



THE REPUBLIC OF UGANDA

MINISTRY OF AGRICULTURE,  
ANIMAL INDUSTRY AND FISHERIES  
MINISTRY OF WATER AND  
ENVIRONMENT



National Consultations on Water, Food Security and Nutrition

Final report of National Consultation on  
Water, Food Security and Nutrition

Uganda  
August 2015



[www.gwp.org](http://www.gwp.org)

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## Highlights of the Uganda report

The National Consultation workshop on Water, Food Security and Nutrition in Uganda was held on the 28<sup>th</sup> July 2015. The workshop was attended by technical experts representing government ministries and departments, the academia, Global Water Partnership Eastern Africa (GWPEA), Uganda National Agro-inputs Dealers Association (UNADA) and the Uganda Seed Trade Association. The main objectives of the consultation were to:

- Obtain views from relevant stakeholders in Uganda on the proposals from the High-level Panel of Experts on Water, Food Security and Nutrition (HLPE) report on the interconnections between food and water security;
- Build awareness and examine the relevance of the proposed HLPE global perspectives to Uganda;
- Provide inputs and options to support bilateral and multilateral negotiations, and recommendations that will enhance resolutions from the 42<sup>nd</sup> Committee on World Food Security (CFS).

The workshop highlighted how issues of Food Security are multi-sectoral, pointing to the need for stronger partnerships between the relevant stakeholders. Outlining Uganda's vast underexploited food potential, Mr. Mutabazi made reference to a July 2010 African Union (AU) and New Partnership for Africa's Development (NEPAD) side event in which Uganda participated – with a focus on the theme 'Africa Must Feed Itself'. He called for mechanisms to enhance stronger commitments in achieving sustainable access to safe water, food security and nutrition, singling out the agricultural sector as Uganda's largest employer and foreign exchange earner.

Three background presentations were made to initiate discussions amongst participants. The first presentation was to provide an overview of the food security situation in Uganda, with a focus on the opportunities and challenges. Second was a presentation on the Water-Food-Energy Ecosystem Nexus with a focus on experiences from Uganda and last was a presentation, featuring highlights of the Report of the High-level Panel of Experts on Food Security and Nutrition.

### Comments by the Stakeholders on the HLPE recommendations

The stakeholders consulted agreed with the eight (8) key recommendations proposed in the HLPE report. They are applicable and are aligned with the policy framework in Uganda, as reflected in the National Development Plan (NDP) 2010/2011-2014/2015, the Agriculture Sector Development Strategy and Investment Plan (DSIP) 2010/11-2014-15), and the Strategic Sector Investment Plan for the Water and Sanitation Sector in Uganda, July 2009. However, stakeholders acknowledged the need for integrated institutional involvement.

Below are the specific comments and suggestions on each of the eight recommendations:

**Recommendation 1: *Ensure sustainable management and conservation of ecosystems for the continued availability, quality and stability of water for FSN.***

- This recommendation is aligned with the National Development Plan (NDP), the Uganda Nutrition Action Plan (UNAP), 2011-2016, the Agricultural Sector Development and Investment Plan and the National Water Resources Strategy, and does not conflict with any policy and codified legal texts that document Uganda's development agenda in the areas of water, agriculture and nutrition.

- It will support and promote the sustainable management and conservation of critical ecosystems and the services they offer
- It will enable to coordinate and harmonize interventions to save scarce resources, especially in view of the fact that they serve the same population

**Recommendation 2: *Ensure an integrated approach to water and Food Security and Nutrition-related policies***

Stakeholders agreed with this recommendation because it reflects a policy integration approach. They noted the following:

- The need for a harmonious integration of the different related policy frameworks.
- The need for review and alignment of existing policies.
- The need to disseminate the policies to stakeholders for comment/input/scrutiny for completeness before implementation.
- The need to put into consideration the supportive infrastructure necessary for implementation of the policies
- There is a need for sectoral integration and joint thinking towards tackling water, food and nutrition challenges from the planning to implementation phase
- There is a need for understanding that we have much more to gain from increased inter-sectoral collaboration as well as involvement of other stakeholders such as the private sector
- The framework for catchment-based Integrated Water Resources Management that is under implementation in Uganda provides an opportunity for promotion of an integrated approach to water and food security and nutrition-related policies.

**Recommendation 3: *Prioritize the most vulnerable and marginalized, including mainstreaming gender and addressing the specific needs of women.***

The following were noted:

- The action point (a) which suggests “*the policy and legislation to give women and men equal access to water*” should be harmonized with existing policies – including the current Uganda land use policy.
- Action point (b) “*Avoid negative effects on the FSN of the urban and rural poor and marginalized in any reform in water management*” should look deeply into the wider natural resource management aspect beyond just water alone.

N.B: The stakeholders consulted were in agreement with the rest of the action points under this recommendation.

**Recommendation 4: *Improve water management in agriculture and adapt agricultural systems to improve their overall water efficiency and water productivity, and their resilience to water stresses.***

In general, the recommendation aligns well with Uganda’s local political dimensions except for action points (d) and (e) which should be modified.

- Action point (d) “*Make rain-fed agriculture systems a more reliable option for farmers and pastoralists, by reducing risk, and adapting formal and informal enabling mechanisms (e.g. credit, community solidarity) to enhance rain-fed systems’ resilience to water stress*” Stakeholders were concerned about the modalities for advancing credit to farmers because “concessional” credit to the agricultural sector is extended through commercial banks or commercial credit

institutions which charge very high interest rates, with short pay-back periods. This makes such credit facilities unaffordable and hence inaccessible to farmers.

○ Action point (e) “*Invest in an enabling environment, mobilizing the full set of tools (from meteorological predictions and credit provision, to social protection) in order to devise a risk management strategy that reduces water-related risks on agricultural production, communities and households*”; the idea is good, for instance other countries such as Kenya is already implementing agriculture insurance and has been seen to work well, but there’s need to formulate the package for local Ugandan farmers – aligning it with what is locally possible using a multi-sectoral and integrated approach.

#### **Recommendation 5: *Improve the contribution of trade to water for food security and nutrition***

Overall, the recommendation is valid, but there is need to include a component on incentive mechanisms and a framework that would vividly bring out the issue of linking water and trade.

Additional issues raised include:

- The need to elaborate the recommendation further as the linkage between trade and water is not fully documented and understood.
- There is a need to promote and implement the virtual water and food print concept.
- Land ownership dynamics - sustainable use of land for food security, e.g. productive use of wetlands (wise use of wetlands) for food production.
- Land policy reform to allow for foreign investment under strict terms and conditions

#### **Recommendation 6: *Devise and share enhanced knowledge, technologies and management tools related to water for FSN***

- Recommendation is good and desirable
- Noted that research results ought to be applicable (action research) by the communities
- Noted the need to develop a knowledge base and provide platforms to bring the concerned stakeholders (government, civil society, and the private sector etc.) together to discuss close linkages between water, food and nutrition-based knowledge, technologies and management tools generated through research.

#### **Recommendation 7: *Foster an inclusive and effective governance of water for Food Security and Nutrition***

Concurred with the recommendation and in addition made the following observations:

- The recommendation should be more specific by mentioning all the relevant stakeholders to be included in the effective governance of the Water for Food Security and Nutrition.
- While pursuing action point (g) due attention must be paid to the current Uganda national Land use policy.
- Employing a nexus approach to water, food security and nutrition will foster an inclusive and effective governance of water for food security and nutrition.
- The framework for catchment based Integrated Water Resources Management provides an opportunity to promote nexus approach to water, food security and nutrition.

#### **Recommendation 8: *Promote a rights-based approach to water for food security and nutrition.***

The participants approved the above recommendation but expressed concern on the definition and scope (the right to food, right to clean water, etc.), in view of the fact that Uganda is signatory to such international

conventions as the Universal Declaration on Human Rights in which such human rights are enshrined. They agreed that the recommendation should be interpreted within the framework of the existing national laws and statutes

### **Key implications and means of implementation identified for achieving the recommendations over the period 2015-30.**

Deliberations on the implications of each of the eight recommendations was comprehensively done through a rapid assessment to examine whether various aspects of the recommendations are already streamlined in Uganda national Government processes and if so how to upscale these. Proposals were made and point towards the need for required capacity (human resources, financing, institutions, and infrastructure) all for the time frame of the next 15 years, putting in place monitoring indicators and having an institutional set up to achieve the recommendations by 2030

### **Concluding Comments**

The HLPE's recommendations for water for FSN are an opportunity for Uganda to contribute to achieving to the post 2015 development agenda. The country has agreed with the eight recommendations of the HLPE on Water, Food security and Nutrition. Stakeholders indicated that ***“We essentially agree with, and have endorsed the recommendations because they came out very clearly when we came together to discuss the recommendations on a case by case basis. It's a document worth, and it will be key to get that global picture when the document comes out ahead of the meeting in Rome.”***

## About the overall initiative

**2015 is a milestone with the new UN Sustainable Development Goals and the COP 21 on Climate Change in Paris. Building on the recent report on Water produced by the High Level Panel of Experts on Food Security and Nutrition, Global Water Partnership Africa (GWP) partners are joining forces to contribute to sustainable development in the face of climate change. This initiative, planned for five years, will, in an inclusive manner, identify challenges and implement relevant concrete activities at all levels.**



Country Water Partnerships (CWPs) in Benin, Burkina Faso, Cameroon, Ethiopia, Mali, Nigeria, Sudan, Uganda, and Zimbabwe decided to seize the opportunity created by the Committee on World Food Security (CFS) to engage further with Food Security and Nutrition (FSN) to make a tangible contribution at country level.

As a first step, these CWPs took the May 2015 HLPE report, explained it to country water and FSN stakeholders and facilitated a national dialog on HLPE recommendations against country priorities. The second step was to convene national workshops with interested stakeholders for more than 200 concerned ministers, farmers organizations, CSOs, and development partners on urgent needs and priority actions to be taken to impact the functioning of the Water Energy Food Ecosystems nexus for better livelihoods.

### **Next steps: elaboration and implementation of the program**

With its “SDGs preparedness facility”, its Water and Climate Development Program, and with partners, GWP will coordinate the elaboration in 2016 and then the implementation of a 3 years program addressing technical and institutional country-identified priorities in the context of CFS resolutions and the COP 21 agenda for solutions.

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## **List of Acronyms**

AU	African Union
CFS	Committee on World Food Security
CSOs	Civil Society Organizations
DLGs	District Local Governments
DSIP	Agriculture Sector Development and Investment Plan
EPRC	Economic Policy Research Center (in Uganda)
FAO	Food and Agriculture Organization of the United Nations
FSN	Food Security and Nutrition
GWP	Global Water Partnership
HLPE	High-level Panel of Experts on Water, Food Security and Nutrition
M&E	Monitoring and Evaluation
MAAIF	Ministry of Agriculture, Animal Industry and Fisheries
MFPED	Ministry of Finance, Planning and Economic Development
MLHUD	Ministry of Lands, Housing and Urban Development
MoLHUD	Ministry of Lands, Housing and Urban Development
MoTIC	Ministry of Trade, Industry and Cooperatives
MUK	Makerere University
MWE	Ministry of Water and Environment
NARO	National Agricultural Research Organization
NDP	National Development Plan
NEMA	National Environment Management Authority
NEPAD	New Partnership for Africa's Development
NPA	National Planning Authority (of Uganda)
OPM	Office of the Prime Minister (of Uganda)
TWG	Technical Working Group
UIA	Uganda Investment Authority
UNADA	Uganda National Agro-inputs Dealers Association
UNAP	Uganda Nutrition Action Plan
UNFCCC	United Nations Framework Convention on Climate Change
VGs	Vulnerable Groups
WB	The World Bank



# National Consultation on Water and Food Security and Nutrition in Uganda

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## 1 Introduction

A report on Water and Food Security was prepared by the High Level Panel of Experts on Food Security and Nutrition (HLPE) to feed into the Committee on World Food Security (CFS) 42nd plenary session to be held in 2015 in Rome. The HLPE report explores the relations between water and food security and nutrition, from household level to global level. It investigates these multiple linkages, in a context of competing demands, rising scarcities, and climate change. It explores ways for improved water management in agriculture and food systems, as well as ways for improved governance of water, for better food security and nutrition for all, now and in the future.

While a broad range of issues have been by the HLPE report at a global level, there are particular nuances in specific national or local context that may be hidden or not well captured. In this regard, the Global Water Partnership (GWP) has facilitated a number of National Consultations in Sub Saharan Africa, which were held to review the work of the HLPE to support the final resolutions of the 42<sup>nd</sup> CFS.

Under the above framework, the National Consultation on Water and Food Security and Nutrition in Uganda was held on the 28<sup>th</sup> July 2015, and had its objectives as to:

- Obtain views from relevant stakeholders in Uganda on the proposals from the HLPE report on the interconnections between food and water security;
- Build awareness and examine the relevance of the proposed HLPE global perspectives to Uganda;
- Provide inputs and options to support bilateral and multilateral negotiations, and recommendations that will enhance resolutions from the 42<sup>nd</sup> CFS.

The workshop was attended by technical experts representing government ministries and departments, the academia, GWP Eastern Africa, UNADA and the Uganda Seed Trade Association.

In his welcome remarks, Mr. Safari Patrick, the Regional Coordinator of GWP Eastern Africa, presented the background of National Consultations on WFSN, being facilitated by GWP in various countries, and their linkages with the ongoing preparation with SDG's.

Mr. Sunday Mutabazi, opened the workshop, on behalf of the Permanent Secretary of Ministry of Agriculture, Animal Industry and Fisheries (MAAIF). In his remarks, the he highlighted how issues of Food Security are multi-sectoral, pointing to the need for stronger partnerships between the relevant stakeholders.

Outlining Uganda's vast underexploited food potential, Mr. Mutabazi made reference to a July 2010 AU and NEPAD side event in which Uganda participated – with a focus on the theme 'Africa Must Feed Itself'. He called for mechanisms to enhance stronger commitments in achieving sustainable access to safe water, food security and nutrition, singling out the agricultural sector as Uganda's largest employer and foreign exchange earner.

After the opening session, three background presentations were made. The first presentation, made by Mr. Peter Abong provided an overview of the food security

situation in Uganda, with a focus on the opportunities and challenges. Dr. Callist Tindimugaya made the second presentation on the Water-Food-Energy Ecosystem Nexus with a focus on experiences from Uganda. Eng. Dr. Henry Ntale made the last presentation, featuring highlights of the Report of the High-level Panel of Experts on Food Security and Nutrition.

## ***2 Discussions and comments by the Stakeholders on the HLPE recommendations***

There are eight (8) key recommendations proposed in the HLPE report. The workshop participants examined the relevance of each of the recommendations in the Ugandan context for helping to meet national food and water security priorities.

In principal, the workshop participants agreed with all the recommendations. They are applicable and are aligned with the policy framework in Uganda, as reflected in the National Development Plan (NDP) 2010/2011-2014/2015, the Agriculture Sector Development Strategy and Investment Plan (DSIP) 2010/11-2014-15), and the Strategic Sector Investment Plan for the Water and Sanitation Sector in Uganda, July 2009. The Participants acknowledged the need for integrated institutional involvement.

The participants raised the following specific comments and suggestions on each of the eight recommendations:

Recommendation 1: ***Ensure sustainable management and conservation of ecosystems for the continued availability, quality and stability of water for FSN.***

The participants were in agreement with the above recommendation because it is well aligned with the National Development Plan (NDP), the Uganda Nutrition Action Plan (UNAP), 2011-2016, the Agricultural Sector Development and Investment Plan and the National Water Resources Strategy, and does not conflict with any policy and codified legal texts that document Uganda's development agenda in the areas of water, agriculture and nutrition.

In addition, the participants acknowledge the need for institutionalization and sustenance of measures towards integrated and participatory institutional involvement of government ministries, departments and agencies, the private sector, civil society organizations, research institutions and the academia -- as one of the ways to coordinate and harmonize interventions to save scarce resources, especially in view of the fact that they serve the same population.

The participants acknowledged the fact that a catchment provides the needed framework for interactions between sectors and actors that do not often come together to share knowledge and visions for the future and to ensure sustainable management and conservation of ecosystems for the continued availability, quality and stability of water for FSN.

The recommendation will also support and promote the sustainable management and conservation of ecosystems and the services they offer interventions. Joint review of ecosystems related policies would provide a unique opportunity for stakeholders from

the different sectors to share lessons learnt in their respective areas with wider audiences from other sectors.

Recommendation 2: ***Ensure an integrated approach to water and Food Security and Nutrition-related policies***

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The participants were in agreement with this recommendation because it reflects a policy integration approach. Harmonizing the policy frameworks and integrating the policy formulation and implementation approaches helps to create harmony and eliminates likely duplication of efforts. The participants however noted:

- The need for a harmonious integration of the different related policy frameworks.
- The need for review and alignment of existing policies.
- The need to disseminate the policies to stakeholders for comment/input/scrutiny for completeness before implementation.
- The need to put into consideration the supportive infrastructure necessary for implementation of the policies
- There is a need for sectoral integration and joint thinking towards tackling water, food and nutrition challenges from the planning to implementation phase
- There is a need for understanding that we have much more to gain from increased inter-sectoral collaboration as well as involvement of other stakeholders such as the private sector
- The framework for catchment-based Integrated Water Resources Management that is under implementation in Uganda provides an opportunity for promotion of an integrated approach to water and food security and nutrition-related policies. The framework aims at creating inter-linkages between various sectors such as ecosystems, energy, food and water to develop a common vision for the future and work jointly towards realizing that vision. The framework enables key stakeholders such as the private sector to contribute to water, food, energy and ecosystem security at national and local levels
- Integrated approach to water and food security and nutrition-related policies is best realized at the lowest appropriate level most preferably the catchment level

Recommendation 3: ***Prioritize the most vulnerable and marginalized, including mainstreaming gender and addressing the specific needs of women.***

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The recommendation is acceptable, but prioritize the most vulnerable and marginalized, including mainstreaming the specific needs of such groups. Unpack the vulnerable groups to specifically map out the needs of the children, women, un-employed youth, the disabled, internally displaced persons and refugees, among others. Specifically:

- The action point (a) which suggests “*the policy and legislation to give women and men equal access to water*” should be harmonized with existing policies – including the current Uganda land use policy.
- Action point (b) “*Avoid negative effects on the FSN of the urban and rural poor and marginalized in any reform in water management*” should look deeply into the wider natural resource management aspect beyond just water alone.

The participants were in agreement with the rest of the action points under this recommendation.

Recommendation 4: ***Improve water management in agriculture and adapt agricultural systems to improve their overall water efficiency and water productivity, and their resilience to water stresses.***

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The participants proposed the need to focus on an integrated, multi-sectoral approach in implementing this recommendation. The framework for catchment based Integrated Water Resources Management provides an opportunity to achieve this. A key action point is to make all possible efforts to align this recommendation to Uganda's local development agenda. The suggested approach is that it is addressed under the "Loss and Damage" thematic area as elaborated in the recent United Nations Framework Convention on Climate Change (UNFCCC) negotiations.

In general, the recommendation aligns well with Uganda's local political dimensions except for action points (d) and (e) which should be modified.

- Action point (d) "*Make rain-fed agriculture systems a more reliable option for farmers and pastoralists, by reducing risk, and adapting formal and informal enabling mechanisms (e.g. credit, community solidarity) to enhance rain-fed systems' resilience to water stress*" The participants were concerned about the modalities for advancing credit to farmers because "concessional" credit to the agricultural sector is extended through commercial banks or commercial credit institutions which charge very high interest rates, with short pay-back periods. This makes such credit facilities unaffordable and hence inaccessible to farmers. Under the Cluster Development Project funded by WB, Government through the MAAIF will be piloting an E Voucher credit facility.
- Action point (e) "*Invest in an enabling environment, mobilizing the full set of tools (from meteorological predictions and credit provision, to social protection) in order to devise a risk management strategy that reduces water-related risks on agricultural production, communities and households*"; the idea is good, for instance Kenya is already implementing agriculture insurance and has been seen to work well, but there's need to formulate the package for local Ugandan farmers – aligning it with what is locally possible using a multi-sectoral and integrated approach.

Recommendation 5: ***Improve the contribution of trade to water for food security and nutrition***

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Overall, the recommendation is valid, but there is need to include a component on incentive mechanisms and a framework that would vividly bring out the issue of linking water and trade. Examples of incentives cited included but were not limited to the establishment of agro-processing infrastructure, farmer-tailored insurance policies, contract farming frameworks, among others. The recommendation needed to make special recognition of the need for provision of incentives for increased contribution of water to food security and nutrition.

Additional issues raised by the participants were;

- This particular recommendation shall need to be elaborated further as the linkage between trade and water is not fully documented and understood. For example the implication of economic water scarcity vis a vis physical water scarcity could impact trade for water for food security configurations. There is need for further study and analysis of the contribution of trade to water

- There is a need to promote and implement the virtual water and food print concept.
- Land ownership dynamics - sustainable use of land for food security, e.g. productive use of wetlands (wise use of wetlands) for food production.
- Land policy reform to allow for foreign investment under strict terms and conditions, taking the Nigerian experience where the landowner is entitled to 30% of the produce from the hired land as an example in case. This is an issue that the workshop identified as requiring further discussion.
- Land – what multinationals want to do on land affects the nexus; they tend to focus on mono cropping which may not contribute to solving the food security issues.

Overall, the participants concurred that it is high time Uganda undertakes serious land reforms to get vast acreage of idle [agricultural] land to be productive.

**Recommendation 6: *Devise and share enhanced knowledge, technologies and management tools related to water for FSN***

The Participants noted that this recommendation is good and desirable. Whereas on the Agriculture side, there is the well-established National Agricultural Research Organization (NARO) and its research affiliates, the waterside has several [small] disaggregated centers carrying out limited research on water management issues. In the Ugandan context, there is an enormous gap in the Water-food-ecosystem nexus knowledge particularly in the water aspects.

The participants noted that research is not just about cataloguing knowledge and technologies, but how these two enablers help to guarantee sustained water availability to ensure sustained food security and improved nutrition. The participants further noted that research results ought to be applicable (action research) by the communities; there have been cases where local communities neighboring a zonal NARO research station are not applying or benefiting from the knowledge and good practices being generated by the said research center.

A lot of useful research has been done but those responsible don't have time to cross compare with what other actors have done. Accordingly, there's a disconnect between the research conducted, and to whom this research is directed – worse if the farmers can't find/access the research information that would benefit their activities.

In general participants noted the need to develop a knowledge base and provide platforms to bring the concerned stakeholders (government, civil society, and the private sector etc.) together to discuss close linkages between water, food and nutrition-based knowledge, technologies and management tools generated through research.

**Recommendation 7: *Foster an inclusive and effective governance of water for Food Security and Nutrition***

The participants concurred with the recommendation and in addition made the following observations:

- The recommendation should be more specific by mentioning all the relevant stakeholders to be included in the effective governance of the Water for Food Security and Nutrition.
- While pursuing action point (g) *“Ensure that all parties to contracts involving large-scale investments in land (with its associated water) are held accountable for the impacts on*

*the sustainable use of natural resources and the consequences on the livelihood and FSN of the affected communities,”* due attention must be paid to the current Uganda national Land use policy.

- Employing a nexus approach to water, food security and nutrition will foster an inclusive and effective governance of water for food security and nutrition. It is key in realizing efficiency and effectiveness in resource utilization, sustainable development and a green economy
- Nexus concept is very relevant to Uganda since implementation of water, food security and nutrition related programs are sectoral oriented thereby limiting possibilities of collaboration and creating synergy
- The framework for catchment based Integrated Water Resources Management provides an opportunity to promote nexus approach to water, food security and nutrition.

**Recommendation 8: *Promote a rights-based approach to water for food security and nutrition.***

The participants approved the above recommendation but expressed concern on the definition and scope (the right to food, right to clean water, etc.), in view of the fact that Uganda is signatory to such international conventions as the Universal Declaration on Human Rights in which such human rights are enshrined. They agreed that the recommendation should be interpreted within the framework of the existing national laws and statutes



Figure 1 Participants discussing the HLPE report recommendations during the break out session.

### ***3 Key implications and means of implementation identified for achieving the recommendations over the period 2015-30.***

The workshop deliberated at length on the implications of each of the eight recommendations. A rapid assessment was made to examine whether various aspects of the recommendations are already streamlined in Uganda national Government processes and if so how to upscale these. Proposals were made on possible actionable

points under the respective recommendations plus the required capacity (human resources, costs, institutions, and infrastructure) all for the time frame of the next 15 years. Monitoring indicators were proposed for each of the recommendations.

A summary of these discussions is presented in the following tables.

**Table 3-1: Implementation Modalities (2015-2030 Horizon): *Recommendation 1: The sustainable management and conservation of ecosystems, from local to continental levels as key to ensure quantity of quality of water for food security and nutrition in the future***

Action	Required Capacity/Infrastructure	Additional Funds (Over the next 15 years)	Indicators	Key Institutions
1) Prepare a comprehensive plan, consolidating disjointed plans from different sectors	Use existing Human resource and physical infrastructure within government  Upscale preparation of Catchment Management Plans to facilitate integrated planning and implementation	<ul style="list-style-type: none"> <li>Public funds (government)</li> <li>Funding from Donors and/or Development Partners (US\$ 2 million)</li> </ul>	<ul style="list-style-type: none"> <li>Catchment Management Plans in place to facilitate integrated planning and implementation</li> <li>Consolidated plan in place</li> <li>Functional infrastructure</li> </ul>	MAAIF, MWE, OPM, MoTTC, MFPED, NPA, UIA (Uganda Investment Authority), NEMA
2) Policy framework for implementation, including a budget and human resource	= ditto =	<ul style="list-style-type: none"> <li>Public funds (government) (US\$ 0.5 million)</li> </ul>	<ul style="list-style-type: none"> <li>Integrated Catchment Management Plans in place</li> <li>Integrated budget in place</li> </ul>	
3) Data collection, taking into account capacity needs, skills sets development,	Some additional reinforcement required <ul style="list-style-type: none"> <li>Management information systems (MIS)</li> <li>Transportation (vehicles, motor cycles, bicycles, etc.) and associated logistics</li> </ul>	<ul style="list-style-type: none"> <li>Public funds (government)</li> <li>Funding from Donors and/or Development Partners (US\$ 4 million)</li> </ul>	<ul style="list-style-type: none"> <li>Coordinated and functional MIS in place on Water for FSN</li> </ul>	
4) Implementation of the policies	<ul style="list-style-type: none"> <li>Implement the developed Catchment Management Plans to facilitate integrated implementation</li> </ul>	<ul style="list-style-type: none"> <li>Public funds (government) (US\$ 75 million)</li> </ul>	<ul style="list-style-type: none"> <li>Catchment Management Plans in place to facilitate</li> </ul>	



Action	Required Capacity/Infrastructure	Additional Funds (Over the next 15 years)	Indicators	Key Institutions
	<ul style="list-style-type: none"> <li>• Additional Water facilities</li> <li>• Agricultural water efficient technologies</li> </ul>		<ul style="list-style-type: none"> <li>• integrated planning and implementation</li> <li>• Water facilities in place with improved agricultural water efficiencies and improved yields.</li> </ul>	
5) Upscale and roll out of preparation and implementation of catchment management plans	<ul style="list-style-type: none"> <li>• Use existing Human resource and physical infrastructure within government</li> </ul>	<ul style="list-style-type: none"> <li>• Public funds (government) (US\$ 0.5 million)</li> </ul>	<ul style="list-style-type: none"> <li>• 75% of the country covered with catchment plans within the next 15 years</li> <li>• Planning and implementation of water related investments is guided by Catchment Management Plans within the next 15 years</li> </ul>	
6) Monitoring and evaluation	Strengthen existing M&E within the respective sectors	<ul style="list-style-type: none"> <li>• Public funds (government) (US\$ 1.5 million)</li> </ul>	<ul style="list-style-type: none"> <li>• Coordinated M&amp;E in place</li> </ul>	

**Table 3-2: Implementation Modalities (2015-2030 Horizon): *Recommendation 2: Ensure an integrated approach to water and FSN related policies***

Action	Required Capacity/Infrastructure	Additional Funds (Over the next 15 years)	Indicators	Key Institutions
1) Harmonize policies and implementation frameworks for water, food security and nutrition – at the moment we have disjointed policies.	Use existing Human resource and physical infrastructure within government	-	<ul style="list-style-type: none"> <li>• Comprehensive, harmonized policies and implementation frameworks for water, FSN</li> </ul>	Ministries, Banks, CSOs, DLGs, Police, Academia, Farmer Organizations,

2) Increase funding for implementation of the policy frameworks	Increased funding	Public funds (government) (US\$ 1.5 million)	<ul style="list-style-type: none"> <li>Increased funding for implementation of the policy frameworks</li> </ul>	Media, Political Leaders, OPM
3) Increase awareness and empowerment	Awareness funds	Public funds (government) (US\$ 0.2 million)	<ul style="list-style-type: none"> <li>Change in landscape management, increased household incomes</li> </ul>	
4) Formulation of a multi-sector monitoring team to oversee monitoring	Use existing Human resource and physical infrastructure within government	-	<ul style="list-style-type: none"> <li>A multi-sector monitoring team in place overseeing all actions</li> </ul>	
5) Increased involvement of different stakeholders in the policy implementation processes	<ul style="list-style-type: none"> <li>Irrigation demonstration infrastructure</li> <li>Marketing infrastructure</li> </ul>	<ul style="list-style-type: none"> <li>Public funds (government)</li> <li>Funding from Donors and/or Development Partners</li> </ul> (US\$ 3 million)	<ul style="list-style-type: none"> <li>Higher level participation of all stakeholders</li> </ul>	
6) Formulation of indicators at output and outcome level	Use existing Human resource and physical infrastructure within government	-	<ul style="list-style-type: none"> <li>Clear shift in the national indicators of Water, Food Security and Nutrition</li> </ul>	

**Table 3-3: Implementation Modalities (2015-2030 Horizon):** *Recommendation 3 and 7: Prioritize the most vulnerable and marginalized, including mainstreaming gender and addressing the specific needs of women; Foster an inclusive and effective governance of water for FSN*

Action	Required Capacity/Infrastructure	Additional Funds (Over the next 15 years)	Indicators	Key Institutions
1) Legal and policy review on existing food security, water and nutrition policies to promote coherence and ensure inclusion of vulnerable groups	Policy analysis units	<ul style="list-style-type: none"> <li>Public funds (government) (US\$ 0.1 million)</li> </ul>	<ul style="list-style-type: none"> <li>No of policies harmonized</li> <li>No of policy reviews conducted,</li> <li>Policy recommendations implemented</li> </ul>	MDAs, MAAIF, OPM, MWE, NEMA, NARO, MJ, Research, EPRC, FS, CSOs, DLGs
2) Institute Food security, WUAs, WASH groups and Catchment Management Organisations	Use existing Human resource and physical infrastructure within government		<ul style="list-style-type: none"> <li>No of committees formed</li> <li>Number of related technologies promoted</li> <li>Number of operational Catchment Management Organisations</li> </ul>	MAAIF, OPM, MWE, NARO, MJ, Research, CSOs
3) Strengthening the PPPs on FSN catering for all including marginalized and vulnerable groups	= ditto =	<ul style="list-style-type: none"> <li>Public funds (government)</li> <li>Funding from Donors and/or Development Partners (US\$ 4 million)</li> </ul>	<ul style="list-style-type: none"> <li>No of marginalized persons and vulnerable reached</li> </ul>	MDAs, MAAIF, OPM, MWE, NEMA, NARO, MJ, Research, EPRC, FS, CSOs, DLGs
4) Conducting a baseline of existing intervention and come up with a roadmap with clear goals and targets on involvement of vulnerable groups	= ditto =	<ul style="list-style-type: none"> <li>Public funds (government) (US\$ 0.3 million)</li> </ul>	<ul style="list-style-type: none"> <li>Baseline on existing interventions with clear roadmap on involvement of vulnerable groups</li> </ul>	
5) Instituting functional structures with representation of Vulnerable Groups	= ditto =	<ul style="list-style-type: none"> <li>Public funds (government) (US\$ 0.05 million)</li> </ul>	<ul style="list-style-type: none"> <li>No of functional structures in place, with representation of VGs</li> </ul>	
6) Technical working groups water or FSN covering all stakeholders	= ditto =	<ul style="list-style-type: none"> <li>Public funds (government)</li> </ul>	<ul style="list-style-type: none"> <li>No of TWGs constituted</li> <li>No of TWG meetings held</li> <li>No. of Catchment Management structures constituted</li> </ul>	
7) Resource mobilization for FSN targeting marginalized groups	Resource mobilization funds	<ul style="list-style-type: none"> <li>Public funds (government) (US\$ 1.2 million)</li> </ul>		



**Table 3-4: Implementation Modalities (2015-2030 Horizon): *Recommendation 4: Improve water management in agriculture and adapt agricultural systems to improve their overall water efficiency and water productivity, and their resilience to water stresses.***

Action	Required Capacity/Infrastructure	Additional Funds (Over the next 15 years)	Indicators	Key Institutions
1) Develop water-agricultural development plans – at catchment level	Human Resources	<ul style="list-style-type: none"> <li>Public funds (government)</li> <li>Funding from Donors and/or Development Partners (US\$ 1 million)</li> </ul>	<ul style="list-style-type: none"> <li>Agricultural water development plans in place</li> </ul>	MAAIF, MWE, OPM, MoTIC, MFPED, NPA, UIA (Uganda Investment Authority), NEMA Financial Institutions
2) Develop adaptive systems to make rain-fed agriculture more reliable	Human resource Technology incubation centers	<ul style="list-style-type: none"> <li>Public funds (government)</li> <li>Funding from Donors and/or Development Partners (US\$ 4 million)</li> </ul>	<ul style="list-style-type: none"> <li>Increased yield and reliability of rain fed agricultural systems</li> </ul>	
3) Develop a viable credit loaning scheme to enhance rain-fed systems resilience to water stress	Funds to start the credit facility Administrative set up to manage the credit facility	<ul style="list-style-type: none"> <li>Public funds (government)</li> <li>Funding from Donors and/or Development Partners (US\$ 20 million)</li> </ul>	<ul style="list-style-type: none"> <li>Viable credit facility in place for the farmers</li> <li>Number of farmers utilizing the credit facility</li> <li>Volume of credit accessed per year.</li> </ul>	
4) Promote and disseminate water harvesting and supplementary irrigation	Strengthen existing Human resource and physical infrastructure within government	<ul style="list-style-type: none"> <li>Public funds (government)</li> <li>Funding from Donors and/or Development Partners (US\$ 2.4 million)</li> </ul>	<ul style="list-style-type: none"> <li>Number of farmers adopting the disseminated technologies</li> <li>Acreage under supplementary irrigation</li> </ul>	
5) Promote water storage infrastructure to overcome water stress, and where necessary bulk water transfers to address issues of water scarcity	Strengthen existing government systems mandated with putting up and managing this infrastructure	<ul style="list-style-type: none"> <li>Public funds (government)</li> <li>Funding from Donors and/or Development Partners (US\$ 75 million)</li> </ul>	<ul style="list-style-type: none"> <li>Volume of storage of water infrastructure</li> <li>Number of farmers served by this infrastructure</li> </ul>	

**Table 3-5: Implementation Modalities (2015-2030 Horizon): *Recommendation 5: Improve the contribution of trade to water for food security and nutrition***

Action	Required Capacity/Infrastructure	Additional Funds (Over the next 15 years)	Indicators	Key Institutions
1) Clear elaboration of “Linkages between trade and water for food security and nutrition” in the Ugandan context	Study	<i>(US\$ 0.04 Million)</i>	Study completed	MAAIF, MWE, OPM, MoTIC, MFPED, NPA, UIA (Uganda Investment Authority), NEMA NARO, MJ, Research, CSOs DLGs MoLHUD
2) Form a special Coordinating unit within the Uganda Investment Authority (but with representation from other stakeholders such as MAAIF and MWE) to attract PPP agricultural investment from “water scarce nations” within the Nile basin.	Strengthen existing government systems mandated with handling the subsector	<ul style="list-style-type: none"> <li>Public funds (government) <i>(US\$ 0.05 million)</i></li> </ul>	<ul style="list-style-type: none"> <li>Special coordination Unit formed</li> <li>Number of meetings held</li> <li>No of new investments in the Agriculture sector</li> </ul>	
3) Further refine the Land Use policy to protect local interest while at the same time taking into account the concerns of the investors	Strengthen existing government systems mandated with handling the subsector	<ul style="list-style-type: none"> <li>Public funds (government) <i>(US\$ 0.1 million)</i></li> </ul>	<ul style="list-style-type: none"> <li>Conducive Land use policy (to large scale agricultural investments) available</li> </ul>	
4) Promote the use of AMIS (Agricultural Market Information System) and RATIN to provide transparency about prices, production, stocks and trade in staple foods	Strengthen existing government systems and CSOs mandated with handling the subsector	<ul style="list-style-type: none"> <li>Public funds (government) <i>(US\$ 0.4 million)</i></li> </ul>	<ul style="list-style-type: none"> <li>Number of farmers using the AMIS and RATIN networks</li> </ul>	
5) Incorporate trade and investment policies into national FSN plans	Strengthen existing government systems mandated with formulating and implementing the FSN policy.	<ul style="list-style-type: none"> <li>Public funds (government) <i>(US\$ 0.05 million)</i></li> </ul>		

**Table 3-6: Implementation Modalities (2015-2030 Horizon): *Recommendation 6: Devise and share enhanced knowledge, technologies and management tools related to water for FSN***

Action	Required Capacity/Infrastructure	Additional Funds (Over the next 15 years)	Indicators	Key Institutions
1) Create a Water Research Institute	Human Resources, some institutional capital, Buildings are already available	<ul style="list-style-type: none"> <li>Public funds (government)</li> <li>Donors/Development Partners (US\$ 4 million)</li> </ul>	Water Research Institute in place.	MAAIF, MWE, OPM, MoTIC, MFPED, NPA, UIA (Uganda Investment Authority), NEMA, NARO, MUK and other universities
2) Put in place a Water-FSN Research policy framework, (with budget and Human Resource)		<ul style="list-style-type: none"> <li>Public funds (government) (US\$ 0.1 million)</li> </ul>	Policy available	
3) Design/develop functional and relevant management information systems	Hardware, software, appropriate networks	<ul style="list-style-type: none"> <li>Public funds (government)</li> <li>Donors/Development Partners (US\$ 1.8 million)</li> </ul>	MIS in place	
4) Undertake integrated action research on water, food security and nutrition; in the process build the necessary capacity	Human resources, Research Funds	<ul style="list-style-type: none"> <li>Action research on ground for improved agriculture, livelihoods (US\$ 12 million)</li> </ul>	3 incubation sites technologies in place; Number of publications produced, evidence of technology application in the field	



**Table 3-7: Implementation Modalities (2015-2030 Horizon): *Recommendation 3: Promote a rights-based approach to governance of water for FSN***

Action	Required Capacity/Infrastructure	Additional Funds (Over the next 15 years)	Indicators	Key Institutions
1. Institute a study on the full and meaningful implementation of the existing a) Right to safe drinking water and sanitation. b) Right to adequate food in the Ugandan context.	Study funds	<ul style="list-style-type: none"> <li>Public funds (government)</li> <li>Donors/Development Partners (US\$ 0.05 million)</li> </ul>	<ul style="list-style-type: none"> <li>Study available</li> <li>Study results disseminated</li> </ul>	<p>MAAIF, MWE, MFA (Ministry of Foreign Affairs) OPM,</p>
2. Carry out another study to establish where Uganda lies as regards following Voluntary Guidelines a) Voluntary Guidelines to support the progressive realization of the right to adequate food in the context of national food security (VGRtF) b) Voluntary Guidelines on the responsible governance of tenure of land, fisheries and forests in the context of national food security (VGGT) c) Committee on Food Security (CFS) principles for responsible investments in agriculture and food systems, in particular in relation to large-scale land acquisitions. Provide recommendations	Study funds	<ul style="list-style-type: none"> <li>Public funds (government)</li> <li>Donors/Development Partners (US\$ 0.05 million)</li> </ul>	<ul style="list-style-type: none"> <li>Study available</li> <li>Study results disseminated</li> </ul>	
3. MWE and MAAIF to take on recommendations from the above studies and formulate a road map for implementation	To be determined after the studies are done	To be determined after the studies are done	Implementation roadmap available	

## *4 Concluding Comments*

Representing the Minister of Water and Environment, Eng. Richard Cong closed the workshop. Quoting former Director General of the Food and Agriculture Organization (FAO), Dr. Jacques Diouf, Eng. Cong said, “Agriculture starts with water and ends with water.” He challenged the participants to harness Uganda’s abundant water resources to improve agricultural productivity and nutrition.

“In Uganda, we are just sleeping over our water,” Eng. Cong said, stressing the unfortunate fact that less than 0.5% of the arable land that was identified as good for irrigation was put under effective use through irrigation as 80% of Ugandans depended on rain-fed agriculture. He further challenged the participants to work together to focus on promoting water-smart agriculture by maximizing the benefits of both rain-fed agriculture and irrigation.

Eng. Cong informed the workshop that during the 7th World Water Forum, Daegu & Gyeongbuk, Korea April 2015, a number of important forums addressing important issues including Water, Sanitation and Hygiene and Water-smart Agriculture were constituted. He also urged the participants to refer to the sourcebook on Climate-smart Agriculture, which impressively predicts that if current income and consumption growth trends continue, FAO estimates that agricultural production will have to increase by 60 percent by 2050 to satisfy the expected demands for food and feed.

Addressing the core purpose of the workshop, Eng. Cong stated that no body significantly disagreed with the recommendations of the HLPE on Water, Nutrition and Hygiene. “We essentially agree with, and have endorsed the recommendations because they came out very clearly when we came together today. It’s a document worth, and it will be key to get that global picture when the document comes out ahead of the meeting in Rome,” he said.

He thanked the participants for their attendance and input to the workshop. He specifically thanked the participants patiently remained up to the end of the workshop, despite the fact that they all had very busy schedules.

## *5 Annex 1. List of Participants*

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