

**INTEGRATED SAFEGUARDS DATA SHEET
APPRAISAL STAGE**

Report No.: ISDSA18671

Date ISDS Prepared/Updated: 08-Sep-2016

I. BASIC INFORMATION

1. Basic Project Data

Country:	Ghana	Project ID:	P150369
Project Name:	Ghana-Peri-Urban Commercial Vegetables Value Chains Project (P150369)		
Task Team Leader(s):	Kadir Osman Gyasi, Cheikh A. T. Sagna		
Estimated Appraisal Date:		Estimated Board Date:	30-Aug-2016
Managing Unit:	GFA01	Lending Instrument:	Investment Project Financing
Is this project processed under OP 8.50 (Emergency Recovery) or OP 8.00 (Rapid Response to Crises and Emergencies)?			No
Financing (In USD Million)			
Total Project Cost:	4.19	Total Bank Financing:	0.00
Financing Gap:	0.00		
Financing Source			Amount
Borrower			0.00
Japan Social Development Fund			2.85
LOCAL BENEFICIARIES			1.34
Total			4.19
Environmental Category:	B - Partial Assessment		

2. Project Development Objective(s)

The objective of the grant proposal is to improve on the productivity and access to market by the beneficiary vegetable farmers in selected peri-urban communities in Ghana.

3. Project Description

The grant will promote water harvesting and small-scale irrigation schemes to facilitate an all year round vegetable production and consumption. It will also develop capacity and provide support to enable the resource poor farmers improve productivity and the quality of their produce. It is further to reduce post-harvest losses through the institution of efficient post-harvest handling mechanisms and the facilitation of access to high value markets to ensure appreciable income levels for the farmers. The project results will be achieved through four project components: 1) Farmer Managed Irrigation Systems Development; 2) Farmer Capacity Development and Support to Productivity Improvement; 3) Improving Post-Harvest Handling and Access to Markets; and 4) Project

Management, Monitoring and Evaluation, and Knowledge Dissemination. It is expected that project will help vegetable farmers to improve productivity, increase product quality, enhance access to high value markets and increase incomes of participating farmers.

Component 1: Farmer Managed Irrigation Systems Development (US\$ 720, 456, 100% Grants): The objective of the component is to improve the existing small scale riverine irrigation systems for the resource poor farmers in the selected farming communities which are bounded by perennial water bodies with high potential for irrigation farming. The component will address the characteristic seasonality of vegetable production and thus empowering the resource poor farmers to improve their productivity for increased earnings.

The component will cover the design and implementation of agriculture irrigation infrastructure, based on the Semi-Californian technology. In particular, it will involve the construction of a closed conduit irrigation systems all the way from the water source (tanks) to the farmers' field. The proposed model, unlike the open canal system which has faced challenges of over irrigation and soil degradation, will enable farmers to have control over the water application and to also shut it off immediately after each irrigation activity. The furrow irrigation technologies will be deployed under the conduit irrigation system. The design will have a network of farms and perimeter roads which will serve for tractor and other transport activities such as for push trucks. Pipes will be laid for pond filling and gravity water distribution from the ponds. This system also known as the Semi-Californian System has been deployed extensively in Burkina Faso with great success. The lessons learned from the deployment of the system in the Burkina Faso will be taken on-board while also contextualizing the design to suit the local needs..

The project will, at every participating community, install one Amiran Farmers Kit (AFK) to demonstrate the technology to farmers. The AFK, which is a greenhouse technology using drip irrigation, has been proved to have high potential to improve on productivity and quality of produce and thus increase in incomes. Due to the cost per kit vis-à-vis the cost per beneficiary however, the project will not immediately introduce the technology on a mass scale to the farmers. It is expected however that as the farmers profit margins increase, they will in themselves begin to invest in the technology to further improve on their yields and hence incomes.

Project Component 2: Farmer Capacity Development and Support for Productivity Improvement (US \$ 545,200 (100% grant): The aim of this component is to facilitate the adoption of modern and improved production technologies through sustained farmer capacity development and other support systems. The component will design and implement an intensive farmer capacity development program to ensure that farmers have the know-how and adopt modern vegetable production and post-harvest handling techniques to be able to improve their productivity and output. Both workshop based and field based training including FAO's Farmer Field School approaches will be adopted for the farmer capacity development. Training areas will include productivity improvement technologies, appropriate use of chemicals and pesticides, agribusiness management, farm management and farm record keeping accounting and financial management, post-harvest handling etc. Relevant themes under the Ghana Good Agricultural Practices (GHANA GAP) will be incorporated into the farmer training program.

Capacity development for selected Agriculture Extension Agents (AEAs) in the beneficiary communities who will be directly involved in field activity implementation will also be undertaken. This is to ensure the technical know-how of the selected AEAs is upgraded to effectively provide

extension and other support services to the beneficiary farmers and communities. Depending on the number of communities and/or farmers, between two to five AEAs from each of the District Agriculture Development Directorate of MOFA will be assigned to the project to provide extension support services to the farmers and communities.

Component 3: Improving Post-Harvest Handling and Market Access (US\$2,020,080: grant ➤(US\$ 1,214,700; beneficiaries ➤(US\$ 889,380): This component seeks to sustain farmers ➤(incomes overall and contribute effectively to the reducing extreme poverty among vegetable growers to develop and coordinate the vegetable value chain through support to producers organizations to enhance their productive capacity and competitiveness and to develop market linkages. The grant will support farmers to enter into productive partnership arrangements with agriculture entrepreneurs to establish and operate two Farmer Cooperative Vegetable Warehousing Systems that would help to improve their access to markets and stabilize prices. To enhance managerial efficiency and profitability, each Warehousing Center will enter into a strategic partnership with productive entrepreneurs who would be existing nucleus farmers with good knowledge and experience in vegetable production and marketing systems in Ghana. The Warehousing System which will be equipped with refrigerated and cold chain transport system will serve as an essential off-take facility that guarantees ready high value markets for the farmers ➤(produce. Multi-year supply-purchase agreements between the farmer groups and the Warehousing Center will be facilitated and this will be supported with capacity development for better understanding and adherence to the basic tenants and guiding principles of such systems

Component 4: Monitoring and Evaluation, and Knowledge Dissemination and Project Management and Administration (US\$ 369,644): This component would support all activities necessary to ensure that the project is implemented in accordance with the project implementation manual. This component will: (i) finance the incremental expenses incurred by the Government in implementing the project and finance various monitoring and evaluation roles.

Sub-Component 4A. Project Management and Administration: The Ministry of Food and Agriculture will establish a project office at the Crops Services Directorate. A Senior Officer of the Directorate will be assigned to coordinate the day-to-day administrative activities of the project. The financial management and procurement functions for the project will be dedicated to an on-going World Bank funded project ➤(West Africa Agricultural Productivity Program (WAAPP) ➤(also housed within the Ministry of Agriculture so as to reduce cost and enhance efficiency. The conclusion of the financial management assessment is that the financial management arrangements under WAAPP meets the World Bank ➤(s requirements under OP/BP10.00 and that both WAAPP and the JSDF grant will be manageable in order not to impact on implementation, including fiduciary/internal control aspects of the JSDF grant. Quarterly and Annual Financial reports be submitted to the Bank. In addition, the Financing Agreement will require the submission of Project Audited Financial Statement to IDA within 6 months after year end.

There will be a Project Steering Committee (PSC) comprising the Directors of Crops Services Directorate, Directorate of Agriculture Extension Services, Women in Agriculture Development Directorate, Ghana Irrigation Development Authority, the Apex Farmers ➤(Associations of Ghana, and Agriculture Engineering Services Directorate of the Ministry as well as collaborating agencies i. e. Food and Drugs Authority and the National Agriculture Research System (NARS). The PSC will meet semi-annually and will serve to provide the overall policy direction to the project. An organogram of project coordination depicting the structure of the steering committee, roles and

responsible will be provided at appraisal.

Sub-Component 4B. Monitoring and Evaluation and Knowledge Dissemination: The monitoring and evaluation (M&E) system will be in line with the implementation structure and results measuring framework for the MESTASIP. A dedicated M&E team will put together to ensure effective and timely monitoring of progress towards achieving the development objective as set out in the Results Framework. The grant proposal will conduct a baseline survey on key parameters within three to six months of project inception. This will form the basis for monitoring of progress and achievement of results. An independent evaluation will be conducted at the end of the project to capture project achievements, experiences and lessons learned for future guidance. Project Implementation Progress reports will be generated quarterly which will be consolidated into annual reports to be shared with all project stakeholders. The project will document the methodologies and processes, achievements, experiences and lessons learned and circulate it widely including on the websites of MOFA, the World Bank, JSDF and other project partners.

4. Project location and salient physical characteristics relevant to the safeguard analysis (if known)

5. Environmental and Social Safeguards Specialists

Demba Balde (GSU01)

6. Safeguard Policies	Triggered?	Explanation (Optional)
Environmental Assessment OP/BP 4.01	Yes	The project will support existing agricultural production, and new marketing activities. The possible use of production inputs as well as construction of one or two warehouses may generate adverse impacts which however are expected to be local and can be mitigated. An ESMF has been prepared and consulted upon.
Natural Habitats OP/BP 4.04	No	The project is not expected to impact on natural habitats.
Forests OP/BP 4.36	No	The project is not related to forestry not expected to impact on forests.
Pest Management OP 4.09	Yes	The project will support agricultural production and marketing activities and the possible use of production inputs (including pesticides) triggers OP 4.09; a pest management framework has been prepared to ensure that the project does not increase the environmental impacts of pesticide use, and these are managed responsibly in line with sound environmental and human health protection objectives. The Pest Management Plan has been prepared and consulted.
Physical Cultural Resources OP/BP 4.11	No	The project is not expected to impact on physical cultural resources.
Indigenous Peoples OP/BP 4.10	No	There are no indigenous peoples in the project area.

Involuntary Resettlement OP/BP 4.12	Yes	The project will support the development of riverine irrigation systems (using pumps) on existing agricultural land. The construction of one or two warehouses (the location of which is not yet known) may require some land acquisition from private land owners, but is unlikely that the project will lead to physical displacement. The GoG has been consistently committed to addressing social and environmental safeguards issues in previous operations in agriculture and infrastructure. A resettlement policy framework (RPF) has been prepared.
Safety of Dams OP/BP 4.37	No	Dams will not be constructed.
Projects on International Waterways OP/BP 7.50	No	The project intervention areas exclude areas with water bodies that are international waterways
Projects in Disputed Areas OP/BP 7.60	No	The project is not located in a disputed area.

II. Key Safeguard Policy Issues and Their Management

A. Summary of Key Safeguard Issues

<p>1. Describe any safeguard issues and impacts associated with the proposed project. Identify and describe any potential large scale, significant and/or irreversible impacts:</p> <p>The project will support existing agricultural production, and new marketing activities. The possible use of production inputs as well as construction of one or two warehouses and processing facilities may generate adverse impacts which however are expected to be local and can be mitigated. Locations have been identified through inclusive consultations. The environmental and social impacts and risks of the project activities are expected to be moderate to low, mostly site-specific and easily manageable to an acceptable level, typical of Category B projects. The potential environmental and social negative impacts and risks of the proposed project are associated with the implementation of Component 1, Farmer Managed Irrigation Systems Development which is designed to support various activities (irrigation schemes, farm and/or warehouses access roads and feeder roads for scaling up Peri-urban Vegetable Value Chains for Poverty Reduction (P150369). These include: limited soil erosion due to agricultural developments since irrigation schemes from the river to the distribution points will not be in open canals but rather with burried pipes; the spread of waterborne disease vectors and health risks associated with pesticide use, risks of increased prevalence of HIV/AIDS and other SCDs due to >(foreign/outside>(workers on rehabilitation/construction sites and farms, the risk of pollution and environmental degradation by fertilizers and pesticides, reduced vegetation and pasture due to vegetable agriculture developments, etc. At the social level, though the project does not anticipate to physically display people, some of its proposed activities may require slight acquisition of land plots from landowners or temporary restriction of access to productive natural resources, and/ or loss of incomes and livelihood resources without proper precautionary measures taken on time; all of which could potentially lead to the involuntary resettlement of project affected persons (PAP).</p> <p>The proposed project therefore triggers OP/BP 4.01 (Environmental Assessment), OP 4.09 (Pest Management), and OP/BP 4.12 (Involuntary Resettlement). In conformity with the World Bank' requirements and the Government's Environmental Impact Assessment legislation, an ESMF was</p>
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prepared, updated from the ongoing WAAPP 2A program and the GCAP project, amply consulted upon, along with an RPF, and a PMP. The three stand alone safeguard instruments will be reviewed simultaneously by the two WBG Social and Environmental Safeguards Specialists, and the Environmental Protection Agency (EPA) of Ghana (attached to the Ministry of Environment), and submitted to the Bank's Regional Safeguards Advisor (RSA) for final approval and public disclosure both in-country and at the InfoShop before appraisal.

No large-scale or irreversible adverse impacts and risks have been identified during the participatory ESMF, IPMP and RPF analysis conducted on the ground with various key stakeholders. The ESMF, PMP and RPF identify specific safeguards activities, roles and responsibilities, capacity building and budget requirements.

2. Describe any potential indirect and/or long term impacts due to anticipated future activities in the project area:

No adverse long term impact and risk have been identified during the ESA process; instead, the project is expected to deliver significant environmental and social benefits to hundred thousands of Ghanaians beneficiaries whose main livelihoods depend largely on agriculture crops and value. The integration of sustainable management practices of land and water as part of the formulation and implementation of the peri-urban vegetable value-chain project integrated projects are expected to increase the productive capital of the land and the net carbon stock. However, project activities to increase agricultural productivity could potentially induce indirect, but manageable impacts associated with increased use of agrochemicals, such as pesticides and fertilizers. These issues, although minor and mostly site specific, are addressed in the Integrated Pest Management Plan (IPMP).

3. Describe any project alternatives (if relevant) considered to help avoid or minimize adverse impacts.

NA

4. Describe measures taken by the borrower to address safeguard policy issues. Provide an assessment of borrower capacity to plan and implement the measures described.

The proposed project will be implemented by an existing PIU already responsible for an ongoing World Bank supported WAAPP project (P129565) and Ghana Commercial Agriculture project-GCAP (114264) which have some well-grounded experience in implementing the Bank's safeguards policies. The Government of Ghana (GoGh) has financed under ongoing WAAPP 2A and GCAP the preparation of an ESMF, IPMP and a RPF to address issues related to the safeguard policies triggered.

The ESMF outlines an environmental and social screening process for future sub-projects to ensure that they are environmentally sound and socially equitable, sustainably implementable, and in line with GoG and World Bank operational safeguards policies and guidelines on environmental and social impacts and risks management. Similarly, mitigation measures to avoid any pressures to project neighboring ecosystems (i.e.-activities that could affect natural habitats and/or pristine forests are ineligible for project financing).

An Integrated Pests Management Plan (IPMP) has been prepared based on project activities to increase agricultural/horticultural productivity which is expected to result in increased use of agrochemicals, such as pesticides. The IPMP aims to ensure safe pests and pesticides management. It includes: (i) a survey on the local bio pesticides and agronomic technical practices to reduce the impacts of pests on the agriculture value chains in the project areas; (ii) appropriate

actions to reduce the exposure of farmer groups to pesticides used in agricultural production systems; (iii) guidelines to be adopted on the possibility of agro-chemical application and disposal; (iv) training sessions to strengthen the capacity of different actors (farmers, local vendors, regional agricultural agents, etc.) on the proper use, storage and disposal of agro-chemical products; and (v) a coherent budget available in the project financing .

The RPF sets forth the basic principles and procedures to be followed once the physical footprints of project activities are known in details to properly mitigate any potential adverse social impacts (i.e. preparation of site specific resettlement action plan-RAP, etc.). The RPF includes specifics such as valuation of assets, public consultation and participation, institutional arrangement, capacity building, monitoring and evaluation, grievance redress mechanism, budget and source of financing.

WAAPP 2A and GCAP already have each a 2-person team of Social and Environmental Safeguards Specialists (SESS) also responsible for gender issues; consideration will be established at the PIU level to adequately handle the implementation of social and environmental recommendations including gender and social inclusion. The SESS will continue working in tandem with the WBG safeguards specialists to ensure due compliance with core safeguards policies requirements.

All bidding documents for civil works will have embedded environmental and social clauses (ESC), in order to enable contractors to follow up on environmental and social due diligence and to mitigate the anticipated negative risks and impacts. Since project is expected to have small size construction type, the PIU will rely on the deconcentrated technical services like Regional Directorate for Environmental, as well as local level Socio-environmental focal point , etc. to ensure due diligence on safeguards as described in the ESC. If any, regular NEPA patrols will inspect the construction sites if the construction activities are in compliance with the approved site specific safeguards documents.

The Borrower has some extensive experience with the World Bank Safeguards policies requirements through several past and ongoing Bank funded projects. The ongoing WAAPP 2A project (P129565) achieves excellent results in building the capacity for the PIU, the Regional Focal Points for the project, members of the Regional Technical subprojects Selection Committees, and the various Implementing Agencies. Likewise, GCAP accomplished the same outcome in terms of safeguards management. The proposed project will build on these initial gains and the 3 standalone safeguards instruments (ESMF, IPMP & RPF) include provisions to further strengthen the capacity of the various stakeholders.

5. Identify the key stakeholders and describe the mechanisms for consultation and disclosure on safeguard policies, with an emphasis on potentially affected people.

The key stakeholders identified are the Government through the Ministry of Agriculture, deconcentrated technical services, local authorities, affected communities, especially youth and vulnerable groups, civil society (NGOs, CSOs, ABCs, etc.) and academia (i.e. research & development). Throughout the entire process of project preparation, transparent and engaging stakeholder participation consultations were organized in the project intervention areas. The key concerns raised by the local stakeholders are related to land degradation issues that affect their livelihood, mainly the reduction of arable lands due to water erosion and silting of lowlands, limited access to financial markets, and need for technical capacity building and strengthening to improve vegetable farming practices. These have been incorporated in the project design

(protection of watersheds from erosion and secure irrigation potential, Farmers Field School program, matching grant facility, etc.). Since stakeholder consultation and participation is an iterative process, it will be pursued and sustained throughout the project lifespan.

The updated ESMF, IPMP and RPF have been disclosed both in-country and by the Bank prior to appraisal. The ESMF describes a comprehensive consultation and participation mechanism and disclosure during sub-projects preparation.

B. Disclosure Requirements

Environmental Assessment/Audit/Management Plan/Other	
Date of receipt by the Bank	22-May-2016
Date of submission to InfoShop	15-Jul-2016
For category A projects, date of distributing the Executive Summary of the EA to the Executive Directors	
"In country" Disclosure	
<i>Comments:</i>	
Resettlement Action Plan/Framework/Policy Process	
Date of receipt by the Bank	08-Jul-2016
Date of submission to InfoShop	28-Jul-2016
"In country" Disclosure	
<i>Comments:</i>	
Pest Management Plan	
Was the document disclosed prior to appraisal?	No
Date of receipt by the Bank	24-Jun-2016
Date of submission to InfoShop	29-Jul-2016
"In country" Disclosure	
<i>Comments:</i>	
If the project triggers the Pest Management and/or Physical Cultural Resources policies, the respective issues are to be addressed and disclosed as part of the Environmental Assessment/Audit/or EMP.	
If in-country disclosure of any of the above documents is not expected, please explain why:	

C. Compliance Monitoring Indicators at the Corporate Level

OP/BP/GP 4.01 - Environment Assessment	
Does the project require a stand-alone EA (including EMP) report?	Yes [<input type="checkbox"/>] No [<input checked="" type="checkbox"/>] NA [<input type="checkbox"/>]
OP 4.09 - Pest Management	
Does the EA adequately address the pest management issues?	Yes [<input checked="" type="checkbox"/>] No [<input type="checkbox"/>] NA [<input type="checkbox"/>]
Is a separate PMP required?	Yes [<input checked="" type="checkbox"/>] No [<input type="checkbox"/>] NA [<input type="checkbox"/>]

If yes, has the PMP been reviewed and approved by a safeguards specialist or PM? Are PMP requirements included in project design? If yes, does the project team include a Pest Management Specialist?	Yes [] No [×] NA []
OP/BP 4.12 - Involuntary Resettlement	
Has a resettlement plan/abbreviated plan/policy framework/process framework (as appropriate) been prepared?	Yes [×] No [] NA []
If yes, then did the Regional unit responsible for safeguards or Practice Manager review the plan?	Yes [] No [×] NA []
Is physical displacement/relocation expected? Provided estimated number of people to be affected	Yes [] No [×] TBD []
Is economic displacement expected? (loss of assets or access to assets that leads to loss of income sources or other means of livelihoods) Provided estimated number of people to be affected	Yes [] No [×] TBD []
The World Bank Policy on Disclosure of Information	
Have relevant safeguard policies documents been sent to the World Bank's Infoshop?	Yes [] No [×] NA []
Have relevant documents been disclosed in-country in a public place in a form and language that are understandable and accessible to project-affected groups and local NGOs?	Yes [] No [×] NA []
All Safeguard Policies	
Have satisfactory calendar, budget and clear institutional responsibilities been prepared for the implementation of measures related to safeguard policies?	Yes [×] No [] NA []
Have costs related to safeguard policy measures been included in the project cost?	Yes [×] No [] NA []
Does the Monitoring and Evaluation system of the project include the monitoring of safeguard impacts and measures related to safeguard policies?	Yes [×] No [] NA []
Have satisfactory implementation arrangements been agreed with the borrower and the same been adequately reflected in the project legal documents?	Yes [×] No [] NA []

III. APPROVALS

Task Team Leader(s):	Name: Kadir Osman Gyasi, Cheikh A. T. Sagna	
Approved By		
Safeguards Advisor:	Name: Maman-Sani Issa (SA)	Date: 08-Sep-2016
Practice Manager/ Manager:	Name: Simeon Kacou Ehui (PMGR)	Date: 09-Sep-2016