

Improvement of Water Management

The Government of The Gambia's Poverty Reduction Strategy (PRSP), the National Medium-Term Investment Programme (NMTIP 2005), the Agriculture and Natural Resources Policy (ANRP) and the Gambia National Agricultural Investment Programme (GNAIP) provides the basis for the development of national and regional programmes to overcome the challenges that constrain the development of agriculture in The Gambia. The challenges are clearly interdependent and require a concerted action. The GNAIP combines policy, institutional, infrastructure and technology related measures to address the multiplicity of supply-side constraints to enhance the growth potential of The Gambia's agriculture. The GNAIP would integrate on-going programmes and projects into this framework and take on the role of a national programme for food security. The overall objective of the GNAIP is to increase the agriculture sector's contribution to the national economy by increasing productivity through commercialization and active private sector participation predicated on a sound national macroeconomic framework aimed at enhanced growth and poverty reduction. The programme will facilitate and strengthen the productive capacities of small and medium scale farmers to create enabling environment to promote large scale farming and development of agribusiness, and facilitate access to markets and value addition for a selected range of commodities such as rice, livestock, groundnuts, millet, sesame, cashew, fish and horticulture. A key performance indicator is an increase in agriculture sector growth from its current estimated 26% to 60% per annum by 2015 to enhance the incomes and food security status of the producers.

The GNAIP focuses on the following key programmes:

1. **Improvement of water management**
2. Improved management of other shared resources
3. Development of agricultural chains and market promotion
4. Prevention and management of food crises and other natural disasters
5. Sustainable farm management
6. Institutional capacity building for programme implementation

Outcomes and Objectives

The overall objective of the Improvement of Water Management program is to ensure food security and rice self-sufficiency in the Gambia by cultivating 25,000 ha through the employment of appropriate, sustainable and environmentally friendly water management techniques and cultivation practices.

Specifically, the program seeks to: consolidate all areas developed for rice production by rehabilitating infrastructure and machinery; intensifying production; developing and crop tidally irrigable areas suitable for rice production; improving access and promoting rice production in seasonally saline tidal swamps; improving water retention and promoting rice production in natural depressions, transition zones, and back swamps, and promoting rice production in the uplands through the introduction of improved rice varieties,

Estimated cost

The total cost of the programme is estimated at US\$ 38,044,000.

SUB-PROGRAMMES

I. LAND DEVELOPMENT

Objective: To provide in each region, a multi-disciplinary land development team, and appropriate machinery to support the development of water control structures specific to crop production and water management strategy adopted for the area in order to boost rice production in the country.

Activities:

- i) Provision of water retention dikes, anti-saline dikes, flood protection dikes, conveyance systems, and field and plot bonds;
- ii) Construction and installation of tidal gates and other flow control structures;
- iii) Land leveling for flood irrigation; and
- iv) Installation of pumping machines and accessories.

¹This brief summarises the specific objectives, activities, and funding requirement for **Programme I: Improvement of Water Management**.

2. MECHANIZATION

Objective: To capacitate the Regional Directorates of Agriculture to address the drudgery involved in crop production, especially rice. The regions will be provided with machinery and equipment required for the major crop production and processing operations. The regional mechanical services will be further strengthened with workshop tools and equipment to facilitate repair and maintenance of the farm machineries.

3. IRRIGATION

Objective: To provide nationwide the design of improvement of water management structures, and explore opportunities for increasing water supplies and availability for crop production and also for livestock watering. In addition, these structures facilitate effective utilization of run-off for crop and livestock production whilst reducing erosion and the resultant degradation.

Activities:

- i) Rainwater harvesting,
- ii) Runoff agriculture, underground water; and surface water irrigation.

- iii) Increase storage and improve water retention capacity of the numerous pools that exist in and around the production areas, especially the back swamps of Central River and Upper River Regions and transition zones countrywide.

4. CAPACITY BUILDING AND SUPPORT SERVICES

Objective: To lay the foundation for effective implementation and sustainability of its positive impact/gain by targeting farmer beneficiaries, implementation staff and service providing institutions. Interventions will address the institutional constraints impeding the realization of intended increased rice production in the country.

Activities:

- i) Training of farmers
- ii) Training of operators and mechanics
- iii) Research and Extension
- iv) Capacity building of Basin Authorities/Agencies.

Table I – Indicative budget for programme I: Improvement of water management

Sub-Programmes	Total US\$	Estimated Government Contribution	Current Estimated Gap
Capacity building	5,970,000	597,000	5,373,000
Irrigation and mechanization	14,174,000	1,417,400	12,756,600
Land development	13,400,000	1,340,000	12,060,000
Introduction of bio-saline agriculture	2,500,000	250,000	2,250,000
Infrastructure and support services	10,000,000	1,000,000	9,000,000
Initiation of pilot year round certified seed production	12,000,000	1,200,000	10,800,000
Land and Water Resources Survey and Monitoring	5,000,000	500,000	4,500,000
Programme Total	63,044,000	6,304,400	56,739,600