WACDEP / GWP Capacity Development in Africa 2013-2015

'Economics of Adaptation, Water Security and Climate Resilient Development in Africa'

DETAILED ASSESSMENT ON THE CAPACITY DEVELOPMENT NEEDS AND CAPACITY DEVELOPMENT PLAN IN GHANA

By

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November, 2013

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ACKNOWLEDGEMENTS

I wish to acknowledge the Chairman and Staff of the Ghana Country Water Partnership for the effort put into this write-up. Their technical backstopping has been cogent. I also wish to thank the Coordinator of the Capacity Development Programme for his immense support in the development of this report. The West Africa Regional support has been strategic and I wish to commend them for the good work done. It is hoped that the practical would yield the best of products so that institutions can be capacitated to deliver on their mandates while ensuring water security and climate resilient development.

EXECUTIVE SUMMARY

The Globa Water Partnership is collabrorating with the African Ministers in charge of Water (AMCOW) to implement the Water, Climate and Development Programme (WACDEP) in eight (8) African countries. The aim is in tandem with the vision of the GWP which is "A Water secure World." WACDEP seeks to integrate water security and climate resilience in development planning and decision making processes. Delivering this objective will be a failure if capacity needs are not addressed. It is against this backdrop that a rapid assessment was carried out in May 2013 to ascertain institutional needs. The assessment is being followed up with a detailed assessment that seeks to take steps to strengthen stakeholder capacity for enhanced performance in the planning of development interventions.

To this end, a capacity development team has been put together to explore with the trainees aspects of vulnerability assessment, policy and stakeholder analysis, economics and projects financing, and water resources and climate issues. Thus the training sessions will be conducted in five (5) Modules with participation of identified personnel from Government outfits including the Water Resources Commission and the Ministry of Local Government and Rural Development. Furthermore, the trainees will undergo mentorship programme as auxiliary mechanism to strengthening capacity.

It is hoped that the training will inure to the benefit of the government institutions to fortify the procedures for elaborating their medium term development plans.

ACRONYMS AND ABBREVIATIONS

AMCOW	African Ministers' Council on Water
Cap-Net	Capacity Network
CDTeam	Capacity Development Team
CDKN	Capacity Development and Knowledge Network
CEEPA	Centre for Environmental, Economic and Policy in Africa
CSIR-WRI	Council for Scientific and Industrial Research-Water Research Institute
CWSA	Community Water and Sanitation Agency
EPA	Environmental Protection Agency
GEF	Global Environment Fund
GMA	Ghana Meteorological Agency
GWCL	Ghana Water Company Limited
GWP	Global Water Partnership
IPCC	Intergovernmental panel on Climate Change
ISDR	International Strategy to Disaster Reduction
IWMI	Integrated Water Management Institute
IWRM	Integrated Water Resources Management
LI	Legislative Instruments
MESTI	Ministry of Environment, Science and Technology and Innovation
MLNR	Ministry of Lands and Natural Resources
MMDAs	Metropolitan, Municipal and District Assemblies
MoF	Ministry of Finance
MoFA	Ministry of Food and Agriculture
MoT	Ministry of Transport
MWRWH	Ministry of Water Resources Works and Housing

NAPs	National Adaptation Plans
NDPC	National Development Planning Commission
NGO	Non Governmental Organization
SEA	Strategic Environmental Assessment
UNCBD	United Nations Convention on Biological Diversity
UNCCD	United Nations Conventions to Combat Desertification
UNDP	United Nations Development Programme
UNEP	United Nations Environment Programme
UNFCCC	United Nations Framework Convention on Climate Change
VBA	Volta Basin Authority
VRA	Volta River Authority
WACDEP	Water, Climate and Development Programme
WEAP	Water Evaluation and Planning Model
WRC	Water Resources Commission
WSSD	World Summits on Sustainable Development

1. INTRODUCTION

Ghana is a developing country that is endowed with freshwater resources. However, the quality of the freshwater is being compromised in recent times, owing to anthropogenic activities. The impacts of climate change pose lots of challenges especially in the northern portions that lie along the fringes of the Sahel as well as the coastal areas. Climate variability and change is affecting the livelihood resources of populations which manifests during droughts and floods leading to destruction of lives and loss of property. The changing climatic conditions are such that water resource is inadequate to satisfy domestic needs and agriculture including livestock rearing/breeding. It is undoubted that a lot of the socio-economic challenges confronting our people in various parts of the country are attributable to climate change. Therefore stakeholders across various levels of development planning and decision making processes must imbibe in them the requisite skills and techniques, and to have the necessary tools and capacity to design and propose options aimed at water security and climate resilient development while at the same time strengthening capacity of the vulnerable populations for adaptation.

The Ghana Country Water Partnership welcomes the training programme on ''Economics of adaptation, water security and climate resilient development'' in Africa 2013-2014targeted at planners and strategic decision makers so as to build mainstreaming mechanisms for water security and climate resilience, and ensuring adaptation responses for national development. This training programme is embedded in the Water, Climate and Development Progromme (WACDEP) that is an initiative of the African Heads of State and implemented within the framework of the African Ministers' Council on Water (AMCOW).

WACDEP is being implemented until 2016 in eight countries: Cameroon, Ghana, Burkina Faso, Mozambique, Zimbabwe, Burundi, Rwanda and Tunisia; four transboundary basins: Volta Basin, Lake Chad Basin, Lake Victoria-Kagera Basin, Limpopo Basin and one shared aquifer: the North Western Sahara Aquifer System. The program encompasses four components as follows:

(i) Investments in regional and national development;

(ii) Innovative green solution;

(iii) Knowledge and capacity development; and

(iv) Partnership and sustainability.

This capacity strengthening is managed by Niras Natura AB cooperation[1], CDKN[2]and Cap-Net UNDP[3], respectively.

To this end, it has been carried out a detailed assessment of the capacity development needs and a plan for the implementation of the WACDEP Capacity Development Programme in Ghana from October 2013 to December 2014.

[1]International, multidisciplinary engineering and development consultancy company and Partners.
[2]Climate and Development Knowledge Network.
[3]United Nations Development Programme - Capacity Building Network.

2. OBJECTIVE OF STUDY AND EXPECTED RESULTS

The overall objective of the detailed assessment of capacity development needs is to make a comprehensive assessment of the issues that have a direct impact on the design and implementation of the WACDEP- Capacity development Programme, and to develop the Capacity Development Plan.

The specific objectives of the study are:

- to review based on the rapid assessment report carried out in May-June 2013 major challenges and on-going and planned processes that the implementation of the Capacity DevelopmentProgramme should be linked with in Ghana;
- to determine options to strengthen water security and climate resilience development based on the identified capacity development needs;
- to identify the Capacity Development Team members and participants;
- to elaborate an overall capacity development plan that provides the basis for the programming and budgeting of the implementation of the programme in the country including training workshops and on job mentoring activities.

The main expected results are

- the detailed major challenges and on-going/ planned processes in terms of water security and climate change in Ghana;
- the list of potential CDTeams' members and participants, their focus and institutional affiliation;
- the capacity development plan for the implementation of the programme in Ghana.

2. METHODOLOGY

This involved (a) discussions with the Country Chairman of Global Water Partnership and the Executive Secretary/ Program Manager for WACDEP and (b) exploring the findings of the Work Plan 2013 – 2015 for WACDEP and the Baseline Report on Water Security and Climate Resilience in Development Planning in Ghana. Given the fact that these documents were prepared after extensive stakeholder consultations, it was an important knowledge resource for the present study. The other elements involve the processes to recommend the members of the Capacity Development Team as well as participants for the training. It also required planning with the NTC to schedule the training sessions.

3. WACDEP- Capacity Development Programme, objectives and expected outputs

WACDEP-Capacity development Programme at national level is developed in order to enhance local technical, analytical and institutional capacity for climate resilient development in collaboration with AMCOW, CDKN, UNDP-GEF, CapNet and GWP. This is a key pillar of the WACDEP and NAPs process. Investment planning for climate resilience needs to be informed by sound economic analysis of adaptation.

The objective of this capacity development initiative is to, among other things develop the capacity of planners and technical officers in planning/finance as well as in ministries in charge of environment, agriculture, water, public works, lands and others. The purpose of the training to identify, develop and appraise no/low regrets investments options and integrate these into national planning processes, development plans and programs.

The initiative will contribute to enhance understanding of the economics of adaptation as it relates to medium- and long-term national, sub-national and sectorial development planning as well as in evaluating different adaptation investment projects.

The initiative, targeting government planners will produce a cadre of practitioners who can prepare high-quality economic analyses related to climate change adaptation projects and programs, and support integration of no/low regrets investments into national development and sectoral plans.

The implementation of the capacity development programme is embedded in GWP and WACDEP regional and country management teams, linked to the UNDP GEF supported portfolio of adaptation projects. Implementation will be conducted in coordination with UNDP country offices, as established following the methodology proposed in the African Union and AMCOW Framework for Water Security and Climate Resilient Development.

The initiative is drawn on local and regional experts as well as promotes North-South and South-South knowledge exchange through involvement of international organizations and academia such as NIRAS with its partners of Stockholm, Yale School of Forestry and Environmental Studies of the USA and the Centre for Environmental Economics and Policy in Africa (CEEPA) in Pretoria. The initiative will also build and benefit from UNDP-GEF's experience in undertaking similar work elsewhere such as the 'economics of the climate change adaptation programme in Asia'.

It will be delivered as a series of training and experience-sharing workshops interspersed with field work, on the job training and application. The Training Programme will be implemented from October 2013 to December 2014 at the national, transboundary and regional level.

The activities of the WACDEP Capacity Development Programme are organized in 8 phases as follows: i) Programme Management; ii) Inception; iii) Learning Material Development; iv) Capacity Development Team Mobilization; v) Regional and Country Assessments and Plans; vi) Production of and Access to Learning Material; vii) Delivery of Capacity Development; and viii) Summary and Reflections.

The initiative is expected to develop the capacities and knowledge required by planners and decision makers in Africa and to enhance skills in the following areas:

- Making an economic case to high level policy makers on the importance of water security and climate resilient development;
- Undertaking climate impact assessment and climate screening;
- Use of economic analysis tools and methods for appraising investment options including use of cost benefit analysis, cost effectiveness assessment and others;
- Robust decision making using the concept of no/low regrets investments;
- Design of financing and investment portfolios for climate resilient development;
- Mainstreaming no/low regrets investments into development processes;
- Monitoring and evaluation of climate resilient development.

4. CONTEXT

4.1. Climate change, adaptation, and the future

Since the Intergovernmental Panel on Climate Change (IPCC) provided evidence about Climate Change in the mid-1970s, Ghana has participated in various Meetings, Workshops, Conferences, etc. at international, regional, sub-regional levels on climate change. They have focused variously on the causes, responsibilities, and impacts and actions to take at international, national and local levels to mitigate and adapt to the impacts of climate change. In addition, Ghana has taken part in negotiations, entered into agreements, made commitments and received technical, capacity development, and financial assistance. These have led at the global level to various international actions such as the United Nations Convention to Combat Desertification, (UNCCD), United Nations Environment Programme UNEP), United Nations Framework Convention on Climate Change (UNFCCC), United Nations Convention on Biological Diversity (UNCBD), World Summits on Sustainable Development (WSSD), International Strategy to Disaster Reduction (ISDR).

Since 1995 national institutions dealing with the sectors of Water, Health, Food and Agriculture, Energy, Lands and Forestry, Environment etc. have developed sector policies, strategies and plans which include how to deal with the impact of climate change on their sectors. ***Very recently the National Development Planning Commission introduced in 2010 a Guide Book on integrating Climate Change and Disaster Risk Reduction into National Development Policies and Planning in Ghana***.

The Environmental Protection Agency (EPA), in particular, has facilitated two important studies dealing with climate change. The first was a forecast of the loss of rainfall and the resulting loss of runoff in Ghana that can be expected by the years 2025 and 2050. This was based on assumptions of certain scenarios of greenhouse gas emissions into the atmosphere. Global Circulation Models adapted to the West African region were used. It has also facilitated a study into Vulnerability and Adaptation Assessment of Climate Change Impacts in Ghana.

In 2012 the Government approved the National Climate Change Policy. It deals with:

- agriculture and food security;
- disaster preparedness and response;
- natural resource management; equitable social development;
- energy;
- industrial and infrastructural development;
- policy implementation arrangements;
- institutional roles and responsibilities and legal and regulatory framework.

It is clear that Ghana has made efforts in its development in the water and sanitation environment sectors and to adapt to climate change and respond to Sharm El Sheikh Declaration on water sanitation and climate changeadopted by the African Union Heads of State and Government in July 2008. The coming years is expected to see to the implementation of the policies and sector strategies to drive adaptation to climate change. In this regard, the Country Water Partnership, through her development partners will assist government to pursue in its bid to strengthen adaptive capacities.

4.1.2 Policy and strategies

For some time, the Government of Ghana has demonstrated goodwill and commitment by directing the relevant state Institutions in coming up with Policies, Legislative Instruments (LI) and Regulations which deal with, and give support to water security and climate resilient development. For instance, since 1995 National Institutions dealing with Sectors of Water, Health, Food and Agriculture, Energy, Lands and Forestry, Environment, Water Resources, etc. have developed Sector Policies, Strategies and Plans which include how to deal with the impact of climate change on their Sectors. Very recently, the National Development Planning Commission introduced in 2010 a Guide Book on Integrating Climate Change and Disaster Risk Reduction into National Development Policies and Planning in Ghana.

Once investment analysis on water and related projects have been carried out, subject to the approval of the National Development Planning Commission (NPDC), financing is generally from the Government's Budgetary allocations and Development Partners. The NPDC has been established to plan and advise Government to invest in projects which bring about sustainable social and economic growth to meet targets determined by the Government. It is worthy to note that before the Sector Institutions and the NDPC submit projects to the Ministry of Finance for investment by Government and other Donor Agencies they should be assured that water will be available under various scenarios of climate variability and change. Secondly, the projects must be adapted to withstand the risks of disaster to which climate variability and change will expose them.

4.1.3 Human, financial and information resources

At the national level, some of the key Staff at the Ministries, Agencies and Departments have had opportunities to participate in national and International Conferences, Workshops and Seminars on water security and climate resilient development. They have not had formal training on the issues we are concerned about. In view of the fact that all these Agencies and Departments have been decentralized to the Regional and District levels and planning has to be done "bottom up", Staff at these levels have not been prepared adequately to deal with climate change issues for water security and climate resilient development. **They lack the requisite knowledge and skills let alone to improve upon them.**

Senior Staff of the following Institutions: Water Resources Commission (WRC), Environmental Protection Agency (EPA) of the Ministry of Environment, Science and Technology and Innovation (MESTI), Water Research Institute (WRI), Volta River Authority (VRA), Ministry of Food and Agriculture (MoFA), Ministry of Water Resources, Works and Housing (MWRWH), Ghana Water Company Ltd. (GWCL), Community Water and Sanitation Agency (CWSA), Ministry of Lands and Natural Resources (MLNR), National Development Planning Commission (NDPC), Ministry of Finance (MoF), Metropolitan Municipal and District Assemblies (MMDAs) and Ghana Meteorology Agency (GMA) of the Ministry of Transport (MoT) have, at one time or the other, attended Meetings, Workshops, Conferences and Seminars on climate change issues related to water and other relevant issues. In view of this, they are knowledgeable superficially. There is, therefore, the need for them to be trained on these issues.

4.2. Legal and institutional frameworks

4.2.1 Legal framework

The lead Agencies in Water Security on one hand and Climate Resilience development on the other hand are Water Resources Commission (WRC) and the Environmental Agency respectively. In 1996 the Parliament passed ACT 522 to vest water resources in the President of the Republic and for it to be managed by a Water Resources Commission. The ACT also gave authority to regulate and manage the utilization of water resources and the co-ordination of any policy in relation to them. Its functions include among others comprehensive, planning, granting of water rights, data collection and dissemination of information in water resources, monitor and evaluate programmes for operation and maintenance of water resources, advise pollution control agencies, on matters concerning pollution of waters.

The Water Resources Commission in pursuit of its mandate has:-

i. Championed the preparation and approval of a comprehensive National Water Policy in 2007,
ii. Adopted an Integrated Management approach at managing the water resources of the country instead of the sectoral approach which existed before the Commission was established,
iii. Provided leadership and advised Government on the management and use of the water resources which Ghana shares with neighboring countries in the Volta River Basin, resulting in the establishment of the Volta Basin Authority (VBA),
iv. Established Six (6) out of seventeen (17) River Basin Boards,
v. Assessed the;
    a) Surface and ground water availability at the national level and in the six (6) river basins,
    b) Current and long term water demand for the various sectors and the aquatic ecosystem up to 2030;
    c) The balance between water availability under various scenarios of climate variability and change of the present and the projected future up to 2030.It uses the "Water Evaluation And Planning" (WEAP) Model of the Stockholm Environment Institute.

vi. Had two Legislative Instruments (LI) for water resources regulation promulgated. The titles are:-
    a) Water Use Regulations LI 1692 of 2001. This LI demands that any person who wishes to have water for domestic, commercial, industrial, municipal, agricultural, power generation, fisheries, etc. purposes shall apply for a water permit from the Commission,
    b) Drilling License and Groundwater Development Regulations LI 1827of 2006 requires that any person who wishes to construct a well for the abstraction or monitoring of groundwater for research should obtain a water drilling license from the Commission,

vii. Obtained external assistance to strengthen water resources information agencies namely for hydro meteorological data: the Ghana Meteorological Agency, of the Ministry of Transport and Communication, the Hydrological Services Division of the Ministry of Water Resources Works and Housing (Hydrological data) and Water Research Institute of the CSIR for groundwater and aquatic ecosystem data,
viii. Entered into a Memorandum of Understanding with the Environmental Protection Agency on surface and ground water quality and the discharge of wastes into water bodies,
ix. Instituted the application of Strategic Environmental Assessment (SEA) principles to its integrated water resources plans for the river basins,
x. Prepared a Buffer Zone Policy and Strategy for Catchment Management awaiting cabinet approval,
xi. Established a National Dam Safety Unit to ensure that dam design, construction, operation and decommissioning are properly done to avoid damage to infrastructure, communities etc. A Dam Safety Regulation has been prepared and it is presently being processed to be promulgated as Legislative Instrument.
xii. Entered into a Memorandum of Understanding with the Environmental Protection Agency (EPA) for the protection and conservation of Water Quality.

In 1994 based on an Environment Policy developed in 1992, ACT490 was passed to establish a new Environmental Protection Agency required to prescribe standards and guidelines relating to the pollution of air, water, land and other forms of environmental pollution including the discharge of wastes and the control of toxic substances and their enforcement. Following the mandate given to it the Environmental Protection Agency has:

- Promulgated LI 1652 Environmental Assessment Regulations of 1999. This requires that no person shall undertake certain identified activities which have an impact on the environment without registering it and obtaining a license before from the Agency. In the case of the water environment it covers not only impact on the quality but also on the ecological changes and processes as they affect communities, habitats, flora and fauna. Provided advice to Government to ratify a number of international conventions on Desertification and Climate Change.
- Replaced the 1992 Environmental Policy with a new National Environment Policy of 2012.

4.2.2 Institutional set-up, mandates, roles and responsibilities

As indicated earlier, the Water Resources Commission (WRC) is mandated by an ACT establishing it to work for water security whereas the Environmental Protection Agency (EPA) is responsible for issues relating to climate resilience development. The NPDC is deeply involved in the activities of these two bodies. Whereas the EPA is decentralized to the Regional and District levels, both WRC and NDPC exist as national Institutions. The WRC, amongst others, is responsible for the preparation of Integrated Water Resources Management (IWRM) Plans either at the national, basin or local levels.

Apart from the three main Institutions mentioned earlier, another national Institution which deals primarily, in water security is the Water Research Institute (WRI) of the Council for Scientific and Industrial Research (CSIR). This Institute has a highly trained Staff to undertake research in both surface water and groundwater resources.

On the international scene, International Water Management Institute (IWMI) has a base in the country. Incidentally, its location is close to that of the WRI. It must be mentioned that a number of Development Partners are involved not only in water utilization projects but also in funding of studies related to water security and climate resilient development. For instance, the EPA, with the assistance from Netherland Climate Assistance Programme, has come up with a document on GHANA CLIMATE CHANGE IMPACTS, VULNERABILITY AND ADAPTATION ASSESSMENTS. NGOs, for example, Water Aid and ProNet are involved in water utilization projects only.

4.3 Challenges and capacity development needs

Although there are ten (10) Public Universities and over twenty (20) Private University Colleges, none of them has developed tailor– made Curriculum on Water Security and Climate Resilient Development. Presently, the Kwame Nkrumah University of Science and Technology in Kumasi runs a course in Water Resources Management at the Master's level. The project would take steps to provoke thinking into building modules for Water Security and Climate Resilient Development. As institution of higher learning, their participation in the capacity development programme would be key to the delivery of the long term benefit for the sub-region, training Ghanaians and non-Ghanaians in this domain in a sustainable manner.

Type of skills that are needed at the national level to integrate water security and climate resilience into national development process are the ability to undertake the following job requirements:

- Identify the Sector Policies, Sector Strategic Development Programmes (long and medium) and water related projects in climate change management issues e.g., food, energy, environment etc. to be submitted to the NPDC.
- Identify which projects have been screened for (i) water security (ii) climate resilience by the Water Resources Commission and (iii) the processes and methods used to get them admitted into the National Development Plan.
- Identify water related development in Sectors, such as, Highways, Forestry, Mining, Housing, Environment etc.
- Identify water components in their development in order to assess how they can be adapted to withstand disasters due to water security and climate change.
- Prepare guidelines for screening such projects for investment analysis.
- Prioritize water secure and climate resilient projects to select those that can be put forward for investment because of their no or low regrets investment.
- Project preparation to meet the special requirements of financing Agencies.
- Monitoring and Evaluation.
- Analysis economics of projects to show that the long term benefits from the intended projects will outweigh or equal to the cost of investment.
- Develop investment financing strategies.

- Develop and implement a communication strategy to create awareness and build political commitment among the Executive arm of Government and Members of Parliament, particularly, the Select Committee on Water, Works and Housing.

4.4. Key on-going development processes and links with WACDED and the capacity development programme

The National Development Planning Commission (NDPC) has developed the National Medium Term Development Policy Framework (2014 – 2017) to guide the Ministry, Department and Agencies as well as the Metropolitan, Municipal and District Assemblies in the development of their Medium Term Development Plans. Following, the annual Work Plans would be developed and sent to the NDPC to facilitate funding with the Ministry of Finance. The training process will support this effort to integrate water security in their operational plans.

Secondly, a number of initiatives have been identified in some of the institutions involved with the capacity development of WACDEP. This includes the White Volta Flood Hazard Assessment, Forecasting and Early Warning System Project funded by the World Bank and implemented by the Water Resources Commission. The project brings on board institutions like the Hydrological Services Department and Ghana Meteorological Agency. The project aims to support institutions, development capacity to apply models for forecasting hydrological impacts while developing early warning systems in the process. This aspect feeds into the Work Package 7 of WACDEP which calls for synergy development with the WACDEP host institution in the delivery of this training and which could influence planning in water security and climate resilient development.

Whereas a number of the institutions have not responded to the call to share ongoing projects with the WACDEP coordination team, the first training session would be used to complement this effort to fill gaps while identifying synergies to strengthen orientations in the aspects of planning in the different sectors.

4.5. Strategy to address identified learning needs

Recognizing the lack of human capacity for effective planning, it is important to begin from scratch the training sessions by exploring the systems and approaches to planning in the various institutions in order to craft effective and tailored skill development.

The second aspect will see to integration of water security and climate resilient development. In the elaboration of the Medium Term Development Plans, it will be critical to ensure a tailored training to catalyze the planning process. This will be followed by mentoring process to ensure that participants applied the tools to real organizational situations. Feedback mechanisms will be put in place at the beginning of the training sessions and channels will be established to foster responses to challenges in the planning process. Above all, the studies to be conducted within the framework of WACDEP will be such that the products will be integrated in the training process so that practical aspects would be devised to support participants in planning at their various jurisdictions.

A critical challenge however, is the time to commence the training. It is not certain that holding the first meeting could take place in December. The Project Management Team will see how to review some of the plans while ensuring that they are well managed with inputs from the capacity development and learning process.

4.6. Selected Capacity Development Team members

The selection of the capacity development team was informed by the need to ensure that sustainable mechanisms were factored into the process as well as expertise in the fields of:

- Water resources and climate,
- Economics of projects and financing strategies, and
- Policy, stakeholder analysis and vulnerability assessment.

In all, six applicants were received including five (5) men and a woman from the academia and state institutions as well as private consultants. The list is shown in table below:

No	Name	Institution/Organisation	Training option	Contact
1	Mr. Frank Ohene Annor	Kwame Nkrumah University of Science and Technology, Kumasi	Water Resources / Climate	costeryz@yahoo.co.uk; costeryz@gmail.com
2	Mr. Ben Ampomah	Water Resources Commission, Accra	Economics & Projects Financing	byampomah@yahoo.com
3	Dr. Emmanuel Tachie-Obeng	Environmental Protection Agency, Accra	Policy, stakeholders, vulnerability assessment	etachieobeng@gmail.com +233(0)208196879 +233(0)240973625
4	Dr. Yaw Opoku Ankomah	Private Consultant	Water Resources/ Climate	y_ankomah@yahoo.com
5	Mrs. Bertha Dartey	Natural Resources Institute, University of Greenwich	Water Resources/ Climate	berthadarteh@yahoo.co.uk +233(0)244157289;
6	Mr. Kwame Odame-Ababio	Private Consultant	Water Resources Management	odameababio@yahoo.com

Above all, their individual strengths should be complementary which was found to be consistent with the selected team.

The applications received from various institutions to have their staff capacities strengthened with planning techniques and tools were screened to ascertain their strengths in respect of the subjects under the capacity development programme. In the end, the list of persons in the table below was recommended for engagement by NIRAS NATURA, implementer of the capacity development component.

No	Domain	Name	Academic qualification	Institution/Organisation	Relevant work experience	Contact
1	Expert Trainer in policy, stakeholders invlovement, vulnerability.	Dr. Emmanuel Tachie-Obeng	Doctorate	Environmental Protection Agency, Accra	Involved with capacity development and consultancy services	etachieobeng@gmail.com +233(0)208196879 +233(0)240973625
2	Expert Trainer in economics and finance of projects	Mr. Ben Ampomah	Masters	Water Resources Commission, Accra	Involved with capacity development in institutional frameworks and economics of water management	byampomah@yahoo.com +233(0)244874138
3	Expert Trainer in hydro-physical issues / Water Resources Management	Mr. Frank Ohene Annor	Masters (Doctorate ongoing)	Kwame Nkrumah University of Science and Technology, Kumasi	Involved with capacity building in IWRM and climate change	costeryz@yahoo.co.uk; costeryz@gmail.com

4.7. Selected participants

The participants were drawn from government institutions in the fields of food, environment, development planning and water management. The participants were considered at two levels: lower level planners and those at senior/strategic management levels. The table below presents the list:

List of 12 Participants Planners

S/N	Ministry/ Sector	Institutions/ Department	Participants Potential	Background	Position in the Institution	National Planning Processes	Correspondent WACDEP WPs	Contact
1.	Environment, Water and Climate	Water Resource Management & Development	1. Manatsa Ruzengwe	Natural Resources, Agriculture, Land, Water Resources Management	Chief River Protection Eng.	Lead Ministry on Environment, Climate and Water spearheading the NCCRS process which is also being supported by WACDEP Zimbabwe	WP2, 5	manatsa.ruzengwe@yahoo.com
2.			2. Gerald Mundondwa	Civil Engineer	River Protection Eng.		WP2, 5	gerald.phi@gmail.com
3.			3. Kudakwashe Kayirasora	Civil Engineer	Hydrologist		WP2, 5	kudakwashekayirasora@gmail.com
4.			4. Nesbert Shirihuru	Economist	Rural Wash Officer (Economist)		WP3, 4	nshirihuru@gmail.com
5.		Environment	5. Kundishora Mpandaguta	Geography and Environmental Studies	Principal Natural Resources Officer		WP2, 5	kmpandaguta@environment.gov.zw; mpandaguta@gmail.com

S/N	Ministry/ Sector	Institutions/ Department	Participants Potential	Background	Position in the Institution	National Planning Processes	Correspondent WACDEP WPs	Contact
6.		Meteorology	6. Linia Mashawi	Meteorologist (Physics)	Climate Applications Specialist		WP2, 5	lmashawi@gmail.com
7.		ZINWA	7. Charles Dini	Civil Engineer	Planning Manager		WP2, 5	cdini@zinwa.co.zw
8.	Energy & Power Development	Energy	8. Johannes Mukambaiza	Chemistry and Biochemistry	Energy Development Officer	Energy; Cleaner energy options such as Solar, biogas	WP2, 5	mukambaizaj@yahoo.co.uk
9.	Agriculture, Mechanisation & Irrigation Develop	Agricultural Extension Services	9.Kennedy Mabehla	Agriculture	Principal Agricultural Extension Specialist	Food; Irrigation development to counter reduced rainfall activity, Adaptive crop varieties	WP2, 5	kmabehla@hotmail.com
10.		Agricultural Economics	10. Alfios Mayoyoh	Economist	Principal Economist		WP3, 4	amayoyoh@gmail.com
11.	Local Government	Civil Protection	11. Lameck Betera	Economist	Principal Officer	Disaster Reduction; Natural disasters forecasting and monitoring projects	WP7, 8	lbetera@eprzim.co.zw; lbetera1968@gmail.com
12.	Ministry of Finance & Economic Development	Policy Planning & Coordination	12. Tafadzwa Mushope	Economist	Principal Economist	Project financing and policy	WP3, 4	tmushope@gmail.com

List of 5 Participants Decision Makers

S/N	Ministry/ Sector	Institutions/ Department	Participants Potential	Background	Position in the Institution	National Planning Processes	Correspondent WACDEP WPs	Contact
	Sector	**Department**	**Name**	**Background**	**Position**	**On-going processes/ initiatives**	**Corresponding WACDEP WPs**	**Email**
	Environment, Water and Climate	Water Resource Management & Development	1. Gilbert Mawere	Civil Engineering & Hydrology	Deputy Director	Lead Ministry on Environment, Climate and Water spearheading the NCCRS process	WP1, 2, 5, 8	; gilbertmawere@gmail.com
		Environment	2. Abraham Matiza	Geography	Deputy Director		WP2, 5, 8	azmatiza@environment.gov.zw; matiza.abraham@gmail.com
	Energy & Power Development	Energy	3. Raphael Tirivanhu	Energy Conservation and Renewable Energy	Director	Energy	WP2, 5, 8	tirivanhur@gmail.com
	Agriculture, Mechanisation & Irrigation Develop	Agriculture	4.Benard Mache	Agriculture	Director	Food	WP2, 5, 8	bernard.mache@yahoo.com
	Local Government	Civil Protection	5. Sibusisiwe Ndlovu	Distater Management	Deputy Director	Disaster Reduction	WP 7, 8	sndlovu@eprzim.co.zw

4.8. Implementation plan of the training workshops and on-job mentoring actions to support participants with their home institutions

Activities	Objectives	Participants/ Number	Period	Proposed Venue details	Budget/Euros
National Review of the Learning Material (LM) by the NTC, CDTeam and relevant Experts and stakeholders		**5**	2 Week in November	Water Resources Commission Conference Room	
Preparation and elaboration of draft action plan by each participant planner			January 2014	During 1st Training Session	
Workshop1: Setting the scene and understanding the problem	To provide an initial overview and sensitization of the framework, present the case for investing in water security for climate resilient development and start exploring some of the methods available to understand vulnerability and climate impacts	17	Last Week of January 2014 (27 – 31)	Accra	**10,000**
On job mentoring actions support to participants with their home institutions during In between Workshops 1 – 2	To help planners to apply theoretical knowledge in their work in connection with the identified on-going or upcoming activities that the implementation needs to support		February – March	Participating Institutions	
Workshop 2: Identifying and appraising solutions	To help participants to develop a balanced portfolio of investment options that enhance water security for climate resilient growth and development, to prioritize no/low regret options and to make a case clear economic for investment	12	First Week of April 2014 (7 – 11)	Kumasi	**7,800**
On job mentoring actions support to participants with their home institutions during In	To help planners to apply theoretical knowledge in their work in connection with the identified on-going or upcoming activities that the implementation needs to support		May -June	Participating Institutions	

between Workshops 2 – 3					
Workshop 3: Delivering solutions	To highlight to participants the financing strategies for the portfolio of initial no/low regret investment identified at workshop 2 and in intervening period, explain how these can be integrated into existing development planning processes	12	Third Week of June (16 – 20)	Kumasi	**7,800**
On job mentoring actions support to participants with their home institutions during In between Workshops 3 – 4	To help planners to apply theoretical knowledge in their work in connection with the identified on-going or upcoming activities that the implementation needs to support		July – August	Participating Institutions	
Workshop 4: Monitoring and moving forwards and introduction to the framework	To highlight the importance of an effective M& E framework in assessing the value that applying the framework has added, and provide feedback for future iterations and applications, amongst participating Strategic Decision Makers, the content and value of the Framework.	17	Last Week of August	Kumasi	8,000
On job mentoring actions support to participants with their home institutions during In between Workshops 4 – 5	To help planners to apply theoretical knowledge in their work in connection with the identified on-going or upcoming activities that the implementation needs to support		September - October		
Workshop 5: Wrap up, lessons learned	Wrap up the training programme; review activities, outcomes, actual learning taking place etc.	17	Third Week of November (17 – 21)	Accra	**9,000**
Total					**42,300**

4.9. Participants planners action plans

Given the nature of the capacity development programme and the fact that the timing is rather short, part of the first training session will allow for participants to develop action plans that take into account the mentoring aspects of the programme. This will aim to accompany the planners in the delivery of the duties. It is important to note that the institutions from which participants originate may have their own mechanisms and procedures for planning. It is therefore necessary to develop approaches that do not seek to impose concepts but rather make cases for integration of water security and climate resilience development while strengthening plans where gaps are identified.

4.10. Timeline, activities and responsibilities

The capacity development training is expected to be carried out from November 2013 to December 2014. To this end, the defined activities will be carried out at regular spacing to enable participant planners implement the tools they are introduced to during the training. The onus lies on the trainees, first and foremost to want to influence the status quo with the new tools that would be applied to situations from their own backgrounds. The second responsibility is with the capacity development team who will develop modules in line with the selected themes and deliver to bring participants to appreciate the coherence required of planning in order to make the impacts necessary. The National Training Coordinator will provide technical backstopping to the entire process to ensure that the programme is well undertaken.

Activities	Sub-activities	Period															Responsible	Collaborators
		2013			2014													
		O	N	D	J	F	M	A	M	J	J	A	S	O	N	D		
National Review of the Learning Material (LM) by the NTC, CDTeam and relevant Experts and stakeholders																	NTC Capacity Development Team	WACDEP Project Manager
Preparation and elaboration of draft action plan by each participant planner																	Trainees	NTC Capacity Development Team
Workshop1: Setting the scene and understanding the problem	Draft Invitation letter																Capacity Development Team	NTC
	Draft Terms of reference for training																	
	Hold training																	
	Draft report																	
On job mentoring actions support to participants with their home institutions during In between Workshops 1 – 2																	Trainees	NTC Capacity Development Team
Workshop 2: Identifying and appraising solutions	Draft Invitation letter																Capacity Development Team	NTC
	Draft Terms of reference for training																	
	Hold training																	
	Draft report																	

On job mentoring actions support to participants with their home institutions during In between Workshops 2 – 3																	Trainees	NTC Capacity Development Team
Workshop 3: Delivering solutions	Draft Invitation letter																Capacity Development Team	NTC
	Draft Terms of reference for training																	
	Hold training																	
	Draft report																	
On job mentoring actions support to participants with their home institutions during In between Workshops 3 – 4																	Trainees	NTC Capacity Development Team
Workshop 4: Monitoring and moving forwards and introduction to the framework	Draft Invitation letter																Capacity Development Team	NTC
	Draft Terms of reference for training																	
	Hold training																	
	Draft report																	
On job mentoring actions support to participants with their home institutions during In between Workshops 4 – 5																	Trainees	NTC Capacity Development Team
Workshop 5: Wrap	Draft Invitation letter																Capacity	NTC, Trainees

up, lessons learned	Draft Terms of reference for training Hold training Draft report															Development Team	

4.11. Quality insurance, monitoring and evaluation system

The project management unit is expected to implement the Monitoring and Evaluation matrix developed for WACDEP. In this light, the National Training Coordinator (NTC) will be instrumental in the use and application of this tool to ensure that the project capacity Development aspect is being delivered to meet stakeholder expectations. Above all the tool will also ensure that the capacity Development programme meets the set targets, ensuring timely delivery without compromising the quality of the process.

The NTC will bring to bear the experiences of teaching and learning. At the same time, the Programme Coordinator for the capacity Development will provide oversight of the performance of the training in order to deliver the best.

5. CONCLUSION

Based on the reports of the baseline survey of WACDEP and the Work Plan, three key Institutions, namely, the Water Resources Commission, which reports directly to the President's Office, the Environmental Protection Agency under the Ministry of Environment, Science and Technology Innovations and the Water Directorate of the Ministry of Water Resources, Works and Housing are directly involved in activities related to water security and climate resilient development.

Learning needs identified, though considered overall as general, have been based on the mandates of these Institutions as well as on the Job Descriptions of their Key Staff. Curricula development, to a great extent, adopts this approach. Although the needs identified may not necessarily be specific in meeting the objectives of the Capacity Development Programme of WACDEP, it is worthy to note that skills acquired (in those areas as outlined or identified), especially, by Staff of the Planning Units of these Institutions, will go a very long way towards Development the capacities to ensure water and related isues are factored in everyday planning and decision making processes. It is essential to equip Staff of these Institutions with the necessary knowledge and skills, tools and techniques to enable them perform their mandates and jobs satisfactorily.

Much of this work is from the documents made available to me by both the Chairman of WACDEP and the Acting Executive Secretary/Manager of GWP as well as some feedback received from the expected participants of the capacity Development programme. The difficulty has been the unavailability of funds to consult with stakeholders in order to deliver timely reports as expected.

It is hoped that the participants to be trained will demonstrate the interests expressed during the application process in order to stimulate teaching and learning. At the end of the day, the institutional capacity would have been strengthened to meet the challenges of planning in the strive for excellence and bringing t bear on development in their jurisdiction.

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