



Partnership Blue Deal Ghana
for Phase I (2019-2022)
31 January 2019

1. GENERAL

1.1 PARTNERSHIP INFORMATION	
Country:	Ghana
Dutch Regional Water Authority (leading partner): (contact person, email, phone)	Waterschap Aa en Maas (Carel Nobbe, +31653649820, cnobbe@aaenmaas.nl)
Large or small partnership	Large
Other Dutch Regional Water Authorities / Dutch partners (NWB, UvW), including (contact person, email, phone):	<ul style="list-style-type: none">• Wereld Waternet (Jaap Bos)• Waterschap DOD (Henk Post)• Waterschap Hunze en Aas (Henk Wolven)• Waterschap Brabantse Delta (Mariska van Rijswijk)• Waterschap Noorderzijlvest (Noortje van Langen)
Local partner(s) type of organization (regional/national water authority, waste water treatment utility etc.), including (contact person, email, phone):	Main partner: Water Resource Commission (WRC) River Basin Authorities of WRC in White Volta and Black Volta, Stakeholders Volta Delta, Bob Alfa Head, Surface Water Resources, bob.alfa@yahoo.com 251912000635) See par 5.4 for stakeholders
New or on-going partnership (if on-going provide a short description of partnership)	Partnership between Ghana and DWA, Deltares, IHE, HKV is already longstanding. There is an already existing partnership between the Dutch water authorities in Faso Koom Burkina Faso and Volta Basin Authority. Wageningen University with Rabobank and Waterschap Aa en Maas already have a relation with the WRC, Universities in Ghana and other institutions to elaborate a water application for information system on water and agriculture.

	The core advisor for NWP Ghana has a long “water” history in Ghana. He is expected to be part of the steering group for the Ghana BD program.
Catchment area: Name river, surface area (km2), number of inhabitants in catchment area	Within the Volta basin. Sub catchments White Volta (2 million inhabitants. 46,500 km2), Black Volta (1.9 million 33,302 km2, million inhabitants) and Volta Delta about 300,000 (inh)).
Contribution to Blue Deal ambition “20 million people in 40 catchment areas” (select one or more themes)	All Blue Deal themes will be included. Clean water/ wastewater treatment/ ecosystems Water availability / reduce water stress/ increase water storage capacity/nexus water/food/energy Flood protection / reduce damage and loss / increase self-sufficiency
Population growth rate	Ghana 3,6%
Expected population in 2030	In Ghana: appr. in the White Volta (4,2 million), Black Volta and Volta Delta it is estimated around 4 and 1 million respectively

1.2 Local context of the partnership

<p>General description</p> <p>Ghana has over the years from the first conceptual emergence of IWRM in the early 1990s, put in place a good part of the basic political, legal and institutional frameworks, which eventually will sustain the implementation of IWRM in the country. Some notable institutional, legal, policy, programmes and action already in place include: - i) the establishment of the Water Resources Commission by an Act of parliament in 1996; ii) the passing into Law of the 2007 Water Policy; iii) the development of eight national river basin plans and eight corresponding River Basin Boards (RBBs) between 2003 and 2017; and iv) the active involvement with neighbouring countries on trans-boundary issues on the Volta Basin. In addition, substantial capacity building has taken place within the key institutions involved in water resources management over the past 15-20 years.</p> <p>Focus on national and regional water governance (Volta Delta, White Volta)</p> <p>Going forward, the strategy of water Resources Management is to ensure implementation of the prioritised water management actions as listed in the various management plans in line with the stipulation of the National water policy. On subcatchment level IWRM plans for the White Volta are available. And a River Basin Board is installed. In this board sixteen stakeholders take place. The executional power and structure of the organisation that support both boards is still limited. About 15 people have a task in the organisation. The Volta Delta has no IWRM plan and no board. A first meeting with 50 stakeholders for this subcatchment was held in 2018. This can be seen as a first start of a River basin Board and an integrated Delta/ IWRM plan. To achieve this objective, the technical and financial capacities of the basin boards must be improved to effectively implement and coordinate local water resources management activities. This request therefore is for a partnership to:</p> <ul style="list-style-type: none"> • Establish a delta governance structure and develop a delta management plan for flood protection and management of the Volta delta resources; • Build capacity of the White Volta Basin and develop a financing strategy for the management of water resources and sanitation towards improving water quality for various uses.

2. PARTNERSHIP FOCUS

2.1 Problem to be addressed

The project aims to support the National and regional water authorities in governance, clean, sufficient and save water. The problems to be addressed are:

Governance, knowledge and communication

- The policy implementation and regulation is not yet well defined on national level
- The implementation of policies in operational and maintenance programs is yet not well defined per sub catchment due to the absence of a coordinating body
- In some parts of Ghana (e.g. the Volta Delta) progress has to be made on governance structure, financing and budgeting, the collection of data and information, the stakeholder engagement, capacity development and evaluation.
- the national cross-sectoral coordination between water and other sectors as environment, health, nature energy and landuse are not yet (fully) developed.
- Insufficient capacity of the Black Volta Basin Board and lacking of a financing strategy for the management of water resources towards water availability for various uses.
- Insufficient capacity of the White Volta Basin and lacking of a financing strategy for the management of water resources and sanitation towards improving water quality for various uses.
- The operational water management on the local level is laid on the lowest level close by the civilians. The lowest level Municipalities and Districts are at this moment not capable to perform an integrated water resource management and sanitation.
- There seems to be a lack of juridical competence, knowledge about water and sanitation and lack of capacity.
- As well as funds and practically applicable knowledge are insight in the most important bottle necks.
- To create proper anchorage for communication activities trainings will be conducted to develop the capacity of the communication staff. Items are public awareness and education. E.g. the programmes and activities of the bleu deal program.
- training of staff in communication issues;
- turning decisions, activities and program of the Bleu Deal into public information products for the media.

Clean water/Sanitation

- the majority of the population continues to dump refuse and liquid waste indiscriminately. This has the potential of creating environmental pollution leading to the outbreak of diarrheal and other diseases.
- With regard to liquid waste disposal, about three-quarters of households (73.7%) discharge their liquid waste into open areas, with another 22.4 percent discharging it into open drains. Only 1.9 Percent of households dispose their liquid waste through a septic tank.
- More than one-third of households use a public toilet facility (35.7%) while 19.1 percent use a pit latrine. Only 13.9 percent of households use a water closet facility while 18.8 percent of households have no toilet facility and so use open spaces including the bush, field or beach.
- Other kind of pollutions from Gold mines, agriculture

Sufficient water/ water availability

- Transboundary challenges of too much or too little water between Burkina Faso and Ghana in the White and Black Volta. And also with Togo (Oti) and Ivory coast (Black Volta).
- Challenges within the catchments between the different functions: drinking water, electricity, agriculture (large and small scale), businesses.
- Erosion and silting of the rivers with ground degradation due to e.g. charcoal production

- Lack of data (quantity and quality) and monitoring plans

Sufficient water/irrigation

- Impacts of diminishing water availability particularly during the low-flow season due to climate change and variability, and possible changes in the cross border flow from upstream Burkina Faso.”
- “The consequences related to the establishment of major irrigation schemes both concerning the need to create reservoir facilities and changes in the inflow regime to Volta Lake”
- Bad maintenance, siltation dams for agriculture

Safe water/Flooding

- no delta management plan for flood protection and management of the Volta delta resources;
- The annual opening of the spillways of the Bagre dam destroys lives, farmlands, livestock and property in Ghana.
- perennial flooding in Accra and its environs.
- Unwanted issuing of permits for building of structures on water ways.
- Meeting environmental flow requirements to protect the ecosystems of the riverine environment

2.2. Partnership impact

Partnership Ghana

Overall the partnership will lead to national (WRC) and regional (Basin Boards) governmental structures that are in a better position to carry out their tasks. This will lead to a better IWRM in the Volta basin. And will have a positive impact on the livelihood of Ghanaian people in the Volta basin i.c.:

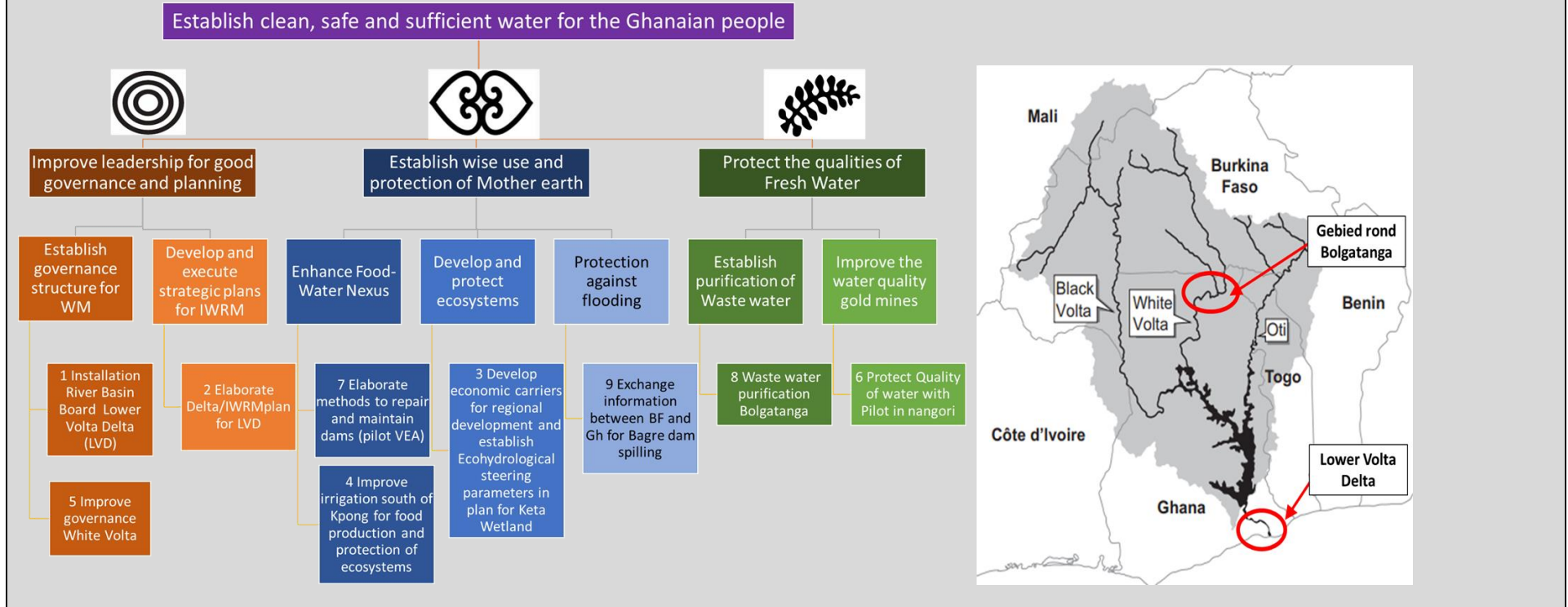
- a better protection of their water sources (for drinking, household use, fetching, irrigation, industry, etc.)
- a better (and more equitable) allocation of water
- a better protection against flooding

Per theme (quality, quantity, safety) and location the positive impact will be felt in a different way, to a different extent and for a different part of the people.

2.3. Partnership outcome(s)

Long term objective

In general, the partnership aims to improve cooperation among and enhancement of the transboundary, national and regional cooperation and thereby realize horizontal and vertical coordination and better performance. Created support and involvement of stakeholders and citizens for the policies and activities of the IWRM and Blue Deal approach in Ghana and the sub catchments. This will be a central point in the individual projects under this partnership. More specifically this partnership will contribute to the objectives in the table and figure below:



2.4. Partnership outputs

The matrix shows the projects to be elaborated and the output in the first four years. We realise ourselves that IWRM is an ongoing process and Blue deal is not starting in a green field. Before starting with a project we will assess other implemented, ongoing or planned initiatives that are relevant. (e.g. Glowa Volta, SAP (VBA), Climate adaption fund, Early warning system (World Bank).

Output per period							
	2019	2020	2021	2022	2026	2030	Long term outcome
Lower Volta Delta (LVD)							
1 Establish Governance for water management River Basin Board LVD	1.1 Meeting with all (50) stakeholders : Stakeholder involvement/commitment tuned with outlines organisation set-up 1.2appointed members steering group and working group for Delta/IWRM Plan (10)	1.3 defined outlines RBB LVD 1.4 installed Steering group for LVD	1.5Decision about structure and financing for office LVD 1.6communication plan for RBB and Delta Plan	1.7steering group fully operating	1.8 Operational and financed office for RBB LVD 1.9executing projects from Delta plan or IWRM	1.10 Evaluation of performance RBB LVD office 1.11 executing projects from IWRM and Delta Plan	A national policy that strengthens, supports and reinforces implementation of decentralized River Basin Boards with a financing system organization with support of relevant stakeholders. A implemented well-functioning river basin board for the Volta Delta with relevant stakeholders. The establishment of a Lower Volta Basin Board (LVBB) and supporting office will lead to the coordination, development and implementation of an Integrated Water Resources Management Plan for the Lower Volta Basin In this office bundling of capacity, knowledge of the Water management executional capacity and funds to finance projects are available.
2 IWRM plan for the Lower Volta Basin for the management of the Delta including a delta program		2.1Executed gap analysis on basis of existing literature and local knowledge 2.2harmonized and consolidated data and information	2.3defined global content general plan as need for knowledge, finance	2.4developped plan 2.5prioritization actions	2.6Implement ation Delta program/ IWRM plan 2.7executing plan in PDCA cycle	2.8Evaluation performance IWRM plan 2.9Adaptation IWRM plan (if necessary)	In spite of a lot initiatives, the Volta Delta lacks integrated coastal management, land use planning and a zoning framework to guide the sustainable development of the delta. Goal is to elaborate a plan containing concrete and actionable measures that will lead to better management and development of the Lower Volta Delta in an integrated and sustainable manner. In this IWRM/ Delta plan for the Volta Delta water initiatives are brought together and prioritized and the governance and operational structure as developed in 1) is laid down.
3 Develop a protection plan for Wetland Keta as part of the IWRM plan/ Volta Delta program	3.1meeting with relevant stakeholders to determine the main challenges and Stakeholder involvement/commitment tuned with problem analysis	3.2defined outlines of plan for ecohydrology and economy	3.3executed gap analysis	3.4defined actions for (eco)hydrology and economy 3.5prioritizati ed activities	3.6executing plans cf PDCA	3.7 Evaluation of plans 3.8Adaptation plans (if necessary)	Achieve a plan with a set of well-balanced measures for the economic development, ecological protection and hydrologic well-functioning of the Keta and Sagoon Lagoon with a focus on (eco)recreation, salt winning, usage of mangrove, fishing, agriculture.

4 Enhance food water nexus and set up water quantity and quality information systems and tools to improve agricultural production	4.1determined scope of cooperation between BD, Embassy, Ghana	4.2Inventory irrigation projects agrifood south of Kpong Dam to improve production and set up buffer zones around the agrifood zones for pesticides and herbicides to protect water quality	4.3testing water apps 4.4selection of three projects for Private, public cooperation	4.5formulated hydrological indicators for water quality and (buffer)zoning	4.6 hydrological support for three projects with partners 4.7Evaluation	4.8Selection of other projects 4.9 executing other projects	An enhanced water food nexus with the focus on an Improved quality and quantity of irrigation water available to improve agricultural production. Goal is to enhance the self-sufficiency of Ghana for food. Intermediate tools for water and agriculture are developed. Water availability for agriculture is improved through better functioning of irrigation and dams for Agriculture. Plans, implementation of laws and regulations, spatial planning (buffer zones) are established to avoid pollution of water (ground and surface) by N, P, and pesti/herbicides. Improved opportunities for commercial agriculture south of the Kpong Dam. Goal is to create hydrological circumstances for more production and less pollution. Together with the triple helix partners: public, private and knowledge institutes
White Volta							
5 Enhance Governance for water management River Basin Board White Volta			5.1 Meeting with (16) stakeholders : Stakeholder involvement/commitment tuned with outlines organisation set-up 5.2 gap analyses executed	5.3Decision about enhancement of office White Volta communication plan for RBB	5.4 Operational and financed office for RBB WV 5.5 Office executing projects	5.6Evaluation of performance 5.7 adaptation (if necessary)	A national policy that strengthens, supports and reinforces implementation of decentralized River Basin Boards with a financing system organization with support of relevant stakeholders. An enhanced office will lead to the better coordination and implementation of the Integrated Water Resources Management In this office bundling of capacity, knowledge of the Water management executional capacity and funds to finance projects are available.
6 Pollution reduction processes (Improved chemical processing) implemented in gold mines in pilot area Nangori	6.1Translated material guidelines from French to English and form BF to Ghana From Faso Koom is available inventory mining sector in pilot area and main problemsites mapped,.	6.2Workshop to learn from experiences Burkina Faso Gold mining and water quality. training material developed and ToT method developed	6.3 Pollution reduction processes (improved chemical processing) in Gold mining companies introduced 6.4developped and distributed materials	6.5 ToT executed pilot Nangori 6.6 Training materials for LVB. Permitting system and enforcement system to control chemicals.	6.7train the trainer workshop are executed for other Gold mines	6.8 Evaluation 6.9 adaptation of set up (if necessary)	An established alternative way of small scale goldmining in minimal three locations (to start in Nangori?) which is more favorable for the quality of water and which economically interesting. This must be part of an developed and established national/regional land-based activities data and information management system in which regional assessment of activities, sources of contaminants, and pollutant levels in water are conducted.

7 Better functioning of dams for irrigation	7.1Analysed challenges in workshop with relevant stakeholders around the VEA Dam	7.2present list of Ghanaian dams that are not fully functioning is clear and presented. 7.3the maintenance and repair tools of dams from Faso Koom are translated	7.4workshop to present and discuss the tools and adjust them on the challenges of the pilot dam Vea	7.5Funds are investigated. 7.6systematic prioritization to determine the urgency of dams is developed and executed	7.7Executed activities for Vea 7.8train the trainer workshop are executed for other prioritized dams from the list	7.9 Evaluation 7.10 adaptation of set up (if necessary)	An enhanced self-sufficiency for food security by strengthening the water food nexus with the focus on an Improved quality and quantity of irrigation water available to improve agricultural production. Tools for water and agriculture are developed. Water availability for agriculture is improved through better functioning of irrigation and dams for Agriculture. Previous dam assessments will be included in this project. Elaborate a plan for the Vea Dam near Bolgatanga on basis of tools for maintenance and wellfunctioning.
8 Improve purification waste water for Bolgatanga Waste Water purification	8.1Exploring meeting with Bolgatanga representatives and other stakeholders	8.2workshop with relevant stakeholders to define the challenges and opportunities	8.3with local partners waste water plans are elaborated and A Technical ToR is developed for a waste water treatment plant for Bolgatanga to attract funding by IFI or bank	8.4Finding funds for executing plans with a focus from the blue deal mainly on setting up the plans, funding approaches, looking for partners and especially the long-term training of locals to maintain the plants	8.5executed quick wins	8.6Construction or extension of sewage collection systems 8.7introduction of successful approaches in other regions.	Reduce impacts of urban areas on water quality. One wastewater purification for every region in 2050. We start with the 2050 goal by examining, planning, funding waste water plants for Bolgatanga (150.000 inhabitants).
9 Improved agreements on shared WIS between all water authorities in the Volta Basin to Avoid impact downstream of Bagre spilling	9.1Elaborated awareness and willingness on the challenges in workshop with relevant partners in both Ghana and Burkina Faso and VBA	9.2 Through workshops will be assessed what the main problems are in the processes	9.3appointments systematic collection and exchange of data	9.4intentional declaration between relevant partners is signed	9.5Bilateral appointments are carried out	9.6 Evaluation of appointments 9.7adaptation of appointments (if necessary)	A developed agreement and technology basis for the free and regular exchange of environmental data and information between Gh and BF and VBA. Elaborated systematic data exchange and monitoring, early warning system so that the spilling of the Bagre dam does not affect livelihood as much as it doing now. It concerns data collection/ monitoring Bagre dam management/ operation Communication between Sonabel and GoG. To determine the actionability of the information that is communicated and how the information is used and transplanted to actions and stakeholders (mainly local farmers). Objectives for improvements will be determined.

3. CROSS-CUTTING THEMES

3.1 How are specific themes addressed

Climate change adaptation

Ghana is one of Africa's fastest growing economies and has made significant strides in poverty reduction, but climate variability and change pose a threat to future growth and development. Rising sea levels, drought, higher temperatures and erratic rainfall negatively impact infrastructure, hydropower production, food security and coastal and agricultural livelihoods. One-quarter of the population lives along the coast in rapidly expanding urban areas like Accra, and are especially vulnerable to flooding and waterborne disease. Drought and reduced rainfall threaten access to reliable power sources, already erratic and insufficient. Despite the country's recent transition to an industry and services-oriented economy, 45 percent of the workforce still depends on rainfed agriculture. The fisheries sector contributes 4.5 percent to GDP and is another important source of income and nutrition, providing livelihoods for as many as 2.2 million people.

Projected climate changes include: Increase in average annual temperatures between 1.4–5.8°C by 2080, with the greatest increases in the north. Increase in the frequency of hot days and nights of 18–59 percent by 2060. Decrease in overall rainfall of 4.4 percent by 2040. More erratic and intense rainfall during the wet season and lower precipitation levels during the dry season; larger decreases in the south. Rise in sea surface temperatures by approximately 2–4°C. Sea level rise of 75–190 mm by 2100. Average coastal erosion and shoreline loss of 0.38 m per year. Flows in the Volta Basin could fall by 24 percent by 2050 and 45 percent by 2100 due to reduced rainfall and increased evaporation. Therefore, it is clear that climate change has impact in all parts of the water projects.

Sustainability

Sustainability focusses on the insurance to continue management of the projects. The implementation of the Blue deal water programme works needs to be aligned with building capacity, knowledge, attention and means for maintenance in which the local stakeholders play an important role. That's why we include several representatives of local districts and municipalities in our stakeholders. So that the sustainability of the outputs and outcomes can be ensured.

Gender

Gender refers to the different roles, rights, and responsibilities, and the relations between men and women. It is generally associated with unequal power and access to resources because, in many societies and cultures, men tend to dominate and consider women to be subordinate. Gender mainstreaming is a process that aims to address this imbalance.

In Ghana policies have emphasised gender equality and women's empowerment, some of which have contributed to important development results. They include decreased gender gaps in schooling, educed maternal mortality rates and notable increase in women's political representation but still are women in Ghana more likely than men to be poor and illiterate so there are significant challenges left to deal with.

Gender is an issue in all aspects of water management. For that reason, the blue deal team or Ghana will have a female communication manager. Communication about water must, by tradition, address the chief and elders. Men occupy the most prominent seats and the women, do not receive the message and cannot react or decide. Yet it is the women who are the primary water users in the compound and at the pump site. Also women are trained for technical and managerial tasks, Programme staff and management are aware of reasons and trained on practicalities of equivalent participation of women and men. We also include a gender expert in the working team, with a clear defined role. The Ghanaian representative for the

initiative for Gender Equality and Development in Africa (IGED-Africa) will be consulted regularly on Gender issues in the KLCRS, beside this we will implement a guide line with key questions to mainstream gender in program implementation. The Ministry of Gender and social protection will be represented in the steering committee to ensure that implementation of activities are gender compliant.

Innovative solutions

In the activities innovative solutions will be found. Examples of these innovations can be: Building with nature approach which can be attributed to the coastal zone against erosion ("zandmotor"), but also in the riparian systems this approach can be helpful. In the monitoring and data collection there will be more focus on new techniques as remote sensing, that can help building models, but also on simple, robust, cheap methods of data collection. In the dams alternative ways of data collection will also be achieved. And in the case the dams must be dredged alternative ways to develop economic models to use the silt/ sand.

Poverty reduction

Despite the yearly economic growth rates of Ghana, poverty remains prevalent in many areas. At the regional level, the Northern, Upper East, and Upper West regions continue to have the highest poverty rates. It is also important to note that although the proportion of people living in poverty has declined by a quarter since 2006, the number of people living in poverty has only declined by 10% (from 7m to 6.4m), meaning that poverty reduction is not keeping pace with population growth. Inequality has been on the rise in Ghana since 1992, though as measured by the Gini its rise has stalled since 2006. The Gini coefficient has risen from 37 in 1992 to 41 in 2013. Average consumption of the wealthiest group increased by 27% between 2006 and 2013, whereas for the poorest it only increased by 19%.

The main conclusions of the 6th Ghana Living Standards Survey (2014) are that there has been substantial progress in educational attainment among the population. However, school attendance rates are still low in the three northern regions of the country. Where the rates are relatively high, there are gender gaps that need to be addressed. There are clear and significant disparities in per capita annual income between urban and rural residents. Strategies must be put in place to bridge this yawning gap.

4. RISK MANAGEMENT

Potential risks

Political situation and stability. In the past two decades, Ghana has taken major strides toward democracy under a multi-party system, with its independent judiciary winning public trust. Ghana consistently ranks in the top three countries in Africa for freedom of speech and press freedom, with strong broadcast media in particular, and radio the medium with the greatest reach.

Governance Risk: WRC has no knowledge and experience of partnership with the Dutch Water Authority. Sufficient training and guidance to WRC and implementing partners will therefore be required especially during project preparation and early in the implementation phase.

Stakeholder Risk: The proposed project will involve several stakeholders and beneficiaries with different priorities. Dialogue during project preparation and implementation will ensure outputs are designed, timed and delivered by means that are optimal for key beneficiaries.

Risk of Duplications: Risk that donor activities in support of the sector will be un-coordinated, overlapping and thus inefficient and needlessly costly. WRC will continue to share information with the donors throughout project preparation and implementation to ensure effective alignment with other projects

Implementation risk The River Basin Boards have only a relatively low number of *staff with effect on the delays* in the execution of works. Understaffing, low salaries and lack of capacity. The organisational and institutional strength of the RBB is on the weak side.

5. BLUE DEAL PARTNERSHIP ROLES & TASKS

5.1 Specific roles of involved partners

A steering committee will be elaborated for the blue delta program in Ghana with the two regional basin boards (White Volta and Volta Delta) the water resource commission, The Dutch Embassy and two water authorities from Holland. A Gender representative from Ghana will be invited on yearly basis. The committee will meet three times a year. Around the meetings of the steering group activities will be elaborated in two week periods. For a more detailed description of the role we refer to section 5.4.

5.2 Cooperation with other partnerships in the same country or catchment

For several projects cooperation will be sought with other (Dutch) activities or partnerships. For the sanitation projects Waterworx and VNG will be incorporated. For the green Blue program funds and partners from agriculture and water will be combined. For the dams project RVO will possibly have an important role in financing the dredging that has to be done. For the program several Dutch companies (e.g. HKV, WiBo, Deltares) and knowledge institutes (WUR, TU Delft, IHE, Delta alliance) are interested or already incorporated in the program. Also on the Ghanaian side a lot of partners are interested in working together. (Ref. to section 5.4)

5.3 Cooperation with Dutch embassy and Delta team

The Netherlands Embassy has been providing support for capacity development and cooperation, and networking with other Netherlands institutions, governmental and private. WRC has received support from the Netherlands Government in 2010 through the ADAPTS project for the development of an Integrated Water Resources Management Plan with emphasis on climate change for the Dayi Sub Basin. Last Year, the Embassy also supported the roundtable discussion on the management of the Volta delta and a Delta Mission to the Netherlands comprising several stakeholders to learn at first hand, innovative ways in managing delta resources.

5.4 Relevant stakeholders

STAKEHOLDERS TO BE INVOLVED For Overarching Ghana	<i>[level]</i>	<i>[relevance (explanation)]</i>
Water Resources Commission	Mr. Ben Ampomah Executive Secretary, Accra	Coordination of the implementation of activities
Centre for African Wetlands	Prof. Yaa Atemoah Head of Department, Legon	Undertake research on Delta Resources and management
Forestry Commission	Mr. Dickson Agyeman	Manages Ramsar sites

	District Manager, Ada	
Delta Wing-Ghana/ The Development Institute	Mr. Ken Kinney Executive Director, Accra	Community engagement on developmental issues
Environmental Protect Agency	Mr. Karl Fiati Head of Natural Resources, Accra	Ensure environmental quality
Volta River Authority	Kwame Darkwa Engineer, Akuse	Hydropower generation
Ada District Assembly and Keta Municipal Assembly	District Chief Executives, Ada and Keta	Support local level implementation and ensures sustainability of activities

STAKEHOLDERS TO BE INVOLVED For White Volta	<i>[level]</i>	<i>[relevance (explanation)]</i>
Water Resources Commission	Mr. Ben Ampomah Executive Secretary	Coordination of the implementation of activities
White Volta Basin Board	Mr. Aaron Aduna	Coordination of local level implementation of activities and basin board members
District Assemblies	District Chief Executives	Support local level implementation and ensure sustainability of activities
Environmental Protection Agency	Mr. Karl Fiati Head of Natural Resources	Ensures environmental quality
Irrigational Development Authority	Mr. Kofi Mozaka	Coordinate irrigation activities

STAKEHOLDERS TO BE INVOLVED Volta Delta	<i>[level]</i>	<i>[relevance (explanation)]</i>
Water Resources Commission (WRC)	Mr. Ben Ampomah, Executive Secretary	responsible for financial and technical support and prioritization
Wild Life Division of Forestry Commission	Dickson Agyeman, Manager, Songhor Ramsar site Kareem Abdul Fuseni, Manager, Keta Lagoon Complex Ramsar site	Protection Marine turtle and other wildlife in the Ramsar sites of the Volta Delta Engages communities in conservation education
The Royal Netherlands Embassy in Ghana	Janet Arthur	Facilitates, coordinates and supports Dutch institutions interests in the Volta Delta
Blue Deal/ Dutch Water Boards	Carel Nobbe	support WRC
UN Habitat	Joris Oele Javier Torner	Project proposal in the last stage for funding from Adaptation Fund
WUR	Erik van Slobbe University for Development Studies Tamalé, Rabobank	Reliable predictions on water and soil conditions. Weather and climate forecast information for Northern Ghana
FAO/MESTI	Mr. Benjamin Adjei, Deputy Country Rep, FAO Tei Ogum, Program Coordinator, MESTI	implement livelihoods project in Keta and Ada communities.
IUCN-Netherlands	Henk Simons, Senior Program Advisor, IUCN-NL Liselotte Hagedoorn	The Ecosystem valuation project

Both ENDS	Annelieke Douma, Senior Water and Environment Program Advisor	Empowering the 6 community groups: women and youth through the Negotiated and support economic empowerment
Delta Alliance/ Ghana Wing	Kim van Nieuwaal, Executive Director of Delta Alliance Peter van Van veelen Victor Langenberg	Support Delta Alliance- Ghana Wing, provides technical support/ funding set up Africa Resilience Delta Lab. with Volta Delta as a pilot.
Technical University of Delft	Peter van Vanveelen	Exchange students Ghana Netherlands
University of Ghana/Institute for Environment and Sanitation Studies	Prof Kwesi Appeaning Addo	Implementation of DECCMA project in the Volta Delta
The Development Institute	Ken Kinney, Executive Director/Coordinator, Delta Alliance-Ghana Wing	NGO sustainable management of the Volta facilitate and build partnership
Water Research Institute (WRI)	Dr. Francis Amevenku, Head of Fisheries Department, WRI, CSRI	training on Aquaculture Pilots community projects
Environmental Protection Agency	Carl Fiati, Head of Natural Resources, EPA	Certifies projects through the EIA procedure, Monitors environmental standards Environmental education
Oil Watch Ghana	Mr. Nobel Wadzah, Director	Working with communities in the Volta Delta and part of Delta Alliance-Ghana Wing
Initiative for Gender Equality and Development in Africa (IGED-Africa),	Ms. Sylvia Hornam Norgbesenu, Executive Director	Women groups on Gender issues in the KLCRS
Hydrological Services	To be completed	To be completed
Volta River Authority	Ir. Kwame Darkwa, Akuse Office	engineering environmental issues & communities
Local Government Representatives	Coordinating directors and District Chief Executives	Coordination of local level developmental activities

6. BUDGET

Ghana				
<i>Amounts: euro's</i>	2019	2020	2021	2022
1. Flights	16.000	24.000	24.000	24.000
2. Visa	2.000	3.000	3.000	3.000
3. Vaccinations and insurance	1.300	2.000	2.000	2.000
4. Travel costs Netherland	2.667	4.000	4.000	4.000
5. Travel costs abroad	5.000	6.000	6.000	6.000
6. Daily stay allowance abroad	22.000	32.760	32.760	32.760
7. Daily stay allowance NL	0	0	0	0
8. Wage costs	130.700	196.050	196.050	196.050
9. Activities and material costs	26.667	40.000	40.000	40.000
10. Costs of sharing knowledge in NL	0	0	0	0
11. Other costs	5.000	7.500	7.500	7.500
12. Program costs (10%) and Unforeseen	32.000	47.297	47.297	47.297
Total costs	243.334	362.607	362.607	362.607

7. BLUE DEAL COMMITMENT

7.1 Commitment Dutch program partners

The Dutch partnership of Faso Koom who are working together in Burkina Faso is also available for the Ghanaian Blue deal program. Besides this extra water authorities are added to the working group from Holland. Enough capacity is herewith guaranteed.

The Royal Dutch Embassy has been providing support for capacity development and cooperation, and networking with other Netherlands institutions, governmental and private. WRC has received support from the Netherlands Government in 2010 through the ADAPTS project for the development of an Integrated Water Resources management Plan with emphasis on climate change for the Dayi Sub Basin. Last Year the Embassy also supported the roundtable discussion on the management of the Volta delta and a Delta Mission to the Netherlands comprising several stakeholders to learn at first hand, innovative ways in managing delta resources.

The Embassy will take active place in the steering committee. The Dutch Ambassador and his colleagues of water and agriculture support the program fully.

7.2 Commitment local program partners

The Minister of sanitation and Water Resources showed interest and spoke out support for the blue deal program in a letter to the DWA (see appendix) . The Water Resources Commission has long recognized and embraced the concept of Integrated Water Resources Management (IWRM) as a means to improve the efficient use and conservation of water resources to ensure sustainable development. The Commission has since established eight Basin Boards and their corresponding management plans as a means of decentralizing water management activities. The Commission has previously partnered with other Development partners such as:

- the World bank for the Development of Flood Early Warning system for the White Volta Basin;
- Adaptation Fund for the Development of the Black Volta and Oti Basins Management Plans;
- The Netherlands Government through the ADAPTS project for the Development of the Dayi Basin Management Plan; and
- The Dutch water Authority for the development of this request for partnership

In case of reply the
number and date of
this letter should be
quoted

Our Ref. No. TA.33/266/1e1
Your Ref. No.
Tel: 0302 685546
Fax: 0302 685503



Republic of Ghana



060361

MINISTRY OF SANITATION AND
WATER RESOURCES
PRIVATE MAIL BOX M 60
MINISTRIES

10th AUGUST, 2018

**SUPPORT FOR THE PROPOSED GHANA AND DUTCH WATER AUTHORITIES
BLUE DEAL SUPPORT PROGRAM**

The Ministry of Sanitation and Water Resources writes to support the proposed Blue Deal program to promote partnership between the Dutch Water Authorities and the Water Resources Commission, which is under the auspices of the Ministry of Sanitation and Water Resources (MSWR), Ghana.

2. The MSWR is seeking for investments in long-lasting projects that will build new partnerships at the regional and national levels and also create mutual benefits for both partners. We are reliably informed that the Blue Deal program aims at assisting 20 million people in 40 catchments around the world to gain access before 2030 to clean, sufficient and safe water by supporting such envisaged partnerships.
3. Reciprocal visits and meetings have been carried out between Ghana and The Netherlands water management institutions in May and July 2018 to explore possible partnership towards addressing the issue of what is needed in Ghana to get clean, sufficient and safe water. These visits and meetings were eventful and fruitful.
4. Accordingly, the MSWR through its implementing agencies wishes to start the proposed partnership in an integrated approach focusing on three sub catchments of the Volta River Basin. These are:
 - the Black Volta for sufficient water;
 - the White Volta for clean water and sanitation; and
 - the Volta Delta for water governance and safe water.
5. MSWR is pleased to work out this approach in accordance to the Blue Deal format with attention to:
 - the need for strengthening technical knowledge and capacities in water management;
 - institutional and organisational improvements required to achieve good water management;
 - relational aspects of water management e.g. stakeholder involvement; and
 - activities necessary to implement the programme adequately.
6. We understand the steps that are required from the request for cooperation to approval of the Blue Deal proposal and will pursue them as appropriate and timeously.

.../2

7. We look forward to your positive consideration of the proposal to support Ghana and The Netherlands water management institutions under the Blue Deal program.



JOSEPH KOFI ADDA, (MP)
MINISTER

DUTCH WATER AUTHORITIES
P.O. BOX 93218
2509 AE THE HAGUE
THE NETHERLANDS
ATTENTION: MR. H. TH. M. PIEPER

cc:

The Royal Netherlands Embassy
Accra, Ghana
Attention: Ms. Janet Arthur

Waterschap Aa en Maas ✓
P.O. Box 5035
5201 GA 's Hertogenbosch
The Netherlands
Attention: Mr. Carel Nobbe

Project Budget Blue Deal Ghana

Naam Partnerschap		Blue Ghana		Groene velden zijn invulvelden							
Naam coördinerend waterschap		Waterschap Aa en Maas									
Kosten, zie toelichting		Totaal begrote kosten 2020-2021		Bijdrage Blue Deal (50%)		Bijdrage Waterschap (50%)					
omschrijving	tarief	vluchten	bedrag	omschrijving	tarief	vluchten	bedrag	omschrijving	tarief	vluchten	bedrag
1 Vliegtickets	Vliegtickets (gemiddelde prijs)	20	€ 24.000		€ 1.200	20	€ 24.000		€ 12.000		€ 12.000
			€ 0				€ 0		€ 0		€ 0
			€ 0				€ 0		€ 0		€ 0
subtotaal			€ 24.000				€ 24.000		€ 12.000		€ 12.000
2 Visumkosten	omschrijving	aantal	bedrag								
	Visum	10	€ 3.000		€ 300		€ 3.000		€ 1.500		€ 1.500
			€ 3.000				€ 3.000		€ 1.500		€ 1.500
totaal			€ 3.000				€ 3.000		€ 1.500		€ 1.500
3 Inentingen en verzekeringen	omschrijving	aantal	bedrag								
		20	€ 2.000		€ 100,00	20	€ 2.000		€ 1.000		€ 1.000
			€ 0				€ 0		€ 0		€ 0
			€ 2.000				€ 2.000		€ 1.000		€ 1.000
totaal			€ 2.000				€ 2.000		€ 1.000		€ 1.000
4 Reiskosten Nederland	omschrijving	aantal	bedrag								
		20	€ 4.000		€ 200	20	€ 4.000		€ 2.000		€ 2.000
			€ 4.000				€ 4.000		€ 2.000		€ 2.000
totaal			€ 4.000				€ 4.000		€ 2.000		€ 2.000
5 Reiskosten buitenland	omschrijving	aantal	bedrag								
		40	€ 6.000		€ 150	40	€ 6.000		€ 3.000		€ 3.000
			€ 0				€ 0		€ 0		€ 0
			€ 6.000				€ 6.000		€ 3.000		€ 3.000
totaal			€ 6.000				€ 6.000		€ 3.000		€ 3.000
6 Verblijfskosten buitenland	omschrijving	DSA	bedrag								
	DSA Ghana	140	€ 32.760		€ 234	140	€ 32.760		€ 16.380		€ 16.380
	DSA Burkina Faso		€ 0				€ 0		€ 0		€ 0
	DSA Mali		€ 0				€ 0		€ 0		€ 0
			€ 32.760				€ 32.760		€ 16.380		€ 16.380
totaal			€ 32.760				€ 32.760		€ 16.380		€ 16.380
7 Verblijfskosten Nederland	omschrijving	DSA	dagen								
	medewerkers partnerorganisaties		bedrag				€ 0		€ 0		€ 0
			€ 0				€ 0		€ 0		€ 0
			€ 0				€ 0		€ 0		€ 0
totaal			€ 0				€ 0		€ 0		€ 0
8 Loonkosten	omschrijving	forfait	dagen				bedrag				
	Medewerkers waterschappen	€ 650	200				€ 130.000		€ 65.000		€ 65.000
	Medewerkers derden WUR/WiBo	€ 950	26				€ 24.700		€ 12.350		€ 12.350
	Resident assistant	€ 40	300				€ 12.000		€ 6.000		€ 6.000
	Lokaal management partners	€ 150	100				€ 7.500		€ 3.750		€ 3.750
	Lokale stagiairs	€ 10	360				€ 3.600		€ 1.800		€ 1.800
	Nederlandse stagiairs	€ 17	360				€ 6.000		€ 3.000		€ 3.000
	Externe experts	€ 950	5				€ 4.750		€ 2.375		€ 2.375
							€ 0		€ 0		€ 0
							€ 196.050		€ 98.025		€ 98.025
totaal			1351				€ 196.050		€ 98.025		€ 98.025
9 Kosten activiteiten en materiaalkosten	omschrijving		bedrag								
	White Volta	1	€ 20.000		€ 20.000	1	€ 20.000		€ 10.000		€ 10.000
	Lower Volta Delta	1	€ 20.000		€ 20.000	1	€ 20.000		€ 10.000		€ 10.000
		1				1			€ 0		€ 0
									€ 0		€ 0
totaal			€ 40.000				€ 40.000		€ 20.000		€ 20.000
11 Kosten kennis delen in Nederland	omschrijving		bedrag								
							€ 0		€ 0		€ 0
							€ 0		€ 0		€ 0
totaal			€ 0				€ 0		€ 0		€ 0
12 Overige kosten	omschrijving		bedrag								
	Kleine investeringen door lokale partner						€ 7.500		€ 3.750		€ 3.750
	Communicatie						€ 7.500		€ 3.750		€ 3.750
totaal			€ 7.500				€ 7.500		€ 3.750		€ 3.750
13 Programmakosten + Onvoorzien	omschrijving	percentage	bedrag								
	onvoorzien	5,0%	€ 15.766		5,0%	€ 315.310	€ 15.766		€ 7.883		€ 7.883
	programmakosten	10%	€ 31.531		10%	€ 315.310	€ 31.531		€ 15.766		€ 15.766
							€ 47.297		€ 23.648		€ 23.648
totaal			€ 47.297				€ 47.297		€ 23.648		€ 23.648
totale kosten			€ 362.607				€ 181.303		€ 181.303		€ 181.303