate pest and disease control interventions

To ensure optimum infrastructure and adequate resources (financial, human and physical) for technology and information generation and dissemination

To build institutional capacity to manage research and outreach activities

Expected Outputs

Crops and livestock technologies which are high-yielding and resistant to pests and diseases generated and disseminated

Interventions for the control of crop and livestock pests and diseases developed and disseminated

Infrastructural rehabilitation done and adequate resources available in the research institutes, ARDCs and the Secretariat and buildings constructed for the ARDCs.

Research management capacity improved

Performance Indicators

Number of high-yielding and pest and disease resistant crop and livestock technologies developed and disseminated

Number of pest and disease control interventions developed and disseminated

Number of staff trained in various areas and MIS infrastructure purchased and operational

Infrastructure rehabilitated and constructed.

Technical Description

The project consists of the following activities: conducting surveys, laboratory work - collection and screening of germplasm for resistance to pests and diseases, development of pest and disease management options, multiplication and distribution of crop and livestock varieties, training stakeholders, rehabilitation and construction work, resource development and external relations, resource management, institutional capacity building and information technology.

Feasibility Studies

The coffee and animal production programmes have had feasibility Studies carried out.

Financing

The project is jointly financed by GOU and IDA. For the FY2005/6 GOU will contribute US \$ 5.041 million and IDA US \$ 7.584 million.

Plan of Operation

The research institutes, ARDCs and the Secretariat in association with a number of development partners will implement the project.