

REPUBLIC OF UGANDA



Food Security within the Water-Food-Energy-Ecosystem Nexus in Sub-Saharan Africa

Design Workshop,

18th -19th May 2016 Addis Ababa, Ethiopia

Proposal

by Florence Grace Adongo (Chair UWP) & Eng. Richard Cong(MWE)



2: GLOBAL PROJECTIONS

Global Water Scarcity



3: Uganda's Water Resources

- Recent WR Assessment studies (2011)by DWRM reveals
- WR reduction by 34% in 16 years
- 69% Renewable WR is transboundary (From Upstream)
- ▶ 31% (13.6 billion m3/year is the internal renewable WRs
- Annual rainfall 500 -2000mm
- ▶ 80% of Uganda is rainfall deficit



Source: DWRM/MWE 2011

4: Challenges

(a) Water Resources

- Unevenly distributed (spatial variation)
- 100% trans-boundary
- Catchment degradation and Water Pollution is on increase
- Impact of extreme weather events arising from climate change (frequent incidences of floods, droughts, landslides and waterborne diseases)- temporal variation
- Fragmented planning/interventions
- Inadequate investments
- Increasing Population hence increasing water-food-energy demands

4: Challenges (cont'd)

(b) Water-Food and Nutrition

• 80% of Ugandans depend on rain-fed agriculture with only 0.5% irrigation potential area under irrigation.

Consequently,

- 2.3 million young children are chronically malnourished
- 16% of children below 5 years are underweight
- 6% of the children wasted
- 12% of women are malnourished
- Frequent famine

(c) Water - Energy

- Main energy source is from Hydropower generation
- 14% of Ugandan are connected
- 34% of embodied water use is for manufacturing
- Most water supply and sewerage systems use electricity
- Untapped renewable energy -solar and wind

5: UGANDA - Vision 2040

"A transformed Ugandan society from a peasant to a modern and prosperous country within 30 years"



Required

 Uganda should be able to exploit and use its resources gainfully and sustainably.

Some of the Key Interventions

- The Vision 2040 identifies key projects that need to the address including large irrigation schemes across the country
- Target for the Irrigation is to develop 1.5 million hectares

6: Water - Food – Energy – Ecosystem Nexus



7: Justification for Proposal

- Uganda's agriculture sector
 Contributes 21 % of GDP
 Provides 70% of employment
 90 % of total export earnings
 72% of women engaged in Agriculture
- The agricultural production in Uganda is over dependent on rain
- Water is a key ingredient (48% input) in Agricultural production and productivity.- a case for Uganda
- Irrigated agriculture is only 0.5%
- Fragmented/ sectoral plans

8: Proposed Project: 8.1 Component 2: Catchment Management and Development Plan

- Proposal: Catchment management and development plans within the Upper Nile and Kyoga Water Management Zones
- Focus:
 - Enhance equitable allocation and efficient use of water resources
 - Community resilience and livelihood from extreme weather events-floods and droughts, etc.
 - Targeting women, youth & Persons with disability
 - Promote food and water foot prints.
- Approaches:
 - Stakeholder engagement based on Catchment –based IWRM
 - Capacity building needs
 - Partnership strengthening



8.2: Component 5: Solar Powered Irrigation in Uganda

- **Proposal**: Piloting solar powered irrigation in Eastern and Northern Uganda
- Focus: Small scale farmers and model farmers
- **Approach**: promoting partnerships PPP (MWE/MAAIF, Private sector, CSOs and Universities)
- Enhance food security, water use efficiency, employment for youth and women
- Capacity building technological, institutional & value chains
- Knowledge platforms

9: Project Cost

	Sub-Projects	Amount (Euro) '000
1	Catchment management and Development plan	200
2	Solar powered irrigation	300
	TOTAL	500

10. Implementation Arrangements

Multi-sectoral approach:-

- Central and Local Governments
- Communities
- Universities
- Private Sector
- Civil Society (NGO/CBOs)

THANK YOU For your attention





