

# **SDG 6 IWRM Implementation Action Plan for Ghana**

Water Resources Commission  
in partnership with  
Ghana Country Water Partnership

July 2019

## ACRONYMS

ABB	Ankobra Basin Board
BB	Basin Board
BVBB	Black Volta Basin Board
CSIR	Council for Scientific and Industrial Research
CSO	Civil Society Organisation
CWP-Ghana	Country Water Partnership
CWSA	Community Water and Sanitation Agency
DBB	Densu Basin Board
EHSD	Environmental Health and Sanitation Directorate
EPA	Environmental Protection Agency
FC	Forestry Commission
GES	Ghana Education Service
GIDA	Ghana Irrigation Development Authority
GSGDA II	Ghana Shared Growth and Development Agenda Phase II
GWCL	Ghana Water Company Limited
GWJN	Ghana WATSAN Journalists Network
GWP	Global Water Partnership
HSD	Hydrological Services Department
IRC	International Resource Centre
IWMI	International Water Management Institute
JTC/IWRM	Joint Technical Committee for Integrated Water Resources Management
MDG	Millennium Development Goal
MESTI	Ministry of Environment, Science, Technology and Innovation
MGCSP	Ministry of Gender, Children and Social Inclusion
MLGRD	Ministry of Local Government and Rural Development
MLNR	Ministry of Lands and Natural Resources
MMDAs	Metropolitan/Municipal/District Assembly
MoE	Ministry of Education
MoF	Ministry of Finance
MoFA	Ministry of Food and Agriculture
MoH	Ministry of Health
MWRWH	Ministry of Water Resources Works and Housing
NDPC	National Development Planning Commission
NESSAP	National Environmental Sanitation Strategy and Action Plan
NGO	Non- Governmental Organisation
NLLP	National Level Learning Alliance
SDG	Sustainable Development Goal
TBA	Tano Basin Board
VBA	Volta Basin Authority
WASH	Water Sanitation and Hygiene
WATSAN	Water and Sanitation Team
WD	Water Directorate
WRC	Water Resources Commission
WRI	Water Research Institute

WSMT  
WVBB

Water and Sanitation Management Team  
White Volta Basin Board

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## 1. INTRODUCTION

As its contribution to catalyse action and accelerate implementation of programmes to achieve the goals and targets of the SDG6 target 6.5, the Global Water Partnership (GWP) in collaboration with UNEP-DHI Centre and Cap-Net UNDP initiated the SDG6 IWRM Action programme to support country responses to SDG target 6.5. The programme is to help countries design and implement responses that directly promotes measurable progress. Ghana is a beneficiary of the programme and is being implemented by the Water Resources Commission (WRC). The SDGs, the new development agenda, aims at building on the successes and unfinished agenda of the Millennium Development Goals (MDGs) and provides basis for development actions to be carried out between 2016 and 2030 to take the world to a higher level of human development, well-being and dignity within a sustainable development framework.

Ghana's population is estimated to be 28.83 million (World Bank, 2017) and projected to reach 36.86 million by 2030. With Ghana located in the downstream section of river Volta and also having a number of smaller rivers, analysis of the surface water resources situation makes the country well-endowed with significant fresh water resources compared to current and future uses. Despite this, the country runs the risk of freshwater availability due to its high population growth rate of 2.2%, rapid urbanisation, coupled with environmentally harmful practices such as uncontrolled illegal mining and the effects of climate change. This makes it imperative for the country to adopt management measures to safeguard and ensure continuous availability in terms of quantity and quality. To manage the country's water resources efficiently, therefore, Ghana has adopted Integrated Water Resources Management (IWRM) as a management tool which is implemented through the WRC.

### 1.1 Strategic Context

Ghana's development agenda is driven by the medium term *National Strategy of Coordinated programme of Economic and Social Development, Agenda for Jobs: Creating Equal Opportunities for All (2017 – 2024)*. Four key goals of the policy are: (i) creating opportunities for all Ghanaians; (ii) safeguarding the natural environment and ensuring a resilient built environment; (iii) maintaining a stable, united and safe country; and, (iv) building a prosperous country which in itself informed by government's commitment to attaining the goals of the SDGs. Development and implementation of the IWRM Action plan will go to support national actions towards achieving the objective of safe safeguarding the integrity of the natural environment especially the water resources both within and to reinforce transboundary cooperation through appropriate monitoring mechanisms. Other water and water related policies include the following:

- National Water Policy (2007);
- Water Sector Strategic Development Plan (2011);
- National Environmental Sanitation Strategy and Action Plan (2010);
- National Climate Change Policy and Strategy (2013);
- National Integrated Water Resources Management Plan (2012);
- Riparian Buffer Zone Policy (For Managing Freshwater Bodies in Ghana (2013);
- National Medium Term Development Plan (Ghana Shared Growth and Development Agenda II, 2014 – 2017).

The National Development Planning Commission (NDPC) has overall responsibility for monitoring progress towards achieving the SDG goals. With reference to sector policies and strategies it has provided a schematic representation of the linkages of the Goal 6 targets to the policy objectives of the Ghana Shared Growth and Development Agenda (GSGDA II, 2014 – 2017). These are reflected

in the goals of the 2017 – 2024 medium-term strategic policy of “*Coordinated Programme of Economic and Social Development, Agenda for Jobs: Creating Equal Opportunities for All*”.

### 1.2 The SDG6.5.1 Baseline Studies

As part of the process towards the preparation of the IWRM Action Plan, the UN Water conducted a baseline study for selected countries including Ghana. This took the form of answering to a set of questions that focused on four thematic areas of: (i) *Enabling Environment*; (ii) *Institution and Participation*; (iii) *Management Instruments and*, (iv) *Financing*. The responses were scored on a scale of 0 – 100. The summary of the collated country results is as shown in the table below.

*Table 1 Summary of the level of IWRM implementation in Ghana, 2017*

<b>IWRM AREA TARGETED</b>	<b>SCORE (0 – 100)</b>
<b>Enabling Environment</b> (policies, laws and plans)	Medium High 56
<b>Institutions and Participation</b> (institutional capacity, cross-sector coordination and stakeholder participation)	Medium High 55
<b>Management Instruments</b> (management and monitoring programmes, data and information sharing)	Medium Low 40
<b>Financing</b> (budgeting and financing)	Medium Low 44
<b>IWRM Implementation Status (0 – 100)</b>	Medium Low 49

Table 1 shows that the overall country level IWRM implementation is classified medium low, indicating the need to ramp up IWRM implementation if the country is to attain the goals of SDG6.5, that is “*By 2030 implement IWRM at all levels, as measured through indicator 6.5.1*”.

### 1.3 Financing of the SDGs

Financing of government programmes is made through the annual budgetary appropriations to Ministries, agencies and government institutions. Ministries and all institutions budget for their programmes based on the policy objectives of the *National Strategy of Coordinated programme of Economic and Social Development, Agenda for Jobs: Creating Equal Opportunities for All (2017 – 2024)* which in itself incorporates the goals and targets for attaining the SDGs. The WRC is directly responsible for implementation of IWRM programmes and budget accordingly. The challenge here is that releases sometimes fall short of budgeted allocation and hamper full implementation. Other sources of funding are from Internally Generated Funds (IGF) and donor supported projects.

### 1.4 Relevant Government Institutions

Key ministries, their agencies and institutions to be involved in the implementation of the programme include the following:

- Ministry of Sanitation and Water Resources/Water Directorate (MSWR/WD) and the agencies: WRC/Basin Boards; CWSA/Water Boards/WATSAN; the GWCL and the Hydrological Services Department (HSD);
- Ministry of Finance

- Ministry of Local Government and Rural Development (MLGRD), identified Metropolitan, Municipal and District Assemblies (MMDAs);
- Ministry of Environment Science Technology and Innovation (MESTI)/EPA, WRI/CSIR;
- Ministry of Food and Agriculture (MOFA)/GIDA;
- Ministry of Lands and Natural Resources (MLNR), acting through the Forestry Commission (FC) and the Minerals Commission (MC);
- Ministry of Gender, Children and Social Protection (MGCSP);
- National Development Planning Commission (NDPC).

Collaborative institutions and partners include the following:

- The Sector Working Groups (Water and Sanitation/Environment), etc.
- International Resource Centre/National Level Learning Alliance (IRC/NLLAP).
- Ghana/Burkina Joint Technical Committee on IWRM (JTC-IWRM).
- Development Partners (DPs).
- Coalition of NGOs in Water and Sanitation (CONIWAS)
- Network of Water and Sanitation Journalist (NWSJ).
- Community Based Organisations (CBOs).
- Identifiable Women Groups (IWGs).

## 2. GOAL AND OBJECTIVES

### 2.1 Goal

The goal is aimed at catalysing action for accelerated implementation to achieve the SDG6.5 target on IWRM and water related goals by 2030.

### 2.2 Objectives

The SDG6 IWRM Action Plan will focus on the objectives as follows:

- To enhance sectoral capacity, coordination and monitoring.
- To create awareness of opportunities in IWRM to attract private sector participation.

## 3. IWRM ACTION PLAN PREPARATION PROCESS

The preparation of the Action Plan followed the three-stage process as depicted in the diagram below:

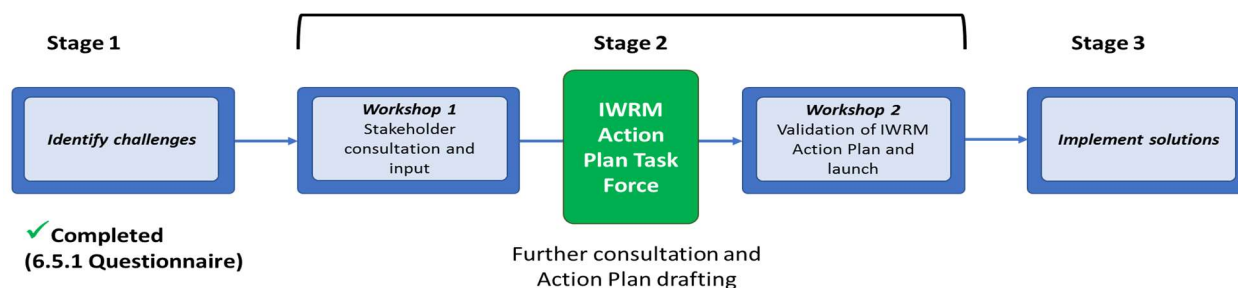


Figure 1 IWRM Action Plan preparation process

The first stage consisted of providing answers to Questionnaire relating to the level of IWRM implementation in Ghana. The answers were scored on a scale of 0 - 100 in relation to the four target areas depicted in the table below. The scoring for each question in the Questionnaire was obtained through a consultation meeting organised by the WRC in 2017 and comprised key stakeholders representing the Ministry of Sanitation and Water Resources, Academia, Research Institutions, CSOs and NGOs. The completed questionnaire was subsequently forwarded to the UN Water for compilation and further analysis. Refer to Table 1 for the composite scores.

### 3.1 Stakeholder Consultation and IWRM Implementation Task Force

The second stage of the preparation began with a two-day stakeholder consultation workshop. The workshop was organised by the WRC and the Country Water Partnership-Ghana under the auspices of the Ministry of Sanitation and Water Resources on 21<sup>st</sup> and 22<sup>nd</sup> November, 2018. The objective of the workshop was to seek inputs to the formulation of the SDG6 IWRM Action Plan implementable within three years. The participants were drawn from the Ministry of Sanitation and Water Resources, the WRC and relevant agencies, Academia, Development Partners, NGOs, CSOs and the media in order to optimise relevance, ownership and buy-in of the IWRM Action Plan. The UNEP-DHI and GWP-WA were represented, providing insight into the SDG6.5 initiative and made contributions in the conduct of the workshop. The workshop deliberated on the action points based on the scores, identified challenges and proposed solutions. This formed the first attempt to the formulation process.

To build on the work of the two-day consultation workshop, a five-member IWRM Action Plan Task Force was formed. Membership was drawn from the following institutions: (i) the Water Research Institute of the Council for Scientific and Industrial Research (WRI-CSIR); (ii) the Ministry of Sanitation and Water Resources (MSWR); (iii) the Water Resources Commission (WRC); and (iv) Coalition of NGOs in Water and Sanitation (CONIWAS). The purpose for forming the Task force is to further engage in consultations especially with other stakeholders outside the participants and present a prioritised draft Action Plan to be reviewed and validated at a Validation Workshop. The Executive Secretary of WRC and Chairman for CWP-Ghana chaired the meetings and together with the CWP-Ghana Country representative provided support in terms of facilitation and policy direction in the work of the Task Force. After consultations and deliberations the Task Force scaled down the action points based on a set of criteria drew up the draft IWRM Action Plan for review and validation. Aside the meetings of the Task Force, a core team consisting of the Chairman, CWP-Ghana and the facilitator met in-between to make proposals for the consideration of the larger TF.

### 3.2 Validation Workshop

The prioritized draft IWRM Action Plan was presented at the Stakeholder Validation Workshop on 21<sup>st</sup> June, 2019 where the plan was reviewed and validated. To engender smooth discussions, participants at the workshop included persons that participated in the Stakeholder Consultation Workshop. The UNEP-DHI was represented at the workshop. To review the draft Action plan three Groups were formed according to the three thematic areas representing (i) Enabling Environment; (ii) Institutions and Participation, and (iii) Management Instruments. The fourth thematic area representing Financing, was reviewed by all the three Group and the results presented, discussed and adopted at plenary.

## 4. OVERVIEW OF ACTIONS

A total of nine (9) Action Points were adopted for implementation at the Validation Workshop.



#### 4.1 Enabling Environment

Two Action points emerged as follows:

- Support Review of National Water Policy (2007).
- Review IWRM Plans for Tano and Pra Basins.

#### 4.2 Institutions and Participation (Four Actions)

Four actions emerged as follows:

- Map out Opportunities to engage the Business Community in IWRM Activities.
- Build capacity of water related Stakeholders in IWRM to achieve SDG 6.5 targets.
- Develop harmonised M&E System for efficient and effective implementation of IWRM activities at the Basin level.
- Develop EIC (Education Information and Communication) Material on key Water Security and Climate Resilient issues taking into account Gender perspectives.

#### 4.3 Management Instruments

Two actions emerged for implementation as follows:

- Strengthen operations of the primary water resources data collection and monitoring stations.
- Increase coverage and strengthen activities of existing water quality monitoring in the country.

#### 4.4 Financing

One action emerged for implementation and presented as follows:

- Develop Incentive-based Policy/Strategy to attract the Private sector to support IWRM activities.

The SDG6 IWRM Action Plan (2020 – 2022) is presented in Table 2

Table 2 SDG6 IWRM Action Plan (2020 - 2022)

Necessary Action/Policy Objective	Expected Output	Method of Delivery	Realisation Time	(Potential) Source of Financing
1.1 Support Review of National Water Policy (2007)	National Water Policy (2007) reviewed to address emerging issues and aligned with SDG 6 and related targets	<ul style="list-style-type: none"> <li>Develop TOR</li> <li>Engage Consultant to conduct review of NWP</li> <li>Consultant conducts Consultative Workshops, with mandatory inception and Validation Workshops</li> <li>Reviewed NWP presented to MoSWR for Cabinet Approval</li> </ul>	24 Months	
1.2 Review IWRM Plans for the Tano (2012) and Pra (2012) Basins	Tano and Pra basins IWRM Plans (2012) reviewed and disseminated for implementation	<ul style="list-style-type: none"> <li>Develop TOR</li> <li>Utilise WRC internal capacity to review Plans</li> <li>Hold two (2) workshops per basin, i.e., Consultation and Validation Workshops.</li> </ul>	18 Months	
2.1 Map out opportunities in IWRM practices to engage the Business Community in IWRM activities	Information Booklet developed elaborating on IWRM practices in Ghana and linkages to the SDGs with potential business opportunities available to the Business Community.	<ul style="list-style-type: none"> <li>Develop TOR</li> <li>Engage Consultant</li> <li>Conduct Key Stakeholder consultation meetings with selected business entities</li> <li>Develop Guide to Business opportunities in IWRM</li> <li>Organise Workshop to disseminate opportunities to Stakeholders</li> </ul>	24 Months	

2.2 Build Capacity of Water related Stakeholders in IWRM to achieve SDG 6.5 targets	<ul style="list-style-type: none"> <li>Stakeholders capacity on implementation to achieve SDG 6.5 targets built</li> </ul>	<ul style="list-style-type: none"> <li>Develop TOR</li> <li>Engage Consultant to <ul style="list-style-type: none"> <li>Identify capacity gaps of Stakeholders in IWRM practices in meeting SDG 6.5 Targets</li> <li>Develop Capacity Building Tools</li> </ul> </li> <li>Organise National Workshop to disseminate Capacity Building Tools especially to Stakeholders (especially at the Metropolitan, Municipal and District Levels)</li> </ul>	18 Months	GWP/IRC/ UNDP	WRC	<b>INSTITUTION S &amp; STAKEHOLDERS</b>
2.3 Develop Harmonised M&E System for efficient and effective implementation of IWRM activities at the Basin level	M&E System involving the following sector agencies: WRC; EPA; Minerals Commission (MC); Forestry Commission (FC), Fisheries Commission, Ghana Irrigation Development Authority (GIDA) developed and disseminated.	<ul style="list-style-type: none"> <li>Develop TOR</li> <li>Engage a facilitator</li> <li>Mobilise internal capacity of agencies to support harmonization of M&amp;E systems targeted at IWRM implementation</li> </ul>	24 Months		WRC / NDPC	<b>INSTITUTION S &amp; STAKEHOLDERS</b>
2.4 Develop EIC (Education Information and Communication) Material on key Water Security and Climate Resilient issues taking into account Gender perspectives	EIC Material on IWRM developed with appropriate reference to key IWRM issues such as water security and climate resilience, incorporating Gender perspectives.	<ul style="list-style-type: none"> <li>Develop TOR</li> <li>Engage Consultant to <ul style="list-style-type: none"> <li>develop EIC Materials, as per the Communication Strategy of WRC (2018 – 2022)</li> </ul> </li> <li>Print out developed EIC materials for distribution to Stakeholders for dissemination</li> </ul>	12 Months		WRC	<b>INSTITUTION S AND STAKEHOLDERS</b>

<b>Necessary Action</b>	<b>Expected Output</b>	<b>Method of Delivery</b>	<b>Realisation Time</b>	<b>(Potential)Source of Funding</b>	<b>Lead Organisation</b>	<b>Aspect of IWRM targeted</b>
3.1 Strengthen operations of the primary water resources data collection and monitoring stations	<ul style="list-style-type: none"> <li>Primary Hydrological monitoring stations identified, rehabilitated and appropriately equipped to deliver expected data (i.e., streamflow and water quality)</li> </ul>	<ul style="list-style-type: none"> <li>Develop TOR</li> <li>Engage Consultant to               <ul style="list-style-type: none"> <li>Assess functionality of the Primary Hydrological Stations/network</li> <li>Propose remedial actions for implementation</li> </ul> </li> </ul>	24 Months	WB (?)	(HSD)/WRC	<b>MANAGEMENT INSTRUMENTS</b>
3.2 Increase coverage and strengthen activities of existing water quality monitoring in the country	National water quality assessment and monitoring enhanced	<ul style="list-style-type: none"> <li>Develop ToR</li> <li>Increase sampling stations and parameters for analysis</li> <li>Build capacity of key staff of relevant institutions in water quality monitoring and assessment techniques</li> </ul>	18 months		WRC	<b>MANAGEMENT INSTRUMENTS</b>
4.1 Develop Incentive-based Strategy to attract the Private sector to support IWRM activities	<ul style="list-style-type: none"> <li>Incentive-based Strategy to attract the Private Sector to participate and support IWRM activities developed for implementation</li> </ul>	<ul style="list-style-type: none"> <li>Develop TOR</li> <li>Engage Consultant</li> <li>Consultant identifies Stakeholders</li> <li>Consultant develops Incentive-based Strategy</li> </ul>	24 months	MoSWR IRC	WRC	<b>SUSTAINABLE FINANCING</b>

## 5. ROLES AND RESPONSIBILITIES

The Table 3 summarises the roles and responsibilities of the key institutions in implementing the programme

*Table 3 Roles and responsibilities of Institutions involved with the implementation of the SDG6 IWRM Action Plan*

<b>Institution</b>	<b>Role and Responsibilities</b>
Ministry of Sanitation and Water Resources	It is the principal water sector ministry responsible for overall policy formulation, planning and coordination, collaboration, monitoring and evaluation of programmes for the water and sanitation sector. The ministry will exercise monitoring role through the Water Directorate to ensure full implementation of the programme
Water Resources Commission	The WRC is mandated to manage the water resources of the country and enact regulations on water use and for the coordination of policies in relation to them. It is the focal point in fostering coordination and collaboration among the various actors involved in the water resources sector.  The WRC is the principal implementer also responsible for the overall coordination of the programme.
Ghana Water Company Limited (GWCL).	It is responsible for the overall planning, managing and implementation of urban water supply. It will collaborate with the WRC to review the National Water Policy.
Community Water and Sanitation Agency (CWSA)	CWSA is responsible for facilitating the provision of water and sanitation-related sanitation facilities in the rural and small towns. It will collaborate with the WRC to review the National Water Policy.
Ghana Irrigation Development Authority (GIDA)	GIDA is responsible for water conservation and irrigation, and also for the development of the country's water for irrigated farming, livestock watering among others. GIDA's role is to collaborate with WRC in implementing relevant action point in the Action Plan,
Environmental Protection agency (EPA)	Responsibilities, amongst others, include protection of water resources and regulation of activities within catchment areas including setting effluent standards. It will collaborate with the WRC to develop a harmonised M&E system..
Minerals Commission (MC)	Issue of Mining license and regulation of such activities. It will collaborate with the WRC to develop a harmonised M&E system (Action 5)
Forestry Commission (FC)	Operates under the Ministry of Lands and Natural Resources. Protects and regulates forest activities for sustainable management manages forest reserves and regulates forestry activities
Fisheries Commission	Functions under the auspices of the Ministry of Fisheries. Responsible for fisheries and fish culture and regulates activities for both inland water and marine fishing. Collaborate with the WRC and NDPC in developing a Harmonised M&E system for efficient and effective implementation of IWRM at basin level

<b>Institution</b>	<b>Role and Responsibilities</b>
National Development Planning Commission	Advices the President on development policies. Ensures effective co-ordination of the preparation, implementation, monitoring and evaluation of national policies and plans. Monitors implementation of SDGs to achieve goals and targets including SDG6.5 and related targets. Collaborate with WRC, EPA, Minerals Commission, Forestry Commission and Fisheries Commission to develop harmonised M&E system for efficient and effective implementation of IWRM at basin level.
Ministry of Finance (MoF)	The ministry is responsible for all public finances and in particular, for the sector administers all public investments in water including negotiating for grants and loans.
Ministry for Gender, Children and Social Protection (MGCSP)	Lead agency responsible for implementing the National Gender and Children's policy. Policy issues on water that affect the wellbeing of women, children and the disadvantaged, fall under its mandate. Collaborate with WRC in implementing Activities 1 and 6 and other cross-cutting issues.
Metropolitan, Municipal and District Assemblies (MMDA's)	Responsible for the MMDA'S within which the Basin Boards operate. Through the Basin Boards collaborate with the WRC in review of IWRM Plans for the Tano and Pra Basins.
Water Research Institute (WRI-CSIR)	Undertakes research activities in water and related resources, generates and provides scientific information on surface and ground water resources. Collaborate with HSD to strengthen operations of the primary water resources data collection and monitoring stations.
Coalition of NGOs In Water and Sanitation (CONIWAS)	Umbrella organisation for NGOs operating in the water and sanitation sector. It organises an annual Mole Conference to deliberate on sector policies and implementation challenges and issues communicated to inform government on decisions made to support sector progress.

## 6. BUDGET

The budget to enable implementation of the SDG6 IWRM Action Plan is estimated at 404,175 EUR for three years. The detail is presented below:

<b>Thematic Area 1: Enabling Environment</b>	
<b>Action</b>	<b>Budget (€)</b>
Support review of National Water Policy (Policy Paper, ToR for the Review, Implementation (Engagement of consultant, Stakeholders consultations (consultations + draft + etc.)	97,750.00
Review existing basins IWRM Plans for Tano and Pra Basins	65,450.00
<b>Sub-total</b>	<b>163,200.00</b>

<b>Thematic Area 2: Institutions and Participation</b>	
<b>Action</b>	<b>Budget (€)</b>
Map out opportunities in IWRM practices to engage the Business Community in IWRM activities	30,250.00
Build capacity of water related stakeholders in IWRM to achieve SDG 6.5 targets	103,500.00

Develop harmonised M&E system for efficient and effective monitoring of IWRM activities at the basin level	18,500.00
Develop EIC – Education Information and Communication materials on key water security and climate resilient issues, considering gender perspectives	19,600.00
<b>Sub-total</b>	<b>171,850.00</b>

Thematic Area 3: Management Instrument	
<b>Action</b>	<b>Budget (€)</b>
Strengthen operations at the primary water resources data collection and monitoring stations	17,400.00
Increase coverage for water quality monitoring in the country	19,000.00
<b>Sub-total</b>	<b>36,400.00</b>

Thematic Area 4: Sustainable Financing	
<b>Action</b>	<b>Budget (€)</b>
Develop incentive-based strategy to attract the private/business sector	32,725.00
<b>Sub-total</b>	<b>32,725.00</b>
<b>GRAND TOTAL</b>	<b>404,175.00</b>

## 7. RISKS AND ASSUMPTIONS

The risks and assumptions relate to key areas that can impact implementation of the actions, and are:

- **Strategic risks:** The strategic risks concerns pressure to demonstrate results to key stakeholders including development partners, policy and decision makers which may lead to change of focus on the main purpose of the programme, which is to catalyse the implementation of SDG6, particularly target 6.5 on IWRM. For this reason, the project design took into account, short term and quick results related actions.
- **Institutional risk:** The programme calls for mobilisation of a number of government agencies. However, the coordination role is defined, building on the existing institutional mechanism for coordination of IWRM interventions in Ghana.
- **Programmatic risk:** It is recognized that selected actions related to private sector engagement for IWRM is a new area in Ghana. This could lead to poor implementation of related actions. Thus capacity development for programme management and coordination teams will help address the readiness of Ghana to carry out the initiative.
- **Administrative and financial risks:** This concerns managing the programme. The source of funds will indicate the required procedure to follow in accessing funds as well as reporting. This can impact the smooth running of the project and donor confidence. The risk arises where the host institutions may not have the capacity for financial management. This risk will continue to be monitored and corrective measures put in place should the need arise to do so.

## 8. RESULTS FRAMEWORK

The results framework for the SDG6 IWRM Action Plan is presented in Table 4.

Table 4 Results Framework

<b>Thematic Area 1 - SDG Indicator 6.5.1 Element Targeted: ENABLING ENVIRONMENT</b>			
<b>Policy Action</b>	<b>Output</b>	<b>Means of verification</b>	<b>Indicator</b>
<b>1. Support Review of National Water Policy (2007)</b>	National Water Policy (2007) reviewed to address emerging issues and aligned with SDG 6 and related targets	Inception and validation meetings reports Policy document	Number of institutions/ stakeholders actively involved in the review process.
<b>2. Review IWRM Plans for Tano and Pra Basins</b>	Basins IWRM Plans (2012) reviewed and disseminated for implementation	Workshop reports on stakeholder engagement	Number of review meetings and stakeholders reached
<b>Thematic Area 2 and SDG Indicator 6.5.1 Element Targeted: INSTITUTIONS AND STAKEHOLDERS</b>			
	<b>Output</b>	<b>Means of verification</b>	<b>Indicator</b>
<b>3. Map out Opportunities to engage the Business Community in IWRM Activities.</b>	Report developed elaborating where businesses will find opportunities in IWRM implementation in Ghana.	Meetings reports  Report on business opportunities in IWRM	Number of business opportunities identified
<b>4. Build Capacity of Water related Stakeholders in IWRM to achieve SDG 6.5 targets</b>	Stakeholders capacity in IWRM to achieve SDG 6.5 targets built	Training workshops reports	Number of institutions/ stakeholders trained with demonstrable capacity in IWRM practices at national and subnational levels (metropolitan, municipal, district).
<b>5. Develop Harmonised M&amp;E System for efficient and effective implementation of IWRM activities at the Basin level</b>	M&E System involving the following sector agencies: WRC; EPA; Minerals Commission (MC); Forestry Commission (FC), Ghana Irrigation Development Authority (GIDA) developed and disseminated.	Meetings reports  Harmonised M&E System	Number of stakeholder meetings
<b>6. Develop EIC (Education Information and Communication) Material on key Water Security and Climate Resilient issues taking into account Gender perspectives</b>	EIC Material on IWRM and its relation to key IWRM issues of water security and climate resilience with particular reference to Gender issues developed.	EIC materials available  Meetings reports	Number of strategic messages on water security and climate resilience, incorporating gender perspectives developed and disseminated



<b>Thematic Area 3 - SDG Indicator 6.5.1 Element Targeted: MANAGEMENT INSTRUMENTS</b>			
<b>Policy Action</b>	<b>Output</b>	<b>Means of verification</b>	<b>Indicator</b>
<b>7. Strengthen operations of the primary water resources data collection and monitoring stations</b>	Primary Hydrological monitoring stations identified, rehabilitated and appropriately equipped to deliver expected data (i.e., streamflow and water quality)	Study report	Number of Hydrological stations rehabilitated equipped with recommended instrumentation  Number of persons trained in the use of the equipment, data capture and storage.
<b>8. Increase coverage and strengthen activities of existing water quality monitoring in the country</b>	National water quality assessment and monitoring enhanced	Monitoring reports  Study report	Number of additional Water Quality monitoring stations Number of additional parameters Number of persons trained in monitoring activities
<b>Thematic Area 4 - SDG Indicator 6.5.1 Element Targeted: SUSTAINABLE FINANCING</b>			
<b>Policy Action</b>	<b>Output</b>	<b>Means of verification</b>	<b>Indicator</b>
<b>9. Develop Incentive-based Strategy to attract the Private sector to support IWRM activities</b>	Incentive-based Strategy to attract the Private Sector to participate and support IWRM activities developed for implementation	Workshops reports  Strategy report	Number of business entities with demonstrable interest in IWRM

## 9. TIMELINE AND NEXT STEPS

The Water and Sanitation Sector Working Group (WSSWG) under the auspices of the Ministry of Sanitation and Water Resources is made up of twenty-two (22) members and constitute the forum where sector policies and programmes are discussed among the sector players to ensure harmonised and effective implementation of projects and programmes. It includes bilateral and multilateral stakeholders, and international and local NGOs. The membership list can be found in Annex 2.

In order to garner support to implement the programme the WRC upon discussion with the sector Minister presented the programme to sector working group members for consideration and support on 25<sup>th</sup> July 2019. The WRC will follow-up with further engagements to solicit support to implement the programme. It is anticipated that all preparatory work and sourcing for funding would be completed by the end of the year, 2019, for implementation to begin in the March 2020.

Proposed timelines for implementation of the various activities are indicated in the activity chart. All the activities are programmed to be implemented within the time frame of three years with durations between 18 months and 36 months as indicated in the activity chart.

Policy Action	Activity	Year 1 (2020)				Year 2 (2021)				Year 3 (2022)			
		Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
1. Support review of National Water Policy	<i>Develop TOR</i>												
	<i>Engage Consultant</i>												
	<i>Inception Report</i>												
	<i>Stakeholder Engagement</i>												
	<i>Stakeholder Workshop</i>												
	<i>Present Draft Reviewed NWP</i>												
	<i>Conduct Validation Workshop</i>												
	<i>Present Draft Final Reviewed NWP</i>												
	<i>Print Launch and Disseminate</i>												
2. Review IWRM Plans for Tano and Pra Basins	<i>Initiate WRC internal Review mechanism</i>												
	<i>Review Tano and Pra IWRM Plans</i>												
	<i>Apply SEA procedure to Reviewed IWRM Plans</i>												
	<i>Conduct validation workshop with stakeholders</i>												
	<i>Finalise IWRM Plans</i>												
3. Map out opportunities to engage the Business Community in IWRM activities	<i>Develop TOR</i>												
	<i>Engage Consultant</i>												
	<i>Inception Report</i>												
	<i>Stakeholder Engagement</i>												
	<i>Validation Workshop</i>												
	<i>Final Report</i>												
	<i>Conduct Training Workshop</i>												

[illegible]

to support IWRM activities	<i>Inception Report</i>												
	<i>First Draft</i>												
	<i>Stakeholder Workshop</i>												
	<i>Final Report</i>												
	<i>Disseminate</i>												

## Annex 1: ELABORATED DESCRIPTIONS OF NECESSARY ACTIONS

<b>[Priority issue 1.1]: A. National water resources policy, or similar</b>
<b>Action 1:</b> Support Review of National Water Policy (2007)
<b>Expected results:</b> Review of National Water Policy (2007) supported to address emerging issues and aligned with SDG 6 and related targets
<p><b>Rationale:</b></p> <p>The National Water Policy was adopted in 2007 and has dictated the policy direction of the country for the past twelve (12) years. Its formulation was influenced by local and international considerations amongst which was the Millennium Development Goals (MDGs). The Policy focussed on the three (3) sub-sectors, namely: <b>(1) Water Resources Management; (2) Urban Water Supply; and (3) Rural and Community Water Supply</b>. With emerging issues such as climate change/resilience, increasing emphasis on environmental flows to maintain ecosystems such as wetlands; rapidly growing urban demand; international cooperation; greater emphasis on gender equality concerns; coupled with demands of the SDGs particularly Goal 6 and related targets, have made it expedient to review the policy document to respond to these and others and other relevant issues, and to reflect the current global development paradigm.</p> <p>The policy is one of the key activities and frameworks of action of the Ministry of Sanitation and Water Resources and it is important to ensure that it is updated based on lessons learned and on the evolution of the national context and stays relevant. When implemented, it will ensure a coherent engagement with relevant stakeholders towards implementation of the global commitment of not leaving anyone behind in matters of water.</p>
<p><b>Approach:</b></p> <p>Review of the National Water Policy will go through a consultative process involving a number of tasks including (i) preparation of the Terms of Reference; (ii) engagement of a process consultant to facilitate delivery of the assignment; (iii) organising consultations at the level of workshops in three (3) zones within the country namely' north, middle and south. This will seek to solicit views of relevant stakeholders and help shape the eventual revised document. The revised document will be subjected to a national validation workshop. Finally, the final revised National Water Policy will be presented to the Minister at the Ministry of Sanitation and Water Resources for submission to Cabinet for approval.</p>
<b>Realization time:</b> 24 Months
<b>Lead organization to ensure action takes place:</b> Ministry of Sanitation and Water Resources (MSWR)
<b>Key supporting organizations:</b> WRC, GWCL,CWSA, GIDA, MGCSP
<p><b>Necessary resources:</b></p> <p>Estimated number of person-months (time): ____ person-months</p> <p>Planned contribution from [the national budget]: USD _____</p> <p>Planned contribution from [other sources]: USD _____</p>

<b>[Priority issue 1.2]: B. Basin/aquifer management plans or similar, based on IWRM</b>
<b>Action 2:</b> Review existing IWRM Plans for the Tano and Pra Basins
<b>Expected results:</b> Tano and Pra basins IWRM Plans (2012) reviewed and disseminated for implementation
<p><b>Rationale:</b> In Ghana, river basin IWRM plans have been prepared with the overall purpose of addressing major problems related to water resource availability; water quality; and environmental or ecosystem sustainability. Seven (7) of such river basin IWRM plans were developed between 2007 and 2013 and are being implemented. These IWRM plans are milestones in the IWRM long-term process, and needs to be kept up-to-date when new knowledge and developments emerge, e.g. changes in the hydrological regime, projections of future water requirements, and planned development projects, and based on lessons learned.</p> <p>Accordingly, the review of IWRM plans is an important part of the IWRM process. Three of the plans have been successfully reviewed as of 2016. <a href="http://www.wrc-gh.org/documents/reports/">http://www.wrc-gh.org/documents/reports/</a>. Next in line for review are the Tano and Pra basin IWRM Plans which were developed in 2012.</p>
<p><b>Approach:</b></p> <p>The review of the river basin IWRM Plans will be executed by Water Resources Commission as part of its mandate to “<i>propose comprehensive plans for utilisation, conservation, development and improvement of water resources</i>” with due consideration to stipulations in the National Water Policy.</p> <p>The review will follow the process developed by WRC, and which has been successfully applied for revisions of 3 plans already. This will entail a number of assessment studies and information reviews, application of SEA procedures and tools, consultative meetings and workshops specifically targeting the respective Basin Board members as well as District Assemblies and their planning officers. The review will incorporate gender equality concerns in the plans.</p>
<b>Realization time:</b> 18 Months
<b>Lead organization to ensure action takes place:</b> Water Resources Commission
<b>Key supporting organizations:</b> MMDAs, Basin Boards, CBOs
<p><b>Necessary resources:</b></p> <p>Estimated number of person-months (time): ____ person-months</p> <p>Planned contribution from [the national budget]: USD ____</p> <p>Planned contribution from [other sources]: USD ____</p>

<b>[Priority issue 2.1]: D. Business role in water resources development, management and sustainable use at national level (Corporate Water Stewardship/IWRM)</b>
<b>Action 3:</b> Map out opportunities to engage the Business Community in IWRM activities
<b>Expected results:</b> Report developed elaborating where business entities will find opportunities in IWRM implementation in Ghana.
<p><b>Rationale:</b></p> <p>IWRM has been implemented in Ghana for the past two decades. However, improper land use practices continue to have adverse impact on the quantity and quality of the water resources in the country. The situation is most evident in the mining sector, especially illegal mining of gold. The overarching government policy of making the private sector the “Engine of Growth” will, undoubtedly, increase participation of the business community in the economic activities in the country. Recent government policies such as “Planting for Food and Jobs” and “One District one Factory (1D1F)” are geared towards rapid industrialisation which will have serious consequences on the water availability and use in the country.</p> <p>It is apparent that sustainable water resources for all by all can be achieved when all key players, including the private sector, are recognised and engaged to contribute to the solutions required to accelerate progress and achieve the SDG target.</p> <p>The business community remains a major water user and potential stakeholder in the management of the country’s water resources.. As a result, it will be useful to provide information to the business community on the benefits derived from Integrated Water Resources Management (IWRM) and corporate water stewardship practices. This is intended to encourage and improve their engagement towards contributing to the improvement of water resources while bringing to their attention opportunities for IWRM and corporate water stewardship.</p>
<p><b>Approach:</b></p> <p>A number of tasks has been outlined as follows: (i) prepare terms of reference (with due reference to GWP strategy, upcoming perspective paper on IWRM and Corporate Water Stewardship); (ii) engage the services of resource person/consultant to map out opportunities for the private sector to engage in Corporate Water Stewardship, IWRM and sustainable business water practices ; (iii) conduct training for the business community, and other relevant stakeholders on Corporate Water Stewardship and IWRM (in collaboration with GWPO) - during which, mapped-out opportunities for Private Sector engagement in IWRM in Ghana will be disseminated.</p>
<b>Realization time:</b> 24 Months
<b>Lead organization to ensure action takes place:</b> Water Resources Commission
<p><b>Key supporting organizations:</b></p> <p>EPA, District Assemblies, Minerals Commission, Tourism Commission</p>
<p><b>Necessary resources:</b></p> <p>Estimated number of person-months (time): ____ person-months</p> <p>Planned contribution from [the national budget]: USD _____</p> <p>Planned contribution from [other sources]: USD _____</p>

<b>[Priority issue 2.1]: E. Developing IWRM capacity at the national level</b>
<b>Action 4:</b> Build Capacity of Water related Stakeholders in IWRM to achieve SDG 6.5 targets
<b>Expected results:</b> Stakeholders capacity on implementation of IWRM to achieve SDG 6.5 targets built
<p><b>Rationale:</b></p> <p>There are some long-term capacity development initiatives but limited in terms of beneficiaries (within the regulatory bodies such as the Minerals Commission, Forestry Commission and the Environmental Protection Agency; water utilisation agencies such as the Ghana Water Company, the Community Water and Sanitation Agency (CWSA) and the Ghana Irrigation Development Authority (GIDA)). Capacity development in IWRM is paramount in achieving SDGs, particularly goal 6 and its targets including other water related goals, the Paris Agreement and issues on gender equality. Until now, IWRM remains a specialised area for water resources management and the need to engage direct and indirect stakeholders is ever pressing. Therefore, decision makers need to appreciate the emerging issues in order to assist devise strategies to improve knowledge and capacity. Hence, building the capacity of IWRM actors in relation to achieving these goals and targets as well as implementing new concepts remains a key challenge.</p>
<p><b>Approach:</b></p> <p>A gap analysis of stakeholder capacity in IWRM and practices is critical. This will allow for determination of existing knowledge on relevant themes while taking advantage of existing studies carried out in the past few years, as well as allow for identification of key gaps to be addressed. Therefore, a number of tasks will be implemented as follows: (i) prepare terms of reference to guide delivery of the work; (ii) engage the services of a consultant to conduct gaps analysis and stakeholder capacity in IWRM practices, and develop new tools to enhance capacity of stakeholders; (iii) organise workshop to disseminate new tools to stakeholders.</p>
<b>Realization time:</b> 18 Months
<b>Lead organization to ensure action takes place:</b> Water Resources Commission
<p><b>Key supporting organizations:</b></p> <p>Universities and Institutions (Training &amp; research); CSIR-WRI, ISSER, IESS, CAW, Regional Centres of Excellence - KNUST, UDS and UENR (water, energy and irrigation)</p>
<p><b>Necessary resources:</b></p> <p>Estimated number of person-months (time): ____ person-months</p> <p>Planned contribution from [the national budget]: USD _____</p> <p>Planned contribution from [other sources]: USD _____</p>



<b>[Priority issue 2.2]: A. Basin/aquifer level organizations for leading implementation of IWRM plans or similar</b>
<b>Action 5:</b> Develop Harmonised M&E System for efficient and effective implementation of IWRM activities at the Basin level
<b>Expected results:</b> Harmonised M&E System involving the following sector agencies: Water Resources Commission (WRC); Environmental Protection Agency (EPA); Minerals Commission (MC); Fisheries Commission; Forestry Commission (FC), Ghana Irrigation Development Authority (GIDA) developed and disseminated.
<p><b>Rationale:</b></p> <p>The River Basin Management Boards and their secretariats derive their mandates and capacity from the WRC to effectively lead basin specific plan formulation and implementation. Implementation of these river basin IWRM Plans is to be holistic and coordinated by the Basin Boards, while recognising the mandates and competences of other water and water-related institutions. However, the issue of different institutions being responsible for monitoring and reporting different actions on water and related resources without coordination pose a challenge.</p> <p>Furthermore, monitoring and evaluating IWRM progress should be seen as dynamic. This requires that critical issues that were hitherto, not given the desired attention should be considered. For instance, wastewater, agricultural water use efficiency, gender disaggregated data, and riverine ecosystems should be targeted, monitored and evaluated within a harmonised framework.</p>
<p><b>Approach:</b></p> <p>A harmonised results-based M&amp;E framework/system will be designed in line with the National Development Planning Commission (NDPC) guidelines to ensure coordinated reporting. The internal capacities of institutions and agencies responsible for specific IWRM actions will be utilised, while issues critical to achieving the SDG targets related to IWRM are to be included in the system.</p>
<b>Realization time:</b> 24 Months
<p><b>Lead organization to ensure action takes place:</b> Water Resources Commission</p> <p><b>Key supporting organizations:</b> National Development Planning Commission; Environmental Protection Agency (EPA); Minerals Commission (MC); Fisheries Commission; Forestry Commission (FC), Ghana Irrigation Development Authority (GIDA)</p>
<p><b>Necessary resources:</b></p> <p>Estimated number of person-months (time): ____ person-months</p> <p>Planned contribution from [the national budget]: USD _____</p> <p>Planned contribution from [other sources]: USD _____</p>

<b>[Priority issue 2.2]: C. Gender-specific objectives at sub-national levels</b>
<b>Action 6:</b> Develop EIC (Education Information and Communication) Material on key Water Security and Climate Resilient issues considering Gender perspectives
<b>Expected results:</b> EIC Material on IWRM developed with appropriate reference to key IWRM issues such as water security and climate resilience with particular reference to Gender issues.
<b>Rationale:</b> The Gender IWRM Strategy (2012) is in place and articulated in the Water Sector Strategic Development Plan (2012-2025). There is also the Communication Strategy (2018-2022), which is yet to be formally implemented. Implementation of the communication strategy in particular, requires appropriate products that address contemporary matters including meeting the Sustainable Development Goal 6 (SDG) and its inter-linkages, climate change and resilience within the context of water security, tackling water-related disasters – flooding and droughts, and advocacy for change. These are to be considered within the paradigm of improving equity and gender sensitivity.
<b>Approach:</b> Developing appropriate communication products will include EIC materials that will deepen the understanding of all relevant stakeholders on the issues of climate change and resilience, and water security in the context of improving IWRM practices. Therefore, the tasks to be implemented are the following: (i) prepare terms of reference to facilitate stakeholder mapping and thematic messages; (ii) engage the services of a consultant to develop education, information and communication materials related to gender and IWRM in practice; (iii) produce EIC materials for dissemination.
<b>Realization time:</b> 12 Months
<b>Lead organization to ensure action takes place:</b> Water Resources Commission
<b>Key supporting organizations:</b> Media Houses, Ghana WATSAN Journalist Association, Media Platform on Environment and Climate Change
<b>Necessary resources:</b> Estimated number of person-months (time): ____ person-months Planned contribution from [the national budget]: USD ____ Planned contribution from [other sources]: USD ____

<b>[Priority issue 3.1]: A. National monitoring of water availability (includes surface and/or ground water, as relevant to the country)</b>
<b>Action 7:</b> Strengthen operations of the primary water resources data collection and monitoring stations
<b>Expected results:</b> Primary Hydrological and Hydrogeological monitoring stations identified, rehabilitated and appropriately equipped (to deliver expected data i.e., water quantity and quality)
<p><b>Rationale:</b></p> <p>The national hydrologic network monitoring system covers all seven (7) hydrological regions in the country. Some hydrogeological monitoring stations also exist, for instance, in the Densu, Ankobra, Black Volta, White Volta and Oti basins. However, some of the hydrological and hydrogeological stations are not functional, necessitating replacement of equipment and the motivation of voluntary gauge observers/readers without which collection of quality data will be compromised. In view of the difficulty in maintaining the Voluntary Gauge Readers, it is important therefore to pursue the option deploying modern technology of remote sensing applications and tele-transmission systems to guarantee real time data with limited human interactions. The data, when available, will strengthen drought and flood risk profiling of basins and will enable analysis when designing infrastructure so as to guarantee their resilience at no/low regrets.</p>
<p><b>Approach:</b></p> <p>The key consideration is to assess the needs with respect to equipment and human resources and provide remedial actions that will improve the hydrological and hydrogeological data collection and monitoring network of the country. The remedial actions will include assessment of the monitoring network coverage, technology for data collection and transmission, human resource requirement and operational cost. The tasks to be carried out will include the following: (i) prepare terms of reference to guide delivery of the work; (ii) engage the services of a consultant to determine current level of operation of the primary hydrological and hydrogeological monitoring stations, challenges and needs; (iii) propose remedial actions with costs for implementation.</p>
<b>Realization time:</b> 24 Months
<p><b>Lead organization to ensure action takes place:</b> Water Resources Commission</p> <p><b>Key supporting organizations:</b> Hydrological Services Department, WRI, Ghana Atomic Energy Commission (GAEC)</p>
<p><b>Necessary resources:</b></p> <p>Estimated number of person-months (time): ____ person-months</p> <p>Planned contribution from [the national budget]: USD _____</p> <p>Planned contribution from [other sources]: USD _____</p>

<b>[Priority issue 3.1]: C. Pollution control from the national level</b>
<b>Action 8:</b> Increase coverage and strengthen activities of water quality monitoring in the country
<b>Expected results:</b> National water quality assessment and monitoring enhanced
<p><b>Rationale:</b></p> <p>Water resources assessment is an important indicator of the health status of water bodies and assist in the design of interventions for the remediation of polluted and deteriorating water sources. A systematic nationwide monitoring programme for assessing the state and trends of surface water quality has been in place since 2005. The water quality index, which gives an indication of the extent of water pollution, is used to assess the status of the waters.</p> <p>The current water quality assessment network of 41 stations is to be expanded to 80 to give an enhanced coverage and to increase the water quality parameters from the current physico-chemical parameters to include trace metals (e.g. Arsenic, Mercury, Lead, Copper, Zinc) and other toxins and sediments. This effort also requires capacity development of the relevant technical staff to fully implement this action and enhance public awareness raising on the anthropogenic practices related to water resources to help eliminate/minimise the impacts.</p>
<p><b>Approach:</b></p> <p>It is important to increase the coverage of sampling stations to improve the representation of sampling sites across the country. Furthermore, it is necessary to equip the basin agencies of the Water Resources Commission, improve technical capacity and analysis of basic parameters to improve water quality monitoring in the country. To this end, a number of tasks will be undertaken as follows: (i) develop a Terms of Reference to guide water quality monitoring; (ii) Identify existing and potential sites and establish the criteria to gradually increase coverage of water sampling stations across the country; (iii) build capacity of key staff of relevant institutions in water quality monitoring and analysis. The outcome of this effort will enable a better understanding of the integrity of the raw water quality of water bodies in the country. This action will subsequently be made an integral part of annual work-plan of the WRC.</p>
<b>Realization time: 18 months</b>
<b>Lead organization to ensure action takes place:</b> Water Resources Commission
<b>Key supporting organizations:</b> WRI, EPA
<p><b>Necessary resources:</b></p> <p>Estimated number of person-months (time): ____ person-months</p> <p>Planned contribution from [the national budget]: USD ____</p> <p>Planned contribution from [other sources]: USD ____</p>

<b>[Priority issue 4.1]: B. National budget for the recurrent costs of the IWRM elements</b>
<b>Action 9:</b> Develop Incentive-based Strategy to attract the Private sector to support IWRM activities
<b>Expected results:</b> Incentive-based Strategy to attract the Private Sector to participate and support IWRM activities developed for implementation
<p><b>Rationale:</b> The cost of financing management of water resources in Ghana is growing steadily. In addition, recurrent costs are financed from Government (15%), External Sources- ODA (30%) and Internally Generated Funds (55%). The funds are mostly insufficient to meet planned expenditure. From the statistics, over 50% of the cost is financed by internally generated funds while the government contributes about 15%. As a result, financing the operations and maintenance of managing water resources has become a shared responsibility. One key area that requires focus is protection and the maintenance of river banks delineated as buffer zones and planted with trees, or designated for beneficial activities with minimal impact on the water bodies. It is important to draw the attention of the private sector especially major industrial and commercial water users to security of the water source and implications for their production systems. A blueprint to attract the private sector and business community will guide their engagement towards participation in integrated water resources management interventions.</p>
<p><b>Approach:</b> Attracting the private sector and business community to participate in water resources management financing requires a framework that makes a case for their engagement. Therefore, understanding the stakes will allow for a carefully thought-through arrangement towards supporting financing of water resources management in Ghana. As a result, a number of tasks will be carried out as follows: (i) prepare terms of reference to set the framework for a study on financial risks and opportunities associated with water resource management in areas where private sector financing could contribute to improving IWRM; (ii) engage the services of a consultant(s) to develop a national strategy, providing incentives for the private sector and business community to invest in IWRM; (iii) organise a validation workshop and disseminate results; (iv) develop communication strategy and appropriate communication messages for the private sector.</p>
<b>Realization time:</b> 24 months
<p><b>Lead organization to ensure action takes place:</b> WRC</p> <p><b>Key supporting organizations:</b> Ministry of Finance, Association of Ghana Industries, National Board for Small Scale Industries</p>
<p><b>Necessary resources:</b> Estimated number of person-months (time): ____ person-months Planned contribution from [the national budget]: USD ____ Planned contribution from [other sources]: USD ____</p>

## Annex 2: WATER AND SANITATION SECTOR WORKING GROUP INSTITUTIONS

The Water and Sanitation Sector Working group is a forum of sector stakeholders who meet under the auspices of the Minister for Sanitation and Water Resources. The list constitutes membership of the group. Meetings are scheduled, monthly and are chaired by the Minister where issues on sector policies and programme implementation are discussed and action taken for the benefit and progress of the sector.

1. Ministry of Sanitation and Water Resources
2. Ghana Water Company Limited (GWCL)
3. Community Water Sanitation Agency (CWSA)
4. Water Resources Commission (WRC)
5. Ministry of Finance (MoF)
6. National Development Planning Commission (NDPC)
7. Ghana Health Service (GHS)
8. School Health Programme (SHEP)
9. African Development Bank (AfDB)
10. Canada
11. Embassy of the Kingdom of Netherlands
12. Japan International Cooperation Agency (JICA)
13. UNICEF (lead of DPs)
14. USAID
15. WHO
16. World Bank
17. Coalition Of NGOs In Water And Sanitation (CONIWAS)
18. Global Communities
19. IRC
20. WaterAid
21. World Vision International
22. SNV (Netherlands NGO)