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Report No: 66499-GH

PROJECT APPRAISAL DOCUMENT

ON A

PROPOSED CREDIT

IN THE AMOUNT OF SDR 64.5 MILLION
(US$100 MILLION EQUIVALENT)

TO THE

REPUBLIC OF GHANA

FOR A

COMMERCIAL AGRICULTURE PROJECT

February 27, 2012

CURRENCY EQUIVALENTS

(Exchange Rate Effective January 31, 2012)

Currency Unit	=	New Ghana Cedis (GH¢)
GH¢1.67615	=	US$1
GH¢1		US$0.596605
US$1	=	SDR 0.64471207

FISCAL YEAR

January 1 – December 31

ABBREVIATIONS AND ACRONYMS

ADR	Alternative Dispute Resolution
AfDB	Africa Development Bank
AgDPO	World Bank Agricultural Development Policy Operations
AFD	Agence Française de Développement
AGRA	Alliance for a Green Revolution in Africa
AM	Aide Memoire
APIP	Accra Plains Irrigation Project
APL	Adaptable Program Lending
ARD	Agriculture and Rural Development
BDS	Business Development Services
BERU	Business Environment Reform Unit
BOT	Build-Operate-Transfer
CAADP	Comprehensive African Agriculture Development Program
CAGD	Controller and Accountant General Department
CAS	Country Assistance Strategy
CDC	Commonwealth Development Corporation
CDD	Community Driven Development
CEPAGRI	Centre for the Promotion of Agriculture, Mozambique
CIDA	Canadian International Development Agency
CQ	Consultant’s Qualifications
DFID	Department for International Development
DPs	Development Partners
DSCR	Debt Service Coverage Ratio
EDIF	Export Development Investment Fund
EMIS	Environment Management Information System
EOI	Expressions Of Interest
EPA	Environmental Protection Agency
ERR	Economic Rate of Return
ESIA	Environmental and Social Impact Assessment
ESMF	Environmental and Social Management Framework
FAO	Food and Agriculture Organization
FASDEP II	Food and Agriculture Sector Development Plan II
FBO	Farmer Based Organizations
FBS	Fixed Budget

FC	Financial Controller
FIDA	International Federation of Women Lawyers - Ghana
FINSSP II	Financial Sector Strategic Plan II
FMC	Financial Management Consultant
FNPV	Financial Net Present Value
FOM	Farmer Ownership Model
GAS	Ghana Audit Service
GCAP	Ghana Commercial Agriculture Project
GH¢	New Ghana Cedi
GIDA	Ghana Irrigation Development Agency
GIFMIS	Ghana Integrated Financial Management Information System
GIPC	Ghana Investment Promotion Center
GIZ	Gesellschaft für Internationale Zusammenarbeit
GLSS+	Ghana Living Standards Survey +
GoG	Government of Ghana
GPN	General Procurement Notice
GRM	Grievance Redress Mechanism
GSGDA	Ghana Shared Growth and Development Agenda
ICs	Individual Consultants
ICB	International Competitive Bidding
ICR	Implementation Completion Report
ICT	Information Communications Technology
IDA	International Development Association
IDC	Interest During Construction
IFAD	International Fund for Agricultural Development
IFC	International Finance Corporation
IFPRI	International Food Policy Research Institute
IFRs	Interim Unaudited Financial Reports
IMF	International Monetary Fund
IP	Investment Promotion
IPM	Integrated Pest Management
IRR	Internal Rate of Return
ISC	Irrigation Service Charge
ISM	Implementation Support Missions
ISR	Implementation Status and Results
JICA	Japan International Cooperation Agency
KfW	Kreditanstalt für Wiederaufbau
KIP	Kpong Irrigation Project
KIS	Kpong Irrigation Scheme
LAP	Land Administration Project
LCS	Least Cost Selection
LCAF	Land Governance Assessment Framework
MCC	Millennium Challenge Corporation
MDAs	Ministries, Departments and Agencies
MDBS	Multi Donor Budget Support
MDG	Millennium Development Goal
METASIP	Medium Term Agriculture Sector Investment Plan

MiDA	Millennium Development Authority
MLNR	Ministry of Land and Natural Resources
MoFA	Ministry of Food and Agriculture
MoFEP	Ministry of Finance and Economic Planning
MoTI	Ministry of Trade and Industry
MSME	Micro, Small and Medium Enterprise
MT	Metric Ton
MTEF	Medium Term Expenditure Framework
M&E	Monitoring and Evaluation
NCB	National Competitive Bidding
NDIS	New Developed Irrigation Scheme
NDPC	National Development Planning Commission
NEPAD	New Partnership for Africa's Development
NLP	National Land Policy
NPV	Net Present Value
NRGP	Northern Rural Growth Program
OASL	Office of the Administrator of Stool Lands
OBA	Output Based Aid
OCSPR	Procurement Services Policy Group
OMM	Operation, Maintenance and Management
OPV	Open Pollinated Varieties
O&M	Operation and Management
P-RAMS	Procurement Risk Assessment and Management System
PCP	Public Consultation and Participation
PDO	Project Development Objective
PDT	Project Delivery Team
PEF	Private Enterprise Foundation
PFM	Public Finance Management
PID	Public Investment Division
PIM	Project Implementation Manual
PIO	Public International Organization
PIU	Project Implementation Unit
PMP	Pest Management Plan
PMU	Project Management Unit
PPF	Project Preparation Facility
PPP	Public-Private Partnerships
PRS	Poverty Reduction Strategy
PSDS II	Second Private Sector Development Strategy
PSIA	Poverty and Social Impact Assessment
QBS	Quality Based Selection
QCBS	Quality and Cost Based Selection
RAI	Responsible Agricultural Investment
RAP	Resettlement Action Plan
RFP	Standard Request for Proposal
RING	Resiliency in Northern Ghana
RPF	Resettlement Policy Framework
SADA	Savannah Accelerated Development Authority

SBD	Standard Bidding Documents
SCF	Standard Conversion Factor
SET	Social and Environmental Team
SIL	Specific Investment Loan
SPN	Specific Procurement Notice
SSS	Single Source Selection
ToR	Terms of Reference
UCS	Use of Country Systems
UNCTAD	United Nations Conference on Trade and Development
UNDB	United Nations Development Business
USAID	United States Agency for International Development
VBA	Volta Basin Authority
VRA	Volta River Authority
WBG	World Bank Group
WEF	World Economic Forum
WFP	World Food Program
WiLDaF	Women in Law and Development in Africa
WTP	Willingness To Pay

Regional Vice President:	Obiageli Katryn Ezekwesili
(Acting) Country Director:	Sergiy Kulyk
Sector Director:	Jamal Saghir
Sector Manager:	Karen Mcconnell Brooks
Task Team Leader:	Christopher Paul Jackson

REPUBLIC OF GHANA
Commercial Agriculture Project

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PAD DATA SHEET

Republic of Ghana

Ghana Commercial Agriculture

PROJECT APPRAISAL DOCUMENT

AFRICA

AFTAR

Basic Information

Date:	February 27, 2012	Sectors:	General agriculture, fishing and forestry sector (40%), Agro-industry, marketing, and trade (40%), Crops (20%)
Country Director:	Sergiy V. Kulyk	Themes:	Rural services and infrastructure (40%), Rural markets (30%), Export development and competitiveness (20%), Infrastructure services for private sector development (10%)
Sector Manager/Director:	Karen Mcconnell Brooks/Jamal Saghir		
Project ID:	P114264	EA Category:	A - Full Assessment
Lending Instrument:	Specific Investment Loan		
Team Leader(s):	Christopher Paul Jackson		

Joint IFC: No

Borrower:

Responsible Agency: Ministry of Food and Agriculture (MOFA)

Contact:	Mr Maurice Tancu Abisa Seidu	Title:	Chief Director
Telephone No.:	+223 302666567	Email:	mabisase@yahoo.com

Project Implementation Period:	Start Date: March 22, 2012	End Date: March 31, 2017
Expected Effectiveness Date:	July 1, 2012	
Expected Closing Date:	March 31, 2017	

Project Financing Data(US$M)

[ ] Loan	[ ] Grant	[ ] Other
[X] Credit	[ ] Guarantee	Credit Terms: Standard IDA terms with forty year maturity including a ten year grace period

For Loans/Credits/Others

Total Project Cost (US$M):	145.00
Total Bank Financing (US$M):	100.00

Financing Source	Amount (US$M)
BORROWER/RECIPIENT	0.00
International Development Association (IDA)	100.00
USAID	45.00
Total	145.00

Expected Disbursements (in US$M)

Fiscal Year	2012	2013	2014	2015	2016	2017	2018
Annual	5.00	15.00	55.00	20.00	20.00	20.00	10.00
Cumulative	5.00	20.00	75.00	95.00	115.00	135.00	145.00

Project Development Objective(s)

The project development objective (PDO) is: increased access to land, private sector finance, input- and output-markets by smallholder farms from private-public partnerships in commercial agriculture in Accra Plains and SADA zone. PDO level indicators are as follows:

1. Yield per hectare (in mt/ha) of major crops on both nucleus farms and the associated out-grower schemes benefiting from project support. This will be disaggregated by crop, especially, for rice, soya and maize, and for Accra Plains and SADA zone;

2. Area (ha) under formal commercial arrangements such as out-grower schemes and contract farming. This will disaggregated between land under nucleus farms and land under out-grower cultivation, and will be disaggregated by Accra Plains and SADA Zone;

3. Formal and/ or semi-formal marketing arrangements for small-holder farms (number). This will indicate the number of new arrangements fostered by the project. For each new arrangement documented, information will be gathered on their location, i.e., Accra Plains or SADA, farm size and the nature of the arrangement, i.e., formal contract or semi-formal agreement;

4. Direct project beneficiaries (number), of which are female (%) (IDA Core Indicator);

5. Gross margins for selected crops (in GHS) and disaggregated by Accra Plains and SADA zone.

Components

Component Name	Cost (USD Millions)
Component 1: Strengthening investment promotion infrastructure, facilitating secure access to land and project management.	11.80
Component 2: Securing PPPs and small-holder linkages in the Accra Plains.	45.40
Component 3: Securing PPPs and small-holder linkages in the SADA Zone.	64.30
Component 4: Project management and monitoring and evaluation	14.30

Compliance

Policy

Does the project depart from the CAS in content or in other significant respects?	Yes [ ]	No [X]
Does the project require any waivers of Bank policies?	Yes [ ]	No [X]
Have these been approved by Bank management?	Yes [ ]	No [ ]
Is approval for any policy waiver sought from the Board?	Yes [ ]	No [X]
Does the project meet the Regional criteria for readiness for implementation?	Yes [X]	No [ ]

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

Legal Covenants

Name	Recurrent	Due Date	Frequency
Conditions of Effectiveness		Effective Date	
Description of Covenant (a) The USAID Grant Agreement has been executed and delivered and all conditions precedent to its effectiveness or to the right of the Recipient to make withdrawals under it (other than the effectiveness of this Agreement) have been fulfilled. (b) The Recipient has prepared and adopted, or caused to be prepared and adopted, a Project Implementation Manual, in form and substance satisfactory to the Association. (c) The Recipient has established, or caused to be established, a Project implementation unit (the Project Implementation Unit) within MoFA with functions, composition and resources satisfactory to the Association.			
Name	**Recurrent**	**Due Date**	**Frequency**
Dated Covenant – PPP advisor		Six (6) months after the Effective Date	
Description of Covenant The Recipient shall not later than six (6) months after the Effective Date, appoint to the Project Implementation Unit, and thereafter maintain until the closure of the irrigation-based PPP transaction(s) in the Accra Plains under Part B.4 of the Project, an irrigation PPP advisor, in accordance with the provisions of Section III.C of the Financing Agreement.			
Name	**Recurrent**	**Due Date**	**Frequency**
Dated Covenant – Procurement Staff		Three (3) months after the Effective Date	
Description of Covenant The Recipient shall, for the purpose of ensuring adequate procurement capacity for the Project, not later than three (3) months after the Effective Date, appoint to the Project Implementation Unit and maintain, throughout the Project implementation, at least three (3) procurement personnel, all with qualifications, experience and terms of reference acceptable to the Association.			
Name	**Recurrent**	**Due Date**	**Frequency**
Dated Covenant – External Auditors		Three (3) months after the Effective Date	
Description of Covenant The Recipient shall not later than three (3) months after the Effective Date, appoint the external auditors for the Project, in accordance with the provisions of Section III.C of the Financing Agreement			
Name	**Recurrent**	**Due Date**	**Frequency**
Dated Covenant – Internal Auditor		Thirty (30) days after the Effective Date	
Description of Covenant The Recipient shall not later than thirty (30) days after the Effective Date, assign an internal auditor to the PIU with qualifications, experience and terms of reference acceptable to the Association.			
Name	**Recurrent**	**Due Date**	**Frequency**
Dated Covenant – Procurement Filing and Tracking System		Three (3) months after the Effective Date	
Description of Covenant The Recipient shall, not later than three (3) months after the Effective Date, establish a procurement filing and tracking system for the Project, satisfactory to the Association.			
Name	**Recurrent**	**Due Date**	**Frequency**
Disbursement Conditions			
Description of Covenant No withdrawal shall be made for: (a) any Eligible Expenditure under Category (3) of the Financing Agreement, unless the Recipient has, in form and substance satisfactory to the Association: (i) adopted a comprehensive legal framework for PPP transactions acceptable to the Association; and (ii) confirmed its approval for at least one transaction for an irrigation-based PPP in the Accra Plains, in accordance with the National Policy on PPP; or (b) any Eligible Expenditures under Category (4) of the Financing Agreement, unless the Recipient has concluded, in form and substance satisfactory to the Association, a feasibility study to, *inter alia,* determine the extent of rehabilitation and construction of agricultural storage infrastructure and processing facilities in the SADA zone, and costs associated with such works under Part C.3 of the Project; or (c) any Eligible Expenditure under Category (5) or (6) of the Financing Agreement, unless the Recipient has: (i) submitted, in form and			

substance satisfactory to the Association, the Matching Grants Manual and the Agri-business Service Grants Manual, in accordance with the PIM; and (ii) established the PIU Grants Management Desk.

Team Composition

Bank Staff

Name	**Title**	**Specialization**	**Unit**
Jonathan Mills Lindsay	Senior Counsel	Senior Counsel	LEGEN
Jyoti Bisbey	Operations Analyst	Operations Analyst	FEUFS
Cheikh A. T. Sagna	Senior Social Development Specialist	Senior Social Development Specialist	AFTCS
Edith Ruguru Mwenda	Senior Counsel	Senior Counsel	LEGAF
Moses Yao Duphey	Environmental Specialist	Environmental Specialist	AFTEN
Christopher Paul Jackson	Senior Economist	Team Lead	AFTAR
Angela Nyawira Khaminwa	Social Development Specialist	Social Development Specialist	AFTCS
Alan Andrew Moody	Lead Private Sector Development Spec.	Lead Private Sector Development Spec.	AFTFW
Robert Wallace DeGraft-Hanson	Financial Management Specialist	Financial Management Specialist	AFTFM
Adu-Gyamfi Abunyewa	Senior Procurement Specialist	Senior Procurement Specialist	AFTPC
Zachary A. Kaplan		E T Consultant	AFTFW
Kilara Constance Suit	E T Consultant	E T Consultant	AFTAR
Luis Schwarz	Senior Finance Officer	Senior Finance Officer	CTRLA
Juan David Casanova Anoll	Sr Water Resources Mgmt. Spec.	Sr Water Resources Mgmt. Spec.	AFTWR
Jan Joost Nijhoff	Senior Agriculture Economist	Senior Agriculture Economist	AFTAR
Aristeidis I. Panou	E T Consultant	E T Consultant	LEGAF

Non Bank Staff

Name	**Title**	**Office Phone**	**City**
Roble Sabrie	Economist		

Locations

Country	**First Administrative Division**	**Location**	**Planned**	**Actual**	**Comments**
Ghana	Northern Region	Northern Region		**X**	
Ghana	Greater Accra Region	Greater Accra Region		**X**	

PROJECT APPRAISAL DOCUMENT

REPUBLIC OF GHANA
Commercial Agriculture Project

I. STRATEGIC CONTEXT

A. Country Context

1. Ghana has attained the status of a middle income country and is likely to have achieved the first millennium development goal (MDG) of reducing poverty by half. A recent revision in the compilation of national accounts portrays a wealthier Ghana than previously thought – the revision resulted in the size of the economy increasing by 52 percent with per capita income now estimated at US$1,343 (in 2010), putting Ghana in the lower-middle income group,[1] on a par with Sudan, Uzbekistan and Papua New Guinea. According to the revised data, economic growth averaged 6.5 percent per annum (p.a.) over the period 2006 – 10 (even accounting for the temporary slowdown to 4 percent in 2009) compared to an average of 5.1 percent in the previous five year period. This is a full two percentage points higher than the previous decade.[2]

2. **Poverty has declined from 52 percent in 1992 to 29 percent in 2008.** It has likely continued to fall, and if so Ghana has achieved MDG 1a (see Table 1). Progress against most other development indicators has shown similar trends with targets for hunger, primary completion, gender parity at school and access to water goals (MDG 1b, MDG 2, MDG 3 and MDG 7a respectively) all on track to be met by 2015, if not also already met (MDG 7a).[3] At the same time, other important MDGs, such as sanitation (MDG7b), child (MDG4) and maternal mortality (MDG5) are still off-track and require more effort, for their own sake and likely large impact on other MDGs.[4]

3. However, development gains have not been distributed evenly across the country with the north of Ghana increasingly characterized as a 'lagging region'. According to a recent Poverty Assessment[5] undertaken jointly by the World Bank and Government of Ghana (GoG) regional imbalances persist with higher and more extreme poverty rates in the northern sector (with a headcount rate of 63 percent) compared to the South (20 percent).[6] Poverty is also more extreme with a poverty gap statistics of 0.283 and 0.048

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[1] World Bank (2011), **Joint IDA-IMF Staff Advisory Note on Ghana's Shared Growth and Development Agenda**, Report No. 63286-GH, World Bank: Washington D.C.. The JSAN was approved by World Bank Board of Directors on July 22, 2011.
[2] See footnote 1.
[3] MDG 7a has already been achieved.
[4] See *A Sourcebook for Poverty Reduction Strategies*, 2002, World Bank, Washington D.C.
[5] World Bank (2011), **Tackling Poverty in Northern Ghana**, Report No. 53991-GH, World Bank: Washington D.C.
[6] The North is defined as the three administrative regions of Upper East, Upper West and Northern region.

for North and South respectively.[7] Other MDG indicators show similar differentials, as do broader measures of human development and food security. For instance, according to a recent food security and vulnerability assessment undertaken by the World Food Program (WFP)[8] in the Northern, Upper East and Upper West regions, 10 percent, 15 percent and 34 percent of the respective households are currently food insecure. The causes of the impoverished North are complex and have a deep historical context. Analysis undertaken for the Poverty Assessment demonstrates that despite convergence in human development indicators, and improved physical connectivity, economic opportunities continue to decline. Should economic and demographic trends continue poverty will be largely eradicated in the South by 2030, while still affecting two-fifths of the population in the North (compared to three-fifths in 2005/06).[9]

Table 1: Ghana's Progress towards the Millennium Development Goals

Observation	Initial		Most Recent	
MDG1a. Poverty headcount ratio, national poverty line (% of population)	51.7	1992	28.5	2008
MDG1b. Malnutrition prevalence, weight for age (% of children under 5)	27.4	1993	13.9	2008
MDG2. Primary completion rate, total (% of relevant age group)	61.2	1991	88.7	2009
MDG3. Ratio of girls to boys in primary and secondary education (%)	78.5	1991	95.0	2009
MDG4. Mortality rate, under-5 (per 1,000)	119.7	1990	80.0	2008
MDG5. Pregnancy-related mortality rate (per 100,000 live births)	740	1990	451	2008
MDG7a. Improved water source (% of population without access)	44.0	1990	16.2	2008
MDG7b. Improved sanitation facilities (% of population without access)	96.0	1993	87.6	2008

Source: 2008 Ghana Millennium Development Goals Report. Republic of Ghana, April 2010.

4. With oil revenues driving Ghana's future growth, the economy will continue to expand at a rapid rate.[10] If managed well, revenues from the oil economy could provide a major source of funding for Ghana's development needs. According to Ghana's poverty reduction strategy (PRS) – known as the Ghana Shared Growth and Development Agenda (GSGDA) – achieving the growth targets of 9.2 percent per year over 2010 – 2013 requires US$23.9 billion of investment and services expenditures over the period, excluding salaries. Realizing these levels of investment is contingent on a financing gap of US$12.5 billion per year being met. According to the recent assessment of the PRS by the World Bank and IMF[11] while the growth targets are reachable it is unlikely that the financing gap will be fully closed. The costing also assumed inflows of oil revenues of GH¢200 million in FY2011, GH¢800 million in FY2012 and GH¢700 million in FY2013 which are subject to uncertainty.[12]

5. Managing revenues appropriately and targeting high priority investments with the highest economic and social returns is critical to avoid potential adverse impacts.[13] As noted in a

[7] See footnote 5. Gendered intra-regional patterns were also noted in the Poverty Assessment with the number of poor female-headed households in the North rising between 1992 and 2006.
[8] WFP (2009), Ghana Comprehensive Food security and Nutrition Survey, WFP: Rome.
[9] See footnote 5.
[10] The macroeconomic targets of the 2012 budget are for 9.4percent in real overall GDP growth with 7.6percent being real non-oil GDP growth.
[11] See footnote 1, reference JSAN
[12] See Table 4.1 of the GSGDA Costing Framework.
[13] The Government have requested World Bank assistance to identify priority investments in infrastructure based on spatial analysis and this work is now underway. The Task Teams are collaborating closely in this effort.

recent World Bank report,[14] oil revenue brings well known challenges in terms of institutional and macroeconomic absorptive capacities. Under some scenarios, long term economic growth could actually decline with oil compared to a non-oil scenario. If half of oil revenues finance consumption rather than productive investments, by 2029 real per capita incomes would be 14 percent lower. There would also be distributional consequences, with major declines in the incomes of some agricultural households and a worsening of poverty in the already-poorest regions.

6. Consequently increased competitiveness of the non-oil sector is essential to mitigate potential macro-economic impacts. These could be significant: for example if real exchange rates appreciated by 10 percent or 25 percent, incomes of export crop farmers would fall by 3 percent and 7 percent respectively. Food crop farmers are somewhat insulated from these impacts, largely because their incomes and expenditures are in the non-tradeable sector although their increased incomes would be lower than others, further exacerbating income inequality. Moreover, as connectivity continues to improve, even food crops not physically traded become tradeable in an economic sense[15] thereby rendering them exposed to negative impacts. Productivity-enhancing investments, as well as other investments to improve the efficiency of key value chains, would offset increased costs from real exchange rate appreciations without an overall loss of competitiveness. Importantly, farm incomes would be maintained. But the window is short and experience elsewhere demonstrates that when markets are lost, it is extremely difficult to regain competitive position.

7. Fortunately, this window of opportunity coincides with a period of increasing private sector interest to capitalize on high global food prices and Ghana’s attractive investment climate for agricultural investment. Notwithstanding the aforementioned risks, Ghana has a number of attributes that make it an attractive location for investment in agriculture and agri-business. It is economically and politically stable. The investment climate is positive. It has good logistics for serving European markets and domestic food markets are likely to expand with continued urbanization and there is substantial scope for import substitution. Existing productivity is low, suggesting the potential for large returns if yields can be increased. Moreover, while food prices have fallen from their recent peaks, they are nevertheless expected to remain above historical levels into the medium term. According to the Ghana Investment Promotion Centre (GIPC), in the third quarter of 2011 alone, three new agriculture-related investments were registered with a value of over US$200 million.[16]

[14] World Bank (2009), **Economy-Wide Impact of Oil Discovery in Ghana**, Report No. 47321-GH, World Bank: Washington D.C.

[15] This is because of cross-price elasticities with imported substitutes. There is a dearth of research on price transmission between well connected markets, especially in the South, and more remote markets in the North. There is some evidence of fragmented markets as shown by more severe intra-seasonal price variability in the North compared to the South.

[16] GIPC Quarterly Report, Third Quarter, 2011.

B. Sectoral and Institutional Context

8. The GSGDA 2011 – 2013 seeks to improve the wellbeing of Ghana's poor, most of which reside in rural areas and are dependent on agriculture for their primary livelihoods. Priority sectors for the US$24 billion of proposed investments envisaged in the GSGDA are infrastructure (with 54 percent of planned expenditures, of which 15 percent is oil and gas development), health and education (25 percent) and enhanced competitiveness of the private sector (8 percent). Modernizing agriculture attracts 4 percent of investment. As noted in paragraph 4, the Joint Staff Advisory Note concludes that while "the underlying sector development plans are compelling and well considered […] their shallow emphasis on geographical interventions in deprived areas and the limited monitoring and evaluation capacity could weaken Ghana's ability to meet the development and poverty reduction objectives of the GSGDA."[17]

9. Ghana's agriculture sector strategy is known as FASDEP II[18] (2010 – 2015) and is organized around six priority themes. These are: (1) Food Security and Emergency Preparedness; (2) Increased Growth in Incomes; (3) Increased Competitiveness and Enhanced Integration into Domestic and International Markets; (4) Sustainable Management of Land and Environment; (5) Science and Technology Applied in Food and Agriculture Development; and (6) Improved Institutional Coordination. FASDEP's policy principles include a pro-poor focus, attention to regional balance and gender inclusion (in an effort to promote greater gender equality),[19] and consideration of environmental and social sustainability. The required investment framework to implement FASDEP II is articulated in the Medium Term Agriculture Sector Investment Plan (METASIP) – and provides the foundation for the GSGDA costing. The METASIP, prepared by the Ministry of Food and Agriculture (MoFA), constitutes the national agriculture investment plan under the Comprehensive African Agriculture Development Program (CAADP); the Roundtable and the signing of the Compact having been concluded in October 2009. Broadly speaking, Ghana's commercial agriculture agenda is defined by elements of the programs seeking to increase incomes (priority area 2) and increased competitiveness and market integration (priority area 3).

10. Other policies also have a major bearing on outcomes in the agriculture sector. Of particular importance is the Second Private Sector Development Strategy (PSDS II). The PSDS II will aim to increase by 20 percent, in real terms, the income of rural people in general and particularly in the poorer Northern and Central areas through more productive agriculture. The strategy highlights increasing the productivity of agriculture and the efficiency of agricultural value chains by supporting public and private initiatives as a sub-component of one of the five main outputs. Ghana's new Financial Sector Strategic Plan (FINSSP II) highlights the importance of agricultural lending, relevant financial products such as crop insurance etc, as well as broader financial sector issues that have a less direct but nevertheless important bearing on the development of the sector such as the stock exchange on which agribusinesses may wish to be listed. Finally,

[17] Ibid, page 2.
[18] The revised Food and Agriculture Sector Development Policy.
[19] The Gender and Agricultural Development Strategy is given due attention in FASDEP II as the basis for mainstreaming gender into the policies and programs of the agricultural sector.

insofar as the Government is seeking to partner with private sector in the development of the agricultural sector, the new Policy Framework on Public-Private Partnerships (PPPs), recently approved by Cabinet, sets out key objectives and the procedures for doing so.

11. In addition, a sustainable development initiative for the Northern Savannah agro-ecological zone has also been developed to address the particular challenges of this lagging region, as already highlighted in paragraph 3. The strategy proposes a Savannah Accelerated Development Authority (SADA), to coordinate efforts of Ministries, Departments and Agencies (MDAs). The area designated under SADA's mandate includes the three administrative regions of Northern Region, Upper East and Upper West Regions, as well as contiguous Districts in Brong Ahafo and Volta Region. A development fund has also been established to provide additional investment funds to complement sector ministries' investment programs.

12. In summary, the modernizing agriculture agenda encapsulates a number of sector policies. Achieving results will require more effective coordination among various parts of Government such as the GIPC, the Lands Commission, the Ministry of Finance and Economic Planning (MoFEP), the Ministry of Trade and Industry (MoTI) and the Ministry of Food and Agriculture (MoFA). Although the relevant sector and cross-cutting policy articulate a coordinated effort, in fact coordination across MDAs is weak and needs to be improved.

Rationale for Bank Involvement

13. The case for Bank involvement is compelling. The project contributes to the objectives of the current Country Assistance Strategy (CAS: FY08 - FY12) and is in line with the CAS Progress Report (Report No. 52988-GH). The CAS Progress Report repositions the Bank's support for agriculture fully behind the CAADP process, as mentioned above. Moreover, the project complements four related interventions that, together, present a 'suite' of IDA financed interventions using a range of instruments that leverage each other in support of commercial agriculture.[20] These are:

- Support to Ghana's emerging PPP agenda under the PPP Support (P125595) which provides technical assistance to the central institutions responsible for effecting a number of complex PPP transactions across a range of sectors plus resources to reach market close on a these transactions. This project adopts an Adaptable Program Lending approach.

- The second Land Administration Project (LAP 2: P120636) which supports various aspects of improved land governance through more effective and efficient administration of formal and informal regimes (see Annex 6 for further details).

- The current project provides resources to help achieve a number of critical policy reforms being supported under the Bank's agriculture sector development policy

[20] USAID, as co-financer, also has additional projects under their Feed the Future strategy that can be leveraged around technology transfer, out-grower value chain development, investment and financial support to investors, as well as policy and capacity building.

lending. The second operation in a second series is currently being prepared and there is, therefore, strong synergy between the two programs and a complementary between the instruments.

- Finally, Agriculture and Rural Development (ARD) is managing a non-lending technical assistance program on agricultural risk management (P122228) which seeks to quantify a range of agricultural-related risks and identify measures to mitigate those with the most severe expected impact. Interventions include innovations such as weather index insurance and other risk-reducing and risk-coping instruments of interest to commercial agricultural enterprises.

14. This commercial agriculture agenda is also in line with USAID's Feed the Future program in Ghana to address the food security situation by increasing household incomes, improving the competitiveness of the rice, maize, and soya value chains, and expanding market opportunities for smallholder farmers.

C. Higher Level Objectives to which the Project Contributes

15. The GSGDA sets out ambitious objectives for continued growth that is more widely distributed than hitherto. The medium term macroeconomic growth targets include per capita income of at least US$1,035 by 2013 with projected non-oil average real GDP growth of 7 percent p.a. and an oil average of at least 9 percent. The long term objective is for per capita income of at least US$3,000 by 2020, driven by the trends for buoyant prices of the two main exports, cocoa and gold. Further targets include population growth not exceeding 2.2 percent p.a., inflation contained to a single digit and stable foreign exchange rates.

16. The project contributes directly to these objectives by leveraging additional private sector investment in agricultural growth. Moreover, by targeting inclusive business models, the project expands the opportunities for Ghana's poor to participate in this growth.

II. PROJECT DEVELOPMENT OBJECTIVES

A. Project Development Objective

17. The Project Development Objective (PDO) is: increased access to land, private sector finance, input- and output-markets by smallholder farms from public-private partnerships in commercial agriculture in Accra Plains and SADA zone. A working definition of "commercial agriculture" is given in Box 1.

Box 1: A Definition of Commercial Agriculture

For the purposes of this project commercial agriculture is defined as economic activities anywhere along the agricultural value chain that have a market orientation. It does not necessarily imply large scale, mechanized production technologies although such enterprises would qualify. Small holder, family farms can be commercial if they interact sufficiently with the market (for inputs and especially outputs). Agri-business and agro-processing – large- and small-scale – is also included. It would not include extremely poor marginalized households dependent on subsistence farming under extremely fragile and disadvantaged circumstances. The opportunities created by this project, for instance participation in out-grower schemes, are unlikely to be accessible because of severe capacity and behavioral constraints. Other interventions – such as IDA-funded Social Opportunities Project (P115247 are more appropriate interventions to address this population. In addition, USAID's Feed the Future Program Resiliency in Northern Ghana Project (RING), will provide assistance to marginal, stressed, and vulnerable households who are not immediately able participate in GCAP.

B. Project Beneficiaries

18. In line with the PDO, the ultimate project beneficiaries are poor households (including female-headed households) who avail themselves of new income generating opportunities through formal sector employment in commercial agricultural ventures and improved opportunities for participating in remunerative value chains resulting from stronger market linkages with input and/ or output markets. It is expected that beneficiaries will be inclusive of both men and women. Measures to ensure gender inclusion are detailed in Section VI.

19. Intermediate project beneficiaries are Ghanaian and international investors – of varying scale – who invest in new or expanded business opportunities in the appropriate value chains. Critically, these business models must be inclusive in nature – i.e., they should provide opportunities for strengthening market linkages of small-holder producers. It is expected that beneficiaries will be inclusive of both men and women.

20. The project has the following estimates of direct beneficiaries, based on reasonable assumptions regarding the likely demand from investors and the number and scale of investment opportunities being supported: [21]

- Component 1 includes capacity building and technical assistance to develop frameworks. Such project outputs have a potentially broad application in terms of improving the land governance regime, and improving the policy environment. As such it is not possible to estimate specific beneficiary numbers.

- Under Component 2, the project will benefit (i) the existing 2,500 small-holder farmers on the existing state-run irrigation who will now benefit from participation in the out-grower scheme, and (ii) 3,000 small-holder out-growers as well as additional direct employees involved in the development of the additional 7,000ha in the Accra Plains. The exact composition of commercial nucleus and out-grower development will be determined during implementation, based on detailed feasibility study including an assessment of investor preferences, but a reasonable scenario of rice production[22] would see 70 percent under nucleus arrangements and 30 percent under an out-grower scheme.

- Under Component 3, it is probably reasonable to expect a doubling in the number of small-holder participants of out-growers and similar arrangements from the current

[21] These estimates are tentative and will be revised as the results framework is finalized.
[22] This scenario is based on detailed analysis of existing out-grower arrangements in Ghana commissioned by the World Bank and undertaken by the FAO in the report on outgrower schemes.

estimates of 10,000.[23] Moreover, additional warehousing capacity of 60,000mt would provide improved storage and reduced post-harvest losses for the production of, on average, 15,000 family farms. Finally, the development of 10,000ha of inland valleys for rice production in the North would result in incremental production of 40,000mt of paddy rice and employing 2,000 out-growers plus additional farm laborers and assuming a 40:60 split in land between the nucleus and out-grower production systems.[24] It should be stressed that additional temporary employment opportunities arise at points during the agricultural cycle.

C. PDO Level Results Indicators

21. Project results will be measured according to the following five PDO level results indicators:[25]

- Yield per hectare (in mt/ha) of major crops on both nucleus farms and the associated out-grower schemes benefiting from project support. This will be disaggregated by crop, especially, for rice, soya and maize, and for Accra Plains and SADA zone;

- Area (ha) under formal commercial arrangements such as out-grower schemes and contract farming. This will be disaggregated between land under nucleus farms and land under out-grower cultivation, and will be disaggregated by Accra Plains and SADA zone;

- Formal and/ or semi-formal marketing arrangements for small-holder farms (number) fostered by the project. For each new arrangement documented, information will be gathered on their location, i.e. Accra Plains or SADA, farm size and the nature of the arrangement, i.e. formal contract or semi-formal agreement, and the financial provisions;

- Direct project beneficiaries (number), of which are female (percent) (IDA Core Indicator);

- Gross margins for selected crops (in GH¢) under marketing arrangements fostered by the project and disaggregated by Accra Plains and SADA zone.

22. Baselines have been established for most PDO-level indicators, as reported in the Results Framework (see Annex 1). A baseline survey will generate data on existing gross margins across the range of locations and crops likely to be incorporated in the project and will be completed before effectiveness. A survey of existing formal and semi-formal marketing arrangements is imminent. PDO-level indicators will be generated through the project's

[23] These estimates are based on discussions with key informants including USAID's ADVANCE project, as well as existing sponsors of such schemes including Wienco, Savannah Agricultural Marketing Company, Gundaa Produce Company and Premium Foods.
[24] The majority of inland valleys in Northern and Upper East regions are ideally suited for rice, due to the heavy soils and potential for water harvesting. In some valleys other crops can also be grown. However, in this document it is assumed that rice would be the preferred crop.
[25] These indicators are consistent with USAID's results indicators for their Feed the Future program.

reporting arrangement as set out in the Project Implementation Manual (PIM); specific instruments are required for the annual value chain survey and the impact evaluation (*ex ante* baseline and *ex post* follow-up survey(s) to be contracted separately). The latter is being supervised by a team of impact evaluation specialists from the Bank's Africa Region Gender Practice. While the impact analysis may be carried out on a subset of PDO and intermediate results indicators, the scope of the data to be collected for the analysis is likely to extend to in-depth information on measures for household well-being, intra-household allocation of resources and individual behavior.[26]

III. PROJECT DESCRIPTION

A. Project Components

23. The project has four components: (i) strengthening investment promotion infrastructure, facilitating secure access to land; (ii) securing PPPs and small-holder linkages in the Accra Plains; (iii) securing PPPs and small-holder linkages in the SADA Zone (see Annex 2 for a detailed description) and (iv) project management and M&E.

Component 1: Strengthening investment promotion infrastructure and facilitating secure access to land (US$11.8 million: IDA US$5.9 million, USAID US$5.9 million)

24. This component will promote a secure investment climate that clarifies and strengthens the rights and obligations of investors, government and affected communities, and support an improved mechanism for facilitating access to land by reducing the search costs to potential investors through an expansion of a database of land suitable and available for investors and by building on nascent mechanisms for actively matching potential investors with suitable land owners. Specific activities include:

- The development of a transparent framework for channeling investors' interest to the appropriate MDAs and mobilizing GIPC to secure investment under this framework by building their capacity and ensuring a more targeted investment promotion efforts based upon a medium term strategic plan, supporting key policy reforms to improve the investment climate and creating an enabling environment for agri-business, including through improved mechanisms for public-private dialogue;

- Improving land access and local rights by establishing a credible land facilitation mechanism for matching interested communities with available land to interested investors, based on international best practice. This will require: (i) an inventory of existing land rights and uses (which identifies existing ambiguities and provides for dispute resolution); and (ii) enhancing a participatory planning of land use at the community level. It will also develop a model lease agreement based on international best practices and will strengthen communities' capacity to engage in consultations and negotiations with investors; and

[26] While the impact analysis may be carried out on a subset of PDO and intermediate results indicators, the scope of the data to be collected for the analysis is likely to extend to in-depth information on measures for household well-being, intra-household allocation of resources and individual behavior.

- Strengthening out-grower arrangements, through a national framework for out-grower schemes and contract farming arrangements, and direct support to investors and smallholder participants looking to establish new (or improve existing) inclusive business arrangements. The latter will be achieved through building the capacity of nucleus and potential small holder participants primarily in the Accra Plains but potentially elsewhere and by providing matching grants for start-up agri-business investments activities.

Component 2: Securing PPPs and small-holder linkages in the Accra Plains (US$45.4 million: IDA US$45.4 million).

25. This component will conclude one or two transactions for PPPs in an irrigation investment in the Accra Plains. The project area includes the existing Kpong Irrigation Project (KIP) as well as an expansion of an additional 7,000ha under a PPP arrangement, inclusive of commercial ‘anchor’ farms and associated out-growers. Special attention will be paid to facilitating the clarification of land rights to promote security of tenure for investors and local communities and small-holder participation in the proposed out-grower arrangements. This component will also support outreach activities to deepen the understanding of PPP modalities for irrigation provision. Specifically, the project will:

- Undertake all necessary pre-feasibility studies including related environmental and social safeguards assessments to identify viable PPP modalities. This will be followed by a full feasibility study and the provision of necessary transaction advice, as well as the convening of an international investor conference to ‘pitch’ the project to potential investors.

- Identify options and implement modalities for small holder participation in the PPP through inter alia land-as-equity arrangements, small-holder schemes etc and implementing these modalities.

- Facilitate the conclusion of a transaction(s) through the use of Viability Gap Funding, where necessary, consistent with Ghana’s PPP policy.

Component 3: securing PPPs and small-holder linkages in the SADA Zone (US$64.3 million: IDA US$29.3 million, USAID US$35.0 million).

26. This component will involve support to the identification and realization of private investments in inclusive commercial agricultural arrangements in the agricultural value chain through PPPs, complementary public investments, and technical assistance concentrated in the SADA zone. Specific activities include:

- A program of capacity building activities for small-holders and/ or nucleus investors to establish or expand nucleus out-growers schemes and the like in the SADA zone through (i) the provision of specifically targeted training and technical advisory services, and (ii) start-up matching grants to eligible participants.

- Facilitate investments in land development in high potential locations (identified through project-financed feasibility studies and 'pitched' to investors in public information packs). The project would support essential land preparation functions such as land clearing and leveling, as well as water management interventions including contour bunding, farm roads and farm buildings at nucleus farms and adjacent out-growers.

- Finance the rehabilitation and construction of agricultural storage infrastructure and processing facilities in the SADA zone, including the rehabilitation of state-owned agricultural storage facilities, warehouses and rice mills; based on rigorous feasibility assessments.

- Facilitating business development through the provision of grants to strengthen the capacity of eligible farmer's organizations, input dealers, mechanization centers, processors and other agricultural service providers along the value chain.

Component 4: project management including M&E (US$14.3 million: IDA US$7.2 million, USAID US$7.2 million).

27. This component finances the operations of the project implementing agencies. It will also finance the various monitoring and evaluation functions as described below.

B. Project Costs and Financing

28. The project will be financed by IDA, and the Government of the United States. IDA financing will be a specific investment loan of SDR64.5 million (US$100 million equivalent). USAID funding of US$45 million will be administered under a Public International Organization (PIO) grant to the World Bank in conformity to USAID's FORWARD Initiative. The Grant will be administered as co-financing under a Bank-administered Trust Fund. It is proposed that USAID's contribution is focused on Components 1 and 3 and, within those components, pooled and not allocated to specific sub-components but rather distributed *pari passu*.

29. The total costs of the project are set out in Table 2.

Table 2 Breakdown of Project Costs

Project Components	Project cost (US$ million)	IBRD or IDA Financing (US$ million)	IDA % Financing	USAID Financing (US$ million)	USAID % Financing
1.Strengthening investment promotion infrastructure, and facilitating secure access to land	11.8	5.9	50%	5.9	50%
2. Securing PPPs and small-holder linkages in the Accra Plains	45.4	45.4	100%	0.0	0%
3. Securing PPPs and small-holder linkages in the SADA Zone	64.3	32.3	50%	32.0	50%
4. Project management including M&E	14.3	7.1	50%	7.1	50%
Total Baseline Costs	135.8	90.8	69%	45.0	31%
Physical contingencies	4.5	4.5			
Price contingencies	1.7	1.7			
Reimburse PPF	3.0	3.0	100%	0.0	0%
Total Project Costs	145.0	100.0	67%	45.0	33%
Interest During Implementation					
Front-End Fees					
Total Financing Required					

30. A Specific Investment Loan (SIL) is preferred because of the range of activities to be supported including technical assistance and capacity building, some works and equipment, as well as direct assistance to potential investors under viability gap financing (see below). A possible alternative approach would have been to fold this project into one of the series of Adaptable Program Loan (APLs) being developed as part of the Bank's complementary support to Ghana's program of PPPs under preparation (Ghana PPP Project, P125595). However, the support in this project is much broader than the individual transaction-based approach of that project.

C. Lessons Learned and Reflected in the Project Design

31. A number of innovative commercial agriculture interventions have recently been approved by IDA with similar objective and modalities as the current project.[27] Others are under preparation.[28] A 'community of practice' has been established within the Africa region to share lessons across task teams. On the client side, the CAADP-sponsored *Grow Africa* initiative facilitates participating countries seeking to expand commercial agriculture to share lessons amongst themselves (see paragraph 114 in Annex 3). Recent Bank-sponsored 'flagship' studies highlight the importance of infrastructure provision in leveraging private investment[29] and in improving value chains and other key policy and investment needs to improve the regions competitiveness.[30] Other major studies on competitiveness such as the McKinsey & Co. report *Lions on the Move* also emphasize the importance of both improved policy environments and strategic complementary public investments. Although these analyses differ in their specific approaches, they are

[27] For example Burkina Faso and Zambia.
[28] For example Tanzania, Mozambique and Senegal.
[29] See the Africa Infrastructure Country Diagnostic, (P098861).
[30] See for instance the AFR Regional Flagship study *Competitive Africa: What Will It Take?* (P116483).

all fundamentally optimistic with regard to the opportunities for private sector growth, including agriculture, across the continent.

32. The following key lessons have direct application with regard to the design of this project:

33. ***Using donor funding to leverage private investment:*** In 2010 development assistance to agriculture sector in Ghana amounted to US$230 million, which equated to less than 5 percent of the sector value added. Agriculture is, and should be, a private sector activity. Consequently, public support should be targeted at addressing clear market failures and public goods in order to leverage private sector activity. Project funding will seek to maximize leverage as far as possible while ensuring clearly defined development impacts.

34. ***The imperative of inclusive commercial agriculture:*** A Poverty and Social Impact Assessment (PSIA) of the previous national agricultural policy examined the likely incidence of Government policies across different farm types including family farms and large(r) commercial enterprises and agribusiness. The PSIA highlighted the importance of affording due consideration to distributional impacts of policies and programs, especially where larger-scale commercial ventures are perceived to disadvantage small-holder farmers. As part of project preparation, the Bank commissioned a political economy analysis to provide guidance as to the conditions under which such ventures – as a sub-set of those to be assisted by the project – would be consistent with wider Ghanaian social norms and, in particular, would be acceptable to local communities. Recognizing that out-grower schemes and the like would be an essential part of the solution, a study was undertaken by FAO experts of international and Ghanaian experience to recommend appropriate schemes to be supported by the project.

35. ***Creating opportunities for transparency can reduce corruption and elite capture.*** International experience in community development work and in the extractive industries sectors has shown that transparency can contribute significantly to ensuring the delivery of project objectives with fewer instances of corruption and funds diversion. In Indonesia for example, posting information on community sub-projects and related financial information in public areas was shown to contribute to reduced instances of corruption. Research from Uganda has shown that providing systematic information on use of an education grant program deterred leakage of funds at the local level. In an effort to avoid elite capture and promote accountability, the project design has considered and incorporated the following elements into project design: promotion of community-level contracts and fund flow transparency and an emphasis on community participation in decision-making, planning, and monitoring (including groups vulnerable to marginalization from discussions on land use and resource flows, such as women and youth) which reflects the extensive experience of Bank-financed work in community level development. The approach towards transparency has taken into account the need for low-technology, user friendly, gender-sensitive and culturally relevant information transmission channels.

36. ***Best practice PPPs:*** With the expanded scope of PPPs a number of best practices have emerged: (i) PPPs should be designed with sustainability and value for money considerations in mind; (ii) PPPs should be viewed as long term commercial relationships between the public and the private sectors, not one-off procurement episodes; and (iii) PPPs are inherently complex, costly and time-consuming to develop properly – a rushed project often becomes a failed project. The Bank's Global Expert Team on PPPs supported the Task Team through project preparation. Moving forward, the project will deploy world-class technical inputs into the preparation of each (large) PPP transactions. Moreover, this project will dovetail with the complementary parallel support provided by the Bank under the Ghana PPP Project (P125595).

37. ***Anticipating and managing failure:*** Private investment is risky and agriculture-based investment more so. Venture capital companies manage failure by demanding exceedingly high returns from the small number of successes they achieve – but such returns are rarely available and consequently investment limited. Success of the public sector in 'picking winners' is notoriously mixed, to say the least, and even specialist private sector investors often encounter unforeseen difficulties.[31] Despite best endeavors and professional management, unforeseen risks will remain and the project will anticipate failure in several ways. First, it will minimize the risk of failure through greater discipline in sub-project selection. Second, where PPPs do encounter challenges, it will be transparent about the nature and consequences. Third, it will pay special attention to the reallocation of assets from failed investments, especially land. This is critical to avoid the situation where land upon which projects have operated – land that by definition has been subject to feasibility studies and has received community acceptance – is abandoned. The project will assist the Lands Commission in a protocol to a quick and efficient while legally sound mechanism for cancelling dormant leases.

38. ***Addressing risks of land grab:*** The spike in global food prices in 2008 led to a rapid expansion of investment – often from overseas – into large-scale commercial ventures. These ventures have both positive aspects – attracting investment, increasing national food production, job creation and the like – but it also poses risks. There are certain examples of the land grab phenomenon that should be avoided. This project will assist Ghana to focus efforts to generate the 'right' investors in the 'right' projects – i.e. reputable investors with technical know-how and financial depth willing to invest in the kind of productive enterprises that yield a private return and contribute to Ghana's development goals. The project will abide by the seven Principles of Responsible Agro-investments (see Box 2) and will apply the lessons from conclusion of the Bank' analysis

[31] For instance, a recent analysis of past agri-business investments by the Commonwealth Development Corporation (CDC) shows that only about one-quarter of all investments (over 1948 – 2000) have yielded a private return in excess of 12 percent. Previous efforts in Ghana, including the Presidential Special Initiatives and enterprises benefiting from the Export Development Investment Fund (EDIF) also demonstrate mixed results. Nor have Bank initiatives been immune either: *Farmapine*, a pineapple exporter established as a Bank-sponsored farmer ownership model (FOM) in 1998 under an IDA-financed agricultural project that accounted for 17 percent of pineapple exports in 2001 – 2002 but has subsequently ceased exporting.

of the large-scale investments in land *Rising Global Interest in Farmland: Can it yield sustainable and equitable benefits?*[32]

Box 2 The Principles of Responsible Agro-Investment

The Principles of Responsible Agro-Investments are a set of guidelines developed by the World Bank and other international organizations to guide client Governments in managing the large-scale investments in land. They have also been applied to guide the lending of development partners. These are:
Principle 1: Existing rights to land and associated natural resources are recognized and respected;
Principle 2: Investments do not jeopardize food security but rather strengthen it.
Principle 3: Processes for accessing land and other resources and then making associated investments are transparent, monitored, and ensure accountability by all stakeholders, within a proper business, legal, and regulatory environment;
Principle 4: All those materially affected are consulted, and agreements from consultations are recorded and enforced;
Principle 5: Investors ensure that projects respect the rule of law, reflect industry best practice, are viable economically, and result in durable shared value;
Principle 6: Investments generate desirable social and distributional impacts and do not increase vulnerability;
Principle 7: Environmental impacts due to a project are quantified and measures taken to encourage sustainable resource use while minimizing the risk/magnitude of negative impacts and mitigating them.

39. ***Securing adequate private financial returns relative to other potential locations:*** Private sector agro-investors are comparing investment opportunities and prospective returns across countries. One important lesson from reviews of other agro-investments in emerging markets is that a substantial portion of anticipated financial returns – typically around one-third – is derived from the appreciation in the value of the assets, i.e., land. Given Ghana's land tenure situation, land will be leased not owned, and this source of return is therefore not available to investors. Consequently, expected returns from productive activities may need to be commensurately higher for Ghana to be competitive. Risks and/ or costs will need to be lower compared to competitors. This means the support to offset establishment costs of socially inclusive investments will be higher than other countries. 'Cost per beneficiary' comparisons of this project with other similar projects will need to take this into account.

IV. IMPLEMENTATION

A. Institutional and Implementation Arrangements

40. The project will be implemented within existing public sector structures while adopting an appropriate private sector orientation. This reflects the fundamental approach of the project to leverage private investment, and the role of the public sector to facilitate such investments based on robust business logic and the efficient deployment of necessary public goods. Implementation arrangements have been informed by the following principles: The project will (i) utilize existing institutional mandates and capacity – however limited – and will not create project-specific duplicates; (ii) put particular efforts into institutional coordination across MDAs through strong mutually beneficial

[32] Rising Global Interest in Farmland: can it yield sustainable and equitable benefits?, World Bank (2011).

partnerships between the responsible Ministry and other parts of Government; and (iii) ensure that project management incorporates private sector perspectives essential for the establishment of long-term PPPs.

41. Strategic oversight of the project will be provided by a Project Steering Committee. This Committee will be chaired by the Minister of Agriculture or his representative and include Ministers or representatives of the Ministers for Finance and Economic Planning and Trade and Industry. It will also include the Chief Executives of GIPC, the Lands Commission, SADA and GIDA. In addition, the Director of the PID in MoFEP will also be a member. Private sector representation will also be important, including the Chief Executive Office of the Private Enterprise Foundation, and other relevant institutions that may be identified. Linkages with other relevant bodies will be important, especially the oversight committees of the PSDS II and the CAADP implementation committee. The steering committee will be responsible for approving the annual workplans and budgets and provide policy direction.

42. The project will be implemented by a Project Implementation Unit (PIU) under the responsibility of MoFA. The Project Team will include all necessary technical staff including financial management and procurement staff, social scientists and environmental specialists, adequate monitoring and evaluation capacity and project accountants etc. In addition, the PIU will be staffed with senior-level technical staff from the partner MDAs, on secondment from their 'home' institutions. Additional staff may be recruited.

43. The appraisal, approval and monitoring of all matching grants shall be undertaken by a specific Grant Management Desk established within the PIU. Matching grants will be used to meet (part of) the costs of establishing inclusive arrangements. This could include: consultancy services and other technical assistance to build the capacity of either small holder participants or the nucleus. It could fund services (e.g. land preparation costs such as tractor services) or essential equipment (goods). In all cases, eligible beneficiaries will be defined as those whose proposals (i) clearly demonstrate a business rationale, and (ii) are sufficiently 'inclusive' in that the purposes for which the grant is awarded is expected to clearly benefit poor rural households, in particular smallholder farmers (including women). Grant recipients will be responsible for reporting on their use in accordance with the grants manual, to be developed as part of the PIM. Recognizing the limited capacity of potential grant applicants, the project will provide capacity building to strengthen applications and the management of awards.

44. The role of the partnering MDAs is two-fold: first, they will be responsible as a 'service provider' for managing specific elements of project activities, as defined in the workplans. Funding for the operational costs associated with this function will be provided under the project. Second, in light of capacity constraints, these partnering MDAs will also be beneficiaries of capacity building efforts by the project.

45. Given the nature of the project, the project must have the ability to reach agreements with potential private investors of sustainable mutually beneficial partnerships. Radical options were considered during project preparation – such as semi-autonomous agencies

free to recruit a wide range of staff on terms separate from the civil service (this approach has been deployed by the Millennium Challenge Corporation [MCC] program, under Millennium Development Authority [MiDA]). Similarly, consideration was given to a special delivery unit that would be essentially contracted on a performance basis and established arms-length from Government. Neither approach generated much support among stakeholders. That said, some of the elements of these models have merit and will be reflected in the following proposed modalities for project implementation:

- First, the project team must have the requisite private sector orientation, necessary skills and competencies to engage effectively with business leaders and to articulate – and understand – sound business propositions. It will be insufficient for the PIU to be staffed just with members of the civil service. A staffing needs assessment will be undertaken to identify the necessary skill sets. This assessment will examine a range of alternatives including individual recruitment of necessary staff, or the procurement of long-term advisory support from a firm.

- Second, there is a need for the PIU to engage potential project developers early in the project identification process. Consideration will be given to replicating the arrangement already in place with AgDevCO (as well as possibly extending this arrangement to the next phase). There is a tension between engaging in PPPs with potential project developers at an early stage and ensuring transparency in the selection of those partners and value for money with respect to the public contribution to subsequent investments. Modalities will be investigated that respect procurement rules and transparency that allow strategic partnerships to be formed early on during the project identification stage.

46. It is likely that a number of different modalities will be deployed and the project will track and evaluate experience in order for comparative lessons to be learnt. In this regard, the project will evaluate the experience of comparable institutional arrangements such as the Center for the Promotion of Investment in Agriculture (CEPAGRI) in Mozambique which is a specialized agency for promoting investment in commercial agriculture. CEPAGRI has clearly established procedures and decision criteria for promoting investment, and for endorsing/supporting proposed investments that meet specific objectives. An institutional assessment will be undertaken at mid-term review to confirm that the existing PIU arrangement can be sustained or propose modifications.

47. The project will coordinate closely with the SADA secretariat. It is anticipated that eventually, the project sub-office located in Tamale to manage activities in the Northern sector will 'migrate' to become the SADA agribusiness transformation team.

48. Further details are provided in Annex 3.

B. Results Monitoring and Evaluation

49. The project has a strong focus on monitoring and evaluation and a range of instruments and approaches will be put in place. As a demand-led project, in some cases data can only be gathered as and when project beneficiaries are identified. Particular attention will be

paid to building sustainable monitoring capacity for an on-going PPP agenda that will extend beyond the life of the project. It will build on existing M&E capacity in MoFA – which is amongst the strongest across GoG – and will help build nascent M&E capacity in SADA that, while initially project-specific, will subsequently evolve into SADA's regular M&E capability.

50. Reporting on progress takes places as three levels:

- ***Project-related M&E is the responsibility of the PIU***: This will ensure effective and timely monitoring of progress towards achieving the development objective as set out in the Results Framework in Annex 1. Data will feed into the implementation support missions.

- ***Annual value chain survey:*** This will be an annual survey of selected value chains in project-impacted locations to calculate key indicators of improvement in the functioning of value chains such as gross margins and the cost structures of each value chains. Although not strictly a panel data set, the survey will be repeated in the same locations. The value chain survey will thus supply data on some of the indicators in the results framework.

- ***Impact evaluation:*** In order to account for the change brought about by the project as well as to foster understanding of its consequences on beneficiaries, the project will conduct a rigorous, scientific impact evaluation based on treatment and control groups. The impact analysis will be able to capture intended and unintended benefits of project interventions. The baseline for the impact evaluation is to be funded separately by USAID under an existing M&E support intervention. However, project funds are programmed for the end-of-project survey.

C. Sustainability

51. Sustainability is considered at the following three levels in this project. The first refers to the sustainability of the private sector businesses that are brought about through the instruments supported by the project. Sustainability of the business will be promoted through direct project assistance for business managers (including at the scale of the household in the case of out-growers). Moreover, careful screening of potential partners to benefit from project support, particularly through matching grants, capital grants and the like – will seek to weed out weak propositions. Even where individual investments fail, the project will improve the way in which failed projects can close and assets – in particular land under existing lease with the defunct operator – can be reallocated to a new investor.

52. Second, the investments and PPPs being realized under the project must be socially and politically sustainable as well as environmentally sustainable. For the latter, the fact that investments must be subject to national and Bank regulations under the safeguards policies provides for a higher standard of environmental consideration than has hitherto occurred. With regard to social and political sustainability, these issues are at the core of the project.

53. Third, sustainability relates to the new approach for the state to partner with the private sector to generate the investments. The use of PIUs is often associated with poor sustainability of institutional capacity because the expertise dissipates when the project closes. Although this remains a concern, the positive arguments for this structure are compelling. The PIU structure seeks to provide an organizational structure for improved coordination across MDAs. It is anticipated that the project will encourage new norms and that once cooperation across agencies is entrenched in the normal business procedures of the Government, the same cooperation can be achieved through agreements between MDAs, and the PIU can be dissolved.

V. KEY RISKS AND MITIGATION MEASURES

54. The project includes both political economy risks associated with commercial agriculture as well as financial risks faced by the private investors that the project seeks to support.

55. Regarding land related risks, land for agriculture will not be acquired through compulsory acquisition under the project. Investors will enter into voluntary leasehold arrangements on customarily owned land or on land already owned by the state. There is substantial positive experience in Ghana with such arrangements. Nevertheless, depending on the location, land governance and tenure conditions on both categories of land can pose risks to the project because: (i) they may impede the ability of investors and outgrowers to gain access to secure land rights; and (ii) they may increase the vulnerability of existing land users to displacement. On customary land tenure arrangements are generally undocumented, vary widely from community to community, and can be complex. Uncertainty may be exacerbated by disputes within and between communities as to ownership and a lack of clarity as to boundaries. A wide range of subsidiary rights (i.e., below the level of ownership) often exist and may be difficult for outsiders to discern, particularly with respect to common property resources and water. Land allocation decisions by customary owners are on occasion made non-transparently without consulting community members and to the detriment of their interests. On state land, there are cases in which acquisitions were not completed correctly and/or compensation not paid, and where the land remains occupied informally by prior occupants. The project will address these risks using a variety of tools – by carefully screening potential investment locations, by deploying relevant safeguards instruments, and by providing support for land use rights inventories, participatory planning, enhanced consultation, strengthened negotiation capacity and contract design.[33]

56. External economic shocks may cause investors to refrain from actively engaging in the agricultural sector, or in the geographical areas of the Accra Plains and the SADA Zone. The project has been designed to provide a menu of incentive packages that are expected to address key investment constraints. However, certain risks, such as macroeconomic performance and global economic events that would negatively affect competitiveness and profitability are outside the control of this project. Ghana's strong macroeconomic

[33] The Government is implementing complementary reforms to improve land governance, including some measures being supported by the second Land Administration Project (P120636).

performance is being supported by the Bank and other donor operations, most notably through the MDBS process.

57. Given the multitude of MDAs and the need for close collaboration to carry out complex tasks, there is a risk of insufficient coordination capacity. A lack of incentives to undertake institutional and business process reforms constitutes another implementing agency risk. The project will devote substantial resources to institutional strengthening among the implementing MDAs, both at the coordination level as well at the policy and technical levels. In addition, a multi-MDA PIU will be established as well as a high-level Steering Committee.

58. The planning and implementation of (a) PPP transactions and (b) the use of a competitive process to determine levels of public support through grants are new in Ghana and could potentially be misused. The implementation of large PPP transactions will be supported by the newly established PPP unit within the Ministry of Finance and Economic Planning, which in turn is expecting support from the upcoming Bank-funded PPP support project (P125595). PPP competitive bidding procedures will also benefit the competitive grants element that will be managed using guidelines and procedures set out in the PIM.

59. There is a risk of capacity constraints on the part of GoG to comply with safeguard requirements and broad social issues such as gender inclusion and benefit-sharing. Hiring and training relevant staff will be undertaken prior to project implementation and close collaboration with Bank staff will be required to ensure capacity development. In addition, as regards safeguards, an ESMF, RPF and PMP have been developed. ESIAs/ ESMPs, and/ or RAPs will be prepared as necessary once works and sites have been identified. Ghana has experience with ESMFs/ RPFs for grants to fund sub-projects at local level. The frameworks outline specific actions to mitigate or avoid social and environmental risks and impacts, such as soil salinity caused by excess water and shallow groundwater. The measures also include capacity building that will be undertaken at all levels (from central to communities) to ensure improved knowledge on social and environmental safeguards for effective implementation and monitoring.

60. The risk of elite capture exists. Communities may be marginalized from discussion on land use (negotiations over rents, lease periods, etc.) and receipt of monetary and non-monetary resources that flow from investors to communities (for example lease payments). The project will put in place principles for community-investor engagement that will be embedded in the model lease and the guidelines for participating communities. In addition, several actions that contribute to an enabling environment for benefit sharing are being promoted under the project (for example, transparency of contract payments and revenue flows, participatory planning on resource use and use of representative community platforms for negotiation purposes, etc.).

61. The risk of coordination failure among the many donors that operate in the same value chains and in the SADA Zone (DFID, IFAD, AFD, CIDA, GIZ, USAID) will be mitigated by continuing close coordination through the Agriculture Sector Working

Group, the Private Sector Development Working Group, and SADA. Co-financing with USAID will promote close collaboration and coordination.

62. It is essential that the in-country project team maintains sufficient capacity and resources for supervision and is available to monitor and provide implementation support.

Table 3 Risk Ratings Summary

Project Stakeholder Risks	Moderate
Operating Environment Risks	Moderate
Implementing Agency (IA) Risks (including Fiduciary Risks)	Moderate
Project Risks	Moderate
Overall Risk	Moderate

A. Overall Risk Rating Explanation

63. The overall risk rating is <u>Moderate</u> for preparation and <u>Moderate</u> for implementation.

VI. APPRAISAL SUMMARY

A. Economic and Financial Analyses

64. Economic, financial and further PPP financial analysis was done for the component 2 and only financial analysis for component 3. Annex 7 provides the detailed hypothesis and results of the analysis. The economic rate of return (ERR) of component 2 is estimated at 20 percent. The net present value (NPV) of the economic returns generated by the Project under this component is approximately US$36.7 million, when discounted at 12 percent. Increases in gross profits for rice under the with-Project scenario are substantial – from 6 percent to 33 percent. The PPP financial analysis was done to confirm that the Accra Plains Irrigation scheme can be developed as a PPP.

65. The analysis concludes that given the tariff levels and payment risk from the farmers, the scheme will not be financially viable for the investor, thereby providing the rationale for PPP arrangements. Government support will be needed in either financing the capital costs or paying an availability payment to support the revenues to the project company or both. Scenario analysis was done based on a fixed irrigation tariff of US$20/1000m3 on the level of government contribution. While the current tariff of US$4.5/1000m^3 is too low, the full cost recovery tariff of US$208/1000m^3 will be unaffordable. Financial viability is defined as minimum Debt Service Coverage Ratio (DSCR) of 1.2 and minimum equity IRR of 20 percent with a 13 percent government and 15 percent project discount rate.

66. For Component 3 an overall ERR has not been calculated but representative models have been developed. The financial analysis covers: (i) the nucleus-outgrower (rice or maize-soybean) model; (ii) warehouse services model; and (iii) and rice mill rehabilitation model. The results show that all the modeled interventions would be profitable both for nucleus and smallholder farmers. There is also scope for the warehouse interventions and rice mills rehabilitation. The assumptions underlying the selected scenarios include

support through matching grant for efficient technology packages, extension, land valley areas preparation, and rehabilitation/construction.

67. Using matching grants to encourage producers to adopt new technologies provides them with an additional financial space, particularly during the first years when they are working their way further along the technology adoption learning curve.

B. Technical

68. The technical approach embodied within the project reflects a number of background analytical studies. These include the Northern Bread Basket Strategy, funded by AGRA and undertaken by McKinsey & Co. The proposed instruments and modalities are also consistent with the expanding number of similar Bank projects in the region while at the same time being innovative and nuanced to reflect local conditions. Experience with existing projects in Ghana, such as the USAID-funded ADVANCE program, have been instrumental in feeding back emerging lessons and in validating the business models and the underlying financial and economic projections. The project design has benefited from a review of MiDA investments and other USAID-commissioned studies such as the markets study and the AgDevCo analysis. There have been extensive consultations throughout the preparation process, and proposed modalities have been widely endorsed.

69. The Government's project preparation team had an opportunity to showcase the project at a recent Grow Africa Initiative event sponsored by CAADP and the WEF. Senior managers from several multinational agri-business industries were present and provided positive feedback to the team on the content of the project, confirming the technical approach. Similarly, a joint Bank and GoG team undertook a knowledge exchange with Brazil to learn from the experience of PPPs in large-scale irrigation schemes in the *Pernambuco* region in the North-East of the country. Discussions with Brazilian counterparts have been instrumental in alerting the Ghanaian team to potential pitfalls and identifying best practice.

70. That said the PPP agenda is at the forefront of global development thinking and without the widespread experience of other kinds of interventions. Therefore, maintaining high level technical inputs to the project to ensure the continued application of best practice will be critical. The synergies with the complementary PPP support project will facilitate this. This will imply the need for potentially expensive international technical assistance – something which the Ghana Aid Policy seeks to avoid – but Government acknowledges the merits in this case.

C. Financial Management

71. In line with the guidelines as stated in the Financial Management Manual issued by the Financial Management Sector Board on March 1, 2010 a financial management (FM) assessment was conducted on Treasury Unit of MoFA the lead implementing entity of the activities to be financed under the Project. The objective of the assessment was to ensure that: (a) MoFA has adequate financial management arrangements to ensure project funds will be used for purposes intended in an efficient and economical way; (b) the project's

financial reports will be prepared in an accurate, reliable and timely manner; and (c) the project's assets will be safeguarded. The FM assessment also included a review of: (i) the number and quality of financial management staff at MoFA that will have fiduciary responsibilities under the project; (ii) FM organization structure of the Ministry and its impact on the internal control processes to be employed under the project; and (iii) the proposed FM systems and processes to be established in support of project implementation.

72. The assessment was carried out for the Government's accounting function within MoFA, with the view to mainstream the financial management of this project. MoFA's Treasury Unit is headed by a Financial Controller who reports to the Chief Director, the administrative head of the ministry. Consistent with the use of country systems, and based on the satisfactory experiences of previous projects within MoFA, the financial management arrangement will to the extent feasible be mainstreamed. The Treasury Unit will be responsible for ensuring that adequate financial management arrangements exist throughout implementation. The specific operational accounting and related function will be the responsibility of a Principal Accountant. The policies, guidelines and operational procedures required to support implementation will be consistent with the Government of Ghana's financial procedures and also in line with IDA policies.

73. The assessment of the financial management arrangements at MoFA concludes that there are adequate systems in place that satisfy the Bank's minimum requirements under OP/BP 10.02. In summary, the existing state of FM systems and the direction and pace of ongoing improvements (notably the IDA funded GIFMIS) have fostered confidence and would enable significant reliance on country systems in the areas of budgeting, budget execution (including accounting and internal controls), financial reporting, and external auditing.

D. Procurement

74. A procurement assessment conducted during preparation rates overall procurement risk as high, prior to mitigation. The corrective measures designed to address the issues and risks are reflected in the action plan, below. These measures include adequate staff of MoFA's procurement unit in charge of the Ministry's overall procurement responsibilities, recruitment of a procurement consultant competitively before the project effectiveness to support implementation of the project and training of mainstream procurement staff, capacity building through training of relevant procurement and other technical staff, particularly in World Bank procurement procedures to enhance their knowledge and on a continuous basis during the project implementation (see details in Annex 3).

75. The Project will be co-financed with the USAID through a grant, which is to be administered by the Bank. In that regard, the activities that are financed through the USAID grant will be subject to the same due diligence requirements as that which the Bank is applying to the IDA financed activities. Procurement for the proposed project will be carried out in accordance with the World Bank's documents (i) "Guidelines: Procurement of Goods, Works and Non-Consulting Services under IBRD Loans and IDA

Credits & Grants by World Bank Borrowers" dated January 2011; (ii) "Guidelines: Selection and Employment of Consultants under IBRD Loans and IDA Credits & Grants by World Bank Borrowers" dated January 2011, and the provisions stipulated in the Legal Agreement; and (iii) "Guidelines on Preventing and Combating Fraud and Corruption in Projects Financed by IBRD Loans and IDA Credits and Grants", dated October 15, 2006, as revised in January 2011, and the provisions stipulated in the Financing Agreement. The procurement procedures will be further described in Procurement Plan and the PIM.

E. Social (including safeguards)

76. It is anticipated that the project will have positive social impacts at the household and community levels. Project activities will lead to an increase in household incomes for participating farmers, improved agriculture-related capacity (such as knowledge of technology and improved farming methods which would have spill-over effects) and it may result in monetary and non-monetary benefits at the community level (a result of community negotiations with private investors).

77. The project triggers OP 4.12 on Involuntary Resettlement as it is foreseen that it will have impacts on land ownership, land use, and livelihoods. Specifically, the project may require the involuntary acquisition of land for civil works such as the construction, rehabilitation and maintenance of irrigation canals, extension of power lines, etc. While the project will not finance the state acquisition of land for agricultural purposes, it may lead to land use changes if community lands are reorganized to facilitate lease agreements with investors or the reconfiguration and improvement of plots in connection with outgrower schemes. This may result in the moving of land users which in turn may negatively impact livelihoods and restrict access to resources needed by households. These shifts may have disproportionate effects on women who may be susceptible to losing access to medicinal plants, water sources, or face increasing time burdens associated with domestic responsibilities such as fuel collection, etc.

78. The Borrower has prepared an RPF which has been disclosed on January 13, 2012. The scope of the RPF includes involuntary land acquisition (under eminent domain) for public infrastructure and voluntary land leases between investors and landowners (chiefs, family heads or the state, as the case may be) where there are customary claims to the land. The latter has been included in the scope of the RPF because much of the land on which investments may be supported is held under customary tenure. In these instances, the ownership of the land (so-called "allodial ownership") is vested in a family head (for the Accra Plains) or a traditional authority or chief (referred to as 'skin' in Northern Ghana). While the power to exercise legal ownership over a given piece of land may reside at a particular level (or in some cases at several levels) in the traditional hierarchy, there is often a complex array of subsidiary interests present on the land – most often not documented. These might include (i) long-term customary rights derived from membership in the community; (ii) tenancies of varying durations, including migrants (or so-called "strangers") from outside the community, some of whom may have been present for generations, others of whom may be of recent origin; (iii) sharecropping arrangements; (iv) pastoral and other rights over common property; and (v) others.

79. Given the frequent presence of many land users and land rights holders in a given piece of land, it will be difficult for the project to ascertain that what the landowner characterizes as a voluntary transaction does in fact represent an informed and voluntary choice on the part of the community as a whole. There exists in such situations the risk of elite capture and coercion of choices. Hence the importance of having the RPF as a tool to ensure that the procedural and substantive rights of local people are appropriately addressed. The project will also support the carrying out of land use rights inventories and participatory community decision-making to help obviate the risk of unintentional displacement of rights or livelihood activities.

80. The RPF will also apply to project-supported investments that may be located on state land (for example, in the Accra Plains). In many cases, there are claims that land acquisitions carried out by the state in the past were done improperly. It is also frequently the case that unused or underused state land is subject to occupation, sometimes by the original communities who were located on the land at the time of the state acquisition and were never required to leave, or by new comers. Hence, as in the case of customary land, the utilization of state land will in many cases have impacts on livelihoods that will need to be identified through due diligence and mitigated in line with the RPF.

81. A minimum principle – applicable to both customary and state land scenarios – will be that no person will be required or asked to relinquish land that they are currently using to accommodate an investment or associated activities (such as the establishment of associated infrastructure or land development for preparation of smallholder plots) without being provided secure tenure over alternative land of at least equivalent quality and without appropriate support for restoring or improving livelihoods.

82. An RPF has been prepared because specific sites for sub-project areas are as yet unknown. However, because the area in the Accra Plains is slightly more defined, the RPF provides detailed information on land ownership in the Accra Plains, informed by a Land Diagnostic Review commissioned by the Government as part of project preparation. The information on the SADA zone is less detailed as only a broad area for potential development has been identified, to be further refined as prospective investors become engaged with government and local communities in the detailed design of the investment. The RPF provides guidance on the preparation of a RAP once sub-project sites have been identified.

83. Both Nucleus and Smallholder farmers will comply with projects' safeguards requirements. Private sector parties whose investment in land is supported by the project through feasibility gap financing or otherwise facilitated by the project will, as a condition of such support, be required to apply and comply with the RPF. As highlighted in the environmental section below, the ESMF and RPF provide processes and conditions for determining the eligibility of investments or activities for project support. The project will not support (nor are private sector investors likely to be interested in) investments on either nucleus farms or on smallholder land over which there are significant ambiguities concerning legal status, including disputes within communities, between different claimants, boundary disputes, disputes between customary owners and the state, or

persisting complaints stemming from prior state land acquisitions. The project will put in place modalities to ensure the due diligence screening of land.

84. The RPF identifies groups that are susceptible to marginalization from the process of decision-making on land use as including women, migrant farmers and pastoralists. It also identifies groups vulnerable to negative impacts related to displacement including those who are over 70 years, have physical/mental disability, women, migrant farmers and herdsmen, widows, orphaned children and bedridden or seriously sick persons. Among the mitigation measures included in the RPF are: the use of a checklist to ensure inclusion of vulnerable groups during sub-project screening; and inclusive consultations with land users and landowners on sub-projects especially during negotiations between investors and communities. More details are provided in Annexes 3 and 6.

Women in Agriculture

85. Gender is an important dimension of the project, in particular in regards to the inclusion of women as direct project beneficiaries, the inclusion of women's voice in decision-making processes, the impact of changes to the intra-household allocation of resources and the protection of women from negative indirect effects of the project.

86. One of the key elements of the project design is the inclusion of women as direct beneficiaries in various roles such as smallholders, contract farmers, paid wage laborers, processors or traders. The design further promotes women's engagement in the project by addressing the importance of their access to productive assets (specifically land) and access to information especially in relation to the risk exposure affected by project activities and their corresponding opportunities. A rapid gender analysis was undertaken during project preparation in an effort to understand the opportunities available to, and barriers affecting, women. This study was instrumental in informing the project design by collating the existing literature on gender in Ghana, in particular as it relates to the engagement of women in agriculture, and summarizing the findings from focus group discussions and key informant interviews.

87. The Gender Analysis highlighted a number of interesting points: women represent the majority of the agricultural labor force (52 percent), they contribute between 55 – 60 percent of the total output and they form 70 percent of food crop growers, 95 percent of agro-processors, and 85 percent of those engaged in food distribution. These figures, however, obscure regional disparities and structural bottlenecks that limit women's upward mobility. Women in the northern regions (Northern, Upper East, and Upper West regions) face significant disadvantages such as difficulties in accessing land use rights and accessing economically viable land, high illiteracy rates, limited access to improved inputs and technologies, etc.

88. In addition, cultural barriers to women accessing economically viable land are significant in the northern regions. The lack of productive capital poses an additional and considerable barrier to women who would like to engage in commercial agriculture. In fact, evidence has shown that the productivity gap between male and female farmers

disappears when access to land and productive inputs are taken into account.[34] In particular, gender dependent discrepancies between farming practices in Ghana were shown to be optimal responses to insecure land tenure faced by women.[35] Another challenge can be seen in access to knowledge on improved agricultural production techniques from extension workers which can be problematic for women in the cultural context. Typically, a limited audience is reached by these services which, in addition, are disproportionately dominated by men.

89. Project design has been informed by the analysis and lessons learned from similar regional and international work. More precisely, the project design is promoting women's inclusion as beneficiaries using the following main mechanism:

90. ***A menu of options for women's inclusion in commercial agriculture ventures.*** The project design has incorporated a flexible approach to women's inclusion in sub-projects in an effort to consider site specific contextual factors (such as crops under production, cultural specificities, etc.). More precisely, the project will require investors to commit to women's inclusion in sub-projects using at least one of a number of mechanisms informed by the context in which the investors will be operating and the agricultural activities proposed by the investor.[36] While these mechanisms will be detailed in the PIM, however, they are anticipated to include elements such as:

- *A minimum percentage of women as smallholders.* This will include a requirement that women can obtain land use rights from family heads or community leaders so that they can participate in out grower schemes.

- *A minimum proportion of women employed as wage-laborers.* For example, in situations where investors lease tracts of land for crop production.

- *A minimum proportion of women involved in the crop value chain*. Investors will be required to include a minimum proportion of women for example, in rice processing (an area in which women dominate).

91. The precise formulation of the menu, including the threshold numbers, will be carefully considered and detailed in the PIM. Related to this intervention, the project will promote the need for documentation of land use rights as it will be a pre-requisite for participation.

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[34] World Bank (2011), **World Development Report 2012**, Report No. 69617, World Bank: Washington D.C.
[35] Goldstein, M. and Udry., C (2008), **The Profits of Power: Land Rights and Agricultural Investment in Ghana**, Journal of Political Economy, Vol. 116, No. 6, pp. 981-1022
[36] That is, due to the crop choice, the farming technology available, cropping technique as well as the cultural setting may imply that aiming at a strict quota is not feasible. In these instances, it may be more applicable to allow investors and nucleus farmers to choose another alternative for promoting women's inclusion from a menu of interventions. Subproject screening will however pay attention to disadvantaging women through this process, taking into account aspects such as: (i) supporting shifts to commercial agriculture for women (in the case, for example, of maize where women are more likely to channel their yields to home consumption rather than the market); and (ii) avoiding the clustering of women in low-wage activities.

92. ***Gender sensitive access to information.*** Investors will be encouraged to design extension services in ways that ensure women can access necessary information. This may require hiring female extension workers or the adoption of other techniques to ensure that women benefit from extension service systems put in place.[37] In addition, investors will be encouraged to promote a broad definition of extension services, to promote capacity development among female farmers (e.g., record keeping, use of credit, and basic financial management).

93. ***Sensitization activities that target women.*** The project will finance a series of sensitization activities which would include community consultations during the project implementation period. The goal of this campaign will be to raise awareness, among both female and male community members, of potential consequences concerning the change brought about by the project such as the household-level risk related to agricultural production and subsequent vulnerability, shifts in the allocation of household resources and assets, time use for income generating activities, altering divisions of responsibilities and income patterns. These information dissemination activities could include mass media but could also build on small-group discussions within communities and tapping into women leaders.

94. ***Recognizing women's time constraints.*** As frequently outlined, especially women from poor and rural households spent more time on household work and care than men despite actually working longer hours if all productive activities are taken into account. This is especially true if small children are present in the household.[38] Therefore, the project recognizes the importance of measures with the potential to partially lift the time constraint placed on women and, thus will promote the assessment of their implementation.

95. ***Women's representation, participation, and voice.*** The project will encourage the formation of women's groups, associations, and organizations as well as increasing participation of women farmers in FBOs or Producer Organizations. In addition, women's participation will be promoted along other relevant dimensions of the project such as the safeguards instruments and in regards to the approach of benefit-sharing. Lastly, women's voice will be channeled through a culturally-appropriate and project-wide Grievance Redress Mechanism (GRM) which will be detailed in the PIM. It is expected that the GRM will build on strategic partnerships with groups such as FIDA (which has trained paralegals in communities), and WiLDAF.

96. These interventions will balance the need for sensitivity to existing social norms and the utilization of best practice both from Ghana and regionally.

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[37] The Gender and Agricultural Development Strategy notes that there is a bias towards men in extension service delivery resulting from a number of inter-related factors including a preference for male extension workers to approach male farmers), a limited number of female extension workers, limited time available to female farmers to attend training and lower agency on the part of female farmers to seek information.

[38] World Bank (2011), **World Development Report 2012**, Report No. 69617, World Bank: Washington D.C.

Benefit Sharing

97. The project will involve voluntary arrangements between investors and land owners over land use. In some cases commercial agriculture arrangements will rely on outgrower schemes, while in others outgrowers may be associated with a nucleus farm that investors lease from communities or the state. In addition investors may, as part of their corporate social and environmental responsibility, have an interest in providing monetary and non-monetary benefits to communities (such as infrastructure rehabilitation, resources for development projects, scholarships, etc.). If not managed properly the provision of these resources could be subject to elite capture and may not be aligned to community needs and development priorities.

98. In order to minimize the risk of elite capture in these instances, the design of the project has incorporated a mechanism to promote benefit-sharing and elements to increase the enabling environment for benefit-sharing. The model lease which will be prepared under Component 1 will form the basis of the community level engagement between communities and investors. This engagement will be guided by a set of principles including community focused discussions and negotiations over land use; corporate social and environmental responsibility and other forms of investor engagement in the community; and transparency of benefit streams to communities. In turn, communities will also receive guidance on how to engage with investors which will include: the preparation of a community platform with which investors could engage,[39] adoption of community participation in decision-making, and requiring investors to adopt a community-level publish-what-you-pay approach. Where necessary – for example in the case of emerging investors – support will be provided to investors on engagement with communities including corporate social and environmental responsibility.

99. The project will also promote benefit-sharing through design features that include: capacity support to participating communities in areas such as negotiation, mediation, legal issues, development planning, gender training, and monitoring. Also to be promoted in project design is transparency and consultation and social accountability. (The tools would be financed out of the community capacity support). While voluntary in nature, the project is likely to target support to arrangements in which the proposed investors and community/ small-holder participants commit themselves to substantive benefit sharing arrangements. This will be reflected in relevant sections of the PIM and in particular the eligibility criteria for the grants elements.

Grievance Redress Mechanism

100. The project design will incorporate a comprehensive project-wide GRM which will enable a broad range of stakeholders (including investors, smallholders, and community members) to channel concerns, questions, and complaints to the PIU (and where necessary to other actors). By necessity, the GRM will be multi-faceted, designed to:

[39] Community platforms can be created or existing platforms can be used. Community platforms could: be elected; serve as an interface between communities and investors; use community driven time-lines for dialogue, negotiation, development of agreements, etc.; have a minimum representation (percent) of women; and adopt measures to ensure broad participation.

accommodate inputs from communities, investors, and external stakeholders; respond to issues related to a broad range of project implementation issues; harness existing and accepted systems for grievance management; forge relevant partnerships with third-parties; and where necessary appropriately align itself with existing legal mechanisms. Arrangements for establishing and monitoring the GRM will be laid out in detail in the PIM. It is anticipated that the social scientist within the PIU will be charged with managing and monitoring the GRM and that training will be provided as necessary.

F. Environment (including safeguards)

101. The project triggers the following environmental safeguard policies: Environmental Assessment (OP/BP 4.01), Natural Habitats (OP/BP 4.04), Pest Management (OP 4.09), Physical Cultural Resources (OP/BP 4.11), Forests (OP/BP 4.36), and Dam Safety (OP/BP 4.37). The Borrower has prepared an ESMF suggested by the triggering of OP/BP 4.01 which also addresses issues related to 4.04; 4.11; 4.36 and 4.37. A PMP has been prepared to fulfill OP 4.09 requirements. Both the ESMF and the PMP have been publicly disclosed in-country and at the World Bank InfoShop on November 22, 2011.

102. The project is rated as a category A project. It is expected to have positive environmental impacts through its support for commercial agriculture investment schemes that promote the better use of land and water resources. Potential environmental risks could include point and nonpoint pollution of water sources, other issues associated with the use of agricultural chemicals, and negative environmental impacts associated with the rehabilitation of irrigation or small-scale civil works on water stations and/or warehouse for food processing or storages: (i) construction, rehabilitation and maintenance of irrigation canals, extension of power lines to connect commercial farms and agro-processing facilities; and (ii) agricultural development and commercialization which will lead to increased production volumes and value added processing and marketing capacity of agribusiness involved in commodity chains and warehousing facilities. The project would be demand-driven, led by the public-private partnership orientation, and would possibly explore a variety of sellable agriculture crops developable in Ghana, including transgenic. If so, the project will proceed with environmental safeguards consistent with international good practice and the regulatory framework of the host country. In particular, development of such crop in either project location would need to be carried out in accordance with the obligation of Ghana under international treaties to which it is a party. Potential adverse environmental impacts associated with the proposed activities such as: post-harvest and handling equipment and means; technology and marketing at agro-enterprise level; and handling, transportation, storage and processing assets improvements, will be low intensity, minor, site specific, and handled under safeguard measures already in place for ongoing activities.

103. In order to comply with national regulations and World Bank safeguards policies, as well as basic USAID regulations requirements, the borrower has prepared both an ESMF and a PMP. The ESMF has set forth the basic principles and prerogatives to be followed once there is a clear definition of project intervention areas, and during implementation. It has also made provision of a social and environmental screening form that each sub-project candidate for project financing would undergo to ensure appropriate compliance with

safeguards policies prior to implementation of the given activities. Likewise, the PMP is mainly driven by the fact that intensification of agricultural activities could lead to increased use of pesticides and herbicides, that if unmanaged could result in negative impacts, on both the physical and natural environment. Sufficient provision is been laid out by the ESMF to ensure appropriate capacity building for all key stakeholders involved in project activities and intervention zones.

104. Once the physical locations and design of the intervention areas are defined, the Borrower will prepare and timely disclose publicly a site specific Environmental and Social Impact Assessment (ESIA) to provide the necessary mitigation measures for any foreseen social and environmental aspects on the proposed intervention site. The ESIA will also be publicly disclosed both in-country and at the InfoShop prior to the physical start of the said activity.

105. Mitigation measures under the Project will include the application of Integrated Pest Management (IPM) practices and the application and promotion of pesticide management practices outlined in the guidelines of the International Code of Conduct on the Distribution and Use of Pesticides; risk management for transgenic crops through the national bio-safety framework and international best practice; and the use of ESIA as appropriate for minor civil works.

106. The World Bank OPs 4.04 and 4.36 have been triggered in this project as there is a possibility that the project may affect or be close to some critical habitats and will involve some afforestation/ reforestation activities. While the project is not expected to affect critical natural habitats, ESIAs and ESMPs prepared during implementation will address any impacts to natural habitats. The project will avoid adverse impacts on natural habitats and, where necessary, appropriate plans will be prepared and/or offsets established to mitigate any impacts. Similarly, for forests, the project may involve some forestation activities. Management Plans will be prepared as and when necessary to avoid or adequately mitigate these impacts, especially on neighboring communities.

107. The project also triggers OP 4.37. With respect to dam safety the VRA as operator of Kpong hydro-power scheme has carried out a dam safety assessment in 2011. OP 4.37 recommends that VRA should continuously carry out the dam safety assessment since the safety of the Kpong dam influences the performance of the project. In fact, VRA is obliged to carry out periodic inspections, and is also responsible for any additional dam safety measures. VRA will provide details of these inspections to MOFA. In any case VRA and MoFA will formalize this arrangement through a memorandum of understanding.

G. Other Safeguards Policies triggered

108. The project also triggers OP/BP 7.50 as some project activities are expected to involve use of irrigation water from the Volta River. The Volta River flows through six riparian countries namely Benin, Togo, Ghana, Ivory Coast, Burkina Faso and Mali. It is the Bank's assessment that the Project will not cause appreciable harm to the other riparian states and will not be appreciably harmed by the other riparian entities' possible water

use. The Government submitted a Notification Letter to all riparian states informing them of the proposed project activities and their impact on water use in order to obtain their no objection through the Volta Basin Authority (VBA), an authority established by treaty among the riparian countries, empowered to authorize the development of infrastructure and projects planned by its member-countries that could have significant impacts on the water resources of the basin. No objections were received.

H. Public Consultation, Participation and Disclosure

109. The ESMF, PCP, RPF and PMP were prepared in compliance with national regulations and Bank safeguard policies, as well as USAID regulations. Their preparation followed a broad participatory consultation process with all relevant stakeholder groups, and was consistent with the approach adopted at Project inception. The RPF preparation followed the same approach. As a Category A project, it was agreed to have a separate comprehensive report on Public Consultation and Participation that will clearly explain the ways and means adopted to ensure meaningful and participatory stakeholders' consultation on the importance of the project with the view of fostering broader community support. Because public consultation and participation is an iterative process, therefore this participatory approach will be carried along throughout project implementation, supervision and evaluation. The ESMF and the PMP were disclosed in-country and at the InfoShop on November 22, 2011; the RFP and PCP were disclosed in country on January 13, 2012 and at the InfoShop on January 30, 2012.

110. Prior to disclosure in-country and the Bank's InfoShop, a series of stakeholder workshop were organized by MoFA, involving project stakeholder groups in public agencies in the Accra Plains and the SADA Zones and representatives of various others government entities including extension services, Environmental Protection Agency (EPA), professional organizations, farmer organizations and civil society/NGOs. This approach was used to present the results of the studies, foster ownership, and garner input from these stakeholders to improve the quality and soundness of the instruments. Recommendations from these stakeholder workshops have been reflected in the final safeguard instruments, prior to disclosure. All these recommendations and relevant provisions from the three sets of safeguard instruments including the PCP will be adequately reflected in the PIM.

Annex 1: Results Framework and Monitoring

REPUBLIC OF GHANA: Commercial Agriculture Project
Results Framework

Project Development Objectives

PDO Statement

The project development objective (PDO) is: increased access to land, private sector finance, input- and output-markets by smallholder farms from private-public partnerships in commercial agriculture in Accra Plains and SADA zone.

Project Development Objective Indicators

Indicator Name	Core	Unit of Measure	Baseline	Cumulative Target Values					Frequency	Data Source/ Methodology	Responsibility for Data Collection
				YR1	YR2	YR3	YR4	End Target			
Yield per hectare of major crops on nucleus farms and in out-grower schemes (disaggregated: by crop: maize, rice, soya, and by Accra Plains/ SADA zone)	☐	MT/ha	0	20%	40%	70%	100%	100%	Annual	MoFA annual reports	PPMED
Area under formal commercial arrangements (disaggregated by nucleus farms and out-grower schemes, Accra Plain/SADA zone, farm size)	☐	Ha	0	1,000	5,000	10,500	18,500	25,000	Annual	Survey	PIU/ PPMED
Formal and/or semi-formal marketing arrangements for smallholder farms (disaggregated by Accra Plan/SADA zone, farm size, formal/semi-formal)	☐	Number	Baseline under preparation						Annual	Project MIS	PIU/ PPMED
Gross Margins of selected crops (disaggregated by: Accra Plains, SADA zone)	☐	GH¢	Baseline under preparation					100% increase	Annual	Value Chain Survey	Consultants/ PPMED

Direct project beneficiaries	☒	Number	0	5000	10000	20000	30000	50000	Annual	Project MIS	PIU/ PPMED
Female beneficiaries	☒	Percentage	0	1500	3000	6500	10000	17000	Annual	Project MIS	PIU/ PPMED

Intermediate Results Indicators

Indicator Name	Core	Unit of Measure	Baseline	Cumulative Target Values YR1	YR2	YR3	YR4	End Target	Frequency	Data Source/ Methodology	Responsibility for Data Collection
Protocol/framework for dealing with investors at agricultural sector level established (Component 1)	☐	Yes/No	No	No	Yes	Yes	Yes	Yes	Annual	Review of relevant documents	PIU/ GIPC
Area entered in the Land bank (Component 1)	☐	Ha	0	1000	5000	10000	25000	50000	Annual	Land bank records	PIU/ Lands Commission
Model lease agreement developed (Component 1)	☐	Yes/No	No	No	Yes	Yes	Yes	Yes	Annual	Review of model lease agreement documentation	PIU/ Lands Commission
Framework for out-grower scheme developed (Component 1)	☐	Yes/No	No	No	Yes	Yes	Yes	Yes	Annual	Review of framework out-grower scheme	PIU/ MoFA
Accra Plain PPP transaction is closed (Component 2)	☐	Yes/No	No	No	No	Yes	Yes	Yes	Annual	Review of relevant document for the PPP contract	PIU/ MoFEP
Smallholder participation in Accra Plain PPP (% of smallholder project area) (Component 2)	☐	Percentage	0	0	25%	35%	40%	40%	Annual	Survey	PIU/ MoFA
Formal jobs directly created in PPP arrangements (disaggregated by storage, agri-business, nucleus farms, etc.) (Component 2 & 3)	☐	Number	0	500	1000	2000	4000	8000	Annual	Survey	PIU/ project partners
Farmers and others who have applied improved technologies or management practices (disaggregated: Accra	☐	Percentage	0	20%	40%	60%	80%	80%	Annual	Value Chain Survey	Consultants/ PPMED

Plains/ SADA zone, farm size, technology, irrigated/ rainfed, gender) (Component 2 & 3)											
Public-private partnerships closed in SADA zone (Component 3)		Number	0	10	50	100	150	200	Annual	Value Chain Survey	Consultants/ PPMED
Total storage capacity (Component 3)		MT	77,000	77,000	85,000	100,000	120,000	135,000	Annual	Survey	Consultants/ PPMED
Total value of private sector participation in PPP as a direct result of GCAP implementation (dis-aggregated by region) (Component 2 & 3)		GH¢	0	0.5m	4m	8m	15m	30m	Annual	Survey	PIU/ project partners
Value of incremental sales (collected at farm-level) attributed to GCAP implementation (Component 2 & 3)		GH¢	Baseline under preparation					200% increase	Annual	Value Chain Survey	Consultants/ PPMED

Annex 2: Detailed Project Description

REPUBLIC OF GHANA: Commercial Agriculture Project

1. The objective of the proposed operation is increased access to land, private sector finance, input- and output markets by small-holder farms from public-private partnerships in commercial agriculture in the Accra Plains and SADA zone. It will do so by seeking to advance the twin pillars of (i) reducing project risks facing agri-business investors by inter alia buying down financial risks and clarifying the rights and obligations of all parties affected by agricultural investments; and (ii) improving the effectiveness of public support – including financial support – that seeks to leverage such investments on the basis of well defined market failures and/ or externalities. Results will be achieved through three interrelated sets of interventions. Component 1 seeks to realize improvements in the broad enabling and policy environment to reduce risks and uncertainty and reduce the up-front establishment costs facing investors while improving the governance and accountability arrangements by which investments occur. These are not spatially focused by design, although their application will imply a specific location. This will likely – but not necessarily – overlap with the focus areas of the other two components.

2. ***Geographic Focus:*** Component 2 and 3 – described in full below – will support the application of a set of instruments to leverage private investment in socially inclusive commercial agriculture. While similar in purpose, the two approaches differ in their modalities in accordance to anticipated investment opportunities that are in turn contingent on prevailing agro-ecological conditions and other factors that determine underlying business opportunities. ***The Accra Plains*** is a large area of approximately 200,000ha that is adjacent to the Volta River, downstream of the Akosombo Dam, in close proximity to Accra and Tema and in the coastal zone with a bi-modal rainy season. Notwithstanding previous ambitions to develop the Accra Plains under large-scale irrigation scheme, some of which date back to the 1950s,[40] much of the area remains under rain-fed production systems. However, a number of more sophisticated operators have established on lands alongside the Volta River, particularly along the western bank. These include multinational investors in high-value horticulture exports such as pineapples and bananas[41] and local investors in irrigated cereals and vegetable production.[42] A second pre-feasibility study was commissioned by the Government with

[40] When originally conceived, the Akosombo Dam – the first IDA Credit to Africa – was to have an off-take to provide gravity-irrigation for the entire 200,000ha. However, this proposal was rejected at some point during the design of the dam. Other pre-feasibility studies – such as the Kaiser Engineering study of 1983 and the Studi Study of 2010 – investigate the options for irrigation of a similar area but using water pumped up from down-stream of the hydro-electric scheme.

[41] For instance, Golden Exotics is the Ghanaian subsidiary of *Compangie Fruitière*, the leading fruit producer in the ACP region with 350,000mt of bananas, 80,000mt of pineapples and 10,000mt of papayas and other minor products. It has a UK-based distribution company including an integrated logistic operation in the African Express Line that managed the shipping of 900,000 pallets per year (**Horticulture Exports from Ghana: A Strategic Study**, World Bank, June 2011).

[42] For instance, Cassi Farms is a local investment in approximately 160ha that started in 2009. Having secured land from the local traditional leaders, the investment was funded predominantly though equity of local investors.

support from JICA[43] to investigate the opportunities for gravity-based irrigation using an extension of the off-take from the existing Kpong Dam. This study identified an area consisting of (i) the KIP, and (ii) an additional area of 6,900ha referred to as the new developed irrigation scheme (NDIS) that could be served from the same Kpong dam via a new primary distribution canal. KIP was developed in 1968 by GIDA for the benefit of small-holder rice farmers. This scheme remains publically managed, although performance is poor. The overall project – Accra Plains Irrigation Project (APIP) – would see the construction and operation of the new, greenfield development under innovative public-private partnership. Moreover, the new project would include mandated anchor farms as well as areas reserved for small-holder participation through out-grower arrangement. This would ensure an appropriate combination of leading commercial investor and small-holder participation. In addition, the right to develop and operate would include obligations to take over the operation and management of the existing KIP scheme as a small-holder arrangement under an out-grower arrangement.

3. The second geographical location for the project is a set of interventions targeted at the lagging region of ***northern Ghana***, under the auspices of the SADA. SADA is a new initiative launched by the Government to address the deprivation that persists in an area characterized by guinea-savannah agro-ecological conditions. It covers the three administrative regions of the Upper East and Upper West regions, and the Northern region and bordering districts from Volta region and Brong Ahafo. Collectively, this SADA zone covers 100,000 km^2 and accounts for a population of approximately 4.2 million. According to the recent Poverty Assessment (World Bank, 2010), poverty rates in the SADA zone are 52 percent compared to the national average of 28 percent.

4. The SADA zone is significantly disadvantaged compared to other part of Ghana – a consequence of historical neglect in public investment, as well as more challenging agro-ecological conditions – and the investment opportunities for agriculture and agribusiness are both more limited and likely to be of a smaller scale. Opportunities for high-value horticulture are more limited than in the South, and cereals are likely to dominate the specific value chains that present investor returns. Nevertheless, the project will retain a demand-led orientation – as compared to an effort to ‘pick winners’ which is rarely successful – by seeking to establish PPPs in a range of business activities likely to provide benefits to specific value chains.

5. ***Beneficiaries:*** Unlike other projects that directly support small-holder production, this project is seeking to provide opportunities for the entrepreneurial poor (with attention to gender) by leveraging private investments in agricultural production and processing from commercial investors – across a spectrum of scale – that provide immediate and identifiable improvements in input and output marketing opportunities for small holders. Any estimates are uncertain.

6. Moreover, by establishing new, improved ‘rules of the game’ governing the nature of commercial agriculture investments, the project is anticipated to have a substantial impact beyond those investments directly supported by the project. These impacts can be

[43] **Preparatory Study on Accra Plain Irrigation Development Project Field Report**, JICA, April 2011.

expected to occur not only in Ghana but also other countries in the region, with Ghana's 'best practice' approach being conveyed to other countries via the CAADP/ WEF sponsored Grow Africa initiatives and other mechanisms for international lesson learning.

7. Component 1 includes capacity building and technical assistance to develop frameworks and the like. Such project outputs have a potentially broad application in terms of improving land governance regime, and improving the policy environment. As such it is not possible to estimate specific beneficiary numbers.

8. Under Component 2, the project will benefit (i) the existing 2,500 small-holder farmers on the existing state-run irrigation who will now benefit from participation in the out-grower scheme[44]; and (ii) 3,000 small-holder out-growers as well as additional direct employees involved in the development of the additional 7,000ha in the Accra Plains. The exact composition of commercial nucleus and out-grower development will be determined during implementation, based on detailed feasibility study including an assessment of investor preferences, but a reasonable scenario of rice production[45] would see 70 percent under nucleus arrangements and 30 percent under an out-grower scheme.

9. Under Component 3, it is probably reasonable to expect a doubling in the number of small-holder participants of out-growers and similar arrangements from the current estimates of 10,000.[46] Moreover, additional warehousing capacity of 60,000mt would provide improved storage and reduced post-harvest losses for the production of, on average, 15,000 family farms. Finally, the development of 10,000ha of inland valleys for rice production in the North would result in incremental production of 40,000mt of paddy rice and employment of 2,000 out-growers plus additional farm laborers. (This assumes a 40:60 split in land between the nucleus and out-grower production systems.[47]) It should be stressed that additional temporary employment opportunities arise at points during the agricultural cycle.

Project Components

10. The project has four components: (i) strengthening investment promotion infrastructure, facilitating secure access to land; (ii) securing PPPs and small-holder linkages in the Accra Plains; (iii) securing PPPs and small-holder linkages in the SADA Zone); and (iv) project management, including M&E.

[44] 38 percent of the 2500 smallholders are women.
[45] This scenario is based on detailed analysis of existing out-grower arrangements in Ghana commissioned by the World Bank and undertaken by the FAO in the report on outgrower schemes.
[46] These estimates are based on discussions with key informants including USAID's ADVANCE project, as well as existing sponsors of such schemes including Wienco, Savannah Agricultural Marketing Company, Gundaa Produce Company and Premium Foods.
[47] The majority of inland valleys in Northern and Upper East regions are ideally suited for rice, due to the heavy soils and potential for water harvesting. In some valleys other crops can also be grown. However, in this document it is assumed that rice would be the preferred crop.

Component 1: Strengthening investment promotion infrastructure, facilitating secure access to land and project management (US$11.8 million: IDA US$5.9 million, USAID US$5.9 million)

11. This component will ensure that Ghana attracts fit and proper investors – not speculative investors[48] – willing and able to invest in strategic subsectors that contribute most positively to national development gains. It will promote a secure investment climate – particularly with respect to access to land – that clarifies and strengthens the rights and obligations of investors, government and affected communities. This component will also support an improved mechanism for facilitating access to land by reducing the search costs to potential investors through an expansion of a database of land suitable for investors, and by building on nascent mechanisms for actively matching potential investors with suitable land owners (i.e., past efforts at constructing a 'land bank'). In the case of land under traditional ownership, due diligence and sensitization of surrounding communities will promote an understanding of the rights and obligations from subsequent lease agreements. A 'model' lease agreement will be developed to form the basis of all subsequent investor agreements, and will include indicative arrangements for managing leasehold payments and other community development-type funds.

12. ***Sub-Component 1.1: Investment promotion and investment climate (US$2.3 million: IDA US$1.2 million, USAID US$1.1 million).*** This component will strengthen the ability of the Government to identify, attract, retain and expand investment in commercial agriculture and agribusiness. An important task will be to develop a clear framework for channeling investor interest to the appropriate agencies, similar to that developed in Mozambique under CEPAGRI that can be widely disseminated thereby ensuring transparency in interactions between potential investors and the public sector. First, the project will support, through technical assistance, the development of a multi-year strategic plan for investment promotion efforts viz. commercial agriculture, incorporating the specific investment opportunities to be supported under Components 2 and 3, as well as other priority investment opportunities identified through this activity.

13. GIPC which will take the lead in formulating and effecting investment promotion (IP) efforts consistent with this strategy and on the basis of an agreed workplan with the PIU. With inputs from GIPC's Monitoring Division, as well as from MoTI, MoFEP, MoFA and SADA, it will retain an inventory of investor interest according to the stage of the investment cycle.[49] Aftercare arrangements and overall (private investor) project monitoring will be strengthened. The unit will be provided with the necessary equipment to function effectively. The regional-office in Tamale will also be strengthened to ensure a closer presence to actual investments in the SADA Zone, as well as to facilitate improved coordination with the SADA officials to be located in Tamale.

14. A second element under this sub-component will focus on providing technical assistance and capacity building for critical policy reforms that will improve the investment climate

[48] P Collier and A Venables: Land Deals in Africa: Pioneers and Speculators, Centre for Economic Policy Research Discussion Paper No. 8644, November 2011.
[49] At present GIPC project database only records investments that are registered. The database is not kept up-to-date, reflecting absence need for improved aftercare services.

and enabling environment for agribusiness. It will also support an improved mechanism for public-private dialogue on policy issues. This mechanism will build on existing initiatives such as the Private Enterprise Foundation (PEF), the private sector dialogue established under the CAADP process utilizing the CAADP Country Team, and the structures emerging from the PSDS II.[50] The composition of the project steering committee will facilitate this collaboration: The project will be integrated into the CAADP process by having PEF on the project steering committee – PEF is also on the CAADP Country team.[51] Modest support will be provided to PEF for this purpose. Furthermore, the project steering committee will include the Chairman of the Board of the PSDS II who is mandated to be a private sector representative.[52] The institutional structure is proposed in Annex 3.

15. Second, it will support a number of key policy reforms. The specific policy reforms and the necessary technical assistance will be identified during project implementation, and will be derived from existing diagnostic studies including the Doing Agribusiness assessment and USAID's AgClir[53] with additional diagnostic assessments to be financed by the project. The policy agenda will be identified through existing agricultural sector policy dialogue including the agriculture sector working group and other forum and could also feed in into Bank's agriculture budget support program (AgDPO).[54] Given the anticipated primary function of the Business Environment Reform Unit (BERU) to be established under the PSDS II structures, good coordination with this overarching reform agenda will be important. Ideally, the agribusiness forum would identify priority reform issues, which would be confirmed by the BERU. The BERU would then utilize the technical assistance provided under this project. The Government could also propose major policy reforms that warranted inclusion in the agriculture sector development policy operation.[55]

16. Third, the project will support detailed technical analysis on the prevailing fiscal incentives to promote commercial agriculture. As reported above, in general fiscal incentives are low down the list of priorities for investors and therefore an ineffective instrument for securing investment. At the same time, current provisions imply a substantial loss to the treasury at a time when the tax base needs to be broadened and deepened. This sub-component will support an appraisal of the historical effectiveness of existing fiscal incentives, and the scoping out of reforms to the fiscal incentive structures to respond to real investor constraints with a view of establishing a more effective

[50] The draft Horticulture Strategy (NRI, 2010a) proposed the development of a Ghana Commercial Horticulture Development Authority that would serve the interests of the industry.
[51] The CAADP Country Team is the steering committee mandated under the CAADP process that is responsible for overseeing implementation of a country's national agriculture investment plan.
[52] Second National Medium Term Private Sector Development Strategy 2010-2015 (PSDS II)
[53] An update to the 2008 AgClir study as expected in 2012 and the Bank's Doing Agri-Business assessment is being finalized now.
[54] The agriculture sector working group is one of several sector working groups established that meets monthly as part of Ghana's aid architecture. It is co-chaired by MoFA and a development partner, currently the World Bank.
[55] The Agriculture sector Development Policy Operation (AgDPO) is a series of three sector budget support operations of an anticipated $50m per year for 2011 – 2013. They are based on a mutually agreed set of 'prior actions' concentrated on agriculture-related policy issues for which financing is required directly into the Government budget.

apparatus for promoting investment in commercial agriculture. This will contribute to an assessment of incentives planned by SADA to identify scope for additional measures to attract investments into the lagging regions.

17. ***Sub-Component 1.2: Improving land governance in support of inclusive land access (US$7.7 million: IDA US$3.8 million, USAID US$3.9 million).*** This sub-component focuses on supporting a suite of inter-related activities designed to help address a number of risks and constraints related to land access and local rights in the context of commercial agriculture. At national level, it seeks to address the paucity of reliable and easily accessible information concerning the potential availability of suitable land for investment. In connection with specific investments under Components 2 and 3, this sub-component will also provide support for improving the transparency and inclusiveness of land negotiations, ensuring the recognition and respect of local land rights and uses and the design of robust contractual and benefit-sharing arrangements. Specific activities under this sub-component include the following:

18. *Land facilitation mechanism (land information clearinghouse).* The project will establish a mechanism for matching interested communities with available land to interested investors. State land acquisition will not be supported under the project, in line with the Principles of Responsible Agriculture Investments (see Annex 6) – hence, the proposed mechanism will not be a mechanism by which the state accumulates land for onward leasing to investors. There have been two previous attempts at a "land bank", which have focused mainly on a database of land owners, with limited effectiveness and populated with insufficient information concerning the land to be of significant use to investors or to the Government in its efforts to promote responsible investment. The project will support the creation of a mechanism by which land owners can nominate land, and which would provide a more pro-active clearing house, providing tools for conducting due diligence and for facilitating sensitization to strengthen the appreciation of rights and obligations among investors, land owners and affected communities. The proposed functioning of the land facilitation mechanism is described in Box 3.

Box 3: Land Facilitation Mechanism

Land owners (including private land owners, family heads or traditional authorities) would propose tracts to be included in the land facilitation mechanism. These nominations would be screened to ensure that they were participatory in nature and that they were made with the informed consent of communities. The screening would also verify that there were no objections to the nomination from within the community, especially among land users and vulnerable land users in particular. Once nominated, the mechanism entity would confirm that the land is indeed available (i.e., it is not subject to contestation or currently occupied) and that, in the case of land under customary rights, the nomination by the traditional authority has the consent of the community.

The mechanism entity would also sensitize land owners and surrounding communities as to the possible implications of securing a large-scale investment. Basic soil type/land suitability analysis would be undertaken, as well as mapping of the proposed area, along with existing infrastructure (roads, power connections) and hydrological resources. This information would be gathered in an 'investment brochure' that would then be made available to interested investors.

19. *Model lease agreement.* This sub-component will support the development of a 'model lease agreement.'[56] In addition to technical assistance on legal aspects, this exercise will be supported by relevant policy, social and economic analysis, and a compilation of lessons learned from investment experiences in Ghana and internationally. A broad process of consultation would be involved, recognizing that elements of such a model lease agreement embody critical policy decisions that require broad stakeholder inputs in order to be legitimate. The output would be a template that reflects international best practice (including lessons from other sectors such as extractive industries) combined with Ghana's unique circumstances. It is expected to serve only as a guideline but could be expected to have considerable persuasive authority.

20. *Land rights/land use inventory and participatory planning*. Project supported investments will need to be preceded by a careful ascertainment of the existing rights in a proposed area, to ensure those rights are respected, to protect livelihoods, to empower communities to negotiate beneficial agreements and to ensure that investments rest upon a secure legal foundation. This will require due diligence to confirm where the legal authority to enter a transaction resides. This should be accompanied by ascertainment and, if possible, documentation of existing rights and uses (i.e., beyond allodial ownership), including those of tenants and vulnerable groups. Uses of common property resources should be ascertained and mapped, as often the perception that certain land areas are "unutilized" arises from a failure to recognize local uses of such areas that are important for livelihoods. Flowing from such an inventory, an inclusive and facilitated process of participatory planning will take place. This involves all levels of the community, including groups at risk of marginalization from these types of discussions (women, youth), to help communities themselves define areas available for investment, to determine values of land, crops and other assets, and to assess potential impacts on livelihoods. Considerable experience has been gained in a number of pilots around Ghana and elsewhere in the utilization of low-cost and culturally-appropriate technologies to map and document customary rights and in carrying out participatory processes of rights ascertainment and community-level planning. This includes experience with customary land secretariats under the Bank-supported Land Administration Project. The project will support access to the needed technology, facilitate the collaboration as needed of state land agencies, and provide means by which communities can collaborate with neutral third-party organizations with experience in the necessary technical experience.

21. *Addressing legal ambiguities or disputes affecting targeted land*. The project will not support (nor are private sector partners likely to be interested in) investments on land for which there are significant ambiguities concerning legal ownership, including disputes within communities between different claimants, boundary disputes, disputes between customary owners and the state, or persisting complaints stemming from prior state land acquisitions. When specific areas come under consideration for project-supported investments, this component will support a process of identifying and analyzing such ambiguities and disputes, and will deploy tailored mechanisms designed to help the parties reach legally robust and socially acceptable solutions. As appropriate, this may include support for alternative dispute resolution (ADR) interventions, again drawing

[56] A similar approach has been adopted in Sierra Leone, with support from the World Bank Group.

upon expertise and capacity that has developed in this area in recent years among some civil society organizations, the judiciary and land sector agencies (with LAP and MIDA support).

22. <u>*Consultation, negotiation and benefit sharing*</u>. Transparent and inclusive consultation will be essential, both *between* communities, the government and prospective investors, and *within* communities themselves (to ensure that the implications of proposed allocations of community land are both understood and accepted by the community at large, that benefits are equitably targeted and that risks of elite capture are mitigated). There is the risk that lease payments and other benefits may be negotiated exclusively between community leaders (chiefs, family heads and clan leaders) sidelining community members including users of land. The model lease will include principles for community-investor engagement and guidelines for participating communities. Capacity support to communities to help build their capacity to engage with investors (negotiation support, legal literacy and enhanced understanding of legal rights and processes, economic analysis, establishment of participatory monitoring tools, etc.) will be provided. The project will also provide support to monitoring and documentation of consultations.

23. <u>*Land investment contracts:*</u> The results of consultations and the elements of any finalized negotiation for project-supported investments need to be reflected in a legally-sound and enforceable contract between investors and landowners, articulating clearly the rights and responsibilities of the parties, and defining in clear and unambiguous terms any agreed-upon benefit sharing arrangements. The project will support the development of a model lease agreement drawing upon international best practice both in commercial agriculture and in extractive industries (from which even more detailed and analogous experience than is available in the agriculture sector can be obtained in the development of benefit sharing agreements, monitoring arrangements, dispute resolution and the like).

24. ***Sub-Component 1.3: Support for out-grower arrangements (US$1.8 million: IDA US$0.9 million, USAID US$0.9 million).*** This subcomponent will support a MoFA-led effort to develop a framework for out-grower schemes, drawing on the analysis undertaken during project preparation.[57] The output is a national framework for out-growers and contract farming arrangements, which will set out, based on wide consultation, the key elements of such arrangements that are considered to be best suited to the Ghana context. It will include a 'manual' and other technical guidance to potential nucleus farmers and off-takers to reduce the establishment costs of setting up a scheme. This framework will also provide the foundation for the direct assistance through matching grants (among other mechanisms) for establishing out grower schemes in the Accra Plains (in this sub-component) and the SADA Zone, (under Components 3, below).

25. In addition to the development of a national framework for out-grower schemes – and a 'tool kit' with guidance for investors seeking to establish such schemes[58] – this sub-component will also finance more targeted technical assistance for investors seeking to

[57] Review of smallholder linkages for inclusive agribusiness development, FAO-World Bank 2011.
[58] USAID have already developed a broad 'manual' that serves as a starting point.

set up inclusive business arrangements. The technical assistance would be provided by third-party specialist organizations contracted by the project for such a purpose and would concentrate on advice and organizational services.[59]

26. This sub-component would also provide direct assistance to the establishment of out grower schemes primarily in the Accra Plains and possibly elsewhere (except in SADA) and similar by meeting (a portion of) the establishment costs of such schemes. This could include functions such as: identifying and organizing the (potential) out-growers; grants to meet establishment costs incurred by the small-holder participants (for instance, planting material, land preparation, etc). Such support would be procured and provided directly to the beneficiaries by the project. A parallel and complementary financial commitment would be required by the nucleus to ensure some 'skin in the game'. As well as establishing new schemes, this sub-component would provide similar assistance to existing arrangements that require remedial improvements and/ or are candidates for expansion. The provision of support will be contingent on a business case that demonstrates such schemes can be financially sustainable once the one-off support for establishment has been provided. (This does not mean the assistance must be of a short-term nature – it could be that it takes three years of support to complete the establishment phase. But it does force a distinction between establishment costs – that can be subsidized– and regular recurrent costs associated with the operation of the arrangement that should be financially sustainable.)

27. Support under this sub-component would be mobilized primarily in response to an initiative from an existing or potential nucleus, in order that there is a clear sponsor of such arrangements. However, the project would seek a limited role in seeking to link up potential out growers with potential nucleus through a 'match-making' function.

Component 2: Securing PPPs and small-holder linkages in the Accra Plains (US$45.4 million: IDA US$45.4 million).

28. This component will conclude a transaction for a PPP in an irrigation investment in the Accra Plains. The entire Accra Plains area extends to around 150,000ha and the ultimate objective of Government is to fully develop the entire area. Such a development has been subject to a number of feasibility studies, the most recent being financed by the Government of Kuwait.[60] This study identified an area of about 150,000ha for initial development. However, irrigation technologies were limited to pump irrigation from the Volta, and the high cost limited the economic and financial viability of the project.

29. A more focused pre-feasibility undertaken in preparation of this project and funded by JICA[61] that considered gravity irrigation has confirmed the potential of an area of 11,570ha. This scheme would extend the existing KIP through the construction of an additional primary canal including a second gate from the existing Kpong dam. The

[59] There are a number of for profit and non-profit organizations with increasing expertise in such activities in Ghana and elsewhere.
[60] These feasibility studies are, in chronological order: the Kaiser Study (1960s), the second Kaiser Study (1983) and the STUDI study (2010).
[61] **Preparatory Study on Accra Plain Irrigation Development Project Field Report**, JICA, April 2011.

project would involve the development of 7,260ha of new irrigated land, some of which (652ha) was acquired under the original KIP but never actually developed as well as 6,454ha that is adjacent and currently under traditional ownership by family heads. (Additional information on the land tenure situation can be found in Annex 6 on Land Issues). The project would also involve the rehabilitation of the existing developed area of KIP (1,852ha) that is currently a small-holder rice farming scheme. Both the existing KIP irrigation scheme and the new scheme would be subject to new management arrangements under a PPP.

30. Specifically, the project will seek to leverage private participation in the development of the 11,000ha. The project will finance the technical assistance required to take the PPP to market. It will also meet the costs of any public subsidy that is required to incentivize a private operator by providing viability gap financing. Finally, this component will support the supervision of the concession by the appropriate regulatory/ oversight body within GoG. Detailed sub-components are described below.

31. ***Sub-Component 2.1: Technical assistance in support of the PPP Transaction (US$1.9 million: IDA US$1.9 million).*** This component will fund necessary technical assistance and capacity building of the institutions responsible for taking forward the PPP transaction. The MoFEP Public Investment Division is responsible for providing technical support within GoG; however, in line with the national PPP policy, the sector line ministry is responsible for leading the transaction. Since the PID is benefitting from generic support on PPPs under the Bank's proposed Ghana PPP Project (P125595), activities under this project will focus on support to the lead Ministry (i.e., MoFA) and in particular the functioning of the Project Delivery Team (PDT) that must be established to lead the transaction as per the national PPP policy. The structure of the PDT is described in Annex 3.

32. The project will fund a long-term irrigation PPP adviser who will report jointly to the PIU and to the PID. While primarily focused on the Accra Plains transaction, the adviser will provide expert technical guidance across the range of specific project interventions, including those under Component 3 (see below). The project will also finance a PPP pre-feasibility study to identify recommended options for a PPP modality. (The PPP pre-feasibility study will build on the existing JICA-funded report,[62] which looked in detail at engineering aspects of the irrigation development but was modeled largely on a publically-funded and managed scheme.) This will include considering issues such as:

- The merits of pursuing an integrated PPP transaction that incorporates both infrastructure development for the whole area combined with land development, compared to a separation of the two transactions;[63]

[62] See footnote 61.
[63] This issue was identified as critical in the knowledge exchange to the Pontal scheme in North-East Brazil. There, IFC had supported a PPP transaction that integrated infrastructure and agri-business development. However, feedback from prospective investors was that construction companies did not appreciate, and therefore want to take on, the business risks of running an agribusiness and vice versa. Consequently the anticipated joint venture failed to materialize.

- A ‘market test’ to assess fully the perspectives of potential investors (international and domestic) and the structure of the PPP most likely to solicit interest; and

- Potential parameters for the incorporation of small-holder participation in the PPP transaction.[64]

33. This component will also finance the necessary safeguards assessments as per the recommendations of the ESMF completed during project preparation.

34. Finally, this component will also finance generic capacity building and training on agriculture-related PPPs as a key element of MoFEP’s outreach to other sectors – in this case, agriculture and agri-business.

35. ***Sub-Component 2.2: Full Feasibility Study for the PPP and Transaction Advice (US$3.0 million: IDA US$3.0 million).*** This component will finance the full feasibility study for the Accra Plains PPP which will reflect the recommendations of the pre-feasibility study. This will include the production of a complete set of bidding documents. An international investor conference will be arranged, in order to generate significant interest among global investors; a similar event will be convened locally in Ghana.

36. This component will also fund a transaction adviser to provide international best-practice throughout the transaction process. The transaction adviser will undertake all the technical elements of the transaction processing, in line with the procedures, and under the authority of the PDT.

37. ***Sub-Component 2.3: Organizing small-holder participation in the PPP (US$0.5 million: IDA US$0.5 million).*** Inclusive agricultural development is critical to this project, and there is a specific need to ensure the Accra Plains development accommodates existing small holder farmers. This includes existing participants of KIP, as well as users of the land originally acquired in the 1970s under the KIP and not developed, plus smallholders within the project footprint on land still under customary rights. This component will provide for specific activities to ensure the modality for the PPP concluded in sub-component 2.2 incorporates the optimum arrangement viz. small holder participation.

38. Specifically, this sub-component will:

- Finance an assessment of alternative mechanisms for small holder participation in an irrigation-based PPP, including for instance through equity stakes or other innovative arrangements;

- Meet the costs of the implementation of the recommendations of the assessment, in line with recommendations and in a manner consistent with the applicable ESMF. This component will not finance compensation payments for any necessary

[64] For instance, the PPP Transaction for the Pontal scheme in Brazil included a mandatory out-grower scheme on a prescribed portion of the total development area.

resettlement (although this is likely to be minimal given the centrality of small holder participation in land development).

39. ***Sub-Component 2.4: Viability gap funding for the PPP (US$40 million: IDA US$40 million).*** This sub-component will be implemented through arrangements that are being developed by the parallel World Bank support for the Government's generic agenda for PPPs. Two options are being considered:

- The first, preferred, option is a Viability Gap payment in the form of an up-front transfer to the project developer. This would be determined through a competitive bidding process through which potential project developers would bid against a set of defined project criteria, including both physical parameters relating to the specifications of the hardware (i.e., construction and operation of the physical infrastructure) and a set of parameters regarding the obligation to operate a socially inclusive facility that provides sustainable opportunities for existing and future small holders.

- Should potential investors not be attracted by this modality – to be calibrated as part of the 'market test' – then a second option will be considered. This would provide an 'availability payment' that was made to the scheme operator on the basis of performance standards for water provision to the water users – commercial consumers and small-holders, the latter be organized under out-grower type arrangements. The scheme developer would be selected competitively but instead of receiving a capital subsidy, a regular payment would be made throughout the lifetime of the concession contract.

40. There are merits to each approach, and a combination of the two is possible. Determining the appropriate arrangement to take to market requires a sophisticated and rigorous analysis, including market testing with potential investors. Only then can the specific modalities be identified that are most likely to solicit a positive response from investors and present best value to the Government of Ghana in terms of the economic cost and their fiscal implications. This is to be undertaken under sub-component 2.2. Consequently, the cost allocation for this sub-component is an initial estimate subject to revisions. Further details can be found in Annex 7.

Component 3: Securing PPPs and small-holder linkages in the SADA Zone (US$64.0 million: IDA US$32.0 million, USAID US$32.0 million).

41. Although economic opportunities in the north of Ghana are more limited compared to the south, previous analysis has suggested a wide range of potential investments that contribute to economic growth and national development objectives, while simultaneously offering positive financial returns to investors. An influential study undertaken by ODI (2003) radically altered the perspective of the north from a lagging region in need of perpetual transfers to a potential source of economic growth contribution significantly to the food security of the nation and the wider West Africa sub-region, especially towards the Sahel. This theme was expanded in the Northern Breadbasket Strategy that was commission by AGRA and undertaken by McKinsey &

Co. The Breadbasket Strategy identified a number of stylized business opportunities and estimated economic and financial returns based on extensive field work and discussions with existing businesses. A recent Poverty Assessment completed by the World Bank and GoG drew similar conclusions. The McKinsey & Co analysis identified the following stylized business models as having the greatest potential given prevailing endowments and existing economic conditions:

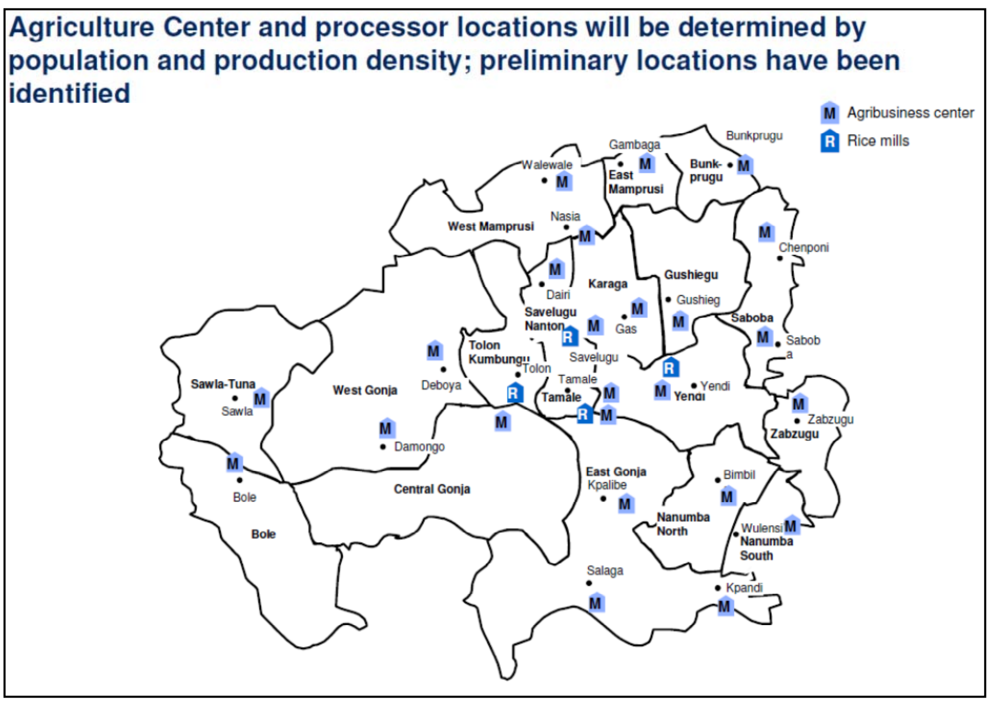
- The first set of business models are referred to as small-holder aggregation units established by local entrepreneurs and include: (i) agriculture business centers that would provide inputs and tractor services on credit and off-take agreements for output marketing from participating farmer groups; (ii) local warehouse operators and agro-dealers providing inputs, storage and off-take to surrounding small-holders; and (iii) large-scale rice mills providing off-take to local producers (large and small).[65]

- The second set of business models are socially inclusive commercial farms of 1,000 – 5,000ha producing rice and maize or soya based on nucleus out-grower arrangements.

- Finally, the third set of business models – identified, but not fully analyzed – were high value agriculture such as vegetables and horticulture.

42. Potential locations for agricultural centers and rice mills and for large scale commercial farms are identified, based on local production patterns (Figure 1 and Figure 2).

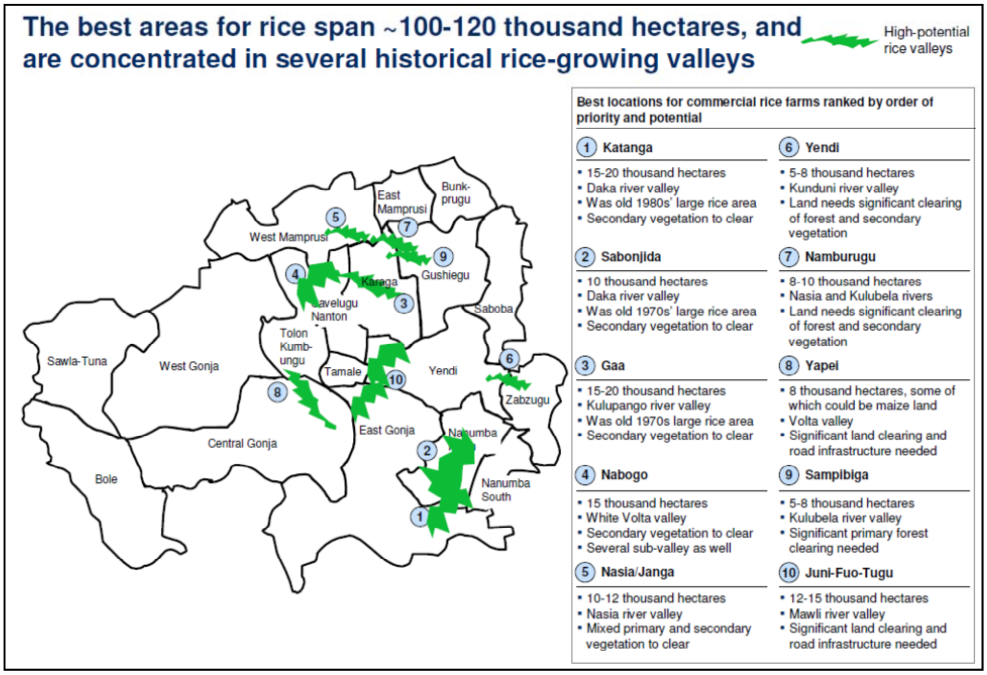
Figure 1: Potential Locations for Agricultural Centers and Rice Mills



Source: McKinsey & Co.

[65] A fourth business model is identified, namely the state-run block farms but these are public enterprises at odds with the private sector orientation of the other examples.

Figure 2: Potential Locations for Commercial Rice Farms

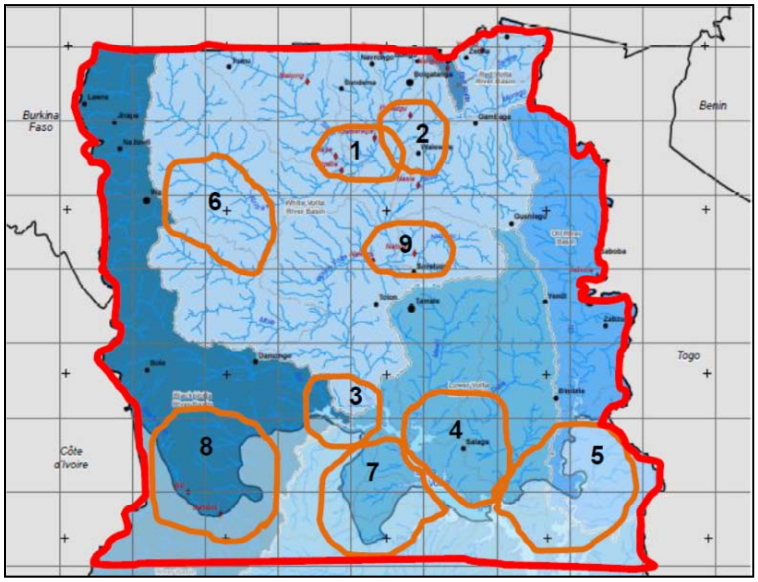


Source: McKinsey & Co.

43. This growth potential is at the heart of the newly published strategy of the SADA. The SADA strategy identifies comparative advantage in rice and other cereals, certain tree crops (e.g., mango) as well as small ruminants and guinea fowl. In terms of production systems, the SADA strategy confirms potential for large-scale commercial development, especially in sparsely populated areas that have recently been rendered free from trypanosomiasis[66]. In particular, the SADA strategy identifies the following inland valleys (see Figure 3): Fumbisi valley (1), Pwalugu area (2), Buipe area (3), Katanga area (4), Oti Rivver basin (5), Fumsi valley (6), Kabaka Gorge (7), Bui development area (8) and Nasia valley (9) (Figure 3).

[66] Sleeping sickness.

Figure 3: SADA Priority Areas for Commercial Agriculture



Source: SADA

44. Component 3 will involve support to the identification and realization of private investments in the agricultural value chain through PPPs, complementary public investments, and technical assistance. Investors could be local or international and would cover both production and processing activities as well as ancillary businesses. Community inclusion will be strengthened by directly supporting small-holder linkages through out-grower schemes and contract farming arrangements as well as other improved arrangements for benefit sharing through corporate social responsibility and revenue management at the local level. Support for specific business opportunities will initially be focused on investment opportunities in the SADA zone, based on extensive analytical work of AGRA and McKinsey & Co, and other analytical work commissioned as part of project preparation. Component 3 will be demand driven, based on viable investment opportunities that require public support. For this component the definition of PPP will be more loosely interpreted than Component 2.

45. ***Commodity selection:*** Consistent with the demand-led approach, the project will not pre-determine the specific value chains to be supported. That said the project will avoid channeling support to speculative investments in commodities for which their production and/ or value addition are unproven. The PIM will set out an overarching framework for screening proposed PPPs on the basis of commodities according to their production and/or marketing risk profile. (This will build on analysis recently concluded under the Bank's non-lending technical assistance program on agricultural risk management as well as other sources, which provides comprehensive risk profile for a number of value chains. The Project will complement this where necessary with studies of additional commodities/value chains using the same methodology.)

46. The following commodity value chains are likely to feature prominently given prevailing production patterns and market potential:

- **Rice:** Ghana imports approximately 300,000mt[67] or 400,000mt[68] of rice per year to complement local production of an estimated 300,000mt. The Government's objective is to increase local production and reduce imports. Given that imported rice serves an urban consumer market that prefers mostly low percentage broken aromatic and non-perfumed rice, any import substitution will require an agribusiness model that meets high-end consumer standards. Locally produced rice typically does not meet these standards, due to a variety of constraints related to production, harvesting, processing, and marketing. However, the potential for low-cost inland valley development for rice production exists in the North where an additional 40,000mt of paddy can be produced on 10,000 hectares in a number of inland valleys. In addition, most of the additional 7,000 hectares in the Accra Plains (Component 2) will be used for rice cultivation, potentially producing two crops per year at 5mt/ha each crop. Under that scenario, an additional 70,000mt of paddy would be produced. The incremental 110,000mt of processed rice (170,000mt of paddy at 65 percent milling efficiency) produced under Components 2 and 3 would reduce import requirements by 25 percent.

- **Maize:** Ghana is self sufficient in white maize and the Government's objective is for the country to become a net exporter of maize. Ghana already exports maize informally to neighboring countries. Small quantities of yellow maize are imported for the animal feed industry. As with soya, growing conditions for maize are favorable in the SADA zone, and the strong potential to increase production has been highlighted in the recent AGRA/McKinsey & Co. and AgDevCo studies. Existing agribusiness firms, such as Wienco, are currently investing in the maize value chain. Based on discussions with ADVANCE, Wienco, Savannah Agricultural Marketing Company, Gundaa Produce Company and Premium Foods, it is estimated that more than 10,000 smallholder out-growers are supplying maize to a number of firms and farmer marketing organizations. According to some of these firms, thousands of additional farmers can be included and there is commercial potential that can be expanded. As an assumption, the number of farmers that are currently included in commercial out-grower arrangements could be doubled during the life of the project. Each of the additional 10,000 farmers would cultivate 2 hectares, of which they would use two-thirds to produce maize (estimated yield of 3mt/ha using certified seed). Under this scenario, incremental annual production would be 40,000mt.

- **Soya and cowpea:** The animal feed and vegetable oil industry imports significant quantities of soy beans and is seeking to increase its domestic supplies. Growing conditions for soya are favorable in the SADA zone, and the strong potential to increase production has been highlighted in the recent AGRA/McKinsey & Co. and AgDevCo studies. Soya can also be cultivated in a crop rotation with maize where its nitrogen-fixing properties will benefit soil health and increase overall productivity. It is assumed that soya is cultivated on one third of the land with an average yield of 2.5mt/ha. Under this scenario, incremental annual production of soya would be

[67] MoFA import estimate. MoFA production estimate is 300,000mt (MoFA Facts and Figures 2011)
[68] USAID – Ghana Markets and Warehousing Study, 2011

17,000mt. Cowpea is an alternative leguminous crop that can be grown in rotation with maize and for which there is a market.

- **Tree crops:** The Integrated Tamale Fruit Company has established a mango nucleus out-grower scheme and exports fresh and dried mango to Europe. Due to a viral disease, the company is suspending expansion plans until the problem has been resolved. Cashew production has expanded rapidly in the southern part of Northern Region. Smallholder cashew growers have since developed an interest in registering their land with the Customary Land Secretariat in order to protect their investment.

- **Sorghum and millet:** Sorghum has become a smallholder crop grown under contract farming arrangements through aggregators with breweries. Guinness in particular has provided a market for several tens of thousands of mt per year, and sorghum is therefore a possible crop for further commercial development. Millet, on the other hand, is largely a drought tolerant subsistence crop grown that complements maize and rice in achieving staple food self-sufficiency among rural households.

- **Seed multiplication:** Current production levels of seed for staple grains are reported to meet only 20 percent of seed demand. However, the seed sector is now developing, following the implementation of the new seed law that will encourage more private investment in breeding and seed multiplication. As a result, an increased level of investor interest is expected that will translate into seed production out-grower or contract farming schemes in the North.

Table 4 Production Figures for Major Crops in the SADA Zone (mt)

	Northern	Upper East	Upper West	Total
Maize	202,316	62,256	96,018	360,590
Rice	185,877	135,221	7,291	328,389
Soya	49,950	6,940	14,970	71,860
Millet	90,619	64,086	64,247	218,952
Sorghum	99,407	20,364	21,219	140,990
Cowpea	105,841	22,801	75,969	204,610
Groundnuts	227,650	73,808	196,676	498,134
Cassava	1,114,723			1,114,723

47. USAID's Feed the Future Strategy focuses on support for rice, maize and soya. The project will ensure that the majority of project funds under this component are targeted at activities that specifically support these specific commodities. This will be reflected in the co-financing modalities to be agreed between the World Bank and USAID. It will not impose additional reporting or financial management obligations over and above those required for IDA-financed projects, and as articulated in the relevant sections of the PAD.

48. Detailed activities under the various sub-components are as follows:

49. ***Sub-Component 3.1: assisting with financing of establishment costs and facilitating the development of out-grower schemes and contract farming arrangements (US$5.9 million: IDA US$2.9 million, USAID US$3.0 million)***. First-time investors in out-

grower schemes face high upfront establishment costs. In addition to investments in the nucleus operation, initial investments in establishing a smallholder out-grower or contract farming operation include the establishment of the logistics of an extension and field supervision network; initial training of farmers and supervisors; equipment for land preparation and harvesting among the smallholder farmers; and infrastructure for post-harvest activities such as cleaning, grading and bulking. Out-grower and contract farming arrangements require a number of growing seasons to develop, both in terms of developing quantity and quality, and typically the majority of the above establishment costs are incurred during the first three years of operation.

50. In order to maximize the production potential among smallholders that can be leveraged by investors and maximize rural development impact, project support will be applied through a matching grants scheme as follows:

- Matching grants for the establishment of extension services: logistics and agronomic training of supervisors and farmers, up to 80 percent matching grant contribution will be provided to firms, up to a maximum of US$250,000 over three years.

- Matching grants for the transfer of agricultural technology and technology innovation. Eligible technology transfer will be related to production, processing, storage and marketing, or communication whereby the technology transfer constitutes an innovation with clear demonstration effects and action learning value. The introduction of new seed and fertilizer technology will be supported where possible, providing an incentive to out-grower firms to introduce the most suitable and profitable technology available. This intervention is in line with overall government policy and programs that aim to increase the use of certified seed for existing plant varieties and the development of new seed technology. As another example, a contribution towards the cost of communication and ICT applications for out-grower schemes can be considered, up to a maximum of US$100,000, representing the cost of system development, technical assistance and training that will be required during the initial two years, after which the operational cost are brought down to approximately 20 percent of the initial annual cost.[69] The relevance of ICT is improved communication between out-grower firm and its out-growers, reducing the risk of side selling and improving agronomic performance as a result of information provision.

- Matching grants will be provided for technical assistance and business facilitation and mediation services to fill gaps among investors and out-growers, such as resolving specific issues of land tenure, providing advice and supporting dialogue on community-level benefit sharing, and other key tasks that are better handled through a third party.

[69] For example, Esoko, a local ICT services provider, has developed a platform for e-extension, farmer feedback, and other ICT applications relevant for the operation of out-grower schemes. Olam, a multinational agribusiness firm, is currently working with Esoko to develop a service for their cotton out-grower scheme in Upper West.

51. Detailed operational modalities for matching grants mechanisms under this sub-component will be defined in the PIM.

52. ***Sub-Component 3.2: Investing in land development for commercial agriculture (US$37.0 million: IDA US$18.5 million, USAID US$18.5 million).***[70] Commercial investments in irrigation schemes for rice production have been limited to southern Ghana. Developing commercial irrigated rice production in the North, involving water storage, pumping stations and canal systems, will require an estimated US$15-20,000/ha and would most likely make such an enterprise unviable from a financial perspective. However, recent experience from Burkina Faso suggests that the development of inland valleys will offer a viable alternative for increasing rice production (need reference) with one crop per year. At an estimated US$3,000/ha, it offers a relatively low-cost alternative water management system that requires limited capital intensive infrastructure, and has the potential of utilizing the large areas of land that are available in the North. Based on the principles of water harvesting during the rainy season, large tracts of land can be cultivated profitably in the rainy season, as evidenced by existing medium scale commercial rice farmers.

53. A number of inland valleys have been identified in the Northern Breadbasket study and in various reports of the Government of Ghana as potentially viable rice producing areas. The valleys vary in size, ranging from 1,000 to 15,000 hectares. From the valleys that appear suitable for the purpose of this project (see Figure 2), a selection will be made for a first phase, and other valleys will be screened and prioritized for subsequent phases. The selection of valleys will be based on the results of a land survey, an ESIA, and a study on topography, hydrology, and soils. A detailed set of criteria for the selection and prioritization of valleys will be defined in the PIM.

54. Greenfield investments in land development involve land clearing and leveling as well as water management interventions including contour bunding, farm roads, and farm buildings. Valleys can be developed in the following ways:

- A nucleus farm (of about 1,000 hectares), complemented by smallholder out-growers covering a similar area.

- A block of several medium scale commercial rice farmers, complemented by smallholder out-growers or farmers who otherwise benefit from services rendered by the larger commercial farmers. In the Northern Region, approximately 20 – 30 medium scale commercial rice farmers are currently farming 30 – 100 hectares each, and some work with several hundreds of smallholder farmers under different contractual arrangements.

55. Opening up inland valleys for greenfield agricultural land development will require public investments in feeder road rehabilitation (this would be financed through the existing Transport Sector Project [P102000]), connectivity to the power grid where

[70] Although rice production is likely to be the main activity, land development may also be feasible in upland parts of selected valleys where maize, soya and other crops can be cultivated.

necessary, as well as assistance in identifying suitable land (as part of Component 1). The cost of connecting a nucleus farms to the electric grid is initially estimated at US$200,000.

56. So far, investors in rice production have selected the Accra Plains and other areas in closer proximity to the main urban centers of Accra and Kumasi. In order to attract investors in the North, it will be necessary to identify and present the commercial opportunity and potential viability upfront. For selected valleys, the project will prepare a series of public information packs, costed at US$5 million. Information packs will contain the following information:

- Available land, based on information gathered from an initial land survey, including discussions with rural communities about land availability for agricultural investors;

- Issues arising from a completed ESIA;

- Topography, hydrology, soil and land suitability based on aerial photography and mapping, a hydrological survey, and soil analysis;

- A description of public infrastructure that will be in place;

- A description of possible investment support and the criteria applied to determine such support;

- The modalities for expressing an interest and bidding by potential investors.

57. The project will support investments in land development, which includes land clearing ('stomping') and leveling as well as water management interventions including contour bunding, farm roads, and possibly farm buildings at nucleus farms and adjacent out-growers. The magnitude of public investments in land development will be based on a competitive bidding/auctioning process, details of which will be defined in the PIM.

- For nucleus farms, full or partial financing will be considered, based on private investor interest as expressed during a competitive bidding process. Various mechanisms will be explored, such as upfront land development procurement to be recovered through a long term land lease, through matching grants. At a maximum, the project will contribute 100 percent of the total cost, or US$12million. A competitive bidding process will maximize investors' contributions.

- Similarly, for adjacent out-growers the initial costs of inland valley development will be fully or partially financed by the project, up to 100 percent, or US$18million. Smallholders and investors may cover a portion of the initial investment, financially or through in-kind labor.

58. Given the high capital outlay required for irrigation infrastructure that involves inter-seasonal water storage, the project does not have the resources to invest in major

irrigation schemes. However, as and when commercially viable proposals are identified, the project will consider support as follows:

- Facilitating investment planning and private financing (using parallel USAID financing facility FinGAP or other financing windows);

- Facilitating public investments in strategic road access through the Transport Sector Project (P102000);

- In cases of exceptional anticipated economic viability, explore options for public investments and PPP transactions.

59. Selection of investors will be made on the basis of a competitive process that takes into account the business model and development impact. Criteria will be developed for the selection of investors and the nature and level of support they will receive from the project. Detailed operational modalities will be defined in the PIM.

60. ***Sub-Component 3.3: Rehabilitation and new construction of agricultural storage infrastructure and processing facilities (US$20.4 million: IDA US$10.2 million, USAID US$10.2 million).*** Many smallholder farmers who produce for the market are limited in taking advantage of seasonal arbitrage opportunities. On-farm storage capacity and quality is limited, and the availability of off-farm storage and transport in rural areas is severely constrained. Smallholder farmers are inclined to sell their commodity soon after harvest, thus unable to take advantage of higher prices later in the marketing season, and foregoing financing opportunities that could potentially be leveraged by their commodity held as collateral by a bank. Similarly, small- and medium-scale traders, who are looking for both seasonal and spatial arbitrage opportunities and provide an essential farm-level aggregation function, have indicated that there is an acute shortage of storage capacity in Tamale, Bolgatanga, Tumu and Wa, all of which are locations of strategic importance for grain markets.

61. Storage capacity for food commodities in Ghana is extremely limited. Although total warehousing capacity in Ghana is estimated at 1.3 million mt, only 8.4 percent is used for storing agricultural commodities (excluding cocoa) and only 1.5 percent of the total capacity, less than 50,000mt, is located in surplus producing rural areas.[71] Across the country, many of the existing storage facilities are in poor condition.

62. In the three northern regions there are 148 warehouses with a total capacity of 77,000mt. The majority of these warehouses (78) are reported to be in bad condition, most of them owned by the government (ex-Fascom).[72] Many of the rural Fascom warehouses have a capacity of 500mt, and are located throughout Upper West and Upper East regions.

[71] Natural Resources Institute, 2009. *Final Report: Feasibility Study Towards Establishment of Commodities Exchange in Ghana* (undertaken on behalf of the Securities and Exchange Commission, Ghana)

[72] The Farmers Services Company (FASCOM) was the largest agro-inputs distributor in the two upper regions of Ghana. In 1995, the 60% government equity stake was transferred to the National Association of Farmers and Fishermen. The remaining 40% equity was owned by banks and individuals. It employed over 300 staff. FASCOM was liquidated on February 24, 2006.

Fascom warehouses were built on land that was not acquired and registered, and was handed back to the original land owners following the introduction of new land legislation in 1992. In instances where land was contested this will severely constrain the project's ability to facilitate and invest in PPP arrangements for the rehabilitation and private operation of Fascom warehouses as described below. Of those facilities (non-Fascom) that are in good condition, many are smaller community-managed warehouses of 150mt capacity, a total of 35,700mt.[73]

63. The continuing development of out-grower and contract farming arrangements as supported by this, or similar projects, will require bulking and storage centers of high quality, sufficient capacity, and in the right locations. With an estimated additional production of some 100,000mt of rice, maize and soya in the SADA zone under Component 3 of the project, there is a need for supporting the rehabilitation of existing warehouses and construction of new ones in strategic rural and urban locations. As an initial target, the project will support rehabilitation and construction of 60,000mt warehousing capacity, with the locations and individual warehouse capacity to be determined by investors.

64. Investments in warehouse rehabilitation and construction will be demand driven, following the basic principles of PPPs that require risk sharing and commitments on the part of the private sector before public resources are spent. A competitive bidding or auctioning process will identify private sector demand and provide information for structuring the transactions. Detailed operational modalities will be defined in the PIM.

65. Investing in storage infrastructure will also support the ongoing establishment of the Warehouse Receipt System, and will thus make an important contribution towards the development of more efficient and effective commodity markets in which warehouse receipts can be traded and used as collateral for commercial finance. In addition, the Warehouse Receipt System will demand grades and standards to be applied, as well as rules and procedures for contract enforcement and dispute resolution.

66. At least two donor-funded rural development programs are planning to build agricultural warehouses. First, the Northern Rural Growth Program (NRGP), funded by IFAD and AfDB, is planning to construct warehouses in many of the district centers in the project area. The proposed individual warehouse capacity is 3,000mt and warehouses would be managed by district value chain committees. Current funding levels are inadequate to fully implement this program. A design study will be carried out by consultants in the coming months, the recommendations of which will be considered for detailed planning of this sub-component. Second, an NGO affiliated with ACDI-VOCA, with funding from AGRA, is constructing 30 community warehouses of 30mt capacity each. These small units would be village-level stores, managed by the communities, and are thus complementary to the larger, more centrally located warehouses proposed under this project.

[73] IFDC warehouse inventory

67. The project will support investments in storage infrastructure through PPP arrangements and public investments as follows:

68. ***Rehabilitating 14 state-owned agricultural storage facilities and transferring operation and management to private operators***, adding 22,000mt of storage capacity. The total cost of rehabilitation is estimated at US$3.7 million, assuming a maximum level of project support of 100 percent of the cost under the second scenario below:

- Following a competitive auctioning/bidding process, the concession holder will take responsibility for rehabilitation, possibly supported by viability gap financing through a grant, in line with Ghana's PPP policy.

- Alternatively, the rehabilitation costs are borne entirely by the Government, while a competitive auctioning/bidding process identifies concession holders who take over the responsibility for operation and maintenance.

69. ***Supporting private investment in 35 new warehouses***, adding 53,000mt capacity. The project's contribution will be a maximum of 80 percent of the total cost, or US$11.1million. Different options include:

- Following a competitive auctioning/bidding process, the concession holder will take responsibility for rehabilitation, possibly support by viability gap financing through a grant in line with Ghana's PPP policy. Grant financing to meet the costs associated with physical access, connectivity of the facility to the power grid, and other justifiable costs based on viability analysis.

- Alternatively, the rehabilitation costs are borne entirely by the Government, while a competitive auctioning/bidding process identifies concession holders who take over the responsibility for operations and maintenance.

70. To guide detailed planning of the above activities, technical assistance and an implementation plan will be funded by the project where appropriate, budgeted at US$600,000.

71. The development of commercial rice production in the North requires an integrated approach. To meet international quality standards, particular attention will have to be paid to harvesting, preventing the grain from drying out to enable milling without the need for parboiling. High quality milling services will be required, of which there is limited capacity at present. In order to fill this gap, there is an opportunity for one or two government-owned rice mills, including the Nasia rice mill in Tamale, to be rehabilitated, and operation and maintenance to be concessioned out to private operators, as outlined below.[74,75]

[74] Nasia rice mill currently operates at half of its installed capacity of 35,000mt of paddy rice per year.
[75] An Indian investor, Avnash Industries, is currently preparing to build a new rice mill in Tamale. In order to secure a steady supply of paddy rice, a contract farming arrangement involving smallholders on 10,000ha of leased land in a valley south of Tamale is also under preparation. The company claims that the mill will have a capacity of

- Following a competitive auctioning/bidding process, the concession holder will take responsibility for rehabilitation of the mill, possibly supported by viability gap financing in line with Ghana's PPP policy.

- Alternatively, the rehabilitation costs are borne entirely by the government, while a competitive auctioning/ bidding process identifies concession holders who take over the responsibility for operation and maintenance of the rehabilitated mill.

72. ***Sub-Component 3.4: Business development services among agricultural service providers and investing in processing businesses (US$1 million: IDA US$0.5 million, USAID US$0.5 million).*** Agricultural service delivery to farmers is an important element of agricultural value chains. Even though out-grower schemes may provide crop specific inputs and extension, the general availability of seed, fertilizer, and agro-chemicals, and the delivery of veterinary, mechanization, and milling services will need to keep up with the growing demand by farmers as the agricultural commercialization process unfolds. Regarding agricultural inputs, a large network of agro-dealers exists and is receiving technical support from IFDC, funded by AGRA and MiDA. Mechanization services are provided by MoFA through the AMSEC program, and by private service providers. Moreover, agricultural machinery is offered for sale by the Government on credit with import duties reimbursable to the buyer. Ongoing support to existing firms mostly focuses on technical aspects rather than entrepreneurship development that would enable existing firms to expand and enhance their service delivery capacity, which is the need that the project aims to address.

73. The delivery of business development services (BDS) will be through matching grants to input dealers, mechanization centers, processors, and other service providers. The average matching grant component (assumed at 50 percent following current practice) will be US$10,000 per enterprise/BDS events, with 100 enterprises/events targeted over five years. The provision of BDS will be at the individual firm level as well as in groups, and grant amounts can vary from US$2,000 to US$60,000. There will be an element of BDS demand generation as part of the group-oriented activities. The implementation of BDS activities under this component will be guided by the ongoing Bank-funded Micro, Small and Medium Enterprise (MSME) project (P085006) and the detailed approach will be defined in the PIM.

74. ***Component 4: Project management, monitoring and evaluation (US$14.3 million: IDA US$7.1 million, USAID US$7.2 million).***

75. This subcomponent would finance the operational costs of the project implementation unit. Details of the institutional arrangements for project implementation are set out in Annex 3. This would include the operational functioning of the project implementation unit, including necessary training and capacity building for the staff (including in procurement and financial management capability).

180,000mt p.a. which, if true, could absorb as much as 50 percent of rice production in Northern and Upper East regions combined. The mill is estimated to cost US$22m, and the company is in the process of securing financing.

Annex 3: Implementation Arrangements

REPUBLIC OF GHANA: Commercial Agriculture Project

Overall Orientation

1. The project will be implemented within existing public sector structures while adopting an appropriate private sector orientation. This reflects the fundamental ethos of the project to leverage private investment, and the role of the public sector to facilitate such investments based on a robust business logic and the efficient deployment of necessary public goods. Implementation arrangements have been informed by the following principles: The project will: (i) utilize existing institutional mandates and capacity – however limited – and will not create project-specific duplicates; (ii) put particular efforts into institutional coordination across MDAs through strong mutually beneficial partnerships between the responsible Ministry and other parts of Government; and (iii) ensure that project management incorporates private sector perspectives essential for the establishing of long-term PPPs and enters into arrangements with project developers where appropriate.

Project Oversight

2. Strategic oversight of the project will be provided by a project steering committee. This Committee will be chaired by the Minister of Agriculture of his representative and include Ministers or representatives of the Ministers for Finance and Economic Planning and Trade and Industry. It will also include the Chief Executives of the GIPC, the Lands Commission, SADA and GIPC. In addition, the Director of the PID in MOFEP will also be a member. Private sector representation will also be important, including the Chief Executive Officer of the Private Enterprise Foundation and others to be confirmed.

3. Linkages with other relevant bodies will be important. Two particularly important structures are the oversight committees of the PSDS II and the CAADP implementation committee. The latter is also chaired by MoFA and hence coordination is assured; moreover the Director of PEF is a key member also. Linkages to the PSDS II are more complex given that there are several sub-committees under the PSDS II implementing structure of relevance to the project. One option to be explored is for this project steering committee to be formally connected with the agri-business group under the PSDS II structure.

4. The steering committee will be responsible for approving the annual workplans and budgets and policy guidance.

National Project Management

5. The project will be implemented by a PIU under the responsibility of MoFA. The Project team will include all necessary technical staff including financial management and procurement staff, social scientists (with expertise in project relevant areas), environmental specialists, adequate monitoring and evaluation capacity and project accountants etc. Where necessary, these will be funded by the project.

6. In addition, the PIU will be staffed with senior-level technical staff from the partner MDAs, on secondment from their 'home' institutions. New staff may be recruited. In such cases, it will be essential that the leadership of the partner MDAs are involved in the recruitment. These technical staff will be responsible for providing the interface between the PIU and each of these partnering MDAs.

7. The role of the partnering MDAs is two-fold: first, they will be responsible as a 'service provider' for managing specific elements of project activities, as defined in the workplans. Funding for the operational costs associated with this function will be provided under the project. Second, in light of capacity constraints, these partner MDAs will also be beneficiaries of capacity building efforts by the project. A preliminary task will be to undertake a detailed needs assessment to confirm these requirements.

8. The PIU will be located in Accra. A satellite office will be established in Tamale to implement Component 3 and to supervise those activities under Component 1 taking place in the SADA zone. The Tamale sub-PIU will work closely with the regional offices of all partnering MDAs in the SADA zone.

Management of the Matching Grants

9. The project will deploy matching grants to (i) help meet the establishment costs of socially inclusive investments (referred to as sub-projects) and (ii) provide low-cost business development services to value chain actors (referred to as agri-business service grants. The PIU will include a Matching Grant Desk to appraise, approve and monitor the respective sub-projects and agri-business service grants, in accordance with the provisions set out in more detail in the Grants Manual, which will be included in the PIM. The PIM will set out clearly eligibility criteria with respect to beneficiaries, and the list of eligibility expenditures for which awards may be utilized. These criteria and terms are conditions are expected to reflect the following key considerations:

10. ***Matching Grants:*** The proposed investment or out-grower arrangement sub-project must be initiated by an eligible beneficiary as defined by eligibility criteria specified in the PIM. (Given the ethos of the project, it is likely that in the majority of cases it will be the nucleus who seeks out-growers, in order that the markets are by definition established. However, the project will consider applications initiated by small-holder groups wishing to form out-growers where a potential nucleus or equivalent has been identified.) This is likely to include, *inter alia:* (i) an ability to manage the grant, including a matching financial contribution of not less 20 percent, and (ii) a financial and business viability plan that also articulates how the proposed project contributes directly to the project development objectives. The latter should include metrics on: the number of small holder beneficiaries and the mechanism(s) by which benefits will accrue to them (e.g., improved yield; price premium; use of improved seeds – and how this will be achieved). Eligible beneficiaries must also have the required technical, financial management and procurement capacity to implement the grants in compliance with the guidelines set forth in the PIM. The project will strengthen their capacity as necessary.

11. ***Agri-business Service Grants***: The proposed grants for business development services will be initiated by an eligible recipient that has met the eligibility criteria specified in the PIM. Recipients can be businesses and associations active in the agricultural value chains that have an express need for training in specified BDS services. Beneficiaries should demonstrate an ability to provide a financial or in-kind matching contribution of not less 20 percent of the total cost of the pertinent, and have the required technical, financial management and procurement capacity. The project will strengthen their capacity as necessary. Beneficiaries may be eligible to receive subsequent BDS grants with satisfactory completion of previous grants, in accordance with the terms of the Grant Agreement.

Ensuring Private Sector Competencies in Project Implementation

12. The credibility of the project – and hence its effectiveness – is contingent on the ability of the project to reach agreements with potential private investors of sustainable mutually beneficial partnerships. Radical options were considered during project preparation – such as semi-autonomous agencies free to recruit a wide range of staff on terms separate from the civil service (this approach has been deployed by the MCC program, under MiDA). Similarly, consideration was given to a special delivery unit that would be essentially contracted on a performance basis and established arms-length from Government. Neither approach generated strong support among stakeholders. That said, some of the elements of these models have merit and will be reflect in the following proposed modalities for project implementation:

- First, the project team must have the requisite private sector orientation, necessary skills and competencies to engage effectively with business leaders and to articulate – and understand – sound business propositions. It will be insufficient for the PIU to be staffed just with members of the civil service. A staffing needs assessment will be undertaken to identify the necessary skill sets. This assessment will examine a range of alternatives including individual recruitment of necessary staff, or the procurement of long-term advisory support from a firm.

- Second, there is a need for the PIU to engage potential project developers early in the project identification process. Consideration will be given to replicating the arrangement already in place with AgDevCO (as well as possibly extending this arrangement to the next phase). There is a tension between engaging in PPPs with potential project developers at an early stage and ensuring transparency in the selection of those partners and value for money with respect to the public contribution to subsequent investments. Modalities will be investigated that respect procurement rules and transparency that allow strategic partnerships to be formed early on during the project identification stage.

13. It is likely that a number of different modalities will be deployed and the project will track and evaluate experience in order that comparative lessons be learned.

Interface with the Savannah Accelerated Development Authority

14. SADA was established in 2010 with the objective to expedite development in the lagging region of Northern Ghana. Governed by an independent Board of Directors appointed by the President, it has an Executive based in Tamale, the capital of the Northern Region, with a small office in Accra. As per the SADA Strategy, it is primarily conceived as a coordination body that seeks to leverage existing programs of MDAs into a more effective effort for tackling the development challenges of Ghana's most deprived areas. In addition, a SADA Development Fund has been established with a notional allocation of GH¢25 million.

15. In principle SADA would be a key partner in implementing Component 3, under the oversight of the national-level PIU. However, the institutional construct to operationalize SADA is still being established. Although a Board has been convened and a number senior positions in the secretariat appointed, the secretariat lacks the capability for implementing the project. Consequently, the following approach has been agreed with the Government:

- In addition to the Chief Executive of the SADA being on the project steering committee, workplans and budgets relating to the activities focused on the SADA Zone would be reviewed by the SADA Board;

- It is envisaged that over time, the satellite office for the SADA zone will form the foundation of the agricultural modernization unit proposed in the organizational structure of SADA. Conditional on the overall structure of the SADA Secretariat being complete, the satellite office would 'migrate' formally into the SADA structure. This would need to be confirmed at such a time, and would be subject to all the necessary procurement and financial management assessments by the Bank.

16. In parallel, DFID is likely to support a program of capacity building to help establish the SADA Secretariat and the project will coordinate closely with that effort.

Project Development Team for specific agriculture-related PPP Transactions

17. Under GoG's National Policy on PPPs, each PPP transaction above a certain size is taken forward by the Project Delivery Team. The PDT should be understood as a temporary team of existing officials from relevant MDAs that are assigned specific roles for concluding a particular transaction. As such, the appointment of a PDT does not require additional staff appointments. The project will fund the operational expenses associated with the PDT fulfilling its terms of reference. In line with the National Policy on PPPs, the PDT will be chaired by MoFA, as the lead MDA. It is expected that the PDT for the Accra Plains transaction will draw largely on members of the project team, as appropriate.

Financial Management, Disbursements and Procurement

Financial Management

18. In line with the guidelines as stated in the Financial Management Manual issued by the Financial Management Sector Board on March 1, 2010 an FM assessment was conducted on Treasury Unit of MoFA – the lead implementing entity of the activities to be financed under the Project. The objective of the assessment is to determine (a) whether MoFA has adequate financial management arrangements to ensure project funds will be used for purposes intended in an efficient and economical way; (b) the project's financial reports will be prepared in an accurate, reliable and timely manner; and (c) the project's assets will be safeguarded.

19. The FM assessment also included a review of (i) the number and quality of financial management staff at the Ministry that will have fiduciary responsibilities under the project; (ii) FM organizational structure of the Ministry and its impact on the internal control processes to be employed under the project; and (iii) the proposed FM systems and processes to be established in support of the implementation of the project.

20. The assessment was carried out for the government's accounting function within MoFA, with the view to mainstream the financial management of this project. MoFA's Treasury Unit is headed by a Financial Controller who reports to the Chief Director, the administrative head of the ministry. The main implementing agency for the project is MoFA. Consistent with the use of country systems, and based on the satisfactory experiences of previous projects within MoFA, the financial management arrangement will to the extent feasible be mainstreamed within MoFA.

21. The Treasury Unit of MoFA will be responsible for ensuring that adequate financial management arrangement exists throughout implementation. The specific operational accounting and related function will be the responsibility of a Principal Accountant. The policies, guidelines and operational procedures required to support implementation will be consistent with the Governments financial procedures and also in line with IDA policies.

22. The assessment of the financial management arrangements at MoFA concludes that there are adequate systems in place that satisfy the Bank's minimum requirements under OP/BP 10.02. In summary, the existing state of FM systems and the direction and pace of ongoing improvements have fostered confidence and would enable significant reliance on country systems in the areas of budgeting, budget execution (including accounting and internal controls), financial reporting, and external auditing.

Country Issues

23. Ghana's fiduciary environment for utilizing both budgetary funds and donor funds is considered adequate. Under the GIFMIS project[76] funded by the Bank and other development partners, Ghana is gearing itself up to embark on a comprehensive Public Financial Management (PFM) reform that caters for, among others, (a) systems-based good practice treasury management premised on a renewed set of in-built re-engineered business processes; (b) adoption of a harmonized chart of account and budget classification across the whole government, consistent with Government Finance Statistics 2001; (c) refining the MTEF[77] approach using a program-based budgeting approach rather than an activity based-line item one; (d) revision of PFM related laws and regulations for full conformance with international standards; (e) adoption of a Treasury Single Account for improved cash management; (f) maintenance of system-based hard-budget constraints to avoid over spending and reinforce budget discipline; (g) improvement in resource allocation and budget release predictability; (h) management of internally generated funds within a single treasury account model; and (i) strategies to introducing a human resources management information systems, with in-built establishment control, to manage personnel costs.

24. Meanwhile a number of activities (revision of rules, business processes, and centralization of treasury activities under the overall control of the Controller and Accountant General) will continue to be carried out to soften the impact of the more serious PFM weaknesses before the full mitigation effects are achieved.

25. Use of Country PFM systems will remain the default for Bank operations but full readiness is expected upon the completion of the GIFMIS project. Selectivity will, in the meantime, prevail where it is considered that an entity within the government has developed adequate PFM capacity to implement the project without ring-fencing. As regards public procurement, Ghana is a pilot country that is planned to be tested for transition to use of country systems in the medium term.

26. GoG has also demonstrated its commitment to continue its PFM reforms by developing more efficient public financial management systems and ensuring transparency by strengthening state oversight institutions including the Public Accounts Committee of Parliament which has recently been holding public hearings on instances of financial irregularities and allegations of fraud and corruption.

Institutional Arrangements

27. The lead implementing Agency will be the Policy, Planning, Monitoring and Evaluation Directorate within MoFA. The project will be implemented with support of a PIU that will be composed of both government civil servants and other technical specialists including F M Consultant, Procurement specialist, M&E specialist, and Safeguard and

[76] The GIFMIS is a component of the Ghana project (P093610). The objective of GIFMIS is to improve the effectiveness of service delivery and the allocation of scarce resources, using the new tools and processes resulting from the GIFMIS, and assure an accountable, more effective, and transparent government.
[77] MTEF – Medium Term Expenditure Framework

Environmental specialist. The primary role of the PIU will be to ensure that the operational safeguards, procurement, disbursement, financial management, outreach and communications requirements, monitoring, and reporting of the Project are implemented in accordance with the Financing Agreement and in accordance with the PIM. The PIM (under preparation) will describe in detail the general functions, core membership, terms of references, specific responsibilities for team members, and other tasks that contribute to implementation.

Project Financial Management Arrangements

28. Given that the project's financial management arrangements will follow the country systems, the Financial Controller of the Treasury Unit of MoFA will have overall financial management responsibility. Their responsibility is to ensure that throughout implementation there are adequate financial management systems in place which can report adequately on the use of project funds. However in carrying out this mandate, the specific day to day transaction processing and reporting will be assigned to the Financial Management Consultant (FMC) recruited for the PIU and supported by a Principal Accountant assigned from the CAGD.

29. The Financial Controller with the assistance of the FMC and Principal Accountant will have oversight responsibilities with regards to ensuring compliance with financial covenants such as submitting Interim Unaudited Financial Reports (IFRs), maintaining internal controls over project expenditure and engaging external auditors. The Financial Controller will also be responsible for maintaining and operating the project's designated account and make payments to contractors and service providers and verifying and authorizing payments for all contracts and activities under this project.

Project Risk Assessment and Mitigation

30. This section presents the results of the risk assessment and identifies the key FM risks that the project management may face in achieving project objectives together with the related risk mitigating measures.

Table 5 Risk Rating Summary Table

Risk	**Risk Rating**	**Risk Mitigating Measures/Remarks**	**Conditions for Effectiveness/ Negotiations**	**Residual Risk Rating**
Inherent Risk				
Country Level Weaknesses in the effective use of public funds, weak oversight regarding transparency and accountability. Poor linkages between strategic planning and long term budgeting at the sector levels.	M	Strengthening the role of the MMDAs in FM capacity building through ongoing reforms in the public financial management.	No	M

Risk	Risk Rating	Risk Mitigating Measures/Remarks	Conditions for Effectiveness/ Negotiations	Residual Risk Rating
Entity Level (MoFA) The ability of MoFA and PIU to effectively coordinate implementation and get key stakeholders (private sector) buy-in. Weak institutional capacity and legal framework within MoFA to implement PPP transactions.	S	New legislation on PPP to be developed as part of the ongoing reforms at the MoFEP. The implementation arrangements include the establishment of key technical and stakeholder committees. These committees will provide ongoing strategic guidance and monitor the results of implementation progress towards outcomes.	No	M
Project Level Coordination during implementation amongst the different stakeholders and MoFA.	S	Staff members to be trained on IDA policies and procedures. Intensive IDA supervision to help identity and address weaknesses.	No	M
Overall Inherent Risk	**S**			M
Control Risk				
Budgeting Challenges in translating the allocated funds into realistic time bound budgets with specific activities and outputs. Risk of cost overruns and adverse variations in expenditure due to potential slow implementation.	S	Implementations challenges are expected to be addressed through the various institutional hierarchies established for the project. The budget for the project will be part of the overall sector's budget which has to be prepared in line with GoG timelines. Budget execution to be monitored through quarterly reports and IFRs by IDA.	No	M
Accounting MoFA uses manual and EXCEL based systems and these have weaknesses in tracking funding and expenditures from various sources as well as in allocating expenditure.	S	Excel will be used initially, followed by full migration to the GIFMIS as soon as the new system becomes operational. As an alternative measure, part of the PPF to be used to initiate the procurement of accounting software Accounts staffing capacity to be strengthened with the recruitment of a qualified FMC on a two year contract.	No	M
Internal Controls Risk of non compliance with internal control processes. Possibility of weaknesses in GAC (transparency in processes) particularly in procurement and contract awarding/execution.	S	MoFA has a functioning Internal Audit Unit to help minimize risk; however the unit has not been very active regarding SIL and donor funded projects. Operational funds will be provided to support the unit. The GoG financial regulations and manuals are adequate for operational control under the project. These manuals document clearly the approval and authorization hierarchies applicable for processing financial transactions. Regular IDA supervision missions and reviews will help ascertain level of compliance.	No	M
Funds Flow Non compliance with the IDA requirements and procedures can pose a challenge to smooth funds flow arrangements, thus undermining implementation progress.	S	Use of government approved treasury and funds flow processing should speed up cashflow. Training to be provided to core accounts staff on IDA requirements and the processes documented as part of the PIM.	No	M
Financial Reporting Delays in processing and submitting IFRs and other progress reports.	S	Training to be provided to core accounts staff on IDA requirements and the processes documented as part of the PIM.	No	M
Auditing				

Risk	Risk Rating	Risk Mitigating Measures/Remarks	Conditions for Effectiveness/ Negotiations	Residual Risk Rating
The risk that audits will not be submitted on time to ensure compliance with covenants. MoFA is audited by the GAS and their scope of work and timing may be different and this may lead to delays in adhering to the financial covenant dates.	S	An arrangement will be reached with the GAS to complete and report on the audit of MoFA within the defined timeframe'. However where this is not feasible then alternative arrangement will be made using private firms to audit project specific transactions.	No	M
Overall Risk Rating	**S**			**M**

H – High **S – Substantial** **M – Moderate** **L – Low**

Strengths and weaknesses of the Financial Management System

31. From the FM perspective, the key strength of the project is that it will be implemented under the auspices of the Treasury Unit which is technically well resourced in accounting and financial management and has been involved in implementing previous IDA funded project and is currently implementing two active project which have satisfactory ratings.

32. A possible weakness could arise from the inherent risk associated with work load challenges of the Treasury Unit. This risk is primarily being mitigated through the competitive recruitment of an FMC to support the unit and also the secondment of additional staff from CAGD. Other fiduciary weaknesses will be address through training of the PIU staff.

Time Bound Action Plan

33. The action plan below indicates the actions to be taken for the project to address the weaknesses that have been identified to ensure the FM system is robust and strengthened. Some of these activities and actions are to be completed during project appraisal and prior to credit effectiveness and these will be monitored on an ongoing basis during implementation.

Table 6 Time Bound Action Plan

Action	Date due by	Responsible
Recruit a Financial Management Consultant	Prior to effectiveness	MoFA Project Director
Assign a Project Accountant from CAGD	Thirty (30) days after effectiveness	FC/CAGD
Prepare a PIM	Not later than six months after effectiveness	MoFA Project Director
Conduct financial management and procurement training	At the start of the project	IDA
Prepare manuals for matching grants and agribusiness service grants, containing financial management arrangements	Disbursement condition	MoFA Project Director

Summary Financial Management Assessment

34. A summary of the key finding of the financial management assessment is presented as follows:

35. ***Budgeting Arrangements:*** MoFA, as a Government agency, follows the budget preparation guidelines as per the Financial Administration Act (2003), the Financial Administration Regulation (2004) and also the annual budget guidelines issued by the MoFEP. The overall budget will be determined between the GoG and the IDA whilst the annual budgeting will be done in line with the Government's existing budget framework and timetable (MTEF/ Budget calendar) as part of the regular budget submission of MoFA. The budget line under which the funds will be allocated for the project should be clearly identified and reported upon as part of MoFA budget allocations under a sub-budget category. This will ensure that the principles of 'aid on budget' are observed.

36. The project will be required to prepare and submit to the Bank for approval its annual workplans and budget including procurement plans. Once the budgets are approved copies will be provided to the Financial Controller of MoFA to enable him monitor and review adequate budgetary control on expenditure. Project management will ensure that all units and component activities are correctly reflected in the workplans and budget. The assessment concludes that the budgeting arrangements at MOFA are adequate.

37. Approved budgets will then be submitted to the Bank for reference purposes. The current budgetary control processes used mostly for the government's discretionary budget are capable of monitoring commitments and outstanding balances and this helps to reduce risk of multiple payments. In addition, the PIM will outline the budgetary processes for preparing the Annual Workplans. The assessment indicates that budgeting processes are satisfactory and can be relied upon to reflect the various components to be implemented.

38. ***Accounting Arrangements:*** The Treasury Unit of MoFA has responsibility for maintaining the accounting records and books of the ministry. The unit is headed by a Principal Accountant who reports through the Financial Controller to the Chief Director. The Financial Controller is a qualified chartered accountant with relevant years of experience, having worked at different MDAs within the government service. Accounting and financial reporting for the proceeds of the credit will follow the existing GoG accounting policies and rely on the existing systems including the GoG Chart of Accounts, internal approval processes, payment vouchers, and authorization limits. Currently, a combination of manual cash books and general ledger, supplemented by excel spreadsheets are used to periodic returns.

39. Due to possible work load and oversight challenges it has also been agreed that, asides the Principal Accountant, there will be the need to assign or second a dedicated project accountant to support implementation. However if the CAGD is unable to assign or second an accountant there is provision for MoFA to recruit a project accountant. It is envisaged that the FMC will be recruited for an initial two year period to help in setting up effective systems and train the GoG assigned accounts staff who will subsequently

take over project accounting function. As part of the implementation readiness, the Bank will organize financial management training programmes for all project staff.

40. ***Internal Control and Internal Auditing:*** In line with the decision to adopt the UCS for implementation, the project's internal controls will rely on the government established accounting and internal control guidelines as documented in the Financial Administration Act (2003) and the Financial Administration Regulation (2004), and informed by the Internal Audit Agency Act (2003). In addition, the controls will follow the authorization and approval processes as per the internal control guidelines issued by Internal Audit and Procurement Unit of MoFA. MoFA has a functioning internal audit unit which helps to ensure a sound control environment for transaction processing. However, the Bank's assessment indicates that the unit is grossly understaffed and as such focuses primarily on GoG funded activities. To mitigate this risk, the project will provide some operational support to enable the unit include donor funded activities as part of its oversight functions. The role of the internal audit will be regularly assessed during supervision missions by reviewing their reports and management responsiveness to their findings. This is to ensure that the role is not limited to transactional reviews (pre-auditing) but adds value to the overall control environment.

41. ***Funds Flow and Disbursement Arrangements:*** The proposed financing instruments is an IDA funded SIL estimated at US$100 million and a USAID co-financing of US$45 million to be implemented by MoFA over a five year period. IDA funds for implementing the Commercial Agriculture will all be disbursed to a segregated designated account operated and maintained by the Treasury Unit of MoFA and managed and operated by the Financial Controller. The signatories to MoFA account will be the: (i) the Director of PIU or the Chief Director (depending on the value of transaction), (ii) the Financial Controller and (iii) the FMC. Specific details will be outlined in the revised PIM.

42. This arrangement to use a central account is important to ensure that the Treasury Unit has oversight responsibilities over transfers and payments related to the implementation of programme activities. As part of fund flow design it has been agreed that in order to facilitate payment of certain expenditures, it is likely that for implementing Components 1, 2, 3 and 4 some other agencies involved may be allowed to operate Project Accounts on an imprest system. The ceiling for the imprest will be based on the agreed workplans of these agencies. The use of these funds will be monitored through the imprest and reported upon by the accounts officer at these agencies. Prior to any such imprest arrangements or transfers the FC and internal audit unit will undertake an assessment and inform the Bank Financial Management Specialist.

43. **Disbursement arrangements and use of funds**: Proceeds of the facility will be used for eligible expenditures as defined in the Financing Agreement. Disbursement arrangements have been designed in consultation with the Recipient after taking into consideration the assessments of MoFA's financial management and procurement capacities, the procurement plan, cash flow needs of the operation. A single disbursement category for each of the four components shall be established for the proposed project for reasons of

flexibility and simplification but it is expected that the annual budgets and work plan will efficiently allocate the cost to the components.

44. Based on the assessment of financial management, the proceeds of the credit will be disbursed to the project using report based disbursement (i.e., IFRs) arrangement. The initial disbursement and ceiling will be based on the expenditure forecast for the first six months. Subsequent replenishments of the designated account would be done quarterly based on the forecast of the net expenditures for the subsequent 6 months after the first quarter, and on duly approved withdrawal applications submitted by the PIU and supported by IFRs. Additional instructions for disbursements will be provided in a disbursement letter issued for this project.

45. ***Financial Reporting Arrangements:*** The PIU through the Project Director will be required to prepare and submit separate quarterly IFRs to account for activities funded and also request for funding under this credit. Financial reporting under the program will be report based and it is expected that the unit will maintain adequate filing and archival system of all relevant supporting documents for review by the Bank's FM team during supervision mission and also for audit purposes. IFRs for the project are expected to be submitted no later than 45 days after the end of each quarter. The financial reports will be designed to provide relevant and timely information to the project management, implementing agencies, and various stakeholders monitoring the project's performance. The formats and content of the quarterly IFRs will be provided in a disbursement letter issued for this project.

46. ***Auditing:*** In line with its mandate as per the Ghana Audit Service Act (Act 584) the Auditor General is solely responsible for the auditing of all funds under the Consolidated Fund and all public funds as received by government ministries, agencies and departments. In this regard, and consistent with the use of country FM systems, the Ghana Audit Service (GAS) will conduct the audit of the project's financial statements and furnish copies to the Bank within 6 months of the end of each fiscal year of the GoG. The capacity of the GAS is considered satisfactory. However as is the practice, due to capacity constraints, it is usual for the auditor general to subcontract the audit of donor funded project to private firms. Under the project this arrangement will be followed subject to the Bank's necessary procurement and technical clearance of the terms of reference (ToR) for the engagement of the audit firm. This is to ensure that there are no delays in meeting the financial covenants for submission.

Conclusion of the Assessment

47. A description of the project's overall financial management arrangements above indicates that they satisfy the Bank's minimum requirements under OP/BP 10.02. The assessment of the financial management arrangements at the PID and MoFEP concludes that there are adequate systems in place that satisfy the Bank's minimum requirements under OP/BP 10.02. In line with the Bank's ORAF rating the FM risk is assessed as Medium I (medium driven by impact).

Supervision Plan

48. Based on the risk rating of the project and the current FM arrangement, it is expected that in the first year of implementation there will be two onsite visits to ascertain adequacy of systems and how effective the country systems are being used to support implementation. The FM supervision mission's objectives will include ensuring that strong financial management systems are maintained throughout project tenure. In adopting a risk-based approach to FM supervision, the key areas of focus will include assessing the accuracy and reasonableness of budgets, their predictability and budget execution, compliance with payment and fund disbursement arrangements, and the ability of the systems to generate reliable financial reports.

Procurement

49. The Project is co-financed with USAID through a grant, which is administered by the Bank. In that regard, the activities that are financed through the USAID grant will be subject to the same due diligence requirements as that which the Bank is applying to the IDA financed activities. Procurement for the proposed project will be carried out in accordance with the World Bank's ***"Guidelines: Procurement of Goods, Works and Non-Consulting Services under IBRD Loans and IDA Credits** & Grants by World Bank Borrowers"* dated January 2011; ***"Guidelines: Selection and Employment of Consultants under IBRD Loans and IDA Credits** & Grants **by World Bank Borrowers"*** dated January 2011; ***"Guidelines on Preventing and Combating Fraud and Corruption in Projects Financed by IBRD Loans and IDA Credits and Grants",*** dated October 15, 2006, as revised in January 2011, and the provisions stipulated in the Financing Agreement. The general description of various items under different expenditure categories is presented below. For each contract to be financed by the Credit, the different procurement methods or consultant selection methods, the need for prequalification, estimated costs, prior review requirements, and time frame would be agreed between the Borrower and IDA project team in the Procurement Plan. The Procurement Plan would be updated at least annually or as required to reflect the actual project implementation needs and improvements in institutional capacity.

50. **Advertising procedures:** In order to get the broadest possible interest from eligible bidders and consultants, a General Procurement Notice (GPN) will b*e prepared by each participating country and published in United Nations Development Business online (UNDB online), on the Bank's external website* and in at least *one national newspaper, or technical or financial magazine of wide national circulation in the Borrower's country, o*r a widely used electronic portal *with free national and international access; after the project is approved by the Bank Board, and/or before Project effe*ctiveness. The borrower will keep a list of received answers from potential bidders interested in the contracts.

51. Specific Procurement Notices for all goods and works to be procured under International Competitive Bidding (ICB) and Expressions of Interest for all consulting services to cost the equivalent of US$200,000 and above would also be published in the *UNDB online*, on *the Bank's external website,* and the widely circulated national newspapers. For works and goods using NCB, the Specific Procurement Notice (SPN) will be published in

widely circulated national newspapers in the country that is procuring for such works and goods.

52. NCB and other post review contracts shall be published in national gazette or on a widely used website or electronic portal with free national and international access within two weeks of the Borrower's award decision and in the same format as in the preceding paragraph.

53. **Exceptions to National Competitive Bidding Procedures.** The procurement system of the Borrower, including Standard Bidding Document, have been assessed and found to a large extent, to be acceptable. In the light of this, for Goods and Works procurement under NCB, the Borrower may follow its own national procedures that are governed by the Public Procurement Policy of 2003, Act 663 **after incorporating the following exceptions**: (a) foreign bidders shall be allowed to participate in National Competitive Bidding procedures; (b) bidders shall be given at least one month to submit bids from the date of the invitation to bid or the date of the availability of bidding documents, whichever is later; (c) no domestic preference shall be given for domestic bidders and for domestically manufactured goods; and (d) in accordance with paragraph 1.14 (e) of the Procurement Guidelines, each bidding document and contract financed out of the proceeds of the Grant shall provide that: (i) the bidders, suppliers, contractors and subcontractors shall permit the World Bank, at its request, to inspect their accounts and records relating to the bid submission and performance of the contract, and to have said accounts and records audited by auditors appointed by the World Bank; and (ii) the deliberate and material violation by the bidder, supplier, contractor or subcontractor of such provision may amount to an obstructive practice as defined in paragraph 1.14 (a) (v) of the Procurement Guidelines.

Procurement Arrangements

54. **Procurement of Works.** Works contracts procured under the project would include new construction and rehabilitation of agricultural storage infrastructure and processing facilities, land development, canal works, construction of farm roads and farm buildings at nucleus farms and adjacent out-growers. Contracts estimated to cost below US$5,000,000 equivalent may be procured through NCB. However, relevant NCB works contracts, which are deemed complex and/or have significant risk levels, will be prior-reviewed. Such contracts will be identified in the tables and also in the procurement plans. For minor works which are labor intensive and spread over time and do not lend themselves into groupings costing less than US$100,000 equivalent per contract, they may be procured using shopping procedures in accordance with Para. 3.5 of the Procurement Guidelines[78] and based on a model request for quotations satisfactory to the Bank. Also, minor Community-Based civil works may be implemented using procedures based on the Africa Region's Guidelines - Simplified Procurement and Disbursement Procedures for Community-Based Investments. Direct contracting may be used in

[78] Shopping consists of the comparison of at least three price quotations in response to a written request. Additional information on how to do prudent shopping is contained in the *Guidance on Shopping* available at the Bank's external web site for procurement under Procurement Policies and Procedures.

exceptional circumstances with the prior approval of the Bank, in accordance with paragraphs. 3.6 and 3.7 of the Procurement Guidelines.

55. **Procurement of Goods.** Goods procured under the project would include furniture, Environmental Management Information System (EMIS), project vehicles, computers and accessories, software, communication and office equipment, etc. Contracts for goods estimated to cost US$500,000 equivalent or more per contract shall be procured through ICB. Goods orders shall be grouped into larger contracts wherever possible to achieve greater economy. Contracts estimated to cost less than US$500,000 but equal to or above US$50,000 equivalent per contract may be procured through NCB. Contracts estimated to cost less than US$50,000 equivalent per contract may be procured using shopping procedures in accordance with Article 3.5 of the Procurement Guidelines and based on a model request for quotations satisfactory to the Bank. Direct contracting may be used in exceptional circumstances with the prior approval of the Bank, in accordance with Articles 3.7 and 3.8 of the Procurement Guidelines.

56. **Procurement of non-consulting services:** Procurement of non-consulting services such as services for organizing workshops for information dissemination, data collection for baseline surveys, transport services, workshops and servicing of office equipment, will follow procurement procedures similar to those stipulated for the procurement of goods, depending on their nature. The applicable methods shall include ICB, NCB, and shopping.

57. **Selection of Consultants**. Services of both national and international consultants will be required under the project. These will among others, include Various Technical Assistance; Technical support for implementation of project management; Development of multi-year strategic plan for investment promotion efforts; Preparation of Policy papers; Conduct of full feasibility study for PPP and transaction advise; Hiring of long-term irrigation PPP adviser who will report jointly to the PIU and to the PID; Training; Conduct of baseline surveys; Conduct of various studies, etc.

58. (a) Firm - Consultancy services which through firms would be selected using Request for Expressions of Interest, short-lists and the Bank's Standard Requests for Proposal, where required by the Bank's Guidelines. The selection method would include Quality and Cost Based Selection (QCBS) whenever possible, Quality Based Selection (QBS), Fixed Budget (FBS), Least Cost Selection (LCS), Single Source Selection (SSS) as appropriate; all consultancy services contracts estimated to cost less than US$200,000 equivalent for firms could be awarded through Consultant's Qualifications (CQ).

59. (b) Individual Consultants - Specialized advisory services and technical assistance to MoFA would be provided by individual consultants selected by comparison of qualifications of at least three candidates and hired in accordance with the provisions of Section V of the Consultant Guidelines.

60. Assignments estimated to cost the equivalent of US$200,000 or more would be advertised for expressions of interest (EOI) in United Nations Development Business (UNDB), in dgMarket and in at least one newspaper of wide national circulation. In

addition, EOI for specialized assignments may be advertised in an international newspaper or magazine. In the case of assignments estimated to cost less than US$200,000, but more than US$100,000 the assignment would be advertised nationally. The shortlist of firms for assignments estimated to cost less than US$200,000 may be composed entirely of national firms in accordance with the provisions of Articles 2.7 of the Consultant Guidelines provided a sufficient number of qualified national firms are available and no foreign consultants desiring to participate has been barred.

61. Procedure of SSS would be followed for assignments which meet the requirements of Articles 3.8-3.11 of the Consultant Guidelines and will always require the Bank's prior review regardless of the amount. Procedures of Selection of Individual Consultants (IC) would be followed for assignments which meet the requirements of Articles 5.1 and 5.6 of the Consultant Guidelines. For all contracts to be awarded following QCBS, LCS and FBS, the Bank's Standard Request for Proposals will be used.

62. The use of civil servants as individual consultants or a team member of a firm will strictly follow the provisions of Articles 1.9 to 1.13 of the Consultants Guidelines.

63. ***Procurement under PPP:*** Contractual arrangements for PPP in irrigation investment in Accra Plains will be awarded under viability gap funding of the project to private sector partners through a competitive selection process. A total of about **US$40** million will be awarded in accordance with the provisions of paragraphs 3.14 and 3.15 of the Guidelines for Procurement under IBRD Loans and Credits issued by the WB in January 2011. Since the Bank does not have standard bidding documents for this type of procurement, the Bidding Documents will be prepared by the Borrower in consultation with the Bank and must be satisfactory to the Bank. In line with the national PPP policy, the MoFEP PID, which is responsible for providing technical support for PPP within GoG and currently being supported under another Bank project, Ghana PPP Project (P125595), will provide technical support to MoFA in procuring the PPP contract. This project will, however focus its support to MoFA in building the capacity of the PDT that must be established to lead the transaction as per the national PPP policy.

64. **Matching Grants:** The project intends to maximize the production potential among smallholders that can be leveraged by investors and maximize rural development impact, project support will be applied through a matching grants scheme (Matching Grants under Component 1 and 3 and Agribusiness Service Grants under Component 3). The matching grants under the project are for: (i) the establishment of extension services: logistics, and agronomic training of supervisors and farmers; (ii) the transfer of agricultural technology and technology innovation related to production, processing, storage and marketing, or communication whereby the technology transfer constitutes an innovation with clear demonstration effects and action learning value; and (iii) technical assistance and business facilitation and mediation services to fill gaps among investors and out-growers, such as resolving specific issues of land tenure, providing advice and dialogue on community-level benefit sharing, and other key tasks that are better handled through a third party. The grant will be awarded in accordance with the provisions o f paragraphs 3.13 o f the Guidelines for Procurement of Goods, Works and Non-consulting

Services under IBRD Loans and IDA Credits & Grants By World bank Borrowers issued in January 2011, commercial practices which are acceptable to the Bank.

65. **Workshops, Seminars and Conferences.** Training activities would comprise workshops and training, based on individual needs as well as group requirements, on-the-job training, and hiring consultants for developing training materials and conducting training. Selection of consulting firms for training services estimated to cost US$100,000 equivalent or more would be procured on basis of QCBS or QBS as appropriate. Training services estimated to cost less than US$100,000 equivalent per contract may be procured through CQ method. When appropriate, training may also be procured on the basis of Direct Contracting subject to review and approval by the Bank. All training and workshop activities would be carried out on the basis of approved annual programs that would identify the general framework of training activities for the year, including: (i) the type of training or workshop; (ii) the personnel to be trained; (iii) the selection methods of institutions or individuals conducting such training; (iv) the institutions which would conduct the training; (v) the justification for the training, how it would lead to effective performance and implementation of the project and or sector; (vi) the duration of the proposed training; and (vii) the cost estimate of the training. Report by the trainee upon completion of training would be required.

66. **Operating Costs**. Operating Costs financed by the project are the incremental expenses incurred on account of Project implementation, based on the Annual Work Plans and Budgets approved by the Association pursuant to Section I.C of Schedule 2 to the Financing Agreement, including office equipment and supplies, vehicle operation and maintenance, communication costs, office administration costs, utilities, travel and *per diem*, excluding the salaries of Ghana's civil service.

67. The procedures for managing these expenditures will be governed by the Borrower's own administrative procedures, acceptable to the Bank.

Assessment of the Agency's Capacity and Risks to Implement Procurement

68. **Institutional Responsibilities for Procurement:** Procurement activities under the Project will be carried out by MoFA through its Procurement Unit. A detailed assessment of the capacity of MoFA to implement procurement actions for the project as part of the Bank's fiduciary requirements to ensure that implementing agencies have systems, structures and capacity to administer procurement in compliance with the Bank's Procurement and Consultants' Guidelines is available in Bank's files under the proposed Ghana Commercial Agriculture Project, has been was carried out by Abunyewa Adu-Gyamfi, Procurement Specialist, on November 30, 2011. The detailed assessment report is available in Bank's files. The assessment reviewed the organizational structure for implementing the project. The overall procurement risk at the Program level is High.

69. **Capacity Assessment:** An assessment of the capacity of the MOFEP/PID to implement procurement for the Project was carried out in accordance with the Procurement Services Policy Group (OCSPR) guidelines dated August 11, 1998, and the newer Procurement Risk Assessment & Management System (P-RAMS). The objectives of the assessment

were to (a) evaluate the capacity of the executing agency and the adequacy of procurement and related systems in place, to administer procurement; (b) assess the risks (institutional, political, organizational, procedural, etc.) that may negatively affect the ability of the agency to carry out procurement; (c) develop an action plan to address the deficiencies detected by the capacity analysis and to minimize the risks identified by the risk analysis; and (d) propose a suitable Bank procurement supervision plan for the project compatible with the relative strengths, weaknesses and risks revealed by the assessment. P-RAMS organize the assessment into eleven risk factors that relate to controls at the level of the Implementing Agency (i.e., MoFA).

70. The assessment concludes that even though the Ministry is in compliance with the procurement law, having a procurement unit in the permanent organization, having adequate internal technical and administrative controls and anti-corruption measures, and satisfactory appeal mechanisms for bidders, it lacked adequate procurement capacity to manage the entire procurement activities of the project and other Bank-financed projects. There is therefore the need to staff the unit with adequate numbers of key personnel. These personnel should preferably be young graduates in the Ministry who are interested to chart a path in procurement. In the meantime, since capacity building could take a while to achieve and the projects cannot wait, it is recommended to recruit at least one, but preferably, two qualified and proficient procurement consultant(s) with adequate knowledge and experience in the use of Ghana’s Public Procurement procedures and the World Bank procurement guidelines and procedures, to join and support the Ministry’s procurement unit to assist in the management of procurement needs of the entire Ministry for at least the first three years.

71. Given that procurement knowledge presently in the permanent organization is low, it is recommended that the procurement consultants will apart from undertaking direct procurement activities under the project, also work closely with the mainstream staff and provide hands on training and mentoring through procurement clinics, direct instructions, monitoring and identifying their weaknesses and drawing up capacity building programs to strengthen their capacities. In so doing, procurement capacity of newly appointed staff would be built practically to assure handling of future normal and complex procurement. In addition, it is suggested that some funds will be set aside in the project to provide training opportunities for the procurement staff at regional procurement training centers like GIMPA (Ghana) and ESAMI (Tanzania). This will help equip the staff with in-depth knowledge in public procurement in general and also sharpen their skills in the use of the World Bank procurement procedures and rules.

Key Procurement Risks and Mitigation Measures

72. The assessment rates the overall risk for procurement as High. The key risks identified for implementing procurement activities under the project relates mainly to (i) the lack of adequate capacity to manage procurement; (ii) the lack proficient skill and experience to undertake and manage normal and complex procurement; (iii) the lack of in-house experience with World Bank procurement procedures; (iv) lack of capacity to manage contracts; and (v) lack of internal audit procedures for donor funded projects.

73. The Table below summarizes key risks identified and proposed mitigation measures and/ or actions to be agreed upon to reduce the risk from High to Medium-L.

Table 7 Procurement Risk Mitigation Action Plan

No	Key risks	Mitigation Actions	By Whom	By When
1	Lack of proficient procurement personnel to implement procurement actions	Appointment of qualified high level procurement consultant through a competitive process to support the project, at least for the first three years.	MoFA	Preferably prior to project effectiveness
2	Lack of adequate key staff in the Procurement Unit	Immediately identify and transfer at least three interested staff, of varied background, to the procurement unit to be trained and kept at the unit. Participation in procurement training workshops for mainstream procurement and technical staff at specialized procurement training institutions like GIMPA (Ghana) or any other acceptable institution to enhance their knowledge. Provide hand-on training and mentoring to the procurement unit and other technical staff by involving them in the activities of the project(s) Continuous capacity building program to be developed for mainstream procurement and technical staff to respond to specific gaps identified.	MoFA's Chief Director MoFA's Project Coordinator Procurement Consultants Procurement Consultants	Not later 3 months after date of effectiveness
3	Lack of familiarity with current trends and updates of World Bank procurement guidelines and procedures	Preparation of project implementation manual reviewed and agreed by Bank Preparation of manuals for matching grants and agribusiness service grants, containing arrangements for the carrying out of procurement by the grants' recipients reviewed and agreed by the Bank Organize a quick workshop to update procurement staff in current changes in Bank procurement procedures and work closely with Bank PS.	MoFA Project Coordinator	Prior to effectiveness Disburse-ment Condition At Project launch and throughout project life
4	Poor Record Keeping	Set up adequate filling system for project records to ensure easy retrieval of information/data. Designate a person responsible for data management.	MoFA Project Coordinator	No later than 3 months within the project implement-ation
5	Delays in taking procurement actions like preparation of BD, RFPs, BER, TER, etc.	Close monitoring of procurement plans on a monthly basis and closely monitor and exercise quality control on all aspects of the procurement process, including evaluation, selection and award.	Procurement Consultant and MoFA Project Coordinator	Throughout project life

No	Key risks	Mitigation Actions	By Whom	By When
6	Fraud and Corruption (Kick-backs)	Enforce provisions of World Bank Guidelines, the Public Procurement Act, the Financial Administration Act and Internal Audit Agency Act on Fraud and Corruption. Observed cases to be referred to Auditor General for further investigations.	MoFA's Chief Director	Throughout project life

74. The overall Project risk for procurement is High, prior to mitigation.

75. **Procurement Documents:** The procurement will be carried out using the latest Bank's Standard Bidding Documents (SBD) or Standard Request for Proposal (RFP) respectively for all ICB for goods and recruitment of consultants. For NCB, the borrower shall submit a sample form of bidding documents to the Bank prior review after incorporating the exceptions listed above and will use this type of document throughout the project once agreed upon. The Sample Form of Evaluation Reports developed by the Bank, will be used. NCB SBD will be updated to include clauses related to Fraud and Corruption, Conflict of Interest and Eligibility requirements consistently with the World Bank procurement guidelines dated January 2011.

Procurement Plan

76. At appraisal the Borrower developed a procurement plan for the first 18 months of project implementation which provides the basis for the procurement methods applicable to each contract and indicates those requiring Bank's prior review. This plan which is an aggregation of all the plans from the beneficiary agencies collated by MoFA's procurement unit in consultation with the project implementation team has been agreed between the Borrower and the Association on February 13, 2012 and is available at the MoFA Offices in Accra, Ghana. It will also be available in the project's database and in the Bank's external website. The Procurement Plan will be updated in agreement with the Association annually or as required to reflect the actual project implementation needs and improvements in institutional capacity.

77. **Prior-Review Thresholds:** The Procurement Plan shall set forth those contracts which shall be subject to the World Bank's Prior Review. All other contracts shall be subject to Post Review by the World Bank. However, relevant contracts below prior review thresholds listed below which are deemed complex and/or have significant risk levels will be prior-reviewed. Such contracts will also be identified in the procurement plans. Summary of Prior-review and procurement method thresholds for the project are indicated in Table A below. All terms of reference for consultants' services, regardless of contract value, shall also be subject to the World Bank's prior review.

Table 8 Thresholds for Procurement Methods and Prior Review

Expenditure Category	Threshold for Method (USUS$)	Procurement Method	Contracts Subject to Prior Review
Works	>=5,000,000 <5,000,000 <100,000	ICB NCB Shopping Direct Contracting	All First 2 contracts None All
Goods and non-consulting services.	>=500,000 <500,000 <50,000	ICB NCB Shopping Direct Contracting	All First 2 contracts for each entity None All
Consulting services	>=200,000 <200,000	QCBS QCBS, CQS, LCS, FBA, QS Single Source	All contracts of US$200,000 and above First two contracts under US$200,000 All single source
Individual consultants		IC	All contracts of US$50,000 and above All single source
Note: All Term of reference regardless of the value of the contract are subject to prior technical review			

ICB – International Competitive Bidding
NCB – National Competitive Bidding
IC – Individual Selection method
QCBS – Quality and Cost-Based Selection method
CQS – Consultants' Qualification Selection method

Frequency of Procurement Supervision

78. In addition to the prior review supervision which will to be carried out by the Bank, the procurement capacity assessment recommends at least, one supervision mission each year to visit the field to carry out post-review of procurement actions and technical review. The procurement post-reviews and technical reviews should cover at least 20 percent of contracts subject to post-review. Post review consist of reviewing technical, financial and procurement reports carried out by the Borrower's executing agencies and/or consultants selected and hired under the Bank project according to procedures acceptable to the Bank.

Details of the procurement arrangements involving international competition

79. (a) Goods and Non Consulting Services

Table 9 List of contract packages to be procured following ICB and direct contracting by country

1	2	3	4	5	6	7	8	9
Ref. No.	**Contract (Description)**	**Estimated Cost**	**Procure-ment Method**	**P-Q**	**Domestic Preference (yes/no)**	**Review by Bank (Prior / Post)**	**Expected Bid-Opening Date**	**Comments**
1	Procurement of Vehicles and Motorcycles	1,600,000	ICB	No	No	Prior	May 26, 2012	

80. ICB contracts estimated to cost the equivalent of US$500,000 and above for all other countries per contract, for Goods and non consulting services, and all Direct Contracting will be subject to prior review by the Bank.

81. (b) Consulting Services

Table 10 List of consulting assignments with short-list of international firms by country

1	2	3	4	5	6	7
Ref. No.	**Description of Assignment**	**Estimated Cost**	**Selection Method**	**Review by Bank (Prior / Post)**	**Expected Proposals Submission Date**	**Comments**
1	Feasibility study for PPP in the Accra Plains	3,000,000	QBS	Prior	July 6, 2012	
2	Pre-feasibility studies inland valleys	3,000,000	QBS	Prior	July 6, 2012	
3	Technical assistance on Outgrower schemes	600,000	QCBS	Prior	June 7, 2012	
4	Technical assistance for PPP	1,900,000	QBS	Prior	July 9, 2012	
5	Technical assistance for Feasibility Studies	600,000	QCBS	Prior	July 13, 2012	
6	Preparation of map products and attribute data in project intervention areas for the Facilitation of Land Acquisition Process for 1st year	300,000	QCBS	Prior	August 27, 2012	

82. Consultancy services estimated to cost US$200,000 equivalent or more per contract with firms and US$50,000 or more per contract with individual consultants and all Single Source Selection of consultants will be subject to prior review by the Bank.

83. Shortlists of consultants for services estimated to cost less than US$200,000 equivalent per contract may be composed entirely of national consultants in accordance with the provisions of paragraph 2.7 of the Consultant Guidelines.

Publications of Awards and Debriefing

84. For all ICBs, request for proposal that involves the international consultants and direct contracts, the contract awards shall be published in *UNDB online* and on *the Bank's external website* within two weeks of receiving IDA's "no objection" to the recommendation of contract award. For works, goods, and non-consulting services, the information to publish shall specify (i) name of each bidder who submitted a bid; (ii) bid prices as read out at bid opening; (iii) name and evaluated prices of each bid that was evaluated; (iv) name of bidders whose bids were rejected and the reasons for their rejection; and (v) name of the winning bidder, and the price it offered, as well as the duration and summary scope of the contract awarded. For Consultants, all consultants competing for an assignment involving the submission of separate technical and financial proposals, irrespective of its estimated contract value, should be informed of the result of the technical evaluation (number of points that each firm received), before the opening of the financial proposals. Furthermore, the following information must be published: (i) names of all consultants who submitted proposals; (ii) technical points assigned to each consultant; (iii) evaluated prices of each consultant; (iv) final point ranking of the consultants; and (v) name of the winning consultant and the price, duration, and summary scope of the contract. The same information will be sent to all consultants who have submitted proposals. The Borrower's implementing agency will be required to offer debriefings to unsuccessful bidders and consultants, should the individual firms request such a debriefing.

85. NCB and other post review contracts shall be published in national gazette or on a widely used website or electronic portal with free national and international access within two weeks of the Borrower's award decision and in the same format as in the preceding paragraph.

Fraud, Coercion and Corruption

86. All procurement entities as well as bidders and service providers, i.e., suppliers, contractors, and consultants shall observe the highest standard of ethics during the procurement and execution of contracts financed under the project in accordance with paragraphs 1.16 and 1.17 of the Procurement Guidelines and paragraph 1.23 and 1.24 of the Consultants Guidelines, in addition to the relevant Articles of the Ghana Public Procurement Laws which refer to corrupt practices.

Environmental and Social (including safeguards)

87. ***Institutional Arrangement for Safeguards Implementation:*** The ESMF, RPF and PMP include institutional arrangements, outlining the roles and responsibilities for the various stakeholder groups involved in each participating region at the central and local levels, for screening, reviewing, and approving subprojects, as well as implementing and monitoring mitigation measures for those subprojects. Given the magnitude of project interventions, the project will establish its own Social and Environmental expertise composed of one Social Scientist and one Environmental Scientist. These experts will benefit from EPA and the Land Commission's support. In view of the somewhat limited

institutional capacity to address Project safeguards adequately within MoFA, the three safeguard instruments include provisions to strengthen the capacity of the various institutions and actors involved, and to promote coordination and synergies among the various sectors in attending to potential social and environmental impacts. Together these safeguards instruments are considered as planning tools and means for harmoniously integrating the project with its biophysical and social environment to maximize project's positive effects in the Accra Plains and SADA Zones, while mitigating the negative impacts.

88. ***Monitoring and Supervision of Safeguard Performance***: Successful implementation of project safeguards requirements and performance measurement requires regular monitoring and evaluation of activities undertaken by the project to comply with national regulations and World Bank safeguard policies. This M&E is expected to be participatory and will also help ensure that Project safeguards measures are systematically implemented throughout the life of the Project.

89. To do so, the following indicators need to be measured, as part of the project's global monitoring plan:

- Number of subprojects screened on environmental and social safeguard grounds;
- Number of subproject needing specific ESIAs;
- Number of ESIAs conducted;
- Number of subprojects with costed ESMPs or ESIAs;
- Number of ESMPs or ESIAs implemented according to schedule;
- Number/frequency of safeguards supervision and annual Project reviews undertaken;
- Number of training programs carried out for safeguards capacity strengthening;
- Number of institutions/organizations trained according to measures identified and specified in the instruments.

90. In addition, biophysical and social changes (both negative and positive) from the baseline – such as changes in the quality of ground and surface water, changes in biodiversity of flora and fauna, land resource management, improvements in agricultural activities – in the natural environment in the project intervention area should be measured, as part of the project's monitoring system.

91. ***Safeguards Requirements in Project Legal Documents:*** As set forth in the financing agreements, the Borrower shall carry out Components 2 and 3 of the Project pursuant to the provisions of the ESMF, PMP and RPF in a timely manner, ensuring that: (i) mitigation and monitoring measures acceptable to the Bank are designed and implemented with due diligence and employing appropriate environmental and social expertise; and (ii) adequate information on the implementation of the measures contained

in the safeguards documents is appropriately included in the Progress Reports to be prepared under the project.

92. In addition, the Recipient shall take all measures required so that the entity in charge of the components: (i) screen, under Components 2, 3.2 and 3.3 of the Project, the activities proposed to be financed under the investment proposals submitted for financing out of the proceeds of Grants or the Credit and establish that such activities avoid or minimize involuntary resettlement as outlined in the RPF; (ii) where involuntary resettlement as outlines in the RFP cannot be avoided ensure that each Beneficiary carry out a site-specific Resettlement Action Plan (RAP) in conformity with the RFP; ensure that each Beneficiary: (a) submit a RAP to the World Bank for approval before any works are initiated; (b) carry out an appropriate site-specific ESIA or ESMP, as the case may be, for each such activities in accordance with the provisions of the ESMF and in form and substance satisfactory to GoG; and (c) disclose the site-specific ESIA or ESMP as approved by GoG; (iii) verify (through its own staff, outside experts, or existing environmental/ social institutions) before approving the investment proposal that the activities meet the environmental and social requirements of appropriate national and local authorities and that it is consistent with the Bank's applicable environmental and social assessment and safeguards policies and complies with the environmental and social review procedures set forth in the PIM; and (iv) thereafter, ensure that the relevant mitigation and monitoring provisions of the ESIA or ESMP, as the case may be, are appropriately implemented.

93. Furthermore, prior to the award of each contract for works under Components 2, 3.2 or 3.3 of the project, the Borrower will: (i) submit to the World Bank for its review and approval the related site-specific RAP and upon receipt of approval disclosure the RAP as outlined in the RFP; (ii) submit to the World Bank for its review and approval the related site-specific ESIA or ESMP, as the case may be, in form and substance satisfactory to the Bank; (iii) disclose the site-specific ESIA or ESMP as approved by the Bank; and thereafter, ensure that the relevant mitigation and monitoring provisions of the ESIA or ESMP, as the case may be, are appropriately included in the works contract concluded for the site and that they are implemented in the carrying out of Components 2 and 3 of the project.

94. Lastly, the Recipient shall carry out its respective Parts of the Project pursuant to its obligations under and in accordance with environmental and social safeguards and international good practice and standards consistent with those of, the Cartagena Protocol on Biosafety.

95. ***Arrangements for Safeguards Supervision:*** The supervision of safeguards implementation for the project will be done as part of the overall project implementation, by GoG/MoFA in conjunction with EPA, Lands Commission and relevant experts involved in social and environmental mitigation. World Bank supervision teams will also include the Social and Environmental Safeguards Specialists and the Land Specialist who will continue to have the overall responsibility for supervision of safeguards activities. They will conduct twice a year a comprehensive supervision of safeguard activities of the project, participate in the wrap-up meeting to discuss findings and draft an action plan to

improve implementation. To ensure effective Bank supervision, MoFA in conjunction with each national counterparts will prepare and update detailed reports on the implementation of the ESMF (and subsequent ESIAs/ESMPs, as applicable), RAP and the PMP, before Bank supervision missions. Appropriate budget for project supervision will be included in the project financial evaluation.

Table 11 Safeguard Policies Triggered

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

Monitoring & Evaluation

96. The project has a strong focus on monitoring and evaluation and a range of instruments and approaches will be put in place. As a demand-led intervention, in some instances data on specific beneficiaries will only be available once they have been identified. As such, there is a constant need to generate baseline data. Particular attention is paid to building sustainable monitoring capacity for an on-going PPP agenda that will extend beyond the life of the project. It will provide a solid foundation of data and information on which evidenced informed programming and policy-making can take place that will also facilitate coordination between development partners and GoG. The project is supporting the development of a sub-sector of commercial agriculture with the potential for transformational changes in the contribution of the agricultural sector to rural and urban livelihoods, job creation in primary and secondary production and in increasing the production levels of especially staples. Through a focus on result monitoring and evaluation and related learning, transparency and accountability in the project it is expected to provide useful lessons to formulate future commercial agriculture interventions in Ghana and attract additional funding from other DPs. It will also provide valuable sector-specific information and feed-back to MoFEP on outcomes of public-private partnership arrangements and to SADA on the contribution that commercial agriculture can make to poverty alleviation and job creation. The Bank would therefore continue dialogue with MoFA on the optimal approach to mainstream some of the lessons and innovations of the project. Part of the process is the coordination with Agricultural Sector Working Groups which brings together GoG and DPs in the agriculture sector and the M&E Sector Working Group that aims to coordinate and effectively use aid in support of the statistical, monitoring and evaluation systems and to avoid duplicate efforts.

97. Reporting on progress takes places at three levels:

98. **Project-related M&E is the responsibility of the PIU**: Monitoring of progress towards meeting the development objective of the five-year project as outlined in the table on results monitoring in Annex 1. It is in essence an M&E plan that for each PDO level outcome indicator and intermediate-level indicator details unit of measurement, baseline value, targets, frequency, data source/methodology and responsibility for data collection. The data feeds into the implementation supervision missions and will be used to track the progress that the Project makes in terms of outcomes. If deemed necessary, corrective measures and more in-depth data collection to drill down to the underlying causes can be designed hereupon or laid up to the annual value chain survey – level two.

99. The monitoring of the indicators in Annex 1 should supply data and information for the semi-annual implementation support missions (ISMs), the implementation status and results (ISRs) report and for the final evaluation of the project in the implementation completion and results (ICR) report. Reporting and use of M&E data as well as assessment of capacity will be described and rated in the ISRs, and be reviewed at mid-term. If deemed necessary, the project may be restructured to improve reporting on progress and improve M&E capacity and arrangements.

100. **Annual value chain survey:** At this level, monitoring is of the commercial agriculture value chain and smallholders participation in it. It will be conducted through an annual survey and data and information generated can be used to calculate key figures such as gross margins and cash flow for selected crops. This will be done through an annual survey provision of key data on input supplies (planting materials, fertilizers, insecticides, etc.), market information (prices, trends, buyers, suppliers), financial services (such as credit, savings or insurance), transport services (cost, market access) and storage services (storage capacity). The value chain survey will thus supply data on some of the indicators in the results monitoring table and ensure that indication at levels one and two are closely linked.

101. It is a consultancy based survey that will involve key staff from MoFA and other implementing partners and results from the surveys will feed in to the projects results framework as well as being important in understanding the commercial agriculture sector in Ghana and the opportunities and threats for further development. Data collection will be concentrated on key points in the value chain and per specific crops, i.e. yield and harvested volumes, prices, and calculate cash flow, and will also discuss the uncertainties along investments and fluctuations in prices, yields and volumes harvested and traded. The first step will be to delineate the value chain and to identify the full range of activities which are required to commercial crops from production, harvesting, storage and processing to marketing thus to identify farmers, traders, processors, transporters, wholesalers, retailers and exporters and including those providing input (finance, planting material, new technologies, etc.). The survey will combine semi-structured interviews and focus group meetings and questionnaires. Quantitative data permit a more objective assessment and facilitates an assessment of larger-scale patterns, trends and relationships among different value chain actors. Questionnaires focused on what value chain actors are doing, and with qualitative research tools not only which provide a means to check

the reliability of data, but can also gave more insight into why actors are doing what they do and how they formulate their decisions. Cash flow, gross margins and other income and livelihood-related economic data can be calculated from the above.

102. **Impact evaluation:** In order to account for the change brought about by the project as well as to foster an understanding of its consequences on beneficiaries, it is the Project's clear aim to conduct a rigorous scientific impact evaluation. The impact analysis deals with the intended and unintended benefits of project interventions. The impact evaluation is to be funded by USAID and is as such not part of the design of the Project per-se but included in the description of M&E arrangements, capacity and use to give a complete picture on how the project can be evaluated.

103. The analysis will be based to a large extent on the quantitative comparison of a treatment group with an adequate control group. By definition, access to all or a specific subset of the project components is given to the treatment group only. In contrast, the control group will ideally remain completely unaffected by the intervention. It is crucial, however, to tailor the selection of the treatment and the control group to the distinct features of the project and its implementation plan. This exercise is key to guarantee statistical identification of changes that can be causally linked to the intervention. The empirical analysis will then mainly build on survey data deliberately collected for this purpose: (1) a base-line survey which will be carried out prior to any intervention activity; (2) an end-line survey which will be administered after the project has been well into operation; and (3) conditional on sufficient implementation a mid-term survey. The information will be collected from representatives of both the treatment group as well as the control group.

104. Methods include reviewing of relevant document and secondary information, informed selection of locations and groups for data collection, semi-structured interviews with key stakeholders involved in implementing or sustaining the project, and interviewing smallholders, farmers, managers and concessionaries for relevant information on the progress of the program as well as internal/external factors influencing the achievement of results. Open interviews will be held with key stakeholders from governmental, parastatal and nongovernmental organizations to gain a better understanding of planning, policy support and sustainability aspects. As regards farmers and smallholder interviews, these will be a combination of focus group discussions, buzz group discussions and individual interviews and should enable all groups to contribute without intimidation and influence from opinion leaders, chiefs, etc.

105. ***M&E and Donor Coordination:*** The approach to M&E is closely linked to the imperatives of the Paris Declaration and the Accra Agenda for Action, i.e., to manage for development results and use country systems and to build up the capacity in M&E for that purpose. In terms of strengthening the linkages to the national development strategy, i.e., the GSGDA and SADA strategy and the MTEF annual budget processes, provision of key data on the commercial agriculture sector is essential and with some of the indicators in the results monitoring table being not only project indicators but national-level indicators too. The project through MoFA and the other participating institutions will work closely with the National Development Planning Commission (NDPC) to strengthen these linkages and assist in revisions of the GSGDA national indicators.

Review of existing M&E plans for MoFA as a sector ministry and for METASIP and CAADP revealed that there is little coverage of a prospective commercial agriculture sector and hence the results framework developed herein will be a platform for revision of these plans. Capacity of MoFA is still low as regards numbers of staff involved and skills available. While the project will provide considerable funding for M&E, inter-alia through financing of the annual surveys and hiring of consultants, development of the capacity MoFA and the other participating institutions is crucial for the success of the project and for sustaining the project achievement and M&E beyond the life time of the project. The project does not intend to create a parallel structure or to duplicate efforts but rather to mainstream and to build a platform on which further development of the commercial agriculture sector can take place.

106. The project is aligned to and supported by the institutional strengthening initiatives under AgDPO and the technical assistance component of the Ghana Statistical Development Projects (P118858) for support to the planned agricultural census in 2013 which will also be supported by IFPRI. The statistical project further supports the capacity development of the statistical and research units of MoFA. Coordination with USAID as a partner in the project is critical given that USAID has additional elaborate reporting requirements in respect to their Feed the Future program which their support falls under, and which includes support to an impact evaluation.

Role of Partners

107. The project is designed to be the leading instrument of development partners to support the Government's commercial agriculture agenda. Therefore, special attention has been paid during preparation to opportunities for additional co-financing from other DPs and of the importance of coordination with existing and future interventions in the same field. As such, the project realizes objectives of aid harmonization as set out in the Paris Declaration and the more recent Accra Agenda for Action, and underpinning the CAADP agenda.

108. Specifically, the project will be co-financed by USAID (see below). It will also coordinate closely with existing USAID programs including ADVANCE and a potential new program of agricultural finance. It will also seek to build from the experience of Ghana's MCC funded program which is due to close at the end of February, 2012. A second Compact has been announced but this will not be a continuation of the existing program, which included some support for nascent commercial agriculture entrepreneurs. There may be opportunities for capturing quick-wins from continuing existing project interventions, and these will be reviewed as an early activity post-effectiveness.

109. Three other collaborations will be prioritized during implementation. The first recognizes the importance of access to finance for agribusiness investors. Specifically, the project will proactively assist potential investors and prospective sponsors of out-grower schemes to secure funding from existing windows. These include in particular (i) STANBIC's funding for agricultural investments that is covered under AGRA's partial risk guarantee arrangement; and (ii) the new project funded by KFW and AFD that seeks to providing financing for out-grower schemes. The latter is an important new instrument

that repositions an earlier project in the rubber and oil palm sectors into a more commercial setting, with the funding and management arrangements under private sector management. It is expected that, where appropriate, out-grower schemes established with the support of the Bank-funded project could be assisted to secure medium-term financing from this facility.

110. The third collaboration of importance relates to DFID's anticipated support for SADA which will include both capacity building for the Authority itself and a market development intervention that seeks to support small and medium scale business development in the SADA Zone. Both are currently under preparation. It is expected that DFID's support for the SADA secretariat will take account of the institutional arrangements of the project, particularly the satellite office in Tamale and the proposed migration to the SADA secretariat in due course.

Co-Financing with USAID

111. The project is to be jointly co-financed with USAID. USAID have indicated a commitment of US$45 million over the project period (FY2012 – FY2017). Given US Government budgetary procedures, a commitment has been made for funding in the first year, with subsequent co-financing subject to Congressional approval. USAID's strategic priorities for their assistance to Ghana are articulated in their new Feed the Future strategy. This focuses on three key cereals crops – rice, soy and maize – with a spatial focus on the lagging regions of Northern Ghana specifically the area north of the 8th parallel. Indeed, it is the result of this co-financing that project activities can be significantly scaled up in the SADA Zone than would otherwise be the case. On this basis, co-funding will not be earmarked to specific (sub-components). No additional reporting requirements will be imposed on the Borrower beyond the normal obligations associated with IDA-financed projects (and as described herein under sections on procurement, financial management and monitoring and evaluation).

112. USAID financing will be managed under a specific trust fund established under normal World Bank trust fund management arrangements. The specific content of the trust fund agreement builds on the USAID – World Bank Framework Agreement for trust funds that has recently been concluded. Formal reporting arrangements of the Bank to the co-financier will be established therein. The Trust Fund is currently being established and will be signed after the World Bank has completed negotiations with the Borrower.

113. As per normal trust fund arrangements, the World Bank will take on all fiduciary responsibilities and World Bank safeguards policies will apply. That said, draft safeguard instruments were reviewed by the USAID regional safeguards specialist and comments provided directly to government (separately from the formal review process of the Bank). Moreover, to maintain the collaboration during implementation, USAID will be invited by the Government to participate in all implementation support missions and will have an opportunity to review and comment on all associated aide memoires etc.

Contributing to the CAADP/ WEF Agenda

114. Finally, Ghana is an active participant of the initiative led by the WEF and integrated into CAADP agenda that seeks to increase investment, particularly from multinational investors, in commercial agriculture. Under this *Grow Africa* initiative, Ghana is preparing to participate in the forthcoming Grow Africa Investors Forum to be convened in partnership by the African Union, NEPAD and the WEF in May, 2012 prior to the main WEF conference on Africa in Addis Ababa, Ethiopia. The project will support Ghana's active participation at this Investors Forum as an opportunity for showcase their new commercial agriculture agenda and the new instruments for effective support, as supported under this project.[79]

[79] Using funds from the Project Preparation Advance, a delegation from Ghana including a number of members of the Government's project preparation team participated in a preparatory event held in Tanzania in November, 2011.

Annex 4: Operational Risk Assessment Framework (ORAF)
REPUBLIC OF GHANA: Commercial Agriculture Project
Stage: Board

Project Stakeholder Risks

Stakeholder Risk	Rating	Moderate
Description: Depending on the location, land governance and tenure conditions on customarily owned land and state owned land can pose significant risks to the project because (i) they may impede the ability of investors and out-growers to gain access to secure land rights and (ii) may increase the vulnerability of existing land users to displacement. There may be a public perception that the World Bank is supporting land grab practices by international agribusiness firms. Investors, smallholder land owners, traditional authorities, and land sector agencies may not find mutually agreeable terms of engagement. External economic shocks may cause investors to refrain from actively engaging in the agricultural sector, or in the geographical areas of the Accra Plains and the SADA Zone.	**Risk Management:** The project will address these risks using a variety of tools – by carefully screening potential investment locations, by deploying relevant safeguards instruments, and by providing support for land use rights inventories, participatory planning, enhanced consultation, strengthened negotiation capacity and contract design. The Project will assist GoG in establishing a socially responsible investment promotion and land facilitation process. No involuntary land transactions will be pursued. Benefit sharing arrangements will be promoted as part of a model agreement between investors and rural communities. As a key member of the project implementation team, the Lands Commission takes a lead role on land issues, identifying rural land availability and facilitating the process of rural land supply meeting rural land demand. In addition, LAP 2 continues to support the Lands Commission in improving land registration and land service provision. The project has been designed to provide a menu of incentive packages that are expected to address key investment constraints. However, certain risks, such as macroeconomic performance and global economic performance that would negatively affect competitiveness and profitability are outside the control of this project. Ghana's strong macroeconomic performance is being support by the Bank and other donor operations, most notably through the MDBS process. **Resp:** Bank **Stage:** Implementation **Due Date:** On-going **Status:** In Progress	

Implementing Agency (IA) Risks (including Fiduciary Risks)

Capacity	Rating	Moderate
Description: Given the multitude of MDAs and the need for close collaboration to carry out complex tasks, there is a risk of insufficient coordination capacity. A lack of incentives to undertake institutional and business process reforms constitutes another implementing agency risk.	**Risk Management:** The project will devote substantial resources to institutional strengthening among the implementing MDAs, both at the coordination level as well at the policy and technical levels. In addition, a multi-MDA PIU will be established as well as a high-level Steering Committee. **Resp:** Bank **Stage:** Implementation **Due Date:** On-going **Status:** In Progress	
Governance	**Rating**	**Moderate**
Description: The poorly defined legal regime of ownership of communal land is a major source of dispute and tension. The result is that parcels of land are sold in multiple cases by different groups laying claim to the land. There is the tendency for cases to remain unresolved for long periods in the courts.	**Risk Management:** Current laws protect property rights except communal land, where the legal status is not well defined. Project interventions aim to address this. The legal basis for secure property and contract rights is acknowledged as being good in the Doing Business Report, where Ghana ranks high in the time required to register property. Transparency and impartiality of laws are well established. The courts are used extensively for civil, business and criminal cases, and the judiciary is well respected and independent. **Resp:** Bank **Stage:** Implementation **Due Date:** On-going **Status:** In Progress	

Project Risks

Design	Rating	Low

Description: The planning and implementation of (a) PPP transactions, and (b) the use of a competitive process to determine levels of public support through grants are new in Ghana and could be misused.	**Risk Management:** The implementation of large PPP transactions will be supported by the newly established PPP Unit within the Ministry of Finance and Economic Planning, which in turn is expecting support from the upcoming Bank-funded PPP support project. PPP competitive bidding procedures will also benefit the competitive grants element that will be managed using guidelines and procedures set out in the PIM. The existing Bank-funded MSME project will provide support to the BDS grants component. **Resp:** Bank **Stage:** Implementation **Due Date:** On-going **Status:** In Progress
Social and Environmental	**Rating** **Moderate**
Description: Capacity constraints to comply with safeguard requirements. Adverse social and environmental impacts. Elite capture. There is a risk that communities may be marginalized from discussion and receipt of monetary and non-monetary resources that flow from investors to communities (for example lease payments).	**Risk Management:** The implementation team will include a qualified social and environmental specialist who will support the implementation of the safeguard instruments, provide necessary oversight, and will, where necessary, coordinate with relevant agencies (such as the EPA and the Lands Commission). The safeguard instruments (ESMF, PMP, and RPF) outline specific actions to mitigate or avoid social and environmental risks and impacts. The measures also include capacity building that will be undertaken to ensure improved knowledge on social and environmental safeguards for effective implementation and monitoring. Training will be provided to the implementation team, in particular the social and environmental specialist, on Bank safeguard issues early in project implementation. Special attention will be provided to gender considerations. Hence, GCAP will make adequate provision for women and various other vulnerable groups to be sustainably involved in project implementation through various benefits sharing and grievance redress mechanisms. The project has put in place principles for community-investor engagement that are embedded in the model lease and the guidelines for participating communities. In addition, several actions that contribute to an enabling environment for benefit sharing are being promoted under the project (for example transparency of contract payments, participatory planning on resource use, use of representative community platforms for negotiation purposes, etc.) **Resp:** Bank **Stage:** Implementation **Due Date:** On-going **Status:** In Progress
Program and Donor	**Rating** **Moderate**
Description: Multiple interventions by other donors in the same value chains and in the SADA Zone (DFID, IFAD, AFD, CIDA, GIZ, USAID).	**Risk Management:** Close coordination through the Agriculture Sector Working Group, the Private Sector Development Working Group, and SADA will be required to ensure complementarities. Co-financing with USAID will promote close collaboration and coordination. **Resp:** Bank **Stage:** Implementation **Due Date:** On-going **Status:** In Progress
Delivery Monitoring and Sustainability	**Rating** **Moderate**
Description: In-country project team has limited capacity and supervisory resources to monitor and provide implementation support.	**Risk Management:** If current in-country staffing levels are maintained, sufficient monitoring and implementation support can be provided. **Resp:** Bank **Stage:** Implementation **Due Date:** On-going **Status:** In Progress

Overall Risk

Preparation Risk Rating: **Moderate**	**Implementation Risk Rating:** **Moderate**
Description: Project preparation has been led by a multi-agency team of GoG and has been developed in a consultative manner with widespread consultations with stakeholders. A political economy analysis was undertaken as part of project preparation studies, and safeguards issues including land have received particular attention.	Description: Building on project preparation, the GoG team proposed to implement the project has demonstrated an awareness of the project risks which is also reflected at the political level. While the risks associated with the political cycle remain, the technical issues of remaining risks are well internalized within the project structure and the client project team.

Annex 5: Implementation Support Plan

REPUBLIC OF GHANA: Commercial Agriculture Project

Background

1. The innovative elements of the project – strong private sector orientation, the deployment of innovative approaches to inclusive business models and sophisticated PPPs and coordinated approach across MDAs – places additional burden on the supervisory responsibilities of the Bank. The combination of skills and competencies required by the executing agencies must be mirrored by the supporting Bank team. The Bank's task team during preparation has included specialists in: agriculture and agribusiness, private sector development, irrigation, investment promotion, land issues, community benefit sharing from extractive industries, as well as financial management, procurement and safeguards specialists. This cross-sectoral approach must continue into implementation.

2. In addition to supervisory tasks, the World Bank Group (WBG) will bring to bear its full range of institutional endowments in support of project activities. First, the joint Bank-IFC investment climate advisory services team participated in preparatory tasks and provided valuable inputs to the design of the investment climate component and will be key partners during implementation in improving investment promotion function of GIPC. Second, there may be an opportunity to draw on IFC's advisory services as a center of technical excellence in agri-business issues, for instance for specific inputs such as transaction advisor for the Accra Plains PPP. Third, if successful, the project should support a number of agri-business investments that could benefit from IFC involvement and/or, in the case of foreign investors, from MIGA insurance. IFC investment departments and MIGA operate on a transaction basis, and therefore will only engage as and when prospective investments materialize. Fourth, there are existing IFC instruments that could be tapped into, such as the agricultural finance program and the like.

3. It is also worth highlighting that the Bank's Africa Region have developed a community of practice among task teams working on similar projects in countries such as Burkina Faso, Mali, Senegal, Tanzania, Zambia and others. This initiative, sponsored by the AFTSD Director, will be an important mechanism for continued sharing of experiences moving forward. In addition, the task team will continue to benefit from parallel initiatives led by ARD in 'doing agri-business', agricultural risk management and commodity exchanges.

4. Finally, regional initiatives under CAADP and the WEF provide opportunities during implementation for the implementation teams to learn from experiences in other African countries pursuing similar initiatives, such as the Grow Africa initiative. Since the Bank (and USAID) is involved in these initiatives at the corporate level, there are opportunities to encourage and facilitate the client's direct participation and to maximize their learning.

Strategy and Approach for Implementation Support

5. The supervision strategy for the project combines three elements of: (i) core supervisory responsibilities related to safeguard, procurement and FM compliance; (ii) partnership between the Bank team, local USAID expertise, and the PIU in deploying the flexibility enshrined in the project in the most effective way; and (iii) using the good offices of WBG and USAID to ensure the PIU keeps up to date with investor sentiment in the agricultural sector, based on separate interactions that Bank/USAID teams might have with other stakeholders (including through interactions between Bank and IFC agribusiness teams).

6. It will be critical for the PIU to keep abreast of market developments that will affect the viability of agricultural investments. It also needs to invest in regular interaction with private sector stakeholders to ensure regular market intelligence and to constantly monitor emerging investment opportunities and investor interest. This will be facilitated by a number of project deliverables but requires additional 'networking' especially at the early stages of project implementation. This will ensure subsequent market developments can be reflected in the investment promotion strategies, and interesting investment opportunities can be pursued for possible support from the project. This 'outward orientation' is an unusual feature of PIUs – which tend to focus inward on project management tasks – and needs to be supported by the Bank team.

7. Activities envisaged under Component 2 are few in number but large and complex. In order to deliver a world-class irrigation PPP – a truly pioneering achievement – it is imperative that world-class consultants are engaged to undertake the very best analytical work for the feasibility studies and the 'market test'. The Bank – with support from the PPP Global Expert Team – will support the PIU in: specifying the scope of work required; ensuring the strongest possible pool of potential consultants; partnering with the selected consultants and quality assuring the deliverables. Similarly, when it comes to the concessioning process, the Bank team will leverage the full range of WBG assets to ensure that, for instance, IFC partners are fully apprised of this investment opportunity, including the opportunity to participate in an investor's conference.

8. Given the flexibility and demand-led orientation of the project, in particular Component 3, a major focus of the implementation support will be to ensure that project interventions are appropriate – insofar as viable partnerships with private investors are identified, and that it is deployed within a clear rules – and deployed in a manner consistent with the procedures to be laid down in the PIM. Fiduciary issues will receive special attention. The project has made certain assumptions with regard to the level of public support required to leverage private investment. This will be closely monitored to ensure that this support is minimized in order to maximize value for money and cost effectiveness of the project throughout implementation – and, in so doing, helping to maximize the number of beneficiaries given project allocations.

Collaboration with USAID

9. It is expected that USAID will be important partners during implementation. USAID have substantial expertise to bring to bear – directly, and through their existing project partners – and the local Mission will be responsible for facilitating this coordination. Although the Bank will retain the responsibility for project supervision, as per the Trust Fund agreement covering the co-financing arrangement, the Government will invite USAID to participate in ISMs and to review and comment on aide memoires of such missions. This is in addition to the existing donor coordination mechanisms that already exist such as the agricultural sector working group.

Implementation Support Plan

10. Table 12 sets out the proposed implementation support plan for the project. The PIU will be critical in ensuring a fully functioning management information system and M&E mechanism to ensure time and reliable data is available to inform decision making. The PIU will prepare a detailed progress report in advance of supervision mission, summarizing key lessons and issues to be addressed during the mission.

11. Supervisory responsibility of the Bank team will be intensive. Attention to safeguards attention will be critical, especially given the framework approach adopted during preparation and given this is a Category A project. Attention to reputational risks will need to be maintained, and the Bank team updating management accordingly. Furthermore, the cross-cutting nature of the project requires a wide spectrum of Bank expertise be brought to bear as part of the implementation support. Some of this will be episodic. (For instance, specific inputs on the deployment of the ‘viability gap funding’ procurement method will be required as the concessioning process is underway and the viability gap payment is being determined). Other will be ongoing throughout project implementation. This will have implications for resource requirements.

Table 12 Implementation Support Plan Matrix

Year	Focus	Primary skills required	Number of Missions	Partner Role	Comments
Project Year 1	• Launching of project steering committee • Initiate project activities in all components • Implementation of safeguards provisions • PIU functioning adequately • PIU endowed with private sector expertise in place • Launching grants mechanisms • Feasibility studies for Accra Plains underway • M&E system established and operational • FM and Procurement practices following Bank norms	• Team lead • FM and procurement • Environmental and social safeguards • Technical specialists on water resources, agri-business, investment promotion • Land	FY12 – 1 pre-effectiveness mission (April 2012) FY13 – 2 ISMs (September 2012 & March 2013)	• PIU will prepare comprehensive progress reports prior to each mission	• Project likely effective July 2012 • Initial meeting of project steering committee essential to endorse first year's work plan
Project Year 2	• Preparation of Bidding documents for Accra Plains PPP • Prepare International Investors Conference • Review status of SADA institutions • M&E system functioning and project making course corrections where necessary • FM and Procurement practices following Bank norms	• Team lead • FM and procurement • 'Viability Gap' modality • Environmental and social safeguards • Technical specialists on water resources, agri-business, investment promotion • Investment Promotion • Operations specialist • Land specialist PPP expertise	FY14 – 2 ISMs (September 2013 & March 2014)	• PIU will prepare comprehensive progress reports prior to each mission	• Review possible formalization of interface between SADA institutions and the Tamale office • WBG support for international investors conference for Accra Plains PPP required
Project Year 3	• M&E system functioning and project making course corrections where necessary • FM and Procurement practices following Bank norms • Undertake mid-term review	• Team lead • FM and procurement • Environmental and social safeguards • Technical specialists on water resources, agri-business • Land • Project economist	FY15 – 2 ISMs (September 2014 & March 2015 – includes mid-term review)	• PIU will prepare comprehensive progress reports prior to each mission • Prepare mid-term review reports	• Mid-term review

Year	Focus	Primary skills required	Number of Missions	Partner Role	Comments
Project Year 4	• M&E system functioning and project making course corrections where necessary • FM and Procurement practices following Bank norms • Undertake mid-term review	• Team lead • FM and procurement • Environmental and social safeguards • Technical specialists on water resources, agri-business • Land	FY16 – 2 ISMs (September 2015 & March 2016)	• PIU will prepare comprehensive progress reports prior to each mission	
Project Year 5	• M&E system functioning and project making course corrections where necessary • FM and Procurement practices following Bank norms • Prepare Impact Evaluation	• Team lead • FM and procurement • Environmental and social safeguards • Technical specialists on water resources, agri-business • Land • Impact evaluation	FY17 – 2 ISMs (September 2016 & March 2017)	• PIU will prepare comprehensive progress reports prior to each mission • M&E team to prepare impact evaluation • PIU will prepare for ICR	• ICR will start immediate after project closing • Impact evaluation will take place within 12 months of project closure

Annex 6: Land Issues

REPUBLIC OF GHANA: Commercial Agriculture Project

Land Issues and Project Interventions

1. The project will have potentially significant implications for land rights in the project areas. Broadly speaking, land-related impacts will result from three types of project-supported activities:

- The construction of infrastructure or other facilities, including irrigation canals, warehouses, feeder roads, etc., that may require the acquisition of land by the government on its own account or on behalf of a public-private partnership entity;

- Project facilitation of the assembling of agricultural land into relatively large holdings for commercial nucleus farms; and

- The integration of smallholders into outgrower and related arrangements, in association with nucleus farms or other agri-business enterprises. This may involve the use of smallholders' current land or the creation of new land parcels.

2. This Annex focuses primarily on issues arising from the second and third of these three types of interventions – the facilitation of land access for purposes of commercial agricultural investment, including outgrower schemes. This process is expected to occur first in the Accra Plains, where an 11,000 hectare area has already been broadly identified as containing potentially suitable areas for commercial investment using a PPP model – the exact location of future investment within that area will be determined during project implementation as prospective investors become engaged with government and local communities in the detailed design of the investment. Various preliminary studies of this area have been conducted, both prior to and as part of project preparation, and the process of exploring investor interest is underway. Among the studies undertaken was a Diagnostic Review of Land Ownership and Land Rights in the Accra Plains (November 2011), the preliminary findings of which are summarized in later portions of this Annex.

3. Similar efforts to facilitate the creation of larger farms, along with associated support for smallholders, may be expected to take place in the SADA Zone as well. Several broad areas of potential interest for commercial agriculture have been identified in this region; these will be further narrowed down during implementation in response to the nature of investor interest.[80]

[80] Additional analysis of land issues in support of the preparation of GCAP includes an important study by USAID experts. Fella and Linkow, *Land Tenure and Property Rights Issues in USAID Food Security Programming in Ghana* (August 2011).

Box 4 Land Administration Project I (P071157)

The objective of the LAP project was to develop a sustainable and well-function land administration system that was fair, efficient, cost effective, decentralized and that enhanced land tenure security over an 8 year life span.
Through the project's support for improved land registration and resolution of land disputes, Ghana's land markets became more efficient, and land administration systems were strengthened to facilitate investment that is beneficial to local communities. The LAP also effectively built the foundation for a follow-on operation that would deepen and broaden land administration reforms in Ghana. For example:

- The LAP initiated efforts to improve the land administration framework, reduce disputes over land rights, and speed the processes for issuing land titles and documenting land rights in urban and rural areas. These efforts made land tenure more secure; secure tenure facilitates access to credit and has the potential to promote greater investment in the economy.
- The project also initiated reforms in the public sector, such as the decentralization of land administration, to rationalize institutional responsibilities for land administration and improve the delivery of (and access to) land services. The reforms contributed to transparent and secure land transactions, reducing transaction costs throughout Ghana, especially in rural and underprivileged communities, and facilitating investment and growth.
- The project facilitated the participation of civil society (through the Coalition of Civil Society Organizations on Land) and the private sector in land management and administration, laying the groundwork to check excesses in public sector management, promoting transparency, and developing self-help initiatives for growth and development.
- At the close of the project, the government was drafting two important bills, a Land Bill and a Land Use and Planning Bill.

*Guiding **Principles***

4. Issues associated with the allocation of sizable areas of lands to agribusiness firms have received increasing international attention in recent years, in connection with the growing phenomenon of large-scale private investment in agricultural land, especially in Africa. In response to concerns that these investments may have potentially negative impacts on local people and environments, the World Bank, IFAD, FAO and UNCTAD have jointly formulated a set of "Principles for Responsible Agricultural Investment that Respects Rights, Livelihoods and Resources." The relevant Principles include:

- Principle 1: Existing rights to land and associated natural resources are recognized and respected;
- Principle 2: Investments do not jeopardize food security but rather strengthen it.
- Principle 3: Processes for accessing land and other resources and then making associated investments are transparent, monitored, and ensure accountability by all stakeholders, within a proper business, legal, and regulatory environment;
- Principle 4: All those materially affected are consulted, and agreements from consultations are recorded and enforced;
- Principle 5: Investors ensure that projects respect the rule of law, reflect industry best practice, are viable economically, and result in durable shared value;

- Principle 6: Investments generate desirable social and distributional impacts and do not increase vulnerability;

- Principle 7: Environmental impacts due to a project are quantified and measures taken to encourage sustainable resource use while minimizing the risk/magnitude of negative impacts and mitigating them.

5. To the extent that the project is involved – directly or indirectly – in facilitating investment in agricultural land, the Principles have informed project design and will guide project implementation.

6. The project seeks to foster socially-inclusive investments that are mutually beneficial for investors, landowners, local communities and the country. Government powers of compulsory acquisition will not be used to assemble land for the creation of nucleus farms for private investment and associated outgrower schemes supported by the project. Instead, the vision is that land allocation should be the result of open negotiation and voluntary leasehold transactions between landowners (customary owners or the state, depending on the land in question) and the investor, subject to appropriate oversight and guidance from government.

7. Despite its emphasis on voluntary transactions, the project will be associated with the land leasing process in several ways, discussed at greater length later in this Annex. It will assist in the identification of suitable and available land, help support the design of different investment models and footprints, and provide facilitation support to the negotiation of leases. Furthermore, in the Accra Plains, and likely in other areas that will be identified as project implementation goes forward, the project will support investors through the provision of feasibility gap financing.

8. Project involvement in land aims at helping to ensure that commercial agriculture land transactions occur in a manner that contributes to secure tenure arrangements for outgrowers and investors, and beneficial outcomes for land owners and users. Achieving these results will require scrupulous attention to a number of substantial land-related risks, which are discussed in later Sections of this Annex. In the Ghanaian context, depending on the location, particular challenges may revolve around (i) confirming with certainty the existing ownership of the land and the absence of or appropriate resolution of disputes concerning that ownership, and (ii) ensuring that all land users on a given piece of land (including tenants, sharecroppers, migrants, women and other vulnerable members of the community) – and not the landowner alone – are consulted, protected and benefitted as land transactions are consummated.

9. As elaborated below, the project intends to address these challenges and risks in a number of ways. It will deploy appropriate safeguard instruments in accordance with the World Bank's Operational Policy on Involuntary Resettlement (OP 4.12) to ensure that displacement is minimized, negative social impacts are mitigated and livelihoods are restored or improved. It also aims to design, test and refine "good-practice" approaches to due diligence in the ascertainment of existing land rights, securing the rights of

outgrowers, benefit sharing, negotiation enhancement, transparent consultation and contract design.

Legal Framework

10. Ghana, like many other countries in Sub-Saharan Africa, is made up of several distinct traditional communities. There are over 13 major linguistic groups and over a hundred different dialects and cultural groups, clans and states, each with its own identity. In many of these communities, land ownership patterns are closely linked to the nature of traditional systems. The land administration system in Ghana thus, operates within a pluralistic environment, with statutes and customary laws, public and indigenous institutions, traditional values and corporate norms operating side by side and to a significant extent intermingled. This has been compounded by the importation of British tenure systems, concepts and principles such as freeholds and leaseholds with variations in interpretation in different localities.

11. There are four categories of land ownership in Ghana governed by both customary practices and enacted legislation. These are: (i) state lands, compulsorily acquired by the government through the invocation of appropriate legislation and held in trust for the entire people of Ghana; (ii) vested lands, belonging to stools or skins but vested in the state in trust for the people of the stool or skin or family from which it was vested; (iii) private lands belonging to stools, skins or family communities and held in trust on their behalf by chiefs, tendana, family heads; and (iv) private lands given or sold as freeholds by stools, skins and families to individuals, corporations and institutions (only freehold private ownership obtained prior to the enactment of the 1992 Constitution is legally recognized as Article 267 (5) of the Constitution bars creation of freehold interests in land out of stool land and by implication skin land as well.) Allodial[81] title holders may enter into formal leasehold agreements of up to 99 years with other Ghanaians or up to 50 years with non-Ghanaians.

12. On the institutional side, the Ministry of Lands and Natural Resources (MLNR) has overall responsibility for land issues as well as mines and forestry. Customary authorities (Stools and Skins), however, are the allodial title holders for more than 80 percent of the land in the country and are responsible for the allocation, administration and management of these lands. The traditional authorities hold the land in trust for the community and its future generations and are expected to dispose of lands in the interest of and with the consent of the community. State and Vested lands are under the management of the Lands Commission which was established by the Constitution.

13. The Lands Commission has been recently restructured and its mandate expanded by Parliamentary Act 2008 (Act 767). The Act brought four land sector agencies namely, the Survey Department, Land Valuation Board, Land Title Registration and the Public and Vested Lands under the umbrella of the National Lands Commission. The Commission is also responsible for providing concurrence to the disposition of stool, skin and private

[81] The term “allodial” refers to absolute ownership (ie, ownership without overlord or landlord). Hence, in Ghana, allodial ownership is often used to refer to the ownership of traditional authorities over stool or skin land.

lands provided the development is consistent with the approved planning schemes of the area and also advising the government, local authorities and traditional authorities on land policy. Other land sector agencies are: (i) the Office of the Administrator of Stool Lands (OASL) responsible for collecting rents, royalties, compensation and other payments on behalf of stool/skin lands and distributes the proceeds in accordance with provisions of the 1992 Constitution in the proportion of; (a) district assembly 49.5 percent; (b) the stool or skin 22.5 percent; (customary council 18 percent; and OASL 10 percent to cover administrative expenses; and (ii) the Town and Country Planning Department responsible for land use-planning and development and currently, falls under the Ministry of Environment and Science.

14. Partly due to the predominance of customary tenure administered by traditional authorities, only a small proportion of the estimated 6 million total land parcels of Ghana is registered. About 30,000 are registered under the title registration system while an unknown number is registered under the deeds registration system. The deed registration system was initiated after the passage of the Land Registration Act (Act 122) in 1962 shortly after independence and sought to replace the registration of oral transactions by making it compulsory to register all instruments affecting land with the state through deeds as proof of ownership and thus the right to transfer property. The weakness in the deeds system is that it does not prove that the party that registered the land actually owns the property. It has failed to assure security and has become characterized by inaccurate maps, multiple sales of the same parcel of land, use of unapproved schemes, haphazard developments, conflicting land issues and time-consuming litigation. In 1986, the Government enacted the Land Title Registration Law (PNDC Law 152) as the official system for recording property in two districts, Greater Accra and the Kumasi Metropolis. The aim was to promote title security by registering title rather than the transaction. Implementation has been slow and less than 5 percent of land in these areas has been registered 25 years later. Lack of public awareness coupled with a turnaround time of about two to five years has been a major drawback to the process of registering titles.

15. Many of the problems facing the land sector are documented in the National Land Policy (NLP) of 1999 and other studies, some dating more than 30 years. The main land sector issues could be characterized as: (i) inadequate policy and legal framework; (ii) fragmented institutional arrangements and weak institutional capacity; (iii) underdeveloped land registration systems and inefficient land markets; (iv) a weak land administration system that excludes land owners and chiefs from major decisions in land administration; and (v) past compulsory acquisitions by government of large tracts of land without payment of compensation. These issues have given rise to: (i) a high incidence of land-related disputes and litigation especially in urban areas; (ii) inadequate security of land tenure which has undermined productivity and potential returns from investment; (iii) depressed national and local government revenues; (iv) difficult access to land, thwarting both urban and rural development; (v) indeterminate boundaries of customarily held lands; and (vi) general indiscipline in the land market. In recent years, a number of donor supported projects have been supporting the government of Ghana in addressing these problems from different angles, including the Land Administration Project (I and II) financed by the World Bank and several other development partners, and the Land Tenure Facilitation Activity financed by the MiDA.

Overview of possible GCAP land assembly scenarios

16. ***Land transfer mechanisms for large farms:*** The precise mechanisms by which land will be made available for commercial investment under the project are still to be determined. This will depend in part on the legal status and current usage of the land that is ultimately identified as suitable for this purpose, which will happen during project implementation. As explained above, there are two broad legal categories of potential land:

17. <u>State land</u>. In some instances, it is anticipated that land previously acquired by the state could be leased by the government to private investors. Potential examples include portions of the KIP area and a number of smaller schemes in the Accra Plains that were subject to government acquisition in the 1970's and 1980's. There are similar examples of previously-acquired areas of state land in the north.

18. <u>Customarily owned land</u>. As noted above, state land comprises a relatively small percentage of land in Ghana -- approximately 80 percent of land is owned by traditional authorities (stools or skins) and families. More than half of the 11,000 hectares in the Accra Plains falls into the category of so-called "family land", and is owned by a number of landowning families. Customary ownership is predominant in the north, in the form of skin land (the 'skin' being the symbol of traditional authority, analogous to the 'stool' in other parts of the country). For such land to become available for commercial investment, a number of possible mechanisms have been considered:

- *Direct leasing agreements* between customary owners and commercial investors.

- *Conversion of land into state land*, through the exercise of compulsory acquisition, followed by the state leasing the land to investors. As explained below, this mechanism will not be utilized for land assembly under the project.

19. ***Benefits and risks of different land acquisition mechanisms:*** There are benefits and risks associated with each of these scenarios, as this Annex will explore in more detail below. For example, land that has been previously acquired by the **<u>state</u>** is sometimes portrayed as representing "low hanging fruit." In theory, it should be possible for the state to mobilize this land fairly quickly for investment purposes, as it has already been cleared of any competing legal rights or practices through the state's exercise of compulsory acquisition and the payment of compensation to affected people. In fact, however, many of the takings that occurred in the past were never properly completed – compensation may have been unpaid or underpaid; there may be persisting and unresolved disputes between the government and local people related to the government's action; the land may not have been put fully to its intended use with the result that it continues to be governed on a *de facto* basis by customary arrangements; etc. In short, while state land may in some instances be an attractive option, its utilization for project-supported investments will need to be accompanied by careful attention to the possibility that there may be pre-existing grievances and legal uncertainties arising from alleged deficiencies in the takings process.

20. With respect to land currently under the control of **traditional authorities or families**, once again there are benefits and risks associated with the different modalities of land transfer. Direct transactions between investors and customary owners are not uncommon in Ghana, and are consistent with a vision of investment as being primarily a matter for negotiation between investors and the affected community. There may be some cases, however, particularly where ownership of the area in question is fragmented among a number of different traditional owners, in which both investors and landowners may prefer the government to play the role of intermediary, responsible for assembling the several "pieces of the puzzle" by first leasing the land from its owners and then leasing it on in a single package to an investor. This could help the investor to avoid having to enter into separate agreements with potentially numerous owners. It should be noted however that where such a modality is employed, it needs to be seen as two steps in a single tri-partite agreement, shaped first and foremost by agreements reached directly as a result of investor-community consultations.

21. For either of these modalities, it is critically important to ensure that any deal that is made takes into account the full range of people on the ground who may have an interest of one sort or another in the affected area. While the power to exercise legal ownership over a given piece of land resides at a particular level (or in some cases several levels) in the traditional hierarchy, there may be a wide array of subsidiary interests present on the land – most often not documented. These might include (i) long-term customary rights derived from membership in the community; (ii) tenancies of varying durations, including migrants (or so-called "strangers") from outside the community, some of whom may have been present for generations, others of whom may be of recent origin; (iii) sharecropping arrangements; (iv) pastoral and other rights over common property; and (v) others. Chiefs or family heads are supposed to exercise control over land as trustees on behalf of the community. Nevertheless, there have reportedly been a growing number of instances in recent years where traditional owners have entered into agreements with investors in a non-transparent way, without consulting with the community as a whole, without ensuring that the transaction entails significant community benefits, and without ensuring that all negative effects on existing land users are fully mitigated. If not managed carefully, this phenomenon poses significant risks for local communities and their livelihoods, and represents an important safeguards and reputational challenge for the project.

22. As noted above, the state's power of **compulsory acquisition** will not be deployed to assemble land for private investment under GCAP, for a number of reasons. Compulsory acquisition is an extraordinary state power, intended to be used for land needed in the public interest or for a public purpose. Its use to facilitate access to land for private investors is likely, at the very least, to generate considerable controversy. Landowning communities generally disfavor its use, preferring to retain a stake in the land and the right to resume it upon termination of a lease, as opposed to losing it through permanent acquisition by the state. Its use inhibits direct negotiation between communities and investors and the involvement of communities in land-related investments as genuine partners. Finally, there have been considerable governance problems associated with a significant number of past state acquisitions that have contributed to a poor public perception of this mechanism, including lengthy delays in the payment of compensation.

23. **Smallholders:** Project support for investments in large farms will be conditioned upon investor willingness to pursue an investment model that incorporates smallholders as outgrowers. In addition, therefore, to the assembling of land for nucleus estates, existing land rights and land use patterns may require readjusting and reconfiguration to accommodate support for smallholders as well, particularly where irrigated smallholder plots are part of the overall investment model.

24. Depending on the shape of the outgrower model being pursued and the underlying ownership of the land in question, the land implications of the incorporation of smallholders into project investments may vary widely. Participating smallholders may continue to use their own land or move to new plots prepared with investor and/or project support (especially in the case of irrigated land). Smallholders rights to land will most likely be derived from the owner of the land on which they are located – that is to say, where the project area is state land, the smallholder will hold a lease from the state; where it is customary land, the smallholder will continue to hold a customary right from the landowner, or in some cases, the smallholder may be a customary landowner in his or her own right. In yet other scenarios, it is possible that large-scale investors who lease land from the state or customary owners may in turn sub-lease some of that land to small-holders.

25. These examples are illustrative only and are not meant to capture the full range of arrangements that might be agreed between all relevant parties. What is fundamental, however, is that any smallholder who participates in a project-supported investment as an outgrower either has already or will be allocated clear, secure and documented rights of a sufficient duration to the land in question, under which ever tenure regime (state or customary) is applicable.

Land Tenure Issues arising in the Project Areas

26. **Accra Plains:** In the Accra Plains, the proposed project area comprises approximately 11,000 hectares along the right side of the Volta River, stretching from Kpong Dam in the west to Dove in the east. Although exact population figures are difficult to determine, along with a number of settlements within the area, there are estimated to be approximately 5,500 people engaged in smallholder agriculture (2,500 as smallholders on state land in the Kpong Irrigation Scheme; the remainder on customarily owned land or land that had previously been taken but never developed by the state).

27. As noted above, the precise locations within this overall 11,000 hectare area for investments – meaning large consolidated areas for one or more nucleus farms as well as areas that will be devoted to smallholder development – have not yet been identified. Similarly, the sitings of the main irrigation canal and secondary canals have not been finalized, though it is expected that the main canal will be located toward the southern side of the project area, parallel to the river course. Final design of the project "footprint" will depend on the outcome of investor interest tests, feasibility studies, agreement on the PPP modality between private and public partners, and negotiations with local communities concerning their interest and willingness to make land available for investment.

28. To help inform this ongoing process and to ensure that project design and safeguard instruments are aligned with an understanding of the opportunities and challenges presented by the existing land use and tenure situation in the project area, the Project Preparation Unit commissioned a *Diagnostic Review of Land Ownership and Land Rights in the Accra Plains (November 2011).*

29. As discussed in the Diagnostic Review, there are two broad categories of land in the project area:

- *State land*: Approximately 40 percent of the project area consists of land that was subject to government compulsory acquisition in the 1970's, 80's and 90's.

- *Customary land*: Approximately 60 percent of the project area consists of land owned by customary land owning families.

30. These two categories of land present a number of similar and distinct opportunities and challenges for project implementation.

31. **State acquired land:** Since 1969, four takings by the government have been carried out affecting the project area to support a number of agricultural initiatives:

- **Akuse-Asutsuare Sugar Project (1969)**, comprising approximately 8000 total hectares, of which about 5,500 hectares fall within the project area. This sugar project failed and is no longer in operation. Parts of this area have been leased by the government to the Golden Exotic Company for banana production. Other parts of the land are being utilized by local communities for scattered farming of rice and vegetables.

- **Kpong Irrigation Project (1995)**, comprising approximately 3,000 total hectares, all of which falls within the project area. The entire area has been allocated to 2,500 smallholder farmers for rice production.

- **Aveyime Cattle Ranch Site (1986)**, comprising 10,000 total hectares, of which only 392 hectares fall within the project area. 1000 hectares of this site are allocated to cattle ranching activities. The remainder (including the portion within the project area) continues to be used by local farmers in scattered plots for annual cropping and range cattle herding.

- **Accra Plains Agricultural Company Ltd. site (1977)**, comprising 8,417 hectares, of which about 100 hectares fall within the project area. 2,000 hectares of this area have been leased by the government to Prairie Volta Rice Farms. There are a number of villages within the acquisition area and small-scale farming continues in the vicinity of the settlements.

32. The Diagnostic Review's account of the above state acquisitions and the current patterns of land use within the acquired areas reveals a number of issues that will require attention

in order for the project to facilitate secure access to land for investors and to mitigate negative impacts on current users:

- There are substantial areas of land previously acquired by the state from the 1960's to the 1990's. The study shows, however, that on much of this land, the process of acquisition was incomplete or flawed. Compensation for two sites was paid more than 30 years late, and there are concerns that much of the compensation paid may not have reached the people affected. In other instances compensation has not been paid nor has the quantum been fully assessed.

- A significant number of people originally slated for resettlement have remained on site and have continued to use the land, particularly in areas where state projects never or only partially materialized.

- Poor geographical data makes the boundaries of state acquisitions in some cases difficult to determine precisely. In one instance, it appears that a large section of land was subjected to two overlapping government takings processes.

- Among people residing in the KIP, there is a perception that migrants have been favored in the allocation process at the expense of so-called "indigenes" or members of the former landowning families.

33. ***Land in customary ownership:*** The project area falls within the geographic jurisdiction of a number of traditional authorities and clans. However, as most land in the Accra Plains is categorized as "family land", these upper levels of the traditional hierarchy do not have authority over the allocation of land. Instead, allodial ownership of the land and authority to transact it is vested in a significant and undetermined number of families belonging to the respective clans.

34. While many family heads, as part of a "sensitization" campaign by GIDA, have indicated their willingness in principle to make land available to the project, there are a number of challenges affecting these areas to differing degrees:

- Some of the families have registered their ownership in government registries. However, consistent with customary practice, not all families have legal documents confirming their ownership, which will need to be rectified if they engage in commercial land transactions.

- There are reportedly a number of protracted disputes within and between customary landholding groups in some cases making it difficult to ascertain the legitimate owner of land, or the boundaries between adjacent landholdings.

- Traditional methods of dispute resolution have weakened, meaning that a number of the disputes affecting the customary sector have been referred to court.

- Migrant communities have largely resided peacefully within native communities, though there are some signs of increasing tension related in part to conflict between adjacent customary owners over land on which migrants reside, leaving them vulnerable to displacement by competing groups.

- There is a clear trend of increasing pressure on land in the area and competition from non-agricultural uses, which is likely to grow as the peri-urban area of Accra continues to expand.

- There is considerable interest among land-owners in participating in the project, but a need to ensure that any allocation process to investors and to participating smallholders is transparent and represents the views and protects the interests of all land users.

Land tenure in Northern Ghana

35. In the Upper West and Upper East regions, ownership of land is vested in the Tindanas (land priests), while in the Gonja areas of the Northern Region the land-owning authority are the "skins" or chiefs. In most parts of the three northern regions undeveloped and unoccupied land may be described as communal lands and subject to common rights. These may be termed as local 'public' lands since they are for the benefit of the whole community. Land that may appear to be unoccupied is in many cases land that is utilized by local communities for a variety of livelihood activities.

36. The Tindana or chief determines new areas that are to be put under cultivation every farming season. Once a plot is allocated to an individual, the person obtains a use right and continues to cultivate it (frequently in rotation with other plots) for any number of years. An individual acquires land use rights by purchase, gift or through inheritance but he/she cannot sell it to anyone outside the group. A person who obtains a user right to land cannot be deprived of the land without his/her consent - even by the owner of the allodial title. A person who does not belong to the land owning group can acquire stool or family land only by some form of grant, license or contract irrespective of the use to which it will be put.

37. The majority of people in the three northern regions are traditionally crop and livestock farmers, growing cereals, root and tubers and keeping livestock, mainly goats, cattle and sheep for subsistence and gain. Outside farming season activities include farm produce processing and marketing, livestock grazing, bush fire prevention and control and renovations/rehabilitation of residential accommodation. Cattle husbandry plays an important role in the socio-economic life of people of the three regions. Wealth is mostly invested in cattle, and the number of cattle is an important indicator of wealth. Cattle are used for bride price and on other important social occasions. Most cattle owners, therefore, put greater emphasis on the herd size, rather than the quality of their stock. To them large herds mean security, wealth and prestige in the community. This leads to overstocking in many parts of the northern savanna area. With respect to range tenure, grazing is on a communal basis and anyone with animals may graze his/her animals on communal lands in the community where he/she lives. By contrast, herders from other communities will have to obtain grazing rights from the village chief or head of the land-owning group before putting their animals on communal lands to graze. For inhabitants

of a village or community there are no restrictions to the use of the communal grazing lands provided that the user of the land does not change the land use form, for instance, into human habitation.

38. Traditionally, forage crops are not grown and livestock graze on communal pastures, for which no one has management responsibility. There is growing concern about the rate of deterioration of pastures, particularly in heavily populated areas.

39. There are significant differences in population density, customary tenure rules, farming systems and ecology between the northern regions and the Accra Plains, but some similar issues arise with respect to land rights that are of relevance:

- Generally speaking, the phenomenon of large areas of land being fragmented among numerous allodial owners (as is the case in the Accra Plains) is not present in the north. Allodial titles are typically vested at a high level in the traditional hierarchy and cover significantly large contiguous areas, in contrast to the stools and clans in the Accra Plains who exercise jurisdictional influence but do not hold ownership to family lands. This can make it easier for investors to identify "who we should talk to" than in areas elsewhere in Ghana where authority over customary land may be more dispersed through the customary hierarchy.

- Land rights both at the level of the allodial owner and individual user are generally not documented. Even medium-large scale commercial farmers who are members or allies of the community within which they farm frequently report that they do not have documents confirming their allocation from the chief. Outside investors, by contrast, generally enter into written leases and register them with the Land Commission.

- Uncertain and unmapped boundaries between allodial owners can serve as a source of insecurity for investors or small-holders who may seek or hold land in such areas, as they are not infrequently the locus of inter-community tension and disagreement over who holds the allocative authority.

- As in other parts of the country, increasing problems with non-transparent community land allocation mechanisms in the face of investor interest have been reported. Several high profile protests against proposed biofuel investments illustrate the phenomenon of chiefs striking deals without consulting the community at large, and offering to transact apparently "empty" land that community members were using for various livelihood activities including the collection of shea nuts.

- Succession disputes or other high-level conflicts within traditional authorities can significantly affect land governance. A case in point[82] concerns the Dagbon Chieftaincy, where the assassination in 2002 of the overlord chief has created a void that is still to be filled. While a regent currently has assumed temporary authority to grant leaseholds, these are vulnerable to being renegotiated when a permanent

[82] Reported in Fella and Linkow (2011), note 83 above.

successor is finally agreed upon. Similar less sensational examples can be found elsewhere in the region.

- In terms of access to and tenure over land, women in northern customary systems are typically significantly more disadvantaged than their counterparts in the Accra Plains. Some northern customary systems do not recognize the right of women to hold land in their own right.

Summary of issues arising

40. From the above account of the legal framework and of land tenure arrangements in the two project areas, as well as consultations and other assessments conducted during project preparation, a number of key land issues emerge that need to be diligently and appropriately managed throughout project implementation. The list that follows also reflects lessons derived from the World Bank's long involvement in Ghana's land sector through the LAP, the ongoing Land Governance Assessment Framework (LGAF) process and other projects, from work by other development partners such as the Millennium Challenge Corporation, as well as key insights from work done by the Bank[83] and others concerning the recent trend of increasing international interest in agricultural land in Africa and other developing areas.

41. *Clarifying who holds allocative authority over land targeted for investment.* Investors seeking secure access to land need assurance that they are dealing with persons who in fact have the authority to grant such access. Experience shows that generally in Ghana an acceptable level of assurance can be achieved on this point. However, given the complexity of customary tenure in Ghana, as well as the great variety in the rules and structures that are found across the country, identifying the locus of allocative authority is not always an easy task for outsiders. Investors have been known to observe that it can be hard to tell "who we're supposed to deal with." This is exacerbated in areas – such as portions of the Accra Plains – where there are intra-community disputes stemming from succession struggles or the emergence of splinter groups. Conflicting claims to the same land by neighboring landowning groups may also be present, fueled in part by the absence of clearly defined boundaries between traditional areas, as most such areas have never been mapped or documented.

42. *Identifying the full range of rights and uses affecting land.* Concern about the neglect of local land rights is a key reason for public criticism of some large-scale investments. Avoiding such neglect requires a clear recognition of the wide range of rights and uses that might be present on a given piece of land. As noted earlier, in the customary land sector in Ghana a complex array of secondary customary rights may exist beneath the level of allodial ownership. Yet allocation of subsidiary rights (leases, usufructs, share-cropping arrangements) within stool, skin or family lands are often not documented or ambiguously documented. Only a small fraction of such interests are registered in state land agencies. As a result, some investors report that they have learned about some

[83] See Deininger et. al, *Rising Global Interest in Farmland: Can it Yield Sustainable and Equitable Results?* (World Bank, 2010).

existing land uses only when they try to take possession of the land that they have acquired. In addition, land of interest to investors may often be perceived to be "empty" or "marginal." Yet it is important to recognize that there are few areas that are truly "unoccupied" or "unclaimed," and that frequently land classified as such is in fact subject to long-standing rights or uses, access and management based on custom. These need to be taken into account to ensure that efforts to make land available to investors and to adjust existing holdings to accommodate associated outgrower schemes do not undermine current or future livelihood opportunities for local people.

43. *Transparency in land governance processes.* Weaknesses in transparency have been observed to afflict both state and customary land institutions in Ghana. At customary law, chiefs and family heads have traditionally acted as trustees of the land; this trustee responsibility is reaffirmed in the 1992 Constitution. There are reportedly those who continue to take this trustee role very seriously. Yet increasingly, especially in peri-urban areas and areas of high investment potential, there are signs that chiefs have begun to conceive of their role as that of landowners in their own right, with subjects in essence reduced to lessees. There are reports of chiefs striking secret deals with outside investors, in essence engaging in the privatization and sale of areas that by custom were considered common forest, water or grazing resources, or alienating land that was fallow or reserved for future generations. Failure by leaders to pursue genuine intra-community consultations can lead to persisting tensions in the aftermath of transactions to the disadvantage both of investors and communities.

44. *Clarifying the status of land previously acquired by the state.* As noted earlier, a potential source of uncertainty relating to state land concerns the issues sometimes left lingering by earlier compulsory acquisition procedures that were not completed properly, or for which compensation was not fully paid. The assumption by some investors may be that, as a rule of thumb, land that has been previously acquired by the state is by definition free of complications that could compromise its availability – under Ghanaian law the legal effect of compulsory acquisition is to "cleanse" land of all existing rights and encumbrances. Investors who rely too readily on this legal effect, however, may find that because of deficiencies in the acquisition, they have inherited lingering disputes and unresolved claims, and communities that have remained on the land notwithstanding the taking that occurred. This is a recurring pattern, for example, in several of the areas of government acquired land in the Accra Plains. The Government of Ghana has recognized that the incomplete nature of acquisitions carried out several decades ago has left some areas of land and the people that live there in a situation of limbo that needs to be resolved if land is to be attractive to investors.

45. *Ensuring meaningful negotiations between communities and investors, leading to clear and enforceable contracts.* International experience shows that negotiations are frequently not held or done in a perfunctory way; that the resulting understanding about benefits and compensation are poorly documented; that communities and their leaders lack capacity to negotiate with sophisticated investors or to realistically ascertain and seek to realize the true value of the assets they are transferring; and that contracts can be difficult to monitor and enforce.

Project framework for engagement on land

46. The project will establish a “framework for engagement” on land-related issues. This framework will set forth threshold standards concerning land to which investors, landowners and government actors involved in project-supported investments will be expected to commit as well as a process for ensuring ongoing communication between all parties to ensure that commitments are observed over time and problems are addressed as they arise. It will also put in place a suite of project-supported mechanisms that can be used to assist the parties to meet these standards, and to address land issues in a manner that is consistent with the guiding principles (including the Principles referred to above).

47. **Firstly, Application of OP 4.12.** The World Bank’s Operational Policy on Involuntary Resettlement, OP 4.12 will apply to assembling of tracts of land into commercial nucleus farms and associated outgrower schemes for investments supported or facilitated by the project. This means that the project RPF will provide the framework for addressing impacts and benefits for local people who may be required to relocate their residences, their farming activities and their access to common resources. OP 4.12 will be considered to apply even when (as is expected will be the case in most if not all situations) the landowner or chief agrees to the transfer of land as a voluntary transaction as opposed to a compulsory acquisition by the state. Given the frequent presence of many land users and land rights holders in a given piece of land, it will be difficult for the project to ascertain that what the landowner characterizes as a voluntary transaction does in fact represent an informed and voluntary choice on the part of the community as a whole. There exists in such situations the risk of elite capture and coercion of choices. Hence the importance of having the RPF as a tool to ensure that the procedural and substantive rights of local people are appropriately addressed. Private sector parties whose investment in land is supported by the project through feasibility gap financing or otherwise facilitated by the project will, as a condition of such support, be required to apply and comply with this RPF. A minimum principle will be that no person will be required or asked to relinquish land that they are currently using to accommodate an investment or associated activities (such as the establishment of associated infrastructure or land development for preparation of smallholder plots) without being provided secure tenure over alternative land of at least equivalent quality or provided other acceptable compensation and assistance consistent with OP 4.12 and the RPF, and without support for livelihood restoration.

48. It should be noted that certain characteristics of the project approach will make the application of OP 4.12 to land acquisition less “onerous” for both government and private investors. First, the project will attempt to target land that is relatively unused or undisputed, hence avoiding the need for extensive relocation of existing rights and uses from the outset. Second, land transactions will be in the form of negotiated agreements between investors and communities, and will be conditioned on ensuring that accepted investment models include significant benefits for local communities (including opportunities to be incorporated into the investment as outgrowers or beneficiaries of smallholdings), with the expectation that the resulting benefit packages (both for communities and individual displaced farmers) will represent appropriate support for restoring or enhancing livelihoods as stipulated by OP 4.12.

49. **Secondly, land rights/land use inventory and participatory planning.** Project supported investments will need to be preceded by a careful ascertainment of the existing rights in a proposed area. This will require due diligence to confirm where the legal authority to enter a transaction resides. This should be accompanied by ascertainment and, if possible, documentation of existing rights and uses (i.e., beyond allodial ownership), including those of tenants and vulnerable groups. Uses of common property resources should be ascertained and mapped, as often the perception that certain land areas are "unutilized" arises from a failure to recognize local uses of such areas that are important for livelihoods. Flowing from such an inventory, a facilitated process of participatory planning will take place, involving all levels of the community, to help communities themselves define areas available for investment, to determine values of land, crops and other assets and to assess potential impacts on livelihoods. Considerable experience has been gained in a number of pilots around Ghana and elsewhere in the utilization of low-cost and culturally-appropriate technologies to map and document customary rights and in carrying out participatory processes of rights ascertainment and community-level planning. This includes experience with customary land secretariats under the Bank-supported Land Administration Project. The project will support access to the needed technology, facilitate the collaboration as needed of state land agencies, and provide means by which communities can collaborate with neutral third-party organizations with experience in facilitating these types of activities.

50. **Thirdly, addressing legal ambiguities or disputes affecting targeted land.** The project will not support (nor are private sector partners likely to be interested in) investments on land for which there are significant ambiguities concerning legal ownership, including disputes within communities between different claimants, boundary disputes, disputes between customary owners and the state, or persisting complaints stemming from prior state land acquisitions. Following on from the process outlined in the preceding paragraph, the project will support a process of identifying and analyzing such ambiguities and disputes, and will deploy tailored mechanisms designed to help the parties reach legally robust and socially acceptable solutions. Utilizing the approach that has already been substantially initiated during project preparation in the Accra Plains, the Lands Commission will take the lead in investigating the status of any previously acquired state land that the project may target for potential support, detailing the history and completeness of past acquisitions and the nature and incidence of persisting disputes surrounding that process, and developing possible strategies for efficient and appropriate remediation. As appropriate, this may include support for ADR interventions, again drawing upon expertise and capacity that has developed in this area in recent years among some civil society organizations, the judiciary and land sector agencies (under LAP).

51. **Fourthly, consultation, negotiation and benefit sharing.** Transparent and inclusive consultation will be essential, both *between* communities, the government and prospective investors, and *within* communities themselves (to ensure that the implications of proposed allocations of community land are both understood and accepted by the community at large, that benefits are equitably targeted and that risks of elite capture are mitigated). There is the risk that lease payments and other benefits may be negotiated exclusively between community leaders (chiefs, family heads and clan leaders) sidelining

community members including users of land. As a result, the project has included in its design principles for community-investor engagement that will be detailed in the model lease and guidelines for participating communities. In addition, several actions that contribute to an enabling environment for benefit sharing are being promoted under the project (for example, transparency of contract payments, participatory planning on resource use and use of representative community platforms for negotiation purposes, etc.) as well as support to communities to build their capacity to engage with investors (negotiation support, legal literacy and enhanced understanding of legal rights and processes and economic analysis, etc.). The project will also provide support to monitoring and documentation of consultations.

52. **Fifthly, land investment contracts.** The results of consultations and the elements of any finalized negotiation for project-supported investments need to be reflected in a legally-sound and enforceable contract between investors and landowners, articulating clearly the rights and responsibilities of the parties, and defining in clear and unambiguous terms any agreed-upon benefit sharing arrangements. The project will support the development of a model lease agreement drawing upon international best practice both in commercial agriculture and in extractive industries (from which even more detailed and analogous experience than is available in the agriculture sector can be obtained in the development of benefit sharing agreements, monitoring arrangements, dispute resolution and the like). In addition to technical assistance on legal aspects, this exercise will be supported by relevant policy, social and economic analysis, and a compilation of lessons learned from investment experiences in Ghana and internationally. A broad process of consultation would be involved, recognizing that elements of such a model lease agreement embody critical policy decisions that require broad stakeholder inputs in order to be legitimate. The output would be a template that reflects international best practice (including lessons from other sectors such as extractive industries) combined with Ghana's unique circumstances. It is expected to serve only as a guideline but could be expected to have considerable persuasive authority.

53. **Sixthly, land support to smallholders.** Project principles of engagement with landowners and investors will require that participating smallholders (whether operating on land they already possess or on new parcels created in connection with the investment) either have already or are allocated documented, secure and durable rights to the land they are using. A transparent and equitable process for allocation of irrigated smallholder plots within project areas will be designed.

Annex 7: Details of the Financial and Economic Annex

REPUBLIC OF GHANA: Commercial Agriculture Project

Introduction

1. An economic and financial analysis of the project was undertaken in order to assess the economic soundness of project's proposed intervention, and the likely impact on the beneficiaries. The analysis takes into account the estimated incremental benefits and costs of the project-related investments to society as a whole. Farm budgets, outgrower schemes models, warehouses models and rice mills models have been prepared in order to assess the financial impact from the point of view of the beneficiaries and to provide the basis for the economic assessment. The findings of the analysis are summarized below.

Project Areas and Beneficiaries

2. The project will have two main areas of intervention: the SADA zone and the Accra Plain. In the SADA zone it will likely focus primarily on rice, maize and soybeans value chains, in areas with a good potential for agricultural growth and irrigation/water management. In the Accra Plain the area targeted include 11,000 ha mainly for irrigated rice cultivation. In both intervention zones the project will promote contract farming and support the establishment of outgrowers schemes for the various agriculture commodities.

3. The primary beneficiaries of the project are the small-size farmers, nucleus farmers, and agribusiness. They will primarily benefit in the following ways: (a) *directly*, through irrigated agriculture, complementary technology package, extension service support, support to farmer engaging in outgrower schemes (or other contract farming agreements) and value-chain enterprises; and (b) *indirectly*, through improved public and private advisory services, access to financial services and value chain enhancement.

Project Benefits

4. Specific benefits expected from the project include: improved productivity and marketed production; value-adding; market opportunities, resulting in increased incomes and employment opportunities; reduced import of selected crops; and improvement in food security.

5. These benefits will primarily result from: (a) adoption of new technology packages which lead to increased production and productivity; (b) reduced post-harvest losses; (c) produce processing and/or packaging; (d) improved access to services, markets, and information; (e) reduced transaction costs; (f) improved product quality and producer (farm-gate) prices; and (g) improved economies of scale. Increased output, income, and employment in the targeted zones will result in increased demand for goods and services, which is expected to generate additional income and employment effects, and increase government tax revenues. As the project is supporting high-potential areas in the

production of major food crops, the increased output from the targeted areas will increase national production, and thereby contribute to growth in overall GDP and national food security. In addition, possible reduced imports would result in foreign exchange savings, especially in the case of rice. Furthermore, it is expected that consumers will benefit from reduced consumer prices and improved availability of better quality locally produced food commodities.

6. Major *institutional benefits* expected from the project are: (a) producer and marketing groups are effectively functioning and linked to markets; (b) local communities are managing their physical infrastructure investments in a sustainable way; (c) public and private sector operators are providing quality services that are demanded by smallholder producers and rural entrepreneurs; (d) a strengthened public institution responsible for overseeing irrigation development in Ghana; (e) contract farming and outgrower schemes including the smallholders are effectively promoted; and (f) sustainable irrigation organizations, and for larger schemes, sustainable private management of public irrigation assets. In addition, the project is expected to contribute to improving the "rules of the game" with respect to improved inclusiveness of agri-investment; it is expected that these indirect benefits could be significant.

7. The *social benefits* expected from the project result from its focus on rural poverty reduction. The project will provide additional sources of incomes for poor rural households and serve to diversify rural incomes, thereby contributing to reduced vulnerability. The irrigation technology introduced by the project and the associated technical know-how on e.g., water management and crop husbandry will help further reduce weather related vulnerability of the targeted population. The promotion of contract farming agreements will help in engaging the target group in the market and reduce its uncertainty.

8. The project's support to sustainable land and water management in irrigation schemes, is expected to result in various *environmental benefits*, including: (a) mitigated effects of droughts; (b) improved sediment retention and flood control; (c) improved access to and control of water; and (d) carbon sequestration.

Potential Market and Price Effects

9. Currently Ghana imports between 350,000 – 500,000mt per year of rice, and a limited amount of yellow maize and soybeans. The expected increase of agricultural production and volume of marketed agricultural products resulting from the GCAP intervention can have a negative impact on producer revenues if they lead to reduced producer prices in the face of limited agricultural demand.

10. The difference between producer (farm-gate) prices and retail prices is made up of two types of costs: (a) transaction costs (for example, transport and marketing costs) and (b) costs associated with value addition, involving a transformation to some degree of the commodity from one form to another (for example, through processing and packaging). The price effects of interventions in a value chain are the result of a complex interaction between: (a) demand-side factors, both for the particular commodity under consideration

but also in related markets for substitutions and complements and (b) supply-side factors. In quantitative terms, the effects depend on the absolute and/or relative measures of: own- and cross-price elasticity of demand; elasticity of supply; and rates of substitution. In addition, trends in incomes mean that the income elasticity of demand is also important.

11. Given the unmet growing domestic demand for commodities targeted by the project (especially perfumed rice) and soybean for livestock feeding, major adverse effects on retail and producer prices of these commodities, as a result of the expected supply increase, are unlikely.

12. Furthermore, it can be assumed that the project will more than offset any potential negative effects of reduced producer and retail prices. This effect will be due to: (a) increased productivity/reduced cost per unit of output; (b) a reduction in transaction costs; and (c) increased value addition as a result of one or a combination of the following factors, among others: productivity gains, increased output (increased yields and/ or reduced losses), improved quality, and economies of scale (the latter having an impact on transaction costs).

Financial and Economic Analysis

13. The analysis has been undertaken separately for Component two (Accra Plain intervention) and component three (SADA Zone intervention), with the following approach.

14. The main objective of the financial analysis is to examine the financial viability of the main crops, outgrower models, warehouses models, milling model and PPP financial model[84], that will be supported by the project. It assesses their potential for increased profitability and income as a result of project interventions.

15. For the purpose of the analysis, representative financial crop models have been prepared on the basis of the rice farming system analysis carried out by JICA,[85] MoFA data, USAID research on the same topic undertaken during project preparation, and information available from similar projects and programs supported by the GoG and other development partners. The total investment costs figures between the JICA study (used as a reference in this annex) and PPP financial model are different as the latter model includes higher contingencies to the overall investments costs plus interest during construction. These are not economic cost and will not therefore affect the economic analysis of the JICA study.

Accra Plains

16. The financial models compare the “future without project” and “future with project” scenarios. Without the project, it is expected that farmers would continue with the existing low-input, low-output, production systems and that opportunities for increased

[84] See separate section on Public Private Partnership financial in the Accra plain
[85] Preparatory study on Accra Plain irrigation development project, draft April 2011

value addition and marketing in the project area remain limited. The available information from ongoing interventions supporting agricultural and value-chain development in Ghana suggests that there is scope for significant increases in productivity and marketed output, which will be reflected in the "future with project" scenario of the representative models.

17. The projected irrigation and drainage benefit will accrue from increase in cropping areas and productivity of the target crop: irrigated rice. The financial benefit was estimated as the incremental net production value between future "with" and "without" project conditions. In with project scenario the current input subsidy scheme is assumed to continue.

18. A key parameter is the water fee. In the without project scenario it is set at GH¢120/ha/year, under the with project condition this figure has been revised to GH¢600/ha/year accordingly to the estimation done in the PPP financial analysis. The with project tariff is considered affordable for the farmers and correspond to a cost-benefit ratio of 43 percent. The extreme end scenario is the one with no government subsidy and implies a tariff of GH¢6,240 /ha/year which is not financially affordable for the farmers. Key results are summarized in the tables below.

Table 13 Financial crop budget per Ha of Rice under Without Project condition (transplanting)

		Major Season Rice (Transplanting)		Minor Season Rice (Transplanting)	
Items	**Unit**	**Quantity**	**Amount (GH¢)**	**Quantity**	**Amount (GH¢)**
Return					
Unit Yield	t/ha	4.7		4.0	
Unit Price	GH¢/t		610		670
Gross Return	GH¢/t		2,867		2,680
Total Production costs	GH¢		1,155		1,167
Net Return	GH¢		1,712		1,513

Table 14 Financial crop budget per Ha of Rice under With Project condition (transplanting)

		Major Season Rice (Transplanting)		Minor Season Rice (Transplanting)	
Items	**Unit**	**Quantity**	**Amount (GH¢)**	**Quantity**	**Amount (GH¢)**
Unit Yield	t/ha	5.5		5.5	
Unit Price	GH¢/t		610		670
Gross Return	GH¢/t		3,355		3,685
Total Production costs	GH¢		1,374		1,374
Net Return	GH¢		1,981		2,311

Table 15 Financial crop budget per Ha of Rice under With Project condition (Direct sowing)

Items	Unit	Major Season Rice (direct sowing)		Minor Season Rice (direct sowing)	
		Quantity	Amount (GH¢)	Quantity	Amount (GH¢)
Unit Yield	t/ha	5.0		5.0	
Unit Price	GH¢/t		610		670
Gross Return	GH¢/t		3,050		3,350
Total Production costs	GH¢		1,493		1,493
Net Return	GH¢		1,557		1,857

19. In the case of direct sowing the increase in the return is modest and estimated at 6 percent, with respect to the 33 percent for the transplanting. This applies only for the 4,100ha already under cultivation and not on the 6,900ha of greenfield where there are no ongoing cultivation.

20. Overall under the with project condition the production of rice is targeted to increase by 75,300mt of paddy or 48,900mt of rice per year at full development stage. This represents almost 10 percent of national rice consumption (2009/2010 estimate) and 13 percent of imports in that year.

21. The economic analysis is based on the following assumptions/conditions:

- All prices are expressed in constant prices at the beginning of 2011 and the foreign exchange rate is fixed at US$1.00 = GH¢1.50;
- The project life is assumed to be 50 years starting from 2014, the proposed year for the commencement of the project implementation;
- Economic farm gate prices of internationally traded agriculture inputs and outputs are calculated in the form of export or import parity prices;
- A standard conversion factor (SCF) of 0.90 was applied. Transfer payments such as tax, duty, subsidy interest etc. were excluded in estimating economic benefits and costs. Financial construction costs were converted into economic costs using the conversion factor of 0.765.

22. ***Economic Benefits.*** The project irrigation benefit will accrue from increase in cropping areas and productivity of the target crop: irrigated rice. The economic benefit was estimated as the increment net production value between future with and without project conditions. The full project benefit is realized from 2020 onward in the KIS and 2022 in the NDIS. Table 16 below summarizes the benefit.

Table 16 Economic Irrigation and drainage benefits

Project/Scheme	Net production value (GH¢'000)			
	Project Area (ha)	With Project	Without project	Increment
Kpong Irrigation Scheme (KIS)	4,100	23,429	12,865	10,564
New Developed Irrigation Scheme (NDIS)	6,900	29,220	5,477	23,743
Total GCAP Accra Plain Intervention	11,000	52,649	18,342	34,307

23. ***Negative benefits:*** The agriculture production foregone in farm lands located outside the project area acquired for the construction of irrigation and drainage and other physical facilities and the loss of generated power due to the use of Kpong Dam for irrigation purpose are the considered ones. They are estimated at GH¢860,000 per year.

24. ***Economic evaluation and sensitivity analysis:*** The economic and benefit streams for the project life of 50 years have been calculated and the results are summarized as follows in the table below.

Table 17 Economic Internal Rate of Return and Present Value

Project/Scheme	EIRR (%)	Present Value (at 12% discount rate)			
		Benefit (GH¢)	Cost (GH¢)	B – C (GH¢)	B/C Ratio
Kpong Irrigation Scheme (KIS)	20.7	44,320	24,272	19,578	1.8
New Developed Irrigation Scheme (NDIS)	19.6	89,203	52,395	36,808	1.7
Total GAP Accra Plain Intervention	20.0	133,523	77,137	56,386	1.7

Table 18 Sensitivity analysis

Schemes	Indicator	Construction costs up 10%	Benefit down 10%	Construction work 1 year delay	Target yield down by 10%	Case 1 combined with case 2	Normal
Kpong Irrigation Scheme (KIS)	EIRR B/C Ratio	18.1 1.5	19.3 1.6	20.2 1.8	19.0 1.6	16.7 1.4	20.7 1.8
New Developed Irrigation Scheme (NDIS)	EIRR B/C Ratio	18.4 1.6	18.1 1.6	18.4 1.6	17.2 1.5	17.1 1.5	19.6 1.7
Total GAP Accra Plain Intervention	EIRR B/C Ratio	18.3 1.6	18.5 1.6	18.9 1.7	17.7 1.5	16.9 1.4	20.0 1.7

25. The results of the sensitivity analysis, to test the robustness of the project interventions, show that the project economic viability is not seriously affected by the changes in the

conditions examined here. The major impact is given by the decrease in yield which highlights the concern on the right varieties and the right extension services.

SADA Zone

26. The component will focus on investments in the North of Ghana, with a focus on the crops: rice, maize, and soya. The main mode of intervention will be public-private partnerships, with nucleus farmers, warehouse operators, or processors, who will extend services to smallholder farmers and create market opportunities for their production. The project will provide grants to the private investors to help them meet the initial costs required to establish outgrower schemes.

27. Farm-level data is from IFDC, ACDI/VOCA, AGRA and MoFA and other organizations. Wholesale price data is from ESOKO. Data on nucleus farm and warehouse investment requirements is from the MiDA. Household-level data is from the 2008 Ghana Living Standards Survey (GLSS). Information on tariffs, taxes, and exchange rate is from the GoG. Additional data is provided by the EAT Markets and Warehouse Study (November 2011) and the AGRA Bread Basket Strategy (2010). The models reflect the interventions and project costs identified by the Bank in the component costing exercise. It is assumed that there are no issues in land acquisition in the North, due among other to the mitigation measures taken under the project as detailed in Annex 6. Moreover, prices for inputs, both at the enterprise and farm level, as well as prices for output at the farm and wholesale level are assumed to be the same throughout the North. We assume that the rest of the required investment (not covered by the grant) will be made using own resources in the case of the warehouse and mostly own resources in the case of the nucleus farm. Commercial lending is available for any loans and those loans are repaid on time. In the without project scenario, there is no increase in land under cultivation. In the with project scenario, a gradual 5 percent annual increase in land under cultivation for the three focus crops is modeled. Participating outgrower farmers are using good agronomic practices and have access to the needed inputs. There will be no major exchange rate devaluation or inflation shocks. Finally, farm gate and world real prices are assumed not change. This assumption is tested with sensitivity analysis of the effect of price changes of the focus crops.

28. The analysis is based on the following representative models and is carried out over a period of ten years:

- Nucleus farmers will receive a matching grant to start-up operations or develop infrastructure in exchange for providing inputs and services to outgrowers producing rice, maize and soya and purchasing their output to aggregate for resale to agricultural buyers.

- Warehouse operators will receive either a grant to rehabilitate an existing warehouse or to construct a new warehouse of up to 100 percent of the construction/rehabilitation costs. They will provide inputs and storage facilities to smallholder farmers.

- Rice mill operators will receive a viability gap grant to rehabilitate rice mills in exchange for extension services as well as lower transportation costs for farmers. Alternatively, the GoG will cover the cost of rehabilitation and will then concession the rice mill.

29. The analysis assumes that without project scenario there is no investment in nucleus farms that the warehouses are not operational and rice mill operates at about 50 percent of capacity. For the model out-grower, it assumes that production is low input and low yield traditional varieties; low use of mechanization services; no warehousing services available; no rice mill accessible; and that the farmer who sells his or her entire production at harvest to an itinerant buyer at the prevailing farm gate price.

30. Incremental costs are modeled as follows:

- For farmers this includes labor (including family labor at opportunity cost) inputs, mechanization and extension services, warehouse and processing fees;

- For nucleus farmers: land, land development, infrastructure, machinery, labor for farm and services, and O&M is included;

- For warehouse operators: costs of rehabilitation or construction, O&M, machinery and equipment for the warehouse and for service provision to farmers, labor, and administrative expenses;

- For the rice mill operator: costs of rehabilitation and O&M of the rice mill, machinery and equipment, labor and admin expenses.

31. Incremental benefits are defined by the following:

- For farmers: higher production due to higher inputs and mechanization. For rice farmers this also includes higher prices for switching to aromatic rice and reduced costs of transport with the introduction of rice mills in the North;

- For nucleus farmers: production on own farm, resale premium on aggregated production from outgrowers, and payment for services to farmers;

- For warehouse operators: income from service provision and storage fees;

- For rice mill operator: income from milled rice and from payment for services, as well as from lower transport and operating costs.

32. **Nucleus – Outgrower scheme models**. The investment model is a nucleus/ outgrower arrangement with a core-nucleus-farm and many smallholder, outgrower, farmers who will add volume to the nucleus farm’s production. A nucleus farm is a farm enterprise that produces sufficient raw material to meet the minimum throughput needs for profitability of a processing operation. Outgrowers provide additional raw material to this processing operation, usually in conjunction with value chain finance for specific inputs

(seeds, fertilizer) required by the nucleus. Crops will be *inter alia* maize, rice, and soya. The analysis will assess the internal rate of return and net present value for such a commercial venture with smallholders, from the point of view of the stakeholders and the overall economy.

33. The model is of two types:

34. ***Rice:*** 1000ha nucleus farm grows aromatic rice only and starts with 650 rice farmer outgrowers who sell their output to the nucleus. In ten years there are 1000 farmers cultivating a total of 2,000 ha of aromatic rice. The counterfactual for the outgrower is assumed to be traditional crops using low-input practices. As the nucleus farm investors are expected to be mainly new foreign investors, the counterfactual for the nucleus farm is assumed to be no investment.

35. ***Maize/soya:*** 1000ha nucleus farm grows soya and has 1300 outgrowers who grow maize and soya and sell all their output to the nucleus farm. After ten years, there are 2000 maize/soya farmers on 4000 ha. The counterfactual for the outgrower is assumed to be traditional crops using low-input practices. As the nucleus farm investors are expected to be mainly new investors, the counterfactual for the nucleus farm is assumed to be no investment.

36. The maize/soya nucleus farms can receive grants of up to GH¢1 million, out of an estimated total investment requirement of GH¢8.6 million. This grant will cover up to 50 percent of the cost of providing extension services and access to ICT to the outgrowers, and up to 100 percent of the cost of technical assistance to the outgrowers.

37. The rice nucleus farms can receive grants of up to 50 percent of the total estimated investment requirement of GH¢17.5 million. This grant will cover up to 80 percent of the total costs of establishing inland valley development irrigation schemes to the nucleus farm and to extend it to the outgrowers and up to 100 percent of the costs of power-grid connectivity for the irrigation schemes. It is assumed that the most likely modality would be to provide 50 percent of the required investment for the nucleus farm and up to 100 percent of the required in-land valley development investment for the outgrowers.

38. Tables 19 and 20 present the financial cash flow in the nucleus-outgrower schemes as a total investment – without the grant, and from the point of view of the nucleus farm investor who is receiving a grant. Net present values were calculated using the assumed economic cost of capital rate of 12 percent as well as the interest rate on GoG Treasury bill as the required rate of return on equity – 27 percent.

Table 19 Rice nucleus – Outgrower Financial Analysis; GH¢ millions (incremental)

	Without Grant (Total Investment)	**With Grant (Nucleus Farmer)**
IRR	39.7%	87.4%
NPV (@12%)	GH¢20.5	GH¢28.5
NPV (@27%)	GH¢5.1	GH¢12.1
EIRR	52.1%	102.3%
ENPV (@12%)	GH¢25.8	GH¢31.8

Table 20 Maize nucleus - Outgrower Financial Analysis; GH¢ millions (incremental)

	Without Grant (Total Investment)	**With Grant (Nucleus Farmer)**
IRR	42.7%	48%
NPV (@12%)	GH¢13.4	GH¢14.2
NPV (@27%)	GH¢3.6	GH¢4.3
EIRR	54.6%	60.1%
ENPV (@12%)	GH¢17.5	GH¢18.3

Table 21 Economic conversion factors used

Maize	0.97
Rice	0.92
Soya	0.92
Labor	0.70
Fertilizer	2.16
Construction	0.765
All other costs	Standard conversion factor of 0.9

39. The IRR and EIRR suggest that nucleus-outgrower schemes can be profitable as total investments – i.e., without the grant component. This points to high potential investor interest and suggests good sustainability prospects. The rice nucleus-outgrower scheme is highly profitable when the maximum available grant is included in the calculation from the point of view of the investor. Therefore, the actual viability gap and hence grant could be lower.

40. While the analysis suggests that the nucleus farms can bring substantial benefits to their investors, there are a small number of large-scale commercial farms being established in the North. This suggests major barriers to entry – and an opportunity for the project.

41. Table 22 presents the results of the scheme for the participating outgrowers at financial and economic (shadow) prices. Both in financial and economic terms, the biggest benefit is derived by the rice farmers who produce aromatic varieties that can compete with imported aromatic rice from Thailand and China. A report[86] finds that there are medium-term opportunities for import substitution for 5 percent broken aromatic rice, with current imports averaging 150,000mt p.a. Evidence from other development projects (e.g., USAID's ADVANCE) confirms that farmers who are able to find markets received higher farm-gate prices for aromatic rice produced in the North. One of the unresolved issues with rice is that the wholesale price for 5 percent broken aromatic rice is US$1,786/mt, significantly higher than world prices. Northern aromatic rice, at approximately US$650/mt milled seems to be highly competitive at this price. But the price premium for rice in Ghana requires further analysis.

Table 22 Outgrowers Financial Results (GH¢)

Incremental Cash Flow	**Rice**	**Maize high input OPV**	**Maize hybrid seed**	**Soya bean**	**Intercrop maize / soya**
FINANCIAL ANALYSIS – TOTAL INVESTMENT POINT OF VIEW					
NPV @12%	29,921	129	4,960	2,769	2,897
NPV @27%	6,018	26	997	557	583
ECONOMIC ANALYSIS					
NPV @12%	11,621	(108)	1,742	1,307	1,200

42. The project aims to produce an additional 60,000mt of maize p.a. As a financial proposition, producing currently used open pollinated varieties (OPV) of maize with improved inputs is slightly better than using traditional methods. Valued at economic prices, however, there is a loss. The main reason for that loss is that currently approved OPV available in Ghana are low-yielding. The productivity gains from increased input use are not sufficient to justify the higher economic cost of production. Higher economic costs are associated mainly with the 50 percent subsidy on fertilizer. USAID's ADVANCE project reports that most maize farmers who use fertilizer access it through the GoG distribution of subsidized fertilizer. Removal of the subsidy without effective seed sector reform would likely remove any incentives to use improved inputs in the maize sector. Maize is frequently intercropped with soya bean, which is profitable. In the model we assume that farmers are devoting 1/3 of their land to soya and 2/3 to maize. We find the intercrop profitable with soya bean inflows subsidizing the small economic loss from maize.

43. Moving to high-yielding hybrid seed maize improves cash flows significantly, both in financial and economic terms. There is a severe shortage of domestically produced high-yield improved or hybrid seed in Ghana, which lacks a large-scale commercial seed producer. Imports of seed are severely constrained. With the passage of the Plant and Fertilizer Act of 2010, there is an opportunity to start importing seed to meet farmer demand. High-yielding hybrid varieties imported from South Africa are currently in the second year of the required two-year testing process and may be approved for the next planting season. Maize outcomes in economic terms can be positive (assuming no major

[86]"The Market for Maize, Rice, Soya and Warehousing in Northern Ghana", EAT Assessment for USAID, October 2011

real price changes) only if the investor is able to distribute high-yield maize seed to outgrowers.

44. Table 23 – Table 25 illustrate the gross margin per acre of land under cultivation for the three focus crops. In all cases yields are net of on-farm losses. Moving from traditional to aromatic rice with improved agricultural practices guarantee the highest gross margin per acre of land, followed by high-yielding maize and soya bean. Key to the high returns in rice is the price differentiation between the traditional rice and the import competing aromatic rice, which fetches up to a 100 percent price premium at farm gate.

Table 23 Rice: Financial Outcomes for the Outgrower Farmers

Component	**Without Project**	**With Project**
Cost of production (GH¢)	193	453
Yield (MT/acre)	0.7	1.3
Price of paddy at farm gate (GH¢/MT)	314	653
Gross margin (GH¢)	156	379

45. In the case of the maize farmer, improved gross margins are due almost entirely to the use of high-yielding maize seed, here assumed to be a hybrid variety. There is no price differentiation in maize varieties, and labor requirements are similar. The use of hybrid seed will encourage also a faster adoption of proper agricultural practices as they are required to achieve the full potential of the hybrid seed. Without access to high-yielding maize, farmers are not able to realize substantial incremental benefit of improved agricultural practices.

Table 24 Maize: Financial Outcome for the Outgrower Farmer,

Component	**Without Project**	**With Project**
Cost of production (GH¢)	184	357
Yield (MT/acre)	1.0	1.8
Price of paddy at farm gate (GH¢/MT)	310	310
Gross margin (GH¢)	127	201

46. There is no price differentiation with soya varieties either. It is assumed that the farmers will continue to use the currently available *jenguma* variety which is shatter-resistant. Here the improved outcome is due to the introduction of proper agricultural practices, in particular timely harvesting to reduce losses due to shattering.

Table 25 Soya: Financial Outcomes for the Outgrower Farmer

Component	Without Project	With Project
Cost of production (GH¢)	185	295
Yield (MT/acre)	0.8	1.4
Price of paddy at farm gate (GH¢/MT)	350	350
Gross margin (GH¢)	95	195

47. Rehabilitation or Construction of Warehouses. Four possible scenarios are analyzed:

- A new 3000mt warehouse in an urban area, with processing capacity. In addition to processing, storage and marketing or products, it sells agricultural inputs to smallholder farmers. Revenue is derived from farm services and commission on sales. 1500 smallholder farmers purchase inputs from the warehouse operator and sell or store their product to the warehouse. Farmers grow 2250ha rice and 750ha maize in one season. The counterfactual for the farmer is assumed to be growing traditional crops using low-input practices. As the warehouse investors are expected to be mainly new investors, the counterfactual for the warehouse is assumed to be no investment. The project will provide a grant of up to 80 percent of the construction costs, estimated at US$300/mt.

- A rehabilitated 3000MT existing warehouse in an urban area, which otherwise operates as above. The project will provide a grant of 100 percent of the reconstruction costs, estimated at two-thirds of the new construction costs.

- A new 1000 MT warehouse in a rural area, with processing capacity, operating as above. 500 smallholder farmers grow 750 ha rice and 250 ha maize in the major season. The project will provide a grant of up to 80 percent of the construction costs, estimated at US$200/mt.

- A rehabilitated 1000mt existing warehouse in a rural area. The project will provide a grant of 100 percent of the reconstruction costs, estimated at two-thirds of the new construction costs.

48. The Financial Net Present Value was estimated using the required return on equity rate of 27 percent and the Economic Net Present Value using the economic discount rate of 12 percent. The results, shown in Table 26, suggest that rural warehouses have much lower profit margins than urban warehouses which exploit significant economies of scale. Without a grant, it is unlikely that the private sector will undertake these investments which return barely above the less risky Ghana T-bill – under strong assumptions. Specifically, the model assumes that all farmers purchase the optimum amount of inputs from the warehouse operators and pay as agreed for the storage services they use.

49. The “Markets” study[87] on the other hand concludes that there is low demand for inputs, and farmers are not used to paying for warehouse services. The model further assumes no loans. If the financing is via a commercial loan, financial NPV would be negative, as the long-term lending rate in Ghana is up to 35 percent. In economic terms, the rural warehouses make a positive contribution, suggesting that there is a viability gap which can be mitigated with the appropriate project incentives.

Table 26 CBA results for warehouse interventions GH¢ (real terms; incremental)

Warehouse		Financial NPV @ 27% (GH¢)	IRR	Economic NPV @ 12% (GH¢)	ERR
New urban	TIP	3,396,354	59%	8,582,157	69.0%
	Investor	4,476,354	89.7%	9,587,407	106.0%
Rehabilitated urban	TIP	3,042,672	69.1%	8,129,315	77.6%
	Investor	3,609,601	94.2%	8,608,461	99.6%
New rural	TIP	49,822	28.2%	1,367,123	30.1%
	Investor	238,798	33.3%	1,403,788	35.4%
Rehabilitated rural	TIP	111,218	29.7%	1,281,086	31.7%
	Investor	288,383	34.9%	1,451,845	37.1

50. Urban warehouses, both new and rehabilitated, can be profitable, both at financial and economic prices, benefiting from economies of scale even with higher wages and other costs. Again, this assumes demand for the warehouse products and services. The models suggests that the sustainability prospects of urban warehouses are better, but as always each proposed project requires a careful estimation of the incentives needed for investment. The overall conclusion of analysis is that urban warehouses are financially and economically feasible. Rural warehouses, while economically beneficial, may require a significant subsidy to the investor to be financially feasible.

51. **Rehabilitation of Rice Mills**. Milling rates (milled to paddy) in Ghana are very low at around 55 percent, compared with 65 – 70 percent in other countries. This is especially true in the North, where the there is a lack of reliable milling capacity to meet the growing demand for unbroken aromatic rice. Over the past few years, traders have made inroads in the rice sector in the North, buying aromatic rice to sell at the major markets in Tema and elsewhere, mostly for domestic consumption. Traders who purchase aromatic rice in the North prefer to transport paddy for processing closer to the main markets in the South, rather than milled rice, as milled rice is more sensitive to breakage. Another major reason given by the traders is the lack of quality processing in the North.

52. The economic and financial analysis is based upon the following scenario. A rice mill using current technology to produce high-percentage broken rice and operating at about 55 percent of its 30,000mt/year capacity is refurbished by the investor with the help of a grant. The mill buys paddy from smallholder rice farmers and sells milled aromatic rice to the domestic market for low-broken aromatic rice, currently dominated by imports. The counterfactual for the farmer is assumed to be producing traditional rice variety using low-input practices. The mill is assumed to remain idle without the intervention.

[87] “The Market for Maize, Rice, Soya and Warehousing in Northern Ghana”, EAT Assessment for USAID, October 2011

The project will provide a grant of 20 percent of the required investment on average, or up to GH¢5 million of the investment requirement for the rehabilitation of the mill.

53. Table 27 shows the results of the financial analysis of the intervention, from the point of view of total investment, the equity investor, and the smallholder beneficiary – the rice farmer. The project seems to be is highly profitable without a grant, implying that it is possible to get some of these rice mills operational by concessioning them as is. Another critical component for the success of the rice mill is the state of infrastructure, especially access to power and an acceptable grade of roads, to mitigate damage to the milled rice in transport. Access to power and to a road network is assumed in the model.

Table 27 Rice Mill Refurbishment, real GH¢1,000 incremental

Model	Financial NPV @ 27% (GH¢)	IRR	Economic NPV @ 12% (GH¢)	ERR
Rice mill - TIP	10,120	74.0%	20,008	83.4%
Rice mill - Investor	22,852	N/A	31,128	N/A
Rice farmer	6.5	N/A	10.1	N/A

54. The incremental benefits to the mill investor derive from the value added of import-competing grade of processed rice, from the savings of transport costs, and from lower cost intermediate inputs required to operate the rice mill. There is no substantial investment required if the maximum grant is applied to the rehabilitation cost – and hence no return on investment is calculated for that scenario. Given the high profit potential of the rice mill, the concession terms have to be structured so that that the community shares the profit and the initial investment is repaid. The benefits to the farmer derive from lower transport costs to the mill as well as from a transition to the higher price aromatic rice that is demanded by the mill operator.

55. The analysis of these representative models suggests that there is scope for the development of successful commercial agriculture in the North of Ghana which can reduce poverty and contribute to the economic development of Ghana. The models discussed above raise the following risk factors:

- **Maize:** the success of the maize interventions is highly dependent on GoG policy. Using currently available OPV varieties, a project to improve agricultural practices in maize farming can have a net negative effect on the Ghanaian economy, even with the assumption of constant, relatively high, maize prices. Seed varieties available in Ghana are low-yielding and do not justify the increased economic cost of higher input use. Timely GoG approval of imported hybrid and other high-yield seeds is a critical risk factor for the success of interventions in the maize sector. The GoG promulgated the new plant and fertilizer which theoretically could provide a solution. The challenge is to establish the regulatory structure needed to implement these laws.

- The model assumes constant real prices at current levels. However, sensitivity analysis shows that maize outcomes, even with high-yield hybrid seed, are highly sensitive to price fluctuations, more so than outcomes in rice and soya.

- **Rice:** There are several uncertainties related to rice interventions in the North. First, currently the wholesale price of imported rice in Ghana is more than twice the world average. Even taking the high cost of freight to Ghana into account, it is likely that some convergence will occur over the next few years. On the other hand, sensitivity analysis shows that rice is profitable to the smallholder farmers even with a 50 percent drop in farm gate prices. Second, the planned interventions involve significant investments in infrastructure and carry substantial commercial risk. As with all project components, this risk can be mitigated to a degree only through credible feasibility studies and a competent evaluation of the individual investment proposals. To sum up, the main risks with the proposed rice interventions derive from cost-effectiveness and sustainability.

- **Soya:** The major risk factors are the size of the local market and future demand. In the short term, there is scope for import substitution. In order for the intervention to be successful, investments should be coordinated with complementary efforts to build the market for soya by strengthening the poultry industry, improving processing capacity, and in the medium term, developing the market for human consumption of soya products.

- **Nucleus farms:** There are major risks in establishing large commercial nucleus-outgrower schemes in the North. Most of the potential investments are expected to be in greenfield sites that will be developed through public-private partnerships, including substantial investments in infrastructure. A thorough assessment of the commercial and economic feasibility of these investments is paramount. Risk factors include the complexities of land tenure and land availability, the inadequate state of roads and power the pervasive lack of access to finance, and the unpredictability of policy on vital issues such as seed imports and exports of food crops. Finally, beneficiary analysis suggests that the share of benefits going to the investors will be large, potentially lowering the project's poverty reduction impact.

- **Warehouses:** The analysis suggests that the project's initial effort should be to support warehouses in more densely populated, urban areas, where there is scope for successful investment by the private sector. There is substantial sustainability risk with rural warehouses. These warehouses may need to be subsidized by the GoG in the medium term at least (10 years).

- **Rice mill:** One of the major risk factors is crowding out private investment as there is likely to be market space for a limited number of rice mills in the North. Again, due diligence in approving projects is of paramount importance. Another issue is the state of road infrastructure in the North. Milled rice is very sensitive to breakage in transport, and broken rice does not attract the price premium which accrues to imported rice. For that reason, traders who purchase aromatic rice in the North prefer to transport the sturdier paddy. On the other hand another major reason quoted by the traders for transporting paddy is the lack of quality processing in the North. This can be a viable investment, with the right infrastructure in place.

PPP Financial Analysis for Accra Plains

56. The development of PPP structures in irrigation are complex and have a set of characteristics distinct to water utilities and power. Often, infrastructure projects are long-term, relatively well known investments with high unmet demand and public good elements. Typically under urban water utilities and power, the long-term purchase agreements can be structured as part of the project. These provide the security of cash flow that allows for the raising of commercial debt during the term of the contract.

57. Contracts in irrigation projects tend to be self-contained investments, which are linked primarily to the local off-take, i.e., the viability of agricultural activities using the water. Infrastructure providers are thus exposed to market and commodity risks so they will need to mitigate these. Commitments, through management or finance, will only be forthcoming if private-sector partners have a degree of certainty that they will be able to recover their investments. Since water is one input into the production process, in addition to management, credit, fertilizer and access to market, the ability and willingness to pay (WTP) for water services must be considered in the context of overall farmer capacities.

58. The motivations for designing and implementing irrigation through PPP are as follows:

- Projects should be commercially sustainable and financially attractive to private investors and farmers. Investments are protected by proper business planning, contractual certainty and risk allocation.

- From the perspective of the private-sector, public finance can be channelled to invest in shared bulk infrastructure.

- From the perspective of the public-sector, private financial and management resources can be mobilised that would not otherwise be available in a way that ensures value for money for the government.

- Infrastructure assets should be professionally maintained and managed with efficient and sustainable water services provided over the whole lifetime of those assets. This safeguards public financial commitments and ensures sustainable impacts.

- Water services can deliver long-term benefits for rural populations and agricultural production, including farming results not generally available in public schemes. Smallholder farmers can be integrated into commercial value chains through the provision of farm services and outgrowing.

- Governance and oversight of water resources is a necessary precondition to long-term investments by the public and private sectors. Implementing PPP projects can act as a catalyst for long-term planning of water resources and investment needs through public-sector institutions, regulation and governance processes.

59. In light of the above, the following analysis assesses the financial viability of various forms of (PPP arrangements for the Accra Plains component APGIP (as described in paragraph 123). Different scenarios on financing options for the APGIP under have been analyzed and are described in this annex.

60. Overall this exercise recognizes that at this time it will not be possible to have the full PPP scheme developed. Accordingly, this following provides the basic methodology by which the project will evaluate and assess the viability (or not) of the proposed irrigation PPP scheme (in terms of the existing KIS, and the NDIS. In assessing the viability of these schemes and their bankability (i.e., the likelihood of attracting private sector involvement in the financing and operation, maintenance and management (OMM) of the scheme), the level of public sector contribution needed to make the APGIP financially viable for the private sector is examined. It is assumed that the form of PPP structure would follow Build-Operate-Transfer (BOT) type concession arrangement for a period of 30 years.

61. ***Key assumptions:*** The information and data for this analysis is based on the JICA pre-feasibility report. Further data is expected to be refined during the project preparation and implementation phases and the analysis will be updated accordingly. The approach of key parameters in the design of the model is as follows:

- Target area: APGIP comprises two areas for development: (i) Rehabilitation of an existing KIS and (ii) development of NDIS. The basic assumptions of key inputs such as projected irrigation area, annual average intake volume, facility design and capital expenditures, operating and maintenance costs, and cropping cycles are consistent with the JICA report.

- Development of APGIP: For the purposes of this analysis, both KIS and NDIS will be developed simultaneously by the same private developer. KIS is an existing agricultural area with irrigation channels. It will be developed as a brownfield project requiring improvement in service and rehabilitation works. NDIS is a new agricultural area adjacent to the KIS where design and engineering of the canal system would be needed. It will be developed as a greenfield project and the new irrigation system will be connected to the current center pivot irrigation field of Cassi Farm. The main canal from Kpong dam is expected to serve both schemes.

- Demand: Demand estimates are based on the information in the JICA study. These estimates are very preliminary as there has been neither actual demand forecasting nor metered measurement of water usage. A proxy for demand has been used by taking the annual average water intake from Kpong Dam, estimated at 238,342,000m^3. This is based on volume of water required for a historic production level of crops in the KIS region. Starting with this volume, the analysis assumes about 10 percent loss due to evaporation, spillage, unmetered usage etc. Thus, post losses, annual average water volume sold to farmers is assumed to be 214,508,000 m^3 or about 19.50 x 1000 m^3 per ha.

- Tariff: The analysis is based on an annual irrigation fee of US$20/1000m3 or about US$390 per ha for a paddy farm. Currently, annual the irrigation service charge (ISC) charged to KIS farmers is 120GH¢/ha for full irrigable paddy farms and 133GH¢/ha for water access of aquaculture. This is equivalent to about US$80 – 89/ha or about US$4.0 – 4.5/1000 m^3 (Column 1 in the Table 28). ISC includes land rent fee, project development fee, irrigation fee and management fee. The recovery rate of ISC was as low as 45 percent in 2010 and it included in kind payment of over 90 percent. Based on consultations with GoG and GIDA, the maximum tariff level affordable to the farmers would be US$20/1000$m^3$ excluding other fees mentioned above. The Table below shows the with-project and without project comparison from the economic-financial analysis in the section above. The Third column shows the unsustainability of a full cost recovery tariff of US$208/1000$m^3$.

Table 28: With and without project comparison for different tariffs

GH¢/ Hectare per year for KIS	Current Without project	As % of Revenue	With Project w/US$20/1000$m^3$	%	with project w/full cost tariff US$208/1000m3	as % of Revenue
Yield Rice tons/ha per season	4.35		5.00		5.00	
Price /ton	640		640		640	
Revenue for Rice 2 seasons	5568		6400		6400	
Input costs	2202	40%	2148	34%	2148	
ADD: Irrigation water/ha	120	2%	585	9%	6084	95%
Total Input costs	**2322**	**42%**	**2733**	**43%**	**8232**	**129%**
In US$ per Ha						
Revenue for Rice	$3,712		$4,267		$4,267	
Input costs	$1,468	40%	$1,432	34%	$1,432	
ADD: Irrigation water/ha	$80	2%	$390	9%	$4,056	95%
Total Input costs	**$1,548**	**42%**	**$1,822**	**43%**	**$5,488**	**129%**

- **Capital costs and construction period**: The capital expenditure data is taken from the JICA report and is in the range of US$91 million. With addition of lender fees including interest during construction (IDC), up front and commitment fees, total capital costs to be financed are US$113 million. Construction period is assumed to be 3 years.

- **Operations costs**: Starting operating costs are estimated at US$2.4 million including 20 percent contingency. Working capital of 6 months of operating costs is assumed.

- **PPP contract structure and period:** A standard BOT concession type arrangement is envisaged for a period of 30 years. Operations are phased with full operations starting in Year 4, after the construction phase. Partial operations will commence as follows:

Table 29: Timeframe for Operations

Year	1	2	3	4
KIS	0%	10%	50%	100%
NDIS	0%	0%	50%	100%

- **Macroeconomic assumptions**: Corporate tax rate of 30 percent and depreciation is straight line over 20 years. Cost of capital or the discount rate for the government is assumed to be 13 percent equivalent to recent Ghana 3 year bond at 13 percent. Discount rate for the project is assumed to be the same as GoG's cost of borrowing capital at 15.25 percent p.a. Exchange rate is assumed to be GH¢1.5=1US$. No inflation or escalation adjustment is considered for this analysis.

- **Financing:** Sources of financing are equity investment, loan from a commercial bank and public funding. Debt to equity ratio is assumed at a conservative ratio of 80:20. Loan is assumed for 7 years with 3 years grace at interest rates of 15:25 percent and 13.25 percent during construction and operations respectively.

62. ***Methodology for analysis:*** Current tariff levels in the irrigation sector are insufficient. The financial model is designed with one basic assumption: tariff level of US$20/1000m3 will be <u>insufficient</u> to cover full commercial rates on a project finance (non recourse basis). Accordingly, the model assumes a minimum level of public contribution to the project will be required to achieve financial viability (i.e., that the project generates sufficient revenues to allow for the private sector to service its debt to lenders and make a return on its equity investment). This implies that the form of the public contribution will have to be determined in such a way that financial viability is achieved but at the same time the necessary incentives to the private sector are brought to bear.

63. PPPs are designed to optimally distribute risks to the party which is best able to manage them. Given the uncertainty of water demand for irrigation and the current regulatory policy for tariffs, the demand risk is deemed the biggest risk in this project. The project's viability and an investor's main concern will be how to ensure a revenue stream which could service its debt and possibly generate a reasonable rate of return on its investment.

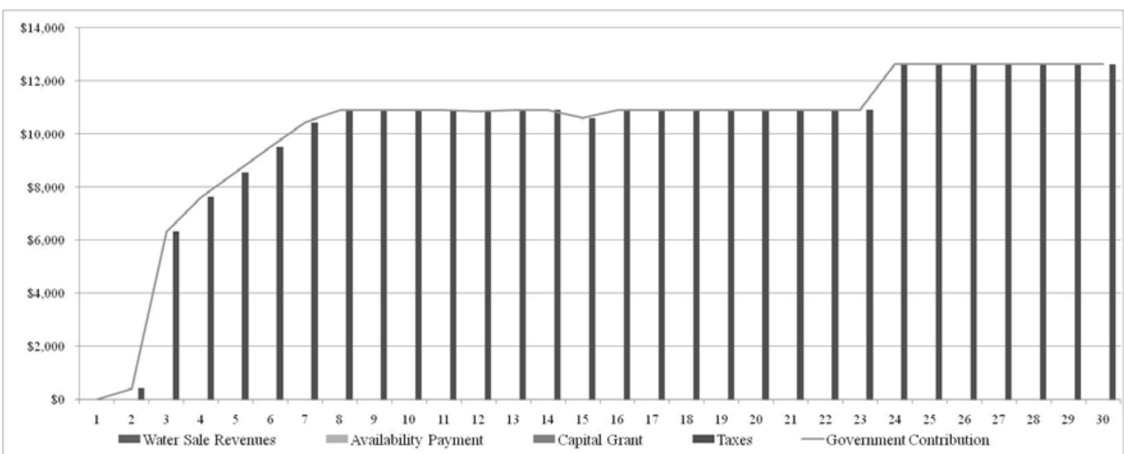
64. The form of capital grant that will be required by the project needs to be carefully assessed. Considering ISC are insufficient to fully service all commercial debt, a capital grant to fund the capital expenditures and an availability payment in support of operational revenues during the operations will be needed. These are defined respectively below:

- Capital grant is a subsidy to reduce the amount of capital expenditures which the project company needs to finance. In the analysis the capital grant is provided for each construction milestone in the first three years. The main benefit to the project company is reduction in its cost of capital (given it has to borrow less) increasing its rate of return. The assumption of a capital subsidy is that the government can raise funds at a much cheaper rate than the private investor. This amount of capital grant could serve as one of the bidding variables.

- Availability payment implies that Project Company needs to make the water available for irrigation to the farmers and perform according to minimum standards as defined in the contract. The main benefit of this arrangement is to provide revenue security i.e., the cash inflow to the project company is contractually safe. The revenues generated by the operation itself will be collected by the project company but transferred to the government. In this analysis, the availability payment covers 100 percent of project company's expenses (OMM, working capital, taxes and debt service) till the debt repayment occurs. After the debt is repaid, it goes down to 50 percent in order to shift the return on equity to later years. This provides incentive to the project company to keep operating till the end in order to recuperate its desired profits after the lenders have been paid.

65. The basic premise of the model is to assess whether the project can be financially viable based on a certain minimum tariff. Financial viability is defined as the minimum level of return the private sector is willing to obtain as a result of investing in the project (in the form of debt and equity) taking into account sector, project and country risks. Our methodology assumes a minimum equity IRR of 20 percent[88]with a debt service coverage ratio of minimum 1.2.[89] In order for the project to achieve this level as seen in Chart below, the tariff level should be US$208/1000 m^3. Figures 4 and 5 below show both government and project profile under a full private BOT with no public funds. Government's receipts are under the assumption that there is no tax holiday.

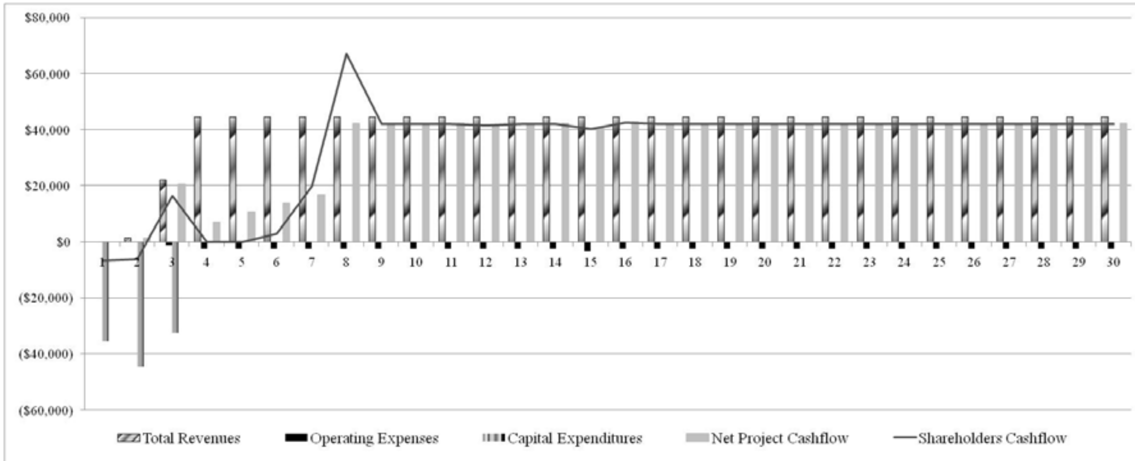
Figure 4 Government receipts from full BOT concession



[88] Equity internal rate of return (IRR) measures project company's efficiency at generating enough profits for every unit of owner's own cash invested in the company. Given S&P rating for Ghana as 'B', which is below investment grade and longest government bill is for 3 years, we believe this is very conservative given a 30 year investment. In 2006 discussion paper #932, published in Yale University, "The Return to Capital in Ghana", stated that pineapple plantations are making annual returns of 205-350percent.

[89] Debt service coverage ratio is proportion of net cash available from the project to pay interest and principal on a loan. Higher the ratio, easier it is to get a loan. At a minimum, lenders will require the project to generate at least 20percent more net cash than interest + principal in the future.

Figure 5 Project profile with full cost recovery tariff and no public contribution



66. The basic affordability analysis suggests that this tariff level is unsustainable for both farmers and agribusinesses although not unreasonable in Ghana. As a comparison the prevailing water rates for GWCL are much higher. The table below shows that if the service is reliable and meets required standards, the consumers are willing to pay much higher fees for the same service.

Table 30 Current Water rate in Ghana

Approved Water rates effective June 1, 2010			
	Rates (GH¢/m3)	**Rates in US$/m3**	**US$/1000m3**
Residential			
0-20	0.8	US$0.5	US$533
20+	1.2	US$0.8	US$800
Non-residential			
Commercial/Industrial	1.8	US$1.2	US$1,200
Public Institutions/Govt dept	1.54	US$1.0	US$1,027

67. Given the huge gap between at cost versus affordable tariff, the model shifts the demand risk to the government by building in an availability payment from the government to the project company. This payment provides certainty to the project company that there will be a fixed amount of cash inflow in the project; hence it can plan its expenditures or cash outflows accordingly.

68. ***Modeling sensitivities:*** The sensitivity analysis looked specifically at four variables: capital grant, availability payment, debt service coverage ratio (DSCR) and equity IRR. A tariff of US$20/1000m^3 is considered affordable and is fixed for the length of the concession.

69. Under different scenarios of capital grant ranging from 0 percent to 100 percent, the level of availability payment was determined in order to achieve desired ratios. As seen in Table 31, GoG's net present value of cash outflow (capital grant and availability

payment) versus cash inflow (project revenues and taxes) decreases as upfront capital subsidy increases. This is due to the greater lifetime costs than upfront money. Although the increase is at a much lower rate due to higher time of value of money in the initial years.

Table 31 Sensitivity Analysis Availability Payment versus Capital Grant

Capital Grant (%)	Availability Payment (US$ per 1000m^3)	Availability Payment (Annual US$1'000s)	Capital Grant (US$1'000s)	Government NPV (USD1'000s)
0%	208	44,633	0	(105,289)
10%	189	40,486	9,099	(101,542)
20%	169	36,338	18,198	(97,795)
30%	150	32,191	27,298	(94,049)
40%	131	28,043	36,397	(90,302)
50%	111	23,896	45,496	(86,555)
60%	92	19,748	54,595	(82,808)
70%	73	15,601	63,695	(79,026)
80%	53	11,453	72,794	(73,881)
90%	34	7,306	81,893	(68,109)
100%	21	4,450	90,992	(76,269)
Full cost recovery tariff of US$208/1000 m^3 with no public contribution				56,951

70. Three cases are considered for further elaboration. The first two cases are with either no or all capital subsidy and a third as a combination case.

71. **High NPV Case: No Capital Subsidy** - This case will be a full concession with both construction and financing risk transferred to the project company. An annual average US$44million availability payment would be needed for the project company if there is no capital subsidy. GoG will have an ongoing liability through the life of the concession. Given the country and project risks, it is very much doubtful that a private developer will be willing to take 100 percent financing risk and political risk for 30 years for its payment. While the analysis assumes a 7 year debt tenor, it is again doubtful that any project developer will be able raise US$113 million for even this length. It is highly likely that lenders will need some sort of central government guarantee to backstop GIDA's contractual obligations, which in turn will be a contingent liability for debt repayment for GoG. Two chart below show both the government and the project's profile.

Figure 6 Government profile with 0 percent capital subsidy

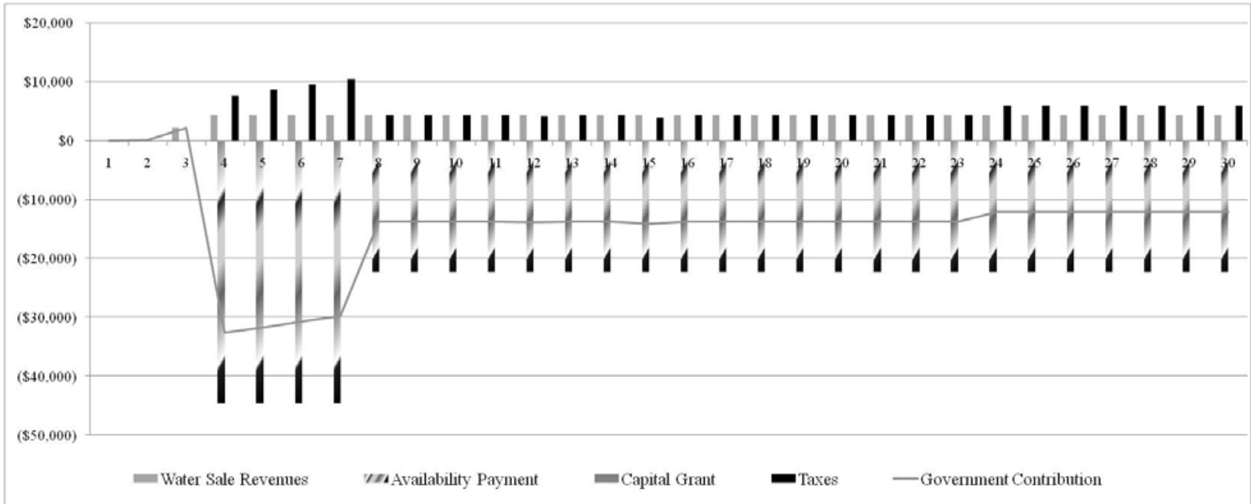
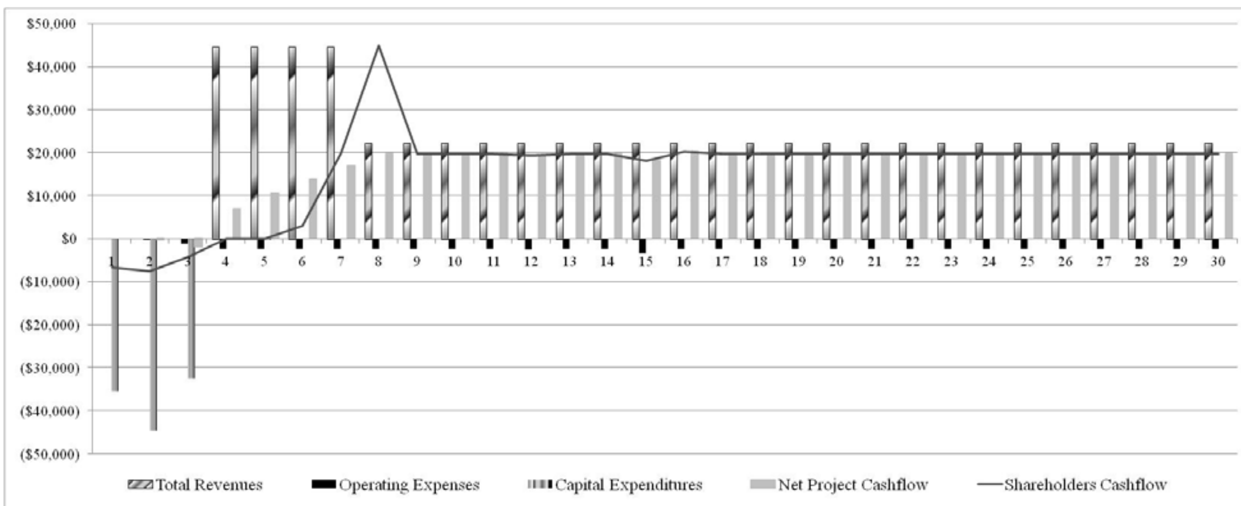


Figure 7 Project profile with 0 percent capital subsidy



72. **Low NPV Case: 100 percent Capital Subsidy** - On the other extreme, if government covers 100 percent of capital expenditures, then availability payment will cover only the operation and maintenance costs, working capital and taxes. This case is similar to a management contract. While the availability payment goes down but with such an increase in upfront capital, the net present value for the government is slightly higher than with 90 percent. Construction risk remains with the private developer. This might not be the best situation for the government as it retains most of the risks with only operation and performance risk with the project operator. Allocating such funds for one project depends on availability of budgetary resources. GoG will need to make a decision on whether this is most effective use of its resources. Figures 8 and 9 below show both the government and the project's profile.

Figure 8 Government profile with 100 percent capital subsidy

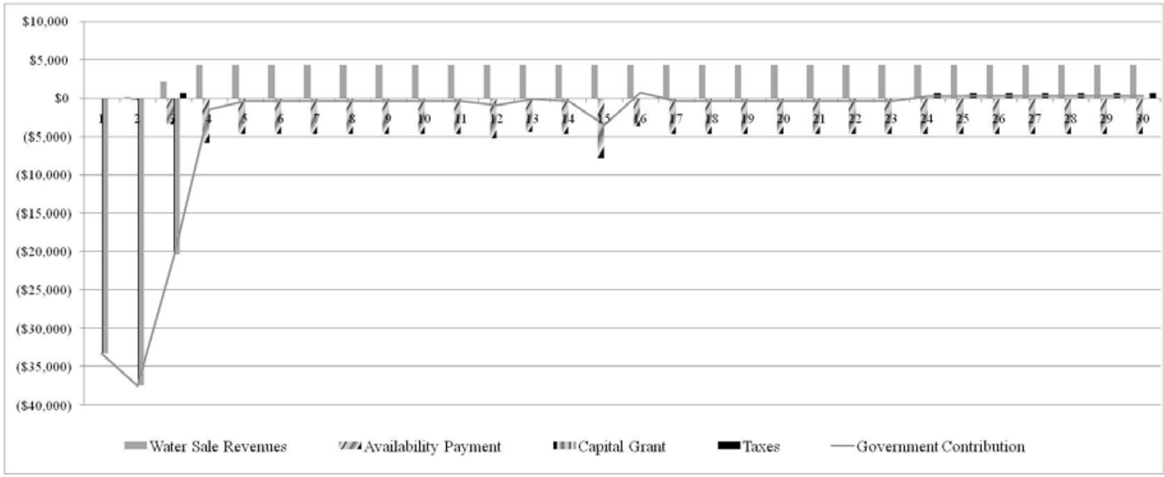
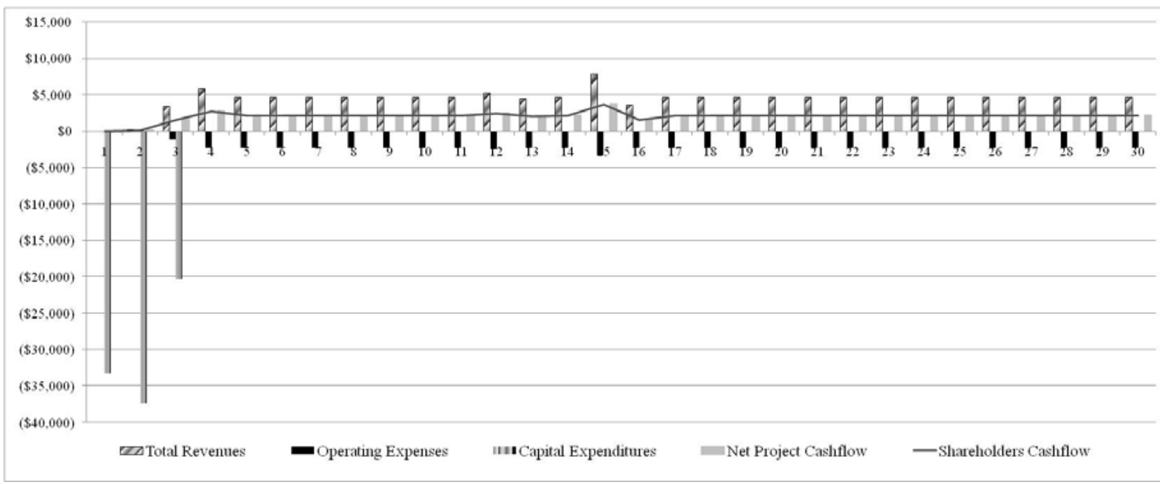
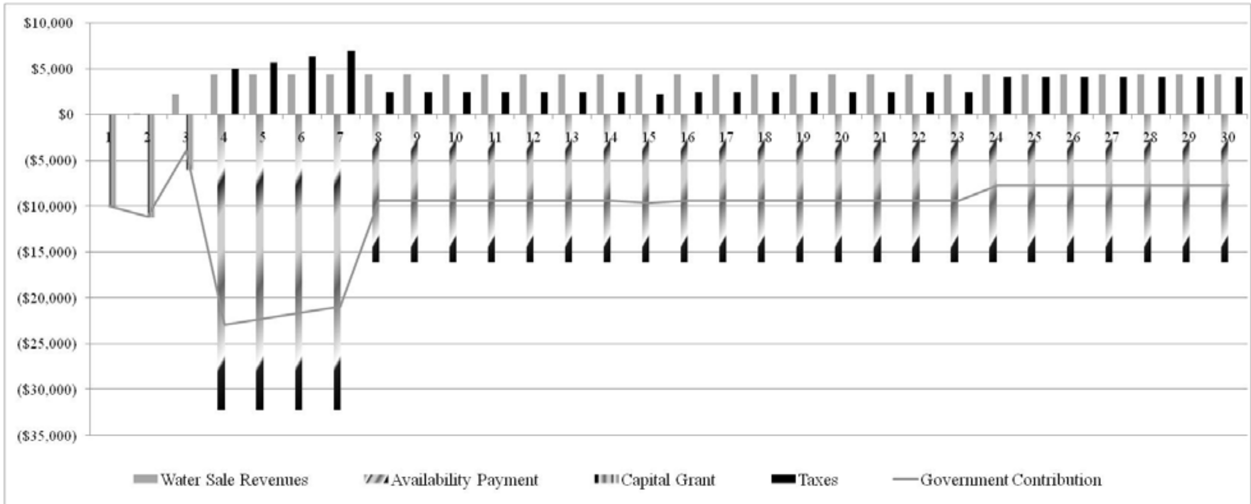


Figure 9 Project profile with 100 percent subsidy



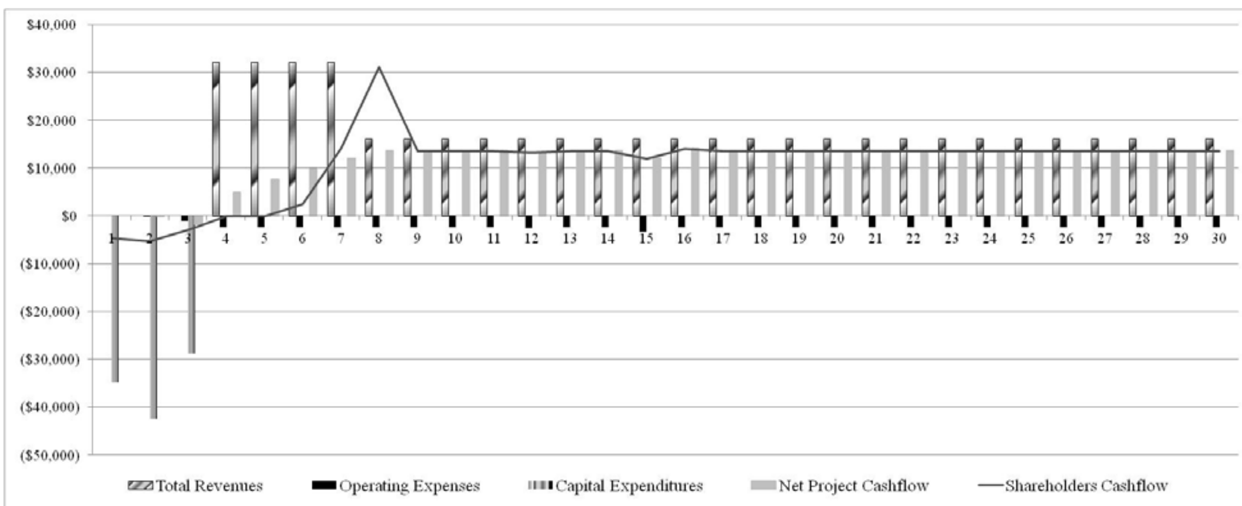
73. **Medium NPV Case: Combination of capital and O&M subsidy** - Given the greater adverse implications for the government in the first two cases, a combination of capital and operational subsidy is considered as optimal. Optimality is achieved by allocating risks to the party best able to bear them. This concept is fundamental in PPPs. Scenario between 40 – 30 percent capital subsidy is. The NPV in this range is similar to the 'business as usual' case, where the schemes are funded with public money under a public O&M. The chart below shows government's net contribution under a 30 percent capital grant scenario. In this case both the government and the project company share the financing risk and will be committed to the project to recuperate their equity return over the long haul.

Figure 10 Government net contribution with 30 percent capital grant and availability payment



74. A similar graph for the private operator would show such government contributions as inflows in the project company's cash flow.

Figure 11 Project profile with 30 percent capital grant and availability payment



75. ***Conclusions*** While this analysis will be further refined through detailed feasibility structuring during project implementation, the following broad conclusions can be made:

76. **Public contribution required for financial viability of the project:** Given the level of tariff and water demand in the project, revenues will not be enough to recover the project's capital costs and efficient functioning of the operations. Whether it is a public authority or a private company, some level of public funding will be needed for a sustainable project design. The critical issue is how to make the project 'bankable' instead of whether the financing is available or not.

77. **Government's decision whether to spend money upfront or later:** As seen in the Figures, the optimal solution would be a combination of capital subsidy (possibly 30 percent) and an availability payment regime (approximate US$32 million on average). This 30 percent financing could mean financing the main canal with public funds and remaining with private. The uncertainty of funding being available whether it is today or in the future and what would be its opportunity cost to the government's budget is a complex decision. The government could set the bidding criteria in way to minimize its financial contribution to the project. Even in this scenario, it would need to consider whether it has the fiscal space for an upfront payment or for future direct liabilities on a periodic basis. The alternative would be to fund the scheme on its own budget upfront of about US$91 million. The benefits of the project are more economical and social bringing sustainability and service efficiency to the farmers.

78. **Government might consider flexibility in the tariff policy:** Although the tariff as a variable has been fixed in this analysis, the government might want to keep the tariff policy flexible. As seen in tariffs for urban water supply, there is precedence of higher water fees in Ghana. The cost structure of a rural water supply is different from an urban system; however, there is enough evidence that if the service meets performance and quality standards then the users are willing to pay a much higher price for this service. Unless the inputs are reliable, the farmers cannot plan their cropping schedules and maintain the quality. The potential for higher revenue generation is very much dependent on quality of inputs.

79. **Creating appropriate incentives mechanisms for better performance and sustainability:** Whichever scenario is selected, the underlying objectives are to create the right framework and incentive mechanisms to improve irrigation water provision in APIP area and to use government's resources more efficiently and effectively. In both public and private contracts, the payment should be results or output-based. Cross subsidy might be considered to differentiate between the scale and willingness to pay for services. For example: in the case of small farmers, it might make sense to go for higher capital subsidy to lower the cost of capital for the private company. In case of agribusinesses, capital costs might even be shared and O&M subsidy might be phased out all together once the payment mechanism has been established.

Annex 8: Detailed Social and Environmental Safeguards Issues

REPUBLIC OF GHANA: Commercial Agriculture Project

1. The project is a category A project that has triggered the following eight safeguards policies (see table below). GoG has prepared four key safeguards documents, namely an ESMF that includes an ESMP addressing issues related to the triggering of OP/BP 4.01, OP/BP 4.04, OP/BP 4.36, OP/BP 4.37 and OP/BP 4.11; a PMP that deals with issues related to OP 4.09 and an RPF that complies with the triggering of OP 4.12; as well as an RN to the VBA representing all riparian countries to comply with the triggering of OP/BP 7.50. Both the ESMF and the PMP have been publicly disclosed in-country and at the World Bank InfoShop on November 22, 2011. The RPF was publicly disclosed both in country on January 13, 2012 and at the InfoShop on January 30, 2012. Ghana's WRC submitted a riparian notification to the VBA on January 5, 2012 and no objections were received by the deadline of February 10, 2012. MoFA has also prepared a freestanding PCP (this is required as a Category A project) as well as a land use and land rights diagnostic review to document stakeholder consultations and assess issues of land use and rights especially in the Accra Plains, respectively.

Table 32 Safeguard Policies Triggered

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

Compliance with the Triggered Social and Environmental Safeguards Policies

Social Safeguards

2. It is anticipated that the project will have positive social impacts at the household and community levels. The project activities will lead to an increase in household incomes for participating farmers, improved agriculture related capacity (such as knowledge on use of technology and improved farming methods) and it may result in monetary and non-monetary benefits at the community level (a result of community negotiations with private investors).

3. OP 4.12 on Involuntary Resettlement is triggered as it is foreseen that the project will have impacts on land ownership, land use, and livelihoods. Specifically, the project may require the involuntary acquisition of land for civil works such as the construction, rehabilitation and maintenance of irrigation canals, extension of power lines, etc. The

project will not finance the state acquisition of land for agricultural purposes. Nevertheless, it may lead to land use changes if community lands are reorganized to facilitate lease agreements with investors or the reconfiguration and improvement of plots in connection with outgrower schemes. This may result in the moving of land users which in turn may negatively impact livelihoods and restrict access to fuel sources, medicinal plants, etc. The project activities may have disproportionate effects on women who may be susceptible to losing access to medicinal plants, water sources, or face increasing time burdens associated with domestic responsibilities such as fuel collection, etc., if their land use rights are moved.

4. The Borrower has prepared an RPF which was disclosed locally on January 13, 2012 and in InfoShop on 30 January, 2012, prior to appraisal. The scope of the RPF includes involuntary land acquisition (under eminent domain) for public infrastructure and voluntary land sales between investors and traditional leaders (chiefs, family heads) where there are customary claims to the land. The latter has been included in the scope of the RPF because much of the land on which investments may be supported is held under customary tenure. In these instances, the ownership of the land (so-called "allodial ownership") is vested in a family head (for the Accra Plains) or a traditional authority or chief (referred to as 'skin' in Northern Ghana). While the power to exercise legal ownership over a given piece of land may reside at a particular level (or in some cases at several levels) in the traditional hierarchy, there is often a complex array of subsidiary interests present on the land – most often not documented. These might include (i) long-term customary rights derived from membership in the community; (ii) tenancies of varying durations, including migrants (or so-called "strangers") from outside the community, some of whom may have been present for generations, others of whom may be of recent origin; (iii) sharecropping arrangements; (iv) pastoral and other rights over common property; and (v) others.

5. Given the frequent presence of many land users and land rights holders in a given piece of land, it will be difficult for the project to ascertain that what the landowner characterizes as a voluntary transaction does in fact represent an informed and voluntary choice on the part of the community as a whole. There exists in such situations the risk of elite capture and coercion of choices. Hence the importance of having the RPF as a tool to ensure that the procedural and substantive rights of local people are appropriately addressed. The project will also support the carrying out of land use rights inventories and participatory community decision-making to help obviate the risk of unintentional displacement of rights or livelihood activities.

6. The RPF will also apply to project-supported investments that may be located on state land. In many cases, there are claims that land acquisitions carried out by the state in the past were done improperly. It is also frequently the case that unused or underused state land is subject to occupation, sometimes by the original communities who were located on the land at the time of the state acquisition and were never required to leave, or by new comers. Hence, as in the case of customary land, the utilization of state land will in many cases have impacts on livelihoods that will need to be identified through due diligence and mitigated in line with the RPF.

7. A minimum principle – applicable to both customary and state land scenarios – will be that no person will be required or asked to relinquish land that they are currently using to accommodate an investment or associated activities (such as the establishment of associated infrastructure or land development for preparation of smallholder plots) without being provided secure tenure over alternative land of at least equivalent quality and without appropriate support for restoring or improving livelihoods or provided other acceptable compensation and assistance consistent with OP 4.12 and the RPF, and without support for livelihood restoration.

8. An RPF has been prepared because currently, specific sites for sub-project areas are unknown and not expected to be known before appraisal. However, because the area in the Accra Plains is slightly more defined, the RPF provides detailed information on land ownership in the Accra Plains, informed by a land diagnostic review commissioned by the Government as part of project preparation. The information on the SADA zone is less detailed as only a broad area for potential development has been identified, to be further refined as prospective investors become engaged with government and local communities in the detailed design of the investment. The RPF provides guidance on the preparation of a RAP once sub-project sites have been physically identified.

9. Both nucleus and smallholder farmers will comply with project safeguards requirements. As highlighted in the environmental section below, the ESMF and RPF provide processes and conditions for determining the eligibility of investments or activities for project support. The project will not support (nor are private sector investors likely to be interested in) investments on either nucleus farms or on smallholder land over which there are significant ambiguities concerning legal status, including disputes within communities, between different claimants, boundary disputes, disputes between customary owners and the state, or persisting complaints stemming from prior state land acquisitions. The project will put in place modalities to ensure the due diligence screening of land.

10. The RPF identifies groups that are susceptible to marginalization from the process of decision-making on land use as including women, migrant farmers and pastoralists. It also identifies groups vulnerable to negative impacts related to displacement including those who are over 70 years, have physical/ mental disability, women, migrant farmers and herdsmen, widows, orphaned children and bedridden or seriously sick persons. Among the mitigation measures included in the RPF are: the use of a checklist to ensure inclusion of vulnerable groups during sub-project screening and inclusive consultations with land users and landowners on sub-projects especially during negotiations between investors and communities.

Environmental Safeguards

11. The project also triggers the following environmental safeguard policies: Environmental Assessment (OP/BP 4.01), Natural Habitats (OP/BP 4.04), Pest Management (OP 4.09), Physical Cultural Resources (OP/BP 4.11), Forests (OP/BP 4.36), and Dam Safety (OP/BP 4.37). The Borrower has prepared an ESMF suggested by the triggering of OP/BP 4.01which also addresses issues related to 4.04; 4.11; 4.36 and 4.37. A PMP has

been prepared to fulfill OP 4.09 requirements. Both the ESMF and the PMP have been publicly disclosed in-country and at the World Bank InfoShop on November 22, 2011.

12. The project is rated as a category A project. It is expected to have positive environmental impacts through its support for commercial agriculture investment schemes that promote the better use of land and water resources. Potential environmental risks could include point and nonpoint pollution of water sources, other issues associated with the use of agricultural chemicals, and negative environmental impacts associated with the rehabilitation of irrigation or small-scale civil works on water stations and/or warehouse for food processing or storages (i) construction, rehabilitation and maintenance of irrigation canals, extension of power lines to connect commercial farmers and agro-processing facilities; and (ii) agricultural development and commercialization which will lead to increased production volumes and value added processing and marketing capacity of agribusiness involved in commodity chains and warehousing facilities. The project is demand-driven led by the private-public partnership orientation, and would possibly explore a variety of sellable agriculture crops developable in Ghana, including transgenic. If it becomes part of the crops list supported under the Project, it will proceed with environmental safeguards consistent with international good practice and the regulatory framework of the host country. In particular, development of such crop in either project location would need to be carried out in accordance with the obligation of Ghana under international treaties to which it is a party. Potential adverse environmental impacts associated with the proposed activities such as: post-harvests and handling equipment and means; technology and marketing at agro-enterprise level; and handling, transportation, storage and processing assets improvements – will be low intensity, minor, site specific, and handled under safeguard measures already in place for ongoing activities.

13. In order to comply with national regulations and Bank safeguards policies, as well as basic USAID regulations requirements, the borrower has prepared both an ESMF and a PMP. The ESMF has set forth the basic principles and prerogatives to be followed once there is a clear definition of project intervention areas, and during implementation. It has also made provision of a social and environmental screening form that each sub-project candidate for GCAP financing would undergo to ensure appropriate compliance with safeguards policies prior to implementation of the given activities. Likewise, the PMP is mainly driven by the fact that intensification of agricultural activities could lead to increased use of pesticides and herbicides, that if unmanaged could result in negative impacts, on both the physical and natural environment. Sufficient provision is been laid out by the ESMF to ensure appropriate capacity building for all key stakeholders involved in project activities and intervention zones.

14. Once the physical locations and design of the intervention areas are defined, the Borrower will prepare and timely disclose publicly a site specific ESIA to provide the necessary mitigation measures for any foreseen social and environmental aspects on the proposed intervention site. The ESIA will also be publicly disclosed both in-country and at the InfoShop prior to the physical start of the said activity.

15. Mitigation measures under the Project will include the application of IPM practices and the application and promotion of pesticide management practices outlined in the

guidelines of the International Code of Conduct on the Distribution and Use of Pesticides; risk management for transgenic crops through the national biosafety framework and international best practice; and the use of ESIAs as appropriate for minor civil works.

16. The World Bank OP/BPs 4.04 and 4.36 have been triggered in this project as there is a possibility that the project may affect or be close to some critical habitats and will involve some afforestation/reforestation activities. While the project is not expected to affect critical natural habitats, ESIAs/ESMPs prepared during implementation will address any impacts to natural habitats. The project will avoid adverse impacts on natural habitats and, where necessary, appropriate plans will be prepared and/or offsets established to mitigate any impacts. Similarly, for forests, the project may involve some forestation activities. Management Plans will be prepared as and when necessary to avoid or adequately mitigate these impacts, especially on neighboring communities

17. The project also triggers OP 4.37. With respect to dam safety the VRA as operator of Kpong hydro-power scheme has carried out a dam safety assessment in 2011. OP 4.37 recommends that VRA should continuously carry out the dam safety assessment since the safety of the Kpong dam influences the performance of the project. In fact, VRA is obliged to carry out periodic inspections, and is also responsible for any additional dam safety measures. VRA will provide details of these inspections to MOFA. In any case VRA and MoFA will formalize this arrangement through a memorandum of understanding.

Other Safeguards Policies triggered

18. The project also triggers OP/BP 7.50 as some project activities are expected to involve use of irrigation water from the Volta River. The Volta River flows through six riparian countries namely Benin, Togo, Ghana, Ivory Coast, Burkina Faso and Mali. It is the Bank's assessment that the project will not cause appreciable harm to the other riparian states and will not be appreciably harmed by the other riparian entities. The Government has already sent a notification letter to all riparian states of the proposed Project activities and their impact on water use in order to obtain their no objection through the VBA, an authority established by treaty among the riparian countries, empowered to authorize the development of infrastructure and projects planned by its member-countries that could have significant impacts on the water resources of the basin.

19. *Rationale for not triggering others safeguards policies*: As presumed, the project did not trigger OP/BP 4.10 (Indigenous Peoples) and OP/BP 7.60 (Projects in Disputed Areas) simply because (i) there are no indigenous peoples as per World Bank's definitions in Ghana, and that (ii) no project activities is expected to occur in disputed areas as defined by OP/BP 7.60.

20. *Public Consultation, Participation and Disclosure:* The ESMF and PMP were prepared in compliance with national regulations and Bank safeguard policies. Their preparation followed a broad participatory consultation process with all relevant stakeholder groups, and was consistent with the approach adopted at project inception. The RPF preparation

followed the same approach. Being a category A project, it was agreed to have a separate comprehensive report on PCP that will clearly explain the ways and means adopted to ensure meaningful and participatory stakeholders' consultation with the view of fostering broader community support. Because public consultation and participation is an iterative process, therefore this participatory approach will be continued throughout project implementation, supervision and evaluation. The ESMF and the PMP have already been disclosed in-country and at the InfoShop on November 22, 2011; and the RPF was disclosed on January 30, 2012.

21. Prior to disclosure in-country and the Bank's InfoShop, a series of workshops were organized by MoFA, involving project stakeholder groups in public agencies in the Accra Plains and the SADA Zones and representatives of various others government entities including extension services, EPA, professional organizations, farmer organizations and civil society/NGOs. This approach was used to present the results of the studies, foster ownership, and garner input from these stakeholders to improve the quality and soundness of the instruments. Recommendations from both ASPEN and stakeholders' workshop have been reflected in the final safeguard instruments, prior to disclosure. Recommendations from both ASPEN and stakeholders' workshop have been reflected in the final safeguard instruments, prior to disclosure. Additionally, the PCP disclosed. All these recommendations and relevant provisions from the three sets of safeguard instruments including the PCP will be adequately reflected in the PIM.

Institutional Arrangement for Safeguards Implementation

22. The ESMF, RPF and PMP include institutional arrangements, outlining the roles and responsibilities for the various stakeholder groups involved in each participating region at the central and local levels, for screening, reviewing, and approving subprojects, as well as implementing and monitoring mitigation measures for those subprojects. Given the magnitude of interventions, the project will establish its own social and environmental capability composed of one Social Scientist and one Environmental Scientist. They will benefit from EPA and the Land Commission's support. In view of the somewhat limited institutional capacity to address project safeguards adequately within MoFA, the safeguard instruments include provisions to strengthen the capacity of the various institutions and actors involved; and to promote coordination and synergies among the various sectors in attending to potential social and environmental impacts. Together these safeguards instruments are considered as planning tools and means for harmoniously integrating the project with its biophysical and social environment to maximize project's positive effects in the Accra Plains and SADA Zones, while mitigating the negative impacts.

Arrangements for Safeguards Performance Supervision, Monitoring and Evaluation

23. Successful implementation of all project safeguards requirements and performance measurement requires regular supervision, monitoring and evaluation of activities undertaken by the project to comply with national regulations and World Bank safeguards policies. This supervision and M&E is expected to be participatory and will

also help ensure that safeguards measures are systematically implemented throughout the life of the project.

24. To do so, the following indicators need to be measured, as part of the project's global monitoring and evaluation plan:

- Number of subprojects screened on environmental and social safeguard grounds;
- Number of subproject needing specific ESIAs/ ESMPs;
- Number of ESIAs/ESMPs conducted;
- Number of subprojects with costed ESMPs or ESIAs;
- Number of ESMPs or ESIAs implemented according to schedule;
- Number/frequency of safeguards supervision and annual Project reviews undertaken;
- Number of training programs carried out for safeguards capacity strengthening;
- Number of institutions/ organizations trained according to measures identified and specified in the instruments.

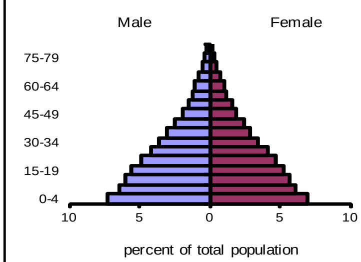
25. In addition, biophysical and social changes (both negative and positive) from the baseline – such as changes in the quality of ground and surface water, changes in biodiversity of flora and fauna, land resource management, improvements in agricultural activities – in the natural environment in the project intervention area should be measured, as part of the project's global monitoring system.

Safeguards Supervision

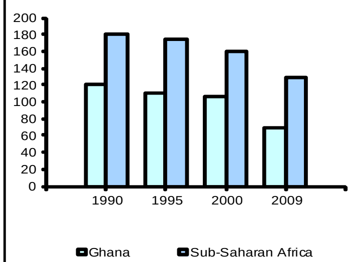
26. The supervision of safeguards implementation for the project will be done as part of the overall project implementation. World Bank supervision teams will also include the Social and Environmental Safeguards Specialists and the Land Specialist who will continue to have the overall responsibility for supervision of safeguards activities. They will conduct, at least, twice a year a comprehensive supervision of safeguard activities of the project, participate in the wrap-up meeting to discuss findings and draft an action plan to improve implementation. To ensure effective Bank supervision, MoFA in conjunction with national counterparts, will prepare and update detailed reports on the implementation of the ESMF (and subsequent ESIAs/ESMPs, as applicable), RAP and the PMP, prior to Bank supervision missions. Appropriate budget for project supervision will be included in the project financial evaluation.

GHANA AT A GLANCE

Key Development Indicators	Ghana	Sub-Saharan Africa	Low income
(2010)			
Population, mid-year (millions)	24.2	840	846
Surface area (thousand sq. km)	*239*	24,242	17,838
Population growth (%)	16	2.5	2.2
Urban population (% of total population)	*51*	37	29
GNI (Atlas method, US$ billions)	30.4	944	431
GNI per capita (Atlas method, US$)	1,250	1,125	509
GNI per capita (PPP, international $)	*1,530*	2,051	1,220
GDP growth (%)	7.7	17	4.6
GDP per capita growth (%)	6.0	-0.7	2.4
(most recent estimate, 2004–2010)			
Poverty headcount ratio at $1.25 a day (PPP, %)	30	51	..
Poverty headcount ratio at $2.00 a day (PPP, %)	54	73	..
Life expectancy at birth (years)	61	53	57
Infant mortality (per 1,000 live births)	47	81	76
Child malnutrition (% of children under 5)	14	25	28
Adult literacy, male (% of ages 15 and older)	73	71	69
Adult literacy, female (% of ages 15 and older)	60	54	55
Gross primary enrollment, male (% of age group)	106	105	107
Gross primary enrollment, female (% of age group)	105	95	100
Access to an improved water source (% of population)	82	60	64
Access to improved sanitation facilities (% of population)	13	31	35

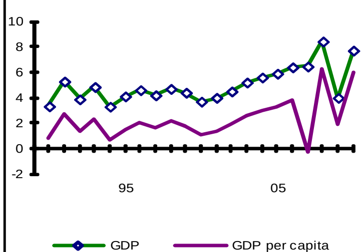


Age distribution, 2009



Under-5 mortality rate (per 1,000)

Net Aid Flows	1980	1990	2000	2010 [a]
(US$ millions)				
Net ODA and official aid	191	560	598	1,583
Top 3 donors (in 2008):				
European Union Institutions	9	20	16	167
United Kingdom	35	22	80	154
United States	19	13	63	151
Aid (% of GNI)	4.3	9.7	12.6	6.2
Aid per capita (US$)	19	39	32	66



Growth of GDP and GDP per capita (%)

Long-Term Economic Trends	1980	1990	2000	2010	1980–90	1990–2000	2000–10
Consumer prices (annual % change)	51.1	37.3	25.2	10.7			
GDP implicit deflator (annual % change)	51.1	31.2	27.2	17.3			
Exchange rate (annual average, local per US$)	0.0	0.0	0.5	14			
Terms of trade index (2000 = 100)	..	..	..	..			
					(average annual growth %)		
Population, mid-year (millions)	10.0	14.3	18.4	24.2	3.6	2.5	2.7
GDP (US$ millions)	4,445	5,886	4,977	32,321	3.0	4.3	5.9
		(% of GDP)					
Agriculture	57.9	44.8	35.3	27.9	..	..	..
Industry	11.9	16.8	25.4	17.4	..	..	..
Manufacturing	7.8	9.8	9.0	6.4	..	..	..
Services	26.7	37.9	28.8	48.0	..	..	..
Household final consumption expenditure	83.9	85.2	77.5	77.6	..	..	..
General gov't final consumption expenditure	11.2	9.3	16.9	9.5	..	..	..
Gross capital formation	5.6	14.4	24.2	26.7	..	..	..
Exports of goods and services	8.5	16.9	63.4	29.3	..	..	..
Imports of goods and services	9.2	25.9	90.9	41.1	..	..	..
Gross savings	4.4	7.0	5.0	19.5			

Note: Figures in italics are for years other than those specified. 2010 data are preliminary. Group data are for 2009. .. indicates data are not available.
a. Aid data are for 2009.

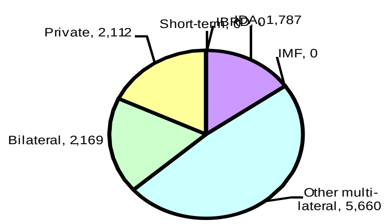
Development Economics, Development Data Group (DECDG).

Balance of Payments and Trade	2000	2010
(US$ millions)		
Total merchandise exports (fob)	1,888	7,960
Total merchandise imports (cif)	3,344	11,758
Net trade in goods and services	-798	-3,791
Current account balance	-387	-2,659
as a % of GDP	-7.8	-8.2
Workers' remittances and compensation of employees (receipts)	32	*114*
Reserves, including gold	297	4,725

Central Government Finance		
(% of GDP)		
Current revenue (including grants)	16.2	14.3
Tax revenue	12.6	10.8
Current expenditure	18.5	15.1
Overall surplus/deficit	-7.9	-7.4
Highest marginal tax rate (%)		
Individual	30	*25*
Corporate	33	*25*

External Debt and Resource Flows		
(US$ millions)		
Total debt outstanding and disbursed	7,021	11,728
Total debt service	388	268
Debt relief (HIPC, MDRI)	3,091	2,570
Total debt (% of GDP)	141.1	36.3
Total debt service (% of exports)	15.7	2.8
Foreign direct investment (net inflows)	166	2,527
Portfolio equity (net inflows)	0	620

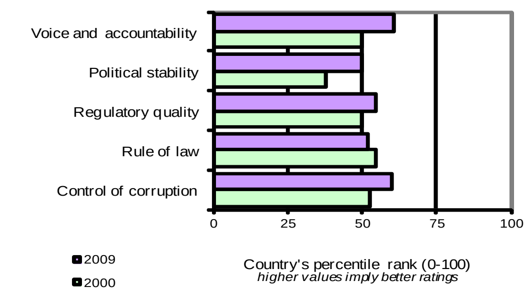
Composition of total external debt, 2010



US$ millions

Private Sector Development	2000	2010
Time required to start a business (days)	–	12
Cost to start a business (% of GNI per capita)	–	20.3
Time required to register property (days)	–	34
Ranked as a major constraint to business	2000	2010
(% of managers surveyed who agreed)		
n.a.	..	..
n.a.	..	..
Stock market capitalization (% of GDP)	10.1	10.9
Bank capital to asset ratio (%)	11.8	19.0

Governance indicators, 2000 and 2009



Source: Kaufmann-Kraay-Mastruzzi, World Bank

Technology and Infrastructure	2000	2009
Paved roads (% of total)	29.6	*14.9*
Fixed line and mobile phone subscribers (per 100 people)	2	65
High technology exports (% of manufactured exports)	19	*14*

Environment		
Agricultural land (% of land area)	64	*69*
Forest area (% of land area)	26.8	*23.2*
Terrestrial protected areas (% of land area)	..	..
Freshwater resources per capita (cu. meters)	*1,480*	*1,325*
Freshwater withdrawal (billion cubic meters)	10	..
CO2 emissions per capita (mt)	0.32	*0.43*
GDP per unit of energy use (2005 PPP $ per kg of oil equivalent)	2.6	*3.4*
Energy use per capita (kg of oil equivalent)	396	*405*

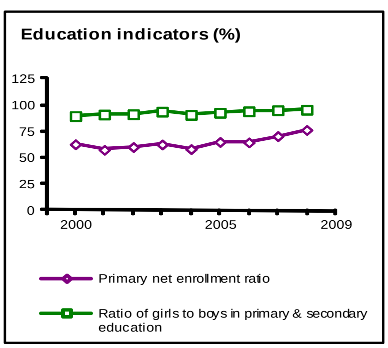
World Bank Group portfolio	2000	2009
(US$ millions)		
IBRD		
Total debt outstanding and disbursed	9	0
Disbursements	0	0
Principal repayments	8	*2*
Interest payments	1	*0*
IDA		
Total debt outstanding and disbursed	3,130	1,581
Disbursements	204	241
Total debt service	47	12
IFC *(fiscal year)*		
Total disbursed and outstanding portfolio	24	201
of which IFC own account	24	191
Disbursements for IFC own account	0	148
Portfolio sales, prepayments and repayments for IFC own account	7	5
MIGA		
Gross exposure	15	86
New guarantees	0	0

Note: Figures in italics are for years other than those specified. 2010 data are preliminary. 11/30/11
.. indicates data are not available. – indicates observation is not applicable.

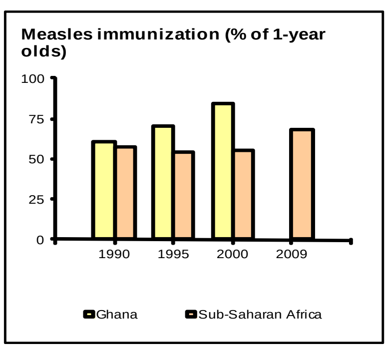
Development Economics, Development Data Group (DECDG).

With selected targets to achieve between 1990 and 2015
(estimate closest to date shown, +/- 2 years)

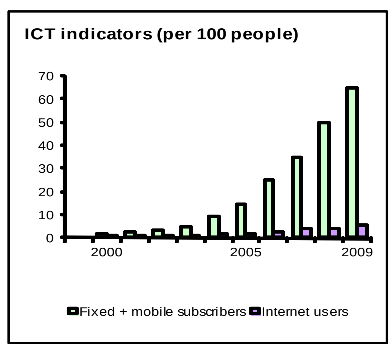
	Ghana			
Goal 1: halve the rates for extreme poverty and malnutrition	**1990**	**1995**	**2000**	**2009**
Poverty headcount ratio at $1.25 a day (PPP, % of population)	*49.4*	..	*39.1*	*30.0*
Poverty headcount ratio at national poverty line (% of population)	*50.0*	..	*39.5*	*28.5*
Share of income or consumption to the poorest qunitile (%)	*7.0*	..	*5.6*	*5.2*
Prevalence of malnutrition (% of children under 5)	*24.1*	*25.1*	*20.3*	*13.9*
Goal 2: ensure that children are able to complete primary schooling				
Primary school enrollment (net, %)	..	..	63	*77*
Primary completion rate (% of relevant age group)	*64*	..	70	83
Secondary school enrollment (gross, %)	35	..	40	57
Youth literacy rate (% of people ages 15-24)	..	..	71	*79*
Goal 3: eliminate gender disparity in education and empower women				
Ratio of girls to boys in primary and secondary education (%)	78	..	90	*96*
Women employed in the nonagricultural sector (% of nonagricultural employment)	..	..	32	..
Proportion of seats held by women in national parliament (%)	..	..	9	8
Goal 4: reduce under-5 mortality by two-thirds				
Under-5 mortality rate (per 1,000)	120	110	106	69
Infant mortality rate (per 1,000 live births)	76	70	68	47
Measles immunization (proportion of one-year olds immunized, %)	61	70	84	*86*
Goal 5: reduce maternal mortality by three-fourths				
Maternal mortality ratio (modeled estimate, per 100,000 live births)	630	540	500	*350*
Births attended by skilled health staff (% of total)	*40*	*44*	*44*	*59*
Contraceptive prevalence (% of women ages 15-49)	*13*	*20*	*22*	*24*
Goal 6: halt and begin to reverse the spread of HIV/AIDS and other major diseases				
Prevalence of HIV (% of population ages 15-49)	0.3	1.7	2.3	1.8
Incidence of tuberculosis (per 100,000 people)	220	220	210	*200*
Tuberculosis case detection rate (%, all forms)	19	23	27	31
Goal 7: halve the proportion of people without sustainable access to basic needs				
Access to an improved water source (% of population)	54	63	71	*82*
Access to improved sanitation facilities (% of population)	7	8	9	*13*
Forest area (% of land area)	32.7	29.8	26.8	*23.2*
Terrestrial protected areas (% of land area)	..	..	..	..
CO2 emissions (metric tons per capita)	0.3	0.3	0.3	*0.4*
GDP per unit of energy use (constant 2005 PPP $ per kg of oil equivalent)	2.5	2.6	2.6	*3.4*
Goal 8: develop a global partnership for development				
Telephone mainlines (per 100 people)	0.3	0.4	1.1	1.1
Mobile phone subscribers (per 100 people)	0.0	0.0	0.7	63.4
Internet users (per 100 people)	0.0	0.0	0.2	5.4
Personal computers (per 100 people)	0.0	0.1	0.3	*1.1*



Education indicators (%)



Measles immunization (% of 1-year olds)



ICT indicators (per 100 people)

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IBRD 33411

SEPTEMBER 2004