# Terms of Reference for the National Expert Water Supply and Irrigation Engineer

### **Background:**

The United Nations Department of Economic and Social Affairs (UN/DESA) is implementing the Project "Managing Water and Energy Services for Poverty Eradication in Rural Gambia" which adopts a holistic approach to promoting human security and reducing poverty in five large villages of The Gambia. Towards this aim, the project combines infrastructure development and natural resources management with principles of local capital formation at the community level. The project has three main components. The first component aims at expanding the existing water supply and energy systems to generate surpluses after meeting the basic demand. Second component will supply the surplus resource (that is available after meeting the basic demand) on a demand basis to generate and promote economic activities. These two components will lead to the emergence of a number of service providers and small scale entrepreneurs. Their capacity building will be the focus of component 3 to reinforce the interventions made under the first two components. Already existing community-based structures in the form of VDCs will be further strengthened. All three components are inextricably linked and mutually supportive from the start of the project. Existing community-based mechanisms and organizations will be strengthened by ensuring community involvement in the implementation of all three components. To support the implementation of planned project activities, the UN DESA would like to fill the post of a National Water Supply and Irrigation Engineer.

#### **Duration:**

One year with possibility of extension for another year.

# **Duty Station:**

Banjul, with frequent travel to project sites in The Gambia.

# **Key Functions:**

Assessment of future water demands, expansion of water supply systems, potential for agricultural activities, training of local communities, irrigation technologies, agricultural marketing, and cooperative farming.

#### **Responsibilities:**

Under the overall supervision of the Project Manager and UN DESA Task Manager for the project, and working in close collaboration with other experts/consultants, the expert will undertake the following specific duties:

- 1. Contribute towards the analysis of general physical conditions of the five selected villages, in terms of water resources (assessment of excess of water available once the drinking and domestic needs have been met);
- 2. Work with the VDCs for the selection of land to be irrigated, based on the soil properties and land tenure characteristics that would sustain traditional and possibly new crops;

- 3. Design the water extensions schemes starting from the main storage tanks to the fields, prepare the specifications of equipment required and supervise the equipment acquisition and the subcontract for construction of these extensions, with in-kind support by the communities;
- 4. Design and conduct training on water use and agronomic practices to the community-based organizations and carry out the diffusion of small-scale irrigation techniques through local NGOs, VDCs and women's organizations for the development of irrigation schemes;
- 5. Contribute to the technical strengthening of existing water committees, and work with the VDCs on designing a realistic and appropriate fee structure and collection mechanisms to ensure maintenance of the irrigation schemes and of access to water, including the drinking water supply and sanitation schemes;
- 6. Follow-up with the community organizations, once the irrigation schemes have been made functional, to create conditions for promotion and expansion of income-generating activities including marketing of products;
- 7. Develop a systematic database to store and process information on water resources and water supply of the villages;
- 8. Prepare and update work plans for the water supply in close co-ordination with the community groups, the Project Manager and the National Project Coordinator;
- 9. Assist in the preparation of TOR for subcontracts for expansion of systems, as well as monitoring the execution of these subcontracts; and
- 10. Prepare semi-annual (six month) progress reports in the area under his/her responsibility;

# **Required Qualifications and Experience:**

The candidate should hold an advanced degree in fields related to water resources management, and water supply schemes, notably as they relate to agricultural use. Experience in working at the community level is an essential requirement of the post. Familiarity with the UN project implementation rules will be an added advantage. The incumbent should be fluent in English as well in local language with excellent report writing capabilities. At the end of the assignment, the expert is required to prepare a final report with a detailed account of all activities undertaken and recommendations and suggestions he/she considers most appropriate for the institutionalization of the functions performed under the project at government/community levels. This post is open only for the Gambian nationals.