

**PROJECT INFORMATION DOCUMENT (PID)
ADDITIONAL FINANCING**

Report No.: PIDA3970

Project Name	Additional Financing Sustainable Land and Water Management (P132100)
Parent Project Name	Sustainable Land and Water Management (P098538)
Region	AFRICA
Country	Ghana
Sector(s)	Agricultural extension and research (35%), General agriculture, fishing and forestry sector (25%), Public administration-Agriculture, fishing and forestry (20%), Public administration-Water, sanitation and flood protection (20%)
Theme(s)	Land administration and management (54%), Water resource management (35%), Biodiversity (11%)
Lending Instrument	Investment Project Financing
Project ID	P132100
Parent Project ID	P098538
GEF Focal Area	Multi-focal area
Borrower(s)	Ministry of Finance
Implementing Agency	Ministry of Environment, Science, Technology and Innovation
Environmental Category	B-Partial Assessment
Date PID Prepared/Updated	20-Mar-2014
Date PID Approved/Disclosed	31-Mar-2014
Estimated Date of Appraisal Completion	31-Mar-2014
Estimated Date of Board Approval	27-May-2014
Decision	

I. Project Context

Country Context

Ghana has experienced rapid economic growth over the past several years resulting in substantial progress in reducing income poverty. GDP growth rose from 8% in 2010 to close to 14.5% in 2011, making Ghana's economy one of the fastest growing on the continent. By 2012, Gross National Income per capita reached US\$1,940, reflecting Ghana's middle-income status. Poverty has been declining steadily, as reflected in the number of people classified as poor, which dropped from about 8.0 million (i.e. slightly over 50% of the population) in 1992 to 6.3 million in 2006 (less than 30% of the population). However, inequalities remain widespread in Ghana, and are reflected in significant disparities in access to economic, social and political opportunities. The northern Savannah regions (with 25% of the country's population) registered an average poverty rate of

58%, compared to 19% in the rest of the country.

Despite these economic gains, recent macroeconomic instability is putting at risk the gains in poverty reduction achieved. The fiscal deficit reached 12% of GDP in 2012 and 10.9% in 2013, and the current account deficit reached 13% of GDP in both years. The government tackled the fiscal imbalances by raising fuel prices as well as electricity and water tariffs, by around 60% in late 2013. The inflationary impact of the adjustment was reinforced by the Cedi depreciation. Hence the higher prices imply a lower income in real terms, which has the risk of pushing many of the near-poor families into poverty. Macroeconomic crises affect disproportionately more the poor members of the society. Hence, any socially responsible macroeconomic policy should be aimed at mitigating the risks that originate macroeconomic crises, i.e., excess spending, price interventions, and reliance on natural resource revenues.

Sectoral and institutional Context

Ghana lies in the Sahelian semi-arid belt and represents the tropical dry forest biome. Its ecosystems are characterized by the tropical dry climate of the Sudan-Sahelian zone. The country is divided into six agro-ecological zones defined on the basis of climate, reflected by the natural vegetation and influenced by the soils. These zones are namely, Sudan, Guinea and Coastal Savannas, the Forest-Savanna Transitional, the Semi-deciduous Forest and the High Forest zones. Notably, the three northern regions are highly vulnerable to environmental degradation and climate change due to its geographic location and the dependence of its population on rain-fed agriculture and transhumance systems.

Agriculture represents 22.7 percent of GDP and agricultural land use accounts for more than 50 per cent of all land use, which currently decreasing. It provides employment for an estimated 50.6 percent of the population as at 2012, particularly women (53 per cent of whom are employed in agriculture). It contributes to insuring food security, provides raw materials for local industries, generates foreign exchange, and provides employment and incomes for most of the population (especially those living in the rural areas), thereby contributing to poverty reduction. It is also an important source of raw materials for the manufacturing industry.

The rapidly expanding population exerts pressure on the narrow and diminishing natural resource base, and leads to increasing land-use conflicts. Area expansion and agricultural practices are placing a significant pressure on available natural resources.

Land degradation continues to increasingly affect land resources in Ghana, including agricultural lands, forests, natural habitats, and waterbodies. According to the government's National Action Program to combat Drought and Desertification, the land area prone to desertification has almost doubled in the last decades. Land degradation is economically significant. A recent study (World Bank Ghana Country Environmental Analysis, 2006) estimated soil erosion to cost around 2 percent and forest degradation to cost about 5 percent of the national GDP. Unsustainable farming practices (particularly the traditional bush-fallow system) and removal of vegetation cover (mainly through deforestation, overgrazing and bush burning) are the main proximate causes of land degradation in Ghana.

Further, in Ghana there is a visible developmental gap across the North and South of the country where the southern coastal and forest zones (both urban and rural) have been the epicenter of rapid

poverty reduction, in contrast to the north which remains under-developed. The Northern region is landlocked and in comparison with the South, its geographic locale brings less rainfall, greater land and soil degradation, and a pre-disposition to droughts and floods. This forces agricultural households to adopt low-risk and low-input strategies, creating a virtual cycle of poverty. Despite attempts to remedy the situation, the decline in poverty still has not been equally spread geographically, and the poor in Ghana therefore, continue to be concentrated in the Northern Savannah Ecological belt. Bridging this developmental gap has been a long-stated goal of most post-independence Governments of Ghana.

Climatic conditions in the country are changing and have become a threat to sustainable environmental management and livelihoods. Drought and floods in parts of the three northern regions of Ghana has become a recurring phenomenon to the people and environment. The country's harsh and deteriorating climatic conditions combined with its high demographic growth rate jeopardize the impact of initiatives to reduce poverty, endanger food security and accelerate environmental degradation.

Total land area of Ghana is about 23.85 million hectares. At the beginning of the last century, about one-third (i.e. 8.2 million hectares) of the area was covered by high forest while the remaining two-third (15.7 million hectares) was savanna woodland (Owusu et. al., 1999). The area of high forest (off reserve) has drastically reduced and the only remaining portions today are mainly in protected areas. Records show that at the turn of the last century, Ghana had about 8.8 million ha of primary forest. By 1950, the area had been reduced to 4.2 million ha and further to about 1.5 million ha by 1999 (Owusu et. al., 1999). This implies that from 1900 to 1950, the nation lost 50 per cent of its primary forest cover and also lost 60 per cent of it between 1950 and 1999. On a 100 year scale (1900 to 2000), the nation lost over 80 per cent of the closed forest (a reduction from 8.8 million ha to 1.5 million ha). Farrhead and Leach (1998) estimated the deforestation rate to be a massive 22,000ha per year around the late 90's. Recent average annual deforestation rate is 1.82 per cent or at 135,395 ha per annum (FAO, 2010).

Forests in Ghana are representative of the dry forests of Africa. Ghana's forests make up part of the Guineo-Congolese phytoecological region. Forests broadly fall into two vegetation zones, each with different vegetation and forest types, the High Forest Zone covering 34 per cent and the Savannah Zone covering 66 per cent of the land area. Total protected forest area is about 2.5 million ha in 266 gazetted Forest Reserves (FRs). The Savannah Zone covers 14.7 million ha of woodlands and includes some 0.88 million ha of reserves, of which Mole National Park alone is about 0.5 million ha. There are 68 gazetted forest reserves with a total area 6,175.09sq (617,509 ha) in the three northern regions of Ghana.

According to Nsenkyire (1998), the main causes of deforestation and forest degradation in Ghana are (i) forest clearance for cocoa and food crop farms and (ii) logging (both legal and illegal). Illegal logging is a major cause of deforestation, depriving the Ghanaian economy of fibre, legal employment and tax revenues. Clearance of forest for agriculture is the leading cause of deforestation not only in Ghana but in the whole of Africa (FAO 2003). Declining soil fertility has resulted in extensive system of crop production to meet food security needs. Other causes of deforestation are shifting cultivation, bush fires, harvesting of fuel wood, human settlements and overgrazing. Conversion of forest lands for industrial activities or infrastructural development is another cause of forest loss. Examples include forest clearance for mining, industrial development, building of stadia, schools and other large infrastructure projects.

Biodiversity and Protected Areas. Ghana serves as an important area for faunal migration. While

several endemic species remain, some of Ghana's threatened species include Roan antelope, Harterbeast, Side Strip Jackel, Buffalo, White and Black Colobus monkeys. Ghana has several national parks and resource reserves: name some key ones Gbele, Mole, Bui, Digya, Kakum, Kyabobo, Ankasa Conservation Area, Shai Hills Resource Reserve, Bia, and Boabeng-Fiema Monkey Sanctuary.

Forestry, agriculture, and biodiversity conservation are interrelated and dependent on each other, which calls for a holistic, landscape approach to land and forest management. Therefore a win-win vision for the environment and regional economy is to turn floodwaters into a productive asset through investing in flood control whilst exploiting green drivers of growth compatible with improved watershed management. This would need to be supported with appropriate commercial and social infrastructure. Tree crops are identified as a key economic driver, and thus the potential for additional agricultural diversification and nature-based tourism need to be recognized for better land management. In addition, land provides habitats for biodiverse species. Due to wildlife requirements for water and to historical patterns of development that avoided river banks previously infested with onchocerciasis, natural habitat corridors centered along rivers form biodiversity corridors linking Mole National Park and Gbele Resource Reserve (GRR) with protected areas in Burkina Faso. Sustainable land management of the surrounding watersheds is thus key to supporting the continued survival of these riparian corridors, which in turn are critical to the hydrological services provided by the watershed as a whole, and form flood protection buffers along the main Volta tributaries flowing into Ghana from Burkina Faso.

II. Proposed Development Objectives

A. Current Project Development Objectives – Parent

Project Development Objective is:

To (a) demonstrate improved sustainable land and water management practices aimed at reducing land degradation and enhancing maintenance of biodiversity in selected micro-watersheds, and (b) strengthen spatial planning for identification of linked watershed investments in the Northern Savannah region of Ghana.

Key Indicators for PDO:

- Area of land in selected micro-watersheds under new sustainable land and watershed management (SLWM) technologies (ha);
- Management effectiveness according to METT score in Gbele Resource Reserve and Wuru Kayero and Wahabu Wiasi corridor sites (score, disaggregated);
- Pre-feasibility studies conducted for new large-scale multipurpose water storage investments (number)

III. Project Description

Component Name

Component 1 - Capacity Building for Integrated Spatial Planning

Comments (optional)

Component 1 is currently undertaking activities that will lead to improved spatial planning to address land and water management needs. This Component will receive no additional funding under AF.

Component Name

Component 2 - Land and Water Management

Comments (optional)

Comp. 2 will continue support to implementation of SLWM technologies which would lead to enhancement of soil productivity, of ecosystem services, and increase in agricultural productivity

Component Name

Component 3 - Project Management and Coordination

Comments (optional)

Component 3 supports project coordination, monitoring, and supervision of the various stakeholders involved in the project implementation, including under Additional Financing.

IV. Financing (in USD Million)

Total Project Cost:	13.25	Total Bank Financing:	0.00
Financing Gap:	0.00		
For Loans/Credits/Others			Amount
Borrower			4.50
Global Environment Facility (GEF)			8.75
Total			13.25

V. Implementation

The institutional and implementation arrangements remain largely as originally established, with MESTI providing overall project management and coordination leadership, EPA leading the PES aspect of SLM and providing cross-sectoral technical support, MoFA leading the watershed planning and implementation of SLWM activities in agricultural landscape, and FC leading planning and implementation of SLM in non-agricultural landscapes. Under AF, the Forestry Commission will engage its Forest Services Division (FSD) to implement the newly added sustainable forest management activities under. SADA will complete its role implementing SLWMP Component 1 once it concludes its activities under the original grant.

VI. Safeguard Policies (including public consultation)

Safeguard Policies Triggered by the Project	Yes	No
Environmental Assessment OP/BP 4.01	x	
Natural Habitats OP/BP 4.04	x	
Forests OP/BP 4.36	x	
Pest Management OP 4.09	x	
Physical Cultural Resources OP/BP 4.11		x
Indigenous Peoples OP/BP 4.10		x
Involuntary Resettlement OP/BP 4.12	x	
Safety of Dams OP/BP 4.37		x
Projects on International Waterways OP/BP 7.50		x
Projects in Disputed Areas OP/BP 7.60		x

Comments (optional)

Potential negative social and environmental impacts of activities are expected to be minor. In

general, environmental and social impacts are expected to be highly positive as the overall aim is to improve land, water and natural habitat management through technologies which benefit participating communities and individuals.

VII. Contact point

World Bank

Contact: Martin Fodor
Title: Senior Environmental Specialist
Tel: 5337+4166 /
Email: mfodor@worldbank.org

Borrower/Client/Recipient

Name: Ministry of Finance
Contact: Emmanuel Adjetey
Title: Head, World Bank Unit, Ministry of Finance
Tel: 233244973278
Email: EAdjetey@mofep.gov.gh

Implementing Agencies

Name: Ministry of Environment, Science, Technology and Innovation
Contact:
Title:
Tel:
Email:

VIII. For more information contact:

The InfoShop
The World Bank
1818 H Street, NW
Washington, D.C. 20433
Telephone: (202) 458-4500
Fax: (202) 522-1500
Web: <http://www.worldbank.org/infoshop>