

INVESTMENT GUIDE FOR THE AGRICULTURE SECTOR IN GHANA



MINISTRY OF FOOD AND AGRICULTURE

(MoFA)

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Acronyms and abbreviations

ABU	Agribusiness Unit
AfDB	African Development Bank
ARI	Animal Research Institute
APCC	Air Ghana Perishable Cargo Center
ATLAFCO	The Ministerial Conference on Fisheries Cooperation among African States Bordering the Atlantic Ocean
Av	Average
AWM	Agricultural Water Management
BDS	Business Development Service
BNARI	Biotechnology and Nuclear Agriculture Research Institute
BSc	Bachelor of Science
CAADP	Comprehensive African Agriculture Development Programme
CEPS	Customs Excise & Preventive Service
CFS	Committee on Food Systems
CFS-RAI	Principles for Responsible Investment in Agriculture and Food Systems
CRI	Crop Research Institute
CRIG	Cocoa Research Institute of Ghana
CUC	Central University College
DOCs	Day Old Chicks
DTA	Double Taxation Agreements
ECOWAP	ECOWAS Agricultural Policy
ECOWAS	Economic Community of West African States
EDAIF	Export Development and Agriculture Investment Fund
EIA	Environmental Impact Assessment
EMQAP	Export Marketing and Quality Awareness Project
EPA	Environmental Protection Agency
EU	European Union
FAO	Food and Agriculture Organization
FASDEP II	Food and Agricultural Sector Development Policy
FCWC	Fisheries Committee for the West Central Gulf of Guinea
FDI	Foreign Direct Investments
FIFA	Federation of International Football Association
FinGAP	Financing Ghanaian Agriculture Project
FORIG	Forestry Research Institute of Ghana
FRI	Food Research Institute
GADs	Gender and Agriculture Development Strategy
GAIP	Ghana Agriculture Insurance Pool
GASIP	Ghana Agricultural Sector Investment Programme
GAX	Ghana Alternative Market

GCAP	Ghana Commercial Agriculture Project
GGC	Ghana Grains Council
GDP	Gross Domestic Product
GEA	Ghana Employers' Association
GEPA	Ghana Export Promotion Authority
GFL	Ghana Federation of Labour
GFZB	Ghana Free Zones Board
GIDA	Ghana Irrigation Development Authority
GIPC	Ghana Investment Promotion Center
GLSS	Ghana Living Standard Survey
GNAT	Ghana National Association of Teachers
GoG	Government of Ghana
GRA	Ghana Revenue Authority
GSGDA	Ghana Shared Growth and Development Agenda
GSS	Ghana Statistical Service
HACCP	Hazard Analysis and Critical Control Point
HIV /AIDS	Human Immunodeficiency Virus/ Acquired Immune Deficiency Syndrome
ICCAT	International Commission for the Conservation of Atlantic Tunas
IFAD	International Fund For Agricultural Development
IIR	Institute of Industrial Research
ILO	International Labour Organization
IPPC	International Plant Protection Convention
IRS	Internal Revenue Service
IUU	Illegal Unreported And Unregulated
JICA	Japan International Cooperation Agency
KNUST	Kwame Nkrumah University of Science And Technology
LDC	Livestock Development Council
METASIP	Medium Term Agriculture Sector Investment Plan
MFRD	Marine Fisheries Research Division
MGF	Matching Grant Fund
MiDA	Millennium Development Authority
MLNR	Ministry of Lands And Natural Resources
MMDYE	Ministry of Manpower Development, Youth And Employment
MOF	Ministry of Finance
MoFA	Ministry of Food And Agriculture
MOTI	Ministry of Trade And Industry
MOU	Memorandum of Understanding
MT	Metric Ton
NDPC	National Development Planning Commission
NGP	National Gender Policy
NLC	National Labour Commission

NLCD	National Liberation Council Decree
NRCD	National Redemption Council Decree
NTC	National Tripartite Committee
NVTI	National Vocational Training Institute
OPRI	Oil Palm Research Institute
OVCF	Out-grower And Value Chain Fund
P.N.D.C.L	Provisional National Defense Council Law
PGRRI	Plant Genetic Resource Research Institute
PPRSD	Plant Protection & Regulatory Services Directorate
PQD	Plant Quarantine Division
PSJSNC	Public Services Joint Standing Negotiation Committee
REDF	Rural Enterprise Development Fund
REP	Rural Enterprise Project
SADA	Savanna Accelerated Development Authority
SMEs	Small and Medium Enterprises
SPV	Special Purpose Vehicle
SSNIT	Social Security And National Insurance Trust
STEPRI	Science and Technology Policy Research Institute
TC	Tree Crops
TCP	Tree Crops Policy
TUC	Trade Union Congress
TWU	Ghana Timber and Wood Workers' Union
UCC	University of Cape Coast
UDS	University for Development Studies
UG	University of Ghana
USD	United States Dollars
VC	Value Chain
VCTF	Venture Capital Trust Fund
VCFCs	Venture Capital Finance
VSD	Veterinary Service Directorate
WRI	Water Research Institute
WTO	World Trade Organization

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Foreword

The Ministry of Food and Agriculture (MoFA) is the lead government agency and focal point for the development of the agricultural sector. MoFA was set up under the Civil Service Act (CSA) 1960. Its mandate is to develop and execute policies, programmes, projects and strategies for the agricultural sector within the context of a coordinated national socio-economic growth and development agenda. Agriculture is a key sector that contributes significantly to the development and growth of Ghana's economy, and currently accounts for employment of about 44.7% of total workforce (GLSS6, 2014). Improving Ghana's agribusiness sector will lead to higher incomes and more jobs, paving the way for economic growth, structural transformation and industrialization of the Ghanaian economy.

In recognizing the important role the agricultural sector plays in Ghana's economic development, MoFA saw the need to come up with an Agriculture Investment Guide (AIG) to provide guidance and direction for existing and potential agribusinesses.

With the support of Japan International Cooperation Agency (JICA) and the Ghana Commercial Agriculture Project (GCAP), this document was developed by the Agribusiness Unit of the Ministry of Food and Agriculture through stakeholder consultative workshops and meetings. The AIG adopts a logical approach in its consideration of agribusiness investment opportunities in Ghana to ensure that investors make the most appropriate investments for their individual needs.

Further, it outlines policies and regulations guiding investments, relevant institutions that serve regulatory functions and existing incentives schemes to create a conducive environment for agriculture. It also provides useful information on existing agricultural infrastructure such as irrigation facilities, pack houses and cooling facilities, warehouses and export facilities at the ports, labour market situation, land acquisition process and registration for agricultural use and financing schemes for agriculture in Ghana.

Through its comprehensive, step-by-step approach *this Investment Guide* will provide you information leading to the rewarding opportunities that await you in agriculture and agribusiness in Ghana.



HON. DR. OWUSU AFRIYIE AKOTO
HON. MINISTER FOR FOOD AND AGRICULTURE

Executive Summary

The Agriculture Investment Guide has been developed in alignment with the Food and Agriculture Sector Development Policy (FASDEP II). The Guide has been developed with strong emphasis on attracting accelerated investment into the sector to increase productivity, growth and transformation and to create jobs, increase incomes, and ensure food security over the medium to long term.

Agriculture has been the principal sector for the development and growth of Ghana's economy over the years. The contribution of agriculture to GDP in the five-year period spanning 2010 to 2015 has declined from 29.8% to 20.3%. It still remains a major contributor to the economy, providing employment to 44.7% of the total workforce (GLSS6, 2014). For instance, FDI inflows between 2008 and 2016 into agriculture sector recorded was US\$1.3 billion (GIPC, 2016).

Improving Ghana's agribusiness sector would lead to higher incomes and more jobs. Attracting private participation in the sector allows Ghana to compete globally. Such agribusiness development path paves the way for economic growth, structural transformation and improved technical skills which in turn can catalyze economic activities and connect major sectors in the Ghanaian economy.

Modernized agriculture, increased productivity and transformation of the agricultural sector remains a policy goal as well as promoting and enhancing investment into the sector. Furthermore to this, MoFA established the Agribusiness Unit (ABU) in 2012 with the role of facilitating investment into agriculture and providing technical support to agribusinesses. The Agribusiness Unit of MoFA collaborates closely with the Ghana Investment Promotion Center (GIPC) and Ghana Commercial Agriculture Project (GCAP) in this endeavor.

This Agriculture Investment Guide has been developed to serve as a reference document for information on institutions, regulations and policies relevant to the agricultural sector. It outlines incentives available to investors in the agriculture sector and provides information on the various procedures required to successfully establish agricultural investments. It is to ensure that investments are in alignment with national policies and regulations as well as help interested investors in making informed investment decisions.

Government's flagship program "Planting for Food and Jobs" and other MoFA projects such as the Ghana Commercial Agricultural Project (GCAP) are among some of the interventions the Ministry is implementing to increase private investment into the sector.

The Agriculture Investment Guide has nine chapters which cover areas of general information on; policies and sub-sector policies prevailing in the agriculture sector; agricultural infrastructure in the sector including irrigation facilities, pack houses, warehouses, cold terminals and other infrastructure and logistics ; laws and regulations governing the agriculture sector and their requirement relating to agriculture investment; labor market situation, structure and disaggregated agriculture labor and demographics; land acquisition process and registration for agricultural use and the institutions responsible; financing schemes for agriculture in Ghana; Investment laws and regulations relating to agriculture; various incentives for investing in agriculture and processes of registering and establishing agricultural firms and businesses.

This Guide addresses the information challenge that investors could encounter in establishing agribusinesses and also provides the opportunities and incentives available and outlines policies and regulations for investors to harness and take cognizance of.

PART ONE: BACKGROUND AND CONTEXT

Chapter 1: Introduction

1.1 General information and historical overview

Ghana is located along the Gulf of Guinea on the West Coast of Africa, about 750 km north of the equator (Figure 1). The country is bordered by Burkina Faso to the north, Cote D'Ivoire to the west, Togo to the east and the Gulf of Guinea to the south. Prior to colonization by the British in the 19th century, the country was the site of numerous kingdoms and empires. Ghana's 560-kilometre (350-mile) coast is dotted by culturally significant castles, forts and harbors. The country attained independence from Great Britain in 1957 - the first sub-Saharan African nation to attain independence from British colonization. Since 1992



Figure 1: Map of West Africa

Ghana has experienced peaceful and democratic changes of government. Ghana's population of about 27 million comprises a variety of ethnic, social and religious groups. Table 1 provides general information on the country.

Table 1: Ghana - General Information

Official Name	Republic of Ghana
Location	West Africa
Capital City	Accra
Administrative Regions	10
Population (2016*)	28.3 Million
Official language	English
Religion	Christianity 73%, Islam 20.2%, Traditional and others 6.8%
Total land area	23,853,300 hectares
Arable land	13,600,000 Hectares (56.94%)
Climate	Warm Tropical
Economic status	Lower Middle Income
Nominal GDP (2016)*	US \$42.685 Billion
GDP Per Capita (2016)	US\$1508

Source; GSS,

*Revised 2016 figures

1.2 Physical and climatic features

1.2.1 Soils and topography

Most of the soils of Ghana are developed on thoroughly weathered parent materials, with alluvial soils (Fluvisols) and eroded shallow soils (Leptosols) common to all the ecological zones. Generally, most of the soils are plagued with inherent or human induced infertility. The soils in the Forest zone, Forest Oxisols and Forest Acid Gleysols, are porous, well drained and generally loamy. They are distinguished from those of the Savannah zones by the greater accumulation of organic matter in the surface resulting from higher accumulation of biomass. Savannah soils are underlain by various igneous, metamorphic and sedimentary rocks, which have influenced the nature and properties of the soil. Consequently, soils of the Savannah zones, especially in the Interior Savannah, are low in organic matter (less than 2% in the topsoil), have high levels of iron concretions and are susceptible to severe erosion.



Figure 2: Map of Ghana - Ecological zones

The topography of the country is mainly undulating with most slopes less than 5% and many not exceeding 1%. The topography of the high rainforest is, however, mainly strongly rolling. The uplifted edges of the Volta Basin give rise to narrow plateau between 300 to 600m high. Despite the general undulating nature of the terrain, about 70% suffer from moderate to severe soil erosion. See Appendix 1 for a map showing the suitability of soils types for the cultivation of various crops in the country.

1.2.2 Climate and Agro Ecological Zones

The climate of Ghana is warm and tropical. The tropical eastern coastal belt is warm and comparatively dry whilst the northern area has generally hot and dry climate. Annual average temperatures range from around 26 degrees Celsius in the coast to around 29 degrees Celsius in the extreme north.

The country's varied geography includes savannas, forests, springs, caves, mountains, estuaries and nature reserves. Ghana is divided into six distinct agro-ecological zones: these are Rain Forest, Deciduous Forest, Forest-Savannah Transition, Coastal Savannah and Northern (Interior) Savannah which comprises Guinea and Sudan Savannahs (see Figure 2).

Rainfall distribution is bimodal in the Forest, Deciduous Forest, Transitional and Coastal Zones, giving a major (March-July) and minor (September-October) growing season. Elsewhere, in the Guinea Savannah and Sudan Savannah, the uni-modal distribution gives a single growing season (July-September). Table 2 presents rainfall distribution in the various agro-ecological zones.

Table 2: Rainfall distribution by various agro ecological zones

Agro-ecological Zone	Mean annual Rain (mm)	Growing Period (Days)	
		Major season	Minor season
Rain Forest	2,200	150 - 160	100
Deciduous Forest	1,500	150 - 160	90
Transitional	1,300	200 - 220	60
Coastal Savannah	800	100 - 110	50
Northern Savannah			
Guinea Savannah	1,100	180 - 200	*
Sudan Savannah	1,000	150 - 160	*

1.3 Economy of Ghana

Ghana is endowed with abundant natural resources such as gold, diamond, bauxite, iron and oil the country is the second largest economy and market by purchasing power parity and nominal GDP in West Africa. Ghana is the world's second largest producer of cocoa and also a major gold producer. In 2010 Ghana started oil production at the offshore Jubilee fields and has recently been producing and processing natural gas. The growing economic prosperity and stable democratic political system of the country has made it a preferred destination for investors in West Africa.

1.3.1 FDI Inflows in Agriculture

In the year 2016, Ghana Investment Promotion Center (GIPC) registered four agriculture projects worth US\$ 6,469, 000 as compare to 2015 registered projects (ie: in 2015 GIPC registered 2 agriculture projects worth US\$ 2,520,000). Additionally, from 2008 to 2016, GIPC has registered 110 projects worth US\$ 1,303 billion.

1.4 Foreign Relations

Ghana has strong economic relations with its neighboring countries and the rest of the world. The country is an active member of the United Nations and many of its specialized agencies, the Non-Aligned Movement, the African Union (AU), the Economic Community of West African States (ECOWAS), the Commonwealth and Bretton Woods Institutions.

PART TWO: THE AGRICULTURE SECTOR

Chapter 2: Agriculture in Ghana

2.1 Overview

Agriculture plays a vital role in Ghana's economy and has a great impact on poverty reduction. It is also critical for rural development and cultural values, social stabilization, environmental sustainability and buffering economic shocks. The sector currently provides employment for about 44.7%¹ of the total workforce in the formal and informal sectors. The main agricultural commodities include root and tubers, cereals, tree plantation crops such as cocoa, oil palms and shea, horticultural crops (mainly papaya, pineapples, mango and vegetables), livestock and fisheries.

Agriculture in Ghana is predominantly a smallholder activity. About 90% of farm holdings are less than 2 hectares in size, although there are some relatively large farms and plantations, particularly for rubber, oil palm, banana, pineapple and coconut and to a lesser extent, rice, maize and cocoa. Ghana's primary cash crops are cocoa, oil palm, pineapple, mango, cassava, tomato, banana, citrus, cashew and vegetables. Appendix 1 shows the suitability of various crops to different soil types in Ghana.

Over the years, the Government of Ghana has been implementing policies and programmes to promote growth and development of the agriculture sector. These include the Ghana Shared Growth and Development Agenda (GSGDA I and II), Food and Agricultural Sector Development Policy (FASDEP I and II) and Medium Term Agricultural Sector Investment Plan (METASIP I and II).

One of the government's main objectives in the crops sector is to enhance the competitiveness and profitability of crops through enhanced access to improved technological packages for increased productivity and to ensure sustainable management of the environment. The list of agriculture research institutes that are mainly responsible for the development of improved technologies is provided in Appendix 2.

The agricultural sector offers a unique set of advantages to investors including a varying range of agro-ecological zones amenable to production of different crops. Ghana has fertile soils suitable for agricultural production. The total land area of about 23.9 million hectares includes about 14 million hectares of agricultural land area, out of which 6.3 million is under cultivation, (MoFA,SRID 2016). There are adequate water resources, both surface water and underground water, for irrigation. The area under inland waters is about 1.1 million hectares.

¹ Ghana Statistical Service : GLSS6 2014

2.2 Agriculture sub-sectors in Ghana

Agriculture is one of the predominant sectors in Ghana's economy. The sector is composed of five sub-sectors: crops, cocoa, forestry and logging, livestock and fisheries.

2.2.1 Crop sub-sector

The 2014 Agricultural Sector Annual Progress Report by MoFA, indicated that, for the preceding five years (2008-2013), food production in Ghana showed an upward trend, thus increasing the country's progress towards complete food self-sufficiency (see Appendix 3). Generally, production levels of major food crops (rice, cassava and yam) increased, except maize output which declined marginally due to the high cost of agricultural inputs and poor weather conditions in some parts of the country which made most farmers in the northern sector shift to crops that are drought tolerant and not heavily dependent on fertilizer (millet and sorghum). A key element of national agriculture development policy is the promotion of processing. The practice of processing agricultural production is widespread and increasing. A list of some agro-processing companies operating in Ghana is provided in Appendix 4.

2.2.2 Livestock sub-sector

From projected estimates, livestock population increased from 2008 to 2014 (see Table 3). This achievement can be attributed to productivity improvement interventions in the livestock sub-sector including supply of improved livestock breeds to farmers, sustainability of the 32 credit-in-kind projects for both pigs and small ruminants, and the cockerel improvement project. Furthermore, investments in veterinary services, particularly improvement in disease control mechanisms and capacity building for community livestock workers, have helped to sustain the gains made from investments in improving animal production.

Table 3: Trend of Livestock Population ('000)

Type of Livestock	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
Cattle	1,407	1,422	1,438	1,454	1,498	1,543	1,590	1,657	1,734	1,815
Sheep	3,420	3,529	3,642	3,759	3,887	4,019	4,156	4,335	4,522	4,744
Goats	4,196	4,405	4,625	4,855	5,137	5,435	5,751	6,044	6,352	6,740
Pigs	491	506	521	536	568	602	638	682	730	777
Poultry	37,038	39,816	43,320	47,752	52,575	57,885	63,732	68,511	71,594	73,885

Source: MoFA/SRID, Facts and Figures (2016)

2.2.3 Fisheries sub-sector

The fisheries sub-sector has contributed to the achievement of the country's food security goals by providing high quality and affordable fish protein in the daily diet of many households. It is estimated that the sub-sector contributes about 60% of the protein requirements of Ghanaians. Total fish produced

in 2014 from all sources, including captured (marine and inland) and cultured (aquaculture), was 413,077 metric tons, contributing about 74% of the total fish needs of the country. Out of the total production in 2014, marine fisheries accounted for about 70%, inland fisheries 21% and aquaculture 9% (Figure 3). Total import in 2013 was 145,910 metric tons.

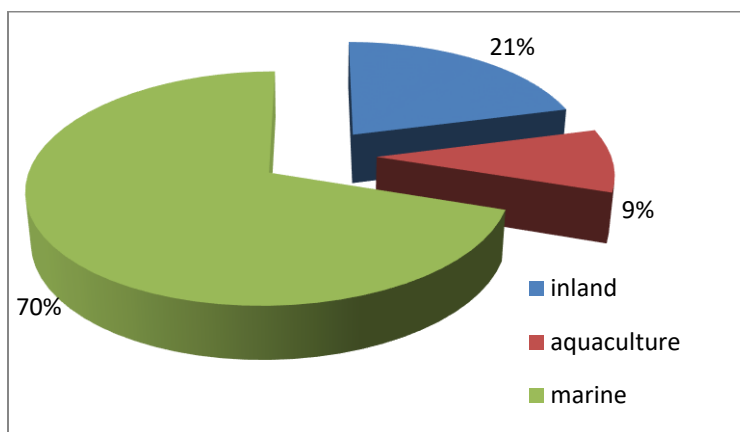


Figure 3: Domestic Fish Production by Sub-sectors

Source: MoFAD, 2015

2.3 Public Sector Investment on Agriculture

Under the Ghana Shared Growth and Development Agenda (GSGDA), and in line with the Maputo Declaration, the Government of Ghana has committed to invest at least 10% of its annual expenditure in the agricultural sector. This is to attain 6% annual agricultural growth. The volume of total government expenditure in agriculture showed an increasing trend from GH¢392 million in 2008 to GH¢1.45 billion in 2011, as indicated in Table 4. From the Table, between 2008 and 2011 the Government of Ghana (GoG) met the 10% commitment.

However, during the period, the average growth rate of the sector was 5.2%. This incremental trend in agricultural expenditure is commendable evidence of government commitment to the sector but the impacts of these investments on smallholder agriculture need to be enhanced to accelerate agriculture growth and productivity in Ghana.

Table 4: Total Government Expenditure (GHS) on the Agricultural Sector (2008-2011)

Sub Sector	2008	2009	2010	2011
MoFA(Crops and Livestock)	155,320	338,598	181,347	248,830
Fisheries	17,950	14,567	5,761	5,890
Forestry	34,234	67,815	35,158	91,996
Agricultural Research	56,510	93,331	79,603	64,815
Debt Servicing	68,418	650	-	-
PSI	2,168	5,462	54,000	125,460
Cocoa	57,613	169,224	822,498	884,516
*Feeder Roads	-	91,732	112,922	26,599
Total Agricultural Expenditure including Feeder Roads	392,213	781,379	1,291,289	1,448,106
**Total GoG Expenditure	3,842,750	8,659,268	11,036,923	13,837,325
% Total GoG Expenditure to Agriculture	10.21	9.02	10.5	11.7

Source: GSS, 2011/PER

2.4 Performance of Gross Domestic Product

The agriculture sector in Ghana used to be the largest contributor to Gross Domestic Product (GDP) until 2005, where the services sector took over. Then, as a result of the oil discovery, the industrial sector topped the agriculture sector in 2011. In 2014, agriculture contributed about 22% of GDP whilst services and industry contributed about 49.6% and 28.4% respectively. The agricultural GDP growth rate in 2014 was 4.6% whereas in 2013 the growth rate was 5.7%. The

Economic activity	2010	2011	2012	2013	2014	2015	2016*
Agriculture	29.9	27.2	24.8	24.4	23.2	21.2	19.3
Industry	18.8	20.2	22.0	21.3	20.9	21.9	22.7
Services	51.3	52.6	53.2	54.3	56.0	56.9	58.1
Gross domestic product at basic prices	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Table 5: Distribution of non-oil GDP by economic activity

*Source: GSS2017 * Revised*

2.5. Domestic and export market trends

Over the last few years, Ghana has embarked vigorously on promoting horticulture as a key sub-sector in driving the non-traditional export sector. More than \$300 million public and \$500 million private

funds² have been invested in the last eight years to upgrade infrastructure, build technical capacities and create a competitive export environment in the sector.

The orientation towards liberalized market economies and globalization has not only created opportunities for horticultural producers and exporters but has also come with fierce competition from other exporting countries amid stringent European market requirements. The need, therefore, is to exploit the Ghanaian domestic market and diversify into West Africa and Middle East markets while consolidating the European market.

The horticultural sector is set to grow on the domestic market. There is increasing presence of supermarket chains, growing middle class and booming hospitality market growth. There has been a steady increase in new hotels with increased demand for fruits and vegetables. In particular, oranges, pineapple, mangoes, bananas, coconut and watermelon remain the strategic fruits for further investment and production expansion in the domestic market. During 2009 to 2013, the market for mangoes doubled while bananas also grew by 48%, oranges by 37%, and watermelon by 5%.

In the export sub-sector, markets for mangoes, oranges, pineapples and specialty vegetables (Bird's eye chilies) in West Africa, Europe and the Middle East provide high opportunities for exports. Also volumes for non-traditional exports such as processed foods and industrial materials have increased by 59.52% during the period 2004-2013. Tables 6 and 7 provide details on the progress in developing non-traditional agriculture exports in recent times.

The Government and its development partners are striving to make the horticultural industry more viable and competitive, and as well to increase production and export of horticultural produce. Under the Export Marketing and Quality Awareness Project (EMQAP) and the Millennium Development Authority (MiDA)), four pack houses have been constructed, including one pre-cooler for nucleus farmers and the Perishable Cargo Center at the Kotoka International Airport.

² Potential Regional and Local Markets for Ghanaian Horticultural Produce, MoFA (2013)

Table 6: Performance of Non-Traditional Agricultural Exports

Items	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
Total Volume of NTAE ('000 MT)	316.60	356.50	293.20	299.50	547.10	553.10	552.40	571.60	670.1	2,435
Value of NTAE (US \$m)	197.30	187.60	150.90	164.90	297.00	276.40	306.10	340.70	396.90	371.14
Total Value of NTAE (US \$b)	1.165	1.341	1.215	1.629	2.423	2.364	2.436	2.514	2.522	2.463
Contribution (%)NTAE	16.90	14.70	12.40	10.10	12.30	11.70	12.60	13.60	15.74	15.07

Source: Ghana Export Promotion Council, Accra.

Table 7: Volume of Main Agricultural Non-Traditional Exports (Mt.)

Commodity	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
Horticultural:										
Pineapple	40,456	35,134	31,567	40,141	45,057	41,212	40,095	33,634	43,461	27,148
Yam	19,716	20,842	17,571	19,485	27,393	25,079	5,230	36,826	28,296	24,105
Oranges	3,674	10,991	11,028	10,729	3,812	7,589	8,233	9,025	5,062	6,789
Vegetables	6	n.a.	2,342	3,695	11,658	1,960	n.a.	870	338	294
Banana	52,069	69,779	47,613	64,202	63,761	60,425	8,656	56,075	95,180	108,473
Mangoes	824	858	435	291	869	1,222	1,789	1,276	2,219	2,122
Pawpaw	1,194	968	891	812	920	426	1,119	1,295	664	520
Fish & Sea foods:										
Tuna Fish	45,119	26,816	19,325	20,632	4,707	19,799	6,496	26,820	12,138	26,387
Other Fish	18,169	12,394	10,695	4,855	7,972	n.a.	7,008	5,792	4,654	8,076
Lobsters/Shrimps, etc.	493	258	18	75	57	18	52	93	27	
Cuttlefish & Octopus	896	557	149	388	560	412	130	556	1,020	5,556
Processed & Industrial:										
Cashew Nuts	23,616	81,190	52,965	57,095	215,587	157,176	271,537	192,376	232,835	231,555
Cocoa Products	n.a.	107,860	n.a.	n.a.	233,730	n.a.	n.a.	220,308	n.a.	261,816

Commodity	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
Raw/Lint Cotton	3,772	3,662	n.a	729	1194	n.a	n.a	2,516	598	1,662
Coffee	1,464	2,023	1,346	1,737	9,035	48,517	918	112	174	538
Cotton Seed	5,337	3,711	1,201	419	3,530	7,077	2,984	509	n.a	-
Kola nut	6,753	4,966	5,182	7,878	1,186	1,758	527	135	n.a	-
Shea nuts	57,166	55,488	67,826	41,219	111,194	108,976	37,518	59,909	134,651	78,268

Source: Ghana Export Promotion Council (GEPC), Accra.

Chapter 3: Agriculture sector policies and legislation

3.1 Overview of policy framework

The Food and Agricultural Sector Development Policy (FASDEP II), is aligned at the national level with the Growth and Poverty Reduction Strategy and the Ghana Shared Growth and Development Agenda (GSGDA II) and at the international level to the Sustainable Development Goals (SDGs) and the ECOWAS Agricultural Policy (ECOWAP). The Medium Term Agriculture Sector Investment Plan (METASIP II) is the agriculture investment plan for Ghana which is aligned to the Comprehensive African Agriculture Development Programme (CAADP). The unique feature of the METASIP is that it seeks to leverage private sector investments in agriculture and to pursue the value chain approach.

The Ministry of Food and Agriculture is implementing a new program, the “Planting for Food and Jobs” Campaign in the agriculture sector to increase productivity and, production of selected value chains and create jobs in the agriculture and related sectors. The agriculture sector has experienced local production deficits in rice and soyabean and some horticulture crops such as tomatoes, onions and sweet pepper which are met through imports. The Planting for Food and Jobs Campaign will initially focus on five value chains namely; maize, rice, soyabean, sorghum and vegetables.

The Planting for Food and Jobs Campaign has five (5) pillars: (i) Improving access to seeds (ii) Improving access to fertilizers (iii) Extension services (iv) Marketing and (v) E-Agriculture Platform.

3.2 Gender aspects of agriculture policies

The following policies help protect women and also promote gender equality in Ghana and the agriculture sector.

3.2.1 Ghana Shared Growth Development Agenda (GSGDA).

GSGDA is the overarching national medium-term development policy framework and poverty reduction strategy of Ghana with the main target of putting the economy on the path to achieving a per capita income of least US \$3,000 by 2020 and attaining the Sustainable Development Goals. The emphasis of the agriculture-related strategy in the GSGDA II is on:

- i. promoting gender equity in land reforms and land use planning and management
- ii. intensifying the incorporation of age/gender analysis into agriculture research
- iii. mainstreaming gender issues into agricultural mechanization
- iv. increasing access and improving allocation of resources to districts for extension service delivery taking cognizance of gender sensitivity
 - promoting land reforms targeting equal access to irrigated land by men, women and persons with disabilities, among others.

3.2.2 National Gender Policy (NGP)

The NGP is aimed at addressing gender inequality of opportunities and women empowerment. It also intends to mainstream gender concerns into national development processes to improve the social, legal, civic, political, economic and socio-cultural conditions of women and men. Therefore, within this national policy framework, all sectors are to develop gender policies using the overarching national gender policy as a guide. This will enable achievement of the NGP aim of accelerating efforts and commitment of government to empower women to have livelihood access to economic opportunities and decent work to improve earnings while addressing disparities in education, socio economic and cultural issues, health, agriculture, trade and related matters.

3.2.3 Food and Agriculture Sector Development Policy II (FASDEP II)

The MoFA developed the FASDEP II, the prevailing national policy for Ghana's agriculture sector, in 2008 to provide a framework to promote sustainable agriculture and thriving agribusiness for all. FASDEP II strategies for gender mainstreaming are to prioritize a key gender mainstreaming programme annually for implementation of Gender and Agriculture Development Strategy (GADS) strategies, strengthen institutional capacity for effective gender mainstreaming and advocate affirmative action in recruitment and training in MOFA. The other strategies are to ensure collection, use and maintenance of gender disaggregated data at all levels and to promote systematic and regular gender analysis of agricultural programmes to ensure they do not increase the workload of poor women and men farmers.

3.3 Tree Crops Policy (TCP)³

The formulation of the Tree Crops Policy (TCP) in Ghana takes into account the major policy and strategy documents developed and currently being implemented in the sector. The Policy is to provide a comprehensive and holistic approach for the sustainable development of the tree crops sub-sector and for proper targeting of support to tree crop value-chains.

3.2.1 Objectives and Strategies of TCP

The TCP has prioritized six major strategic objectives to promote the sustainable growth and development of the tree crops sub-sector in Ghana. These are to:

- i. support increased production and productivity
- ii. promote investment and increase processing capacities
- iii. improve marketing through value-chain development
- iv. promote sustainable practices for environmental protection
- v. support research and development
- vi. improve coordination and management

³ For full document visit www.mofa.gov.gh

3.4 Seed Policy⁴

The production of certified seed and planting materials for sale to farmers in Ghana is a private-sector driven activity in which direct public sector seed production, marketing has been terminated, and small and medium scale seed enterprises, including small-scale farmers and commercial firms, produce and sell seeds and planting materials. In this privatized seed market, small and medium scale seed growers and dealers are registered and trained annually in the production and marketing of seeds in Ghana. To guide, promote and facilitate the accelerated development of the seed industry, Ghana has developed a comprehensive Seed Policy which is very informative and educative and captures the interests of the whole spectrum of actors along the agriculture value chain in the seed industry.

The main objective of the Seed Policy is to support the development and establishment of a well-coordinated comprehensive and sustainable private sector-driven seed industry through systematic and strategic approaches that continuously create and supply new improved varieties for use by farmers. The Seed Policy supports successful, seed production, certification, marketing and seed security systems which forms the basis for food security and supports the overall development of the agriculture sector. The Policy also provides implementation guidelines to guide the general approach to implementing the policy.

3.5 Agricultural Extension Policy⁵

The Agricultural Extension Policy sets out to address the specific needs of farmers, especially the rural poor, in an effort to reduce poverty, to ensure that farmers adopt environmentally sustainable methods, to raise agricultural productivity, and to create an enabling environment for private sector participation in the funding and delivery of extension services.

The extension policy has nine objectives:

- i. promote farmer-driven extension and research to ensure that services provided are relevant to farmers' needs
- ii. empower farmers through the formation and development of FBOs, including marketing and agro-processing associations and co-operatives, in collaboration with the Department of Co-operatives
- iii. promote the best agricultural practices
- iv. improve the efficiency and cost-effectiveness of publicly funded extension services
- v. broaden extension services delivery
- vi. ensure that appropriate institutional structures are developed at all implementation levels to operate the new agricultural extension policy. Therefore, MoFA will make more operational the

⁴Contact the Directorate of Crop Services for the Full Document

⁵You may contact www.MoFA.gov.gh or the Extension service directorate of MoFA for the full document

- roles and responsibilities of staff at the various levels (national, regional and districts) as defined by the decentralization policy
- vii. implement an effective monitoring and evaluation system for agricultural extension services.
 - viii. undertake a broad based human resource development programme by ensuring continuous capacity building of agricultural development workers.
 - ix. drive the national agricultural extension system to respond to the emerging and under-served issues of the HIV/AIDS pandemic, environmental degradation, poverty reduction, gender, equity and client empowerment as they relate to sustainable agricultural production.

3.6 Livestock Development Policy

Ghana's agro-ecology, climatic conditions and land availability make livestock production suitable. However, livestock production has not kept pace with increasing consumer demand of meat and animal products.

3.7 National Fisheries and Aquaculture Development Policy⁶

The National Fisheries and Aquaculture Development Policy developed in 2008 was the first comprehensive policy document on aquaculture development in Ghana and serves as a blue print. The policy aims at achieving full potential of the fisheries sub-sector.

The development of the Policy is in line with the Food and Agriculture Organization (FAO) Code of Conduct for Responsible Fisheries which also serves as a guide for integrated rural development and coastal area management. The policy is structured around four strategic areas of focus: (a) management of fisheries, conservation of aquatic resources and protection of their natural environment, (b) promotion of value addition in the fisheries sector and the improvement of livelihoods in the fishing communities, (c) sustainable development of aquaculture, and (d) improvement of services provided to the sector by the Ministry of Fisheries and other supporting institutions.

3.8 Alignment of Sector policies to CFS RAI

Most of the policies of FASDEP II and other subsector policies and cross cutting policies in the agriculture sector are aligned to these Principles for Responsible Investment in Agriculture and Food Systems (CFS RAI). The CFS RAI acknowledges that the starting point for defining how responsible investment in agriculture and food systems can contribute to food security and nutrition is the recognition and respect for human right (see appendix 6).

⁶You may contact www.mofad.gov.gh or the Ministry of Fisheries and Aquaculture for the full document

3.9 Agricultural and related legislation

The policy framework for agriculture operates within the context of various types of legislation that relate to the sector. These legislations cover all the sectors of relevance to agriculture. A list of agricultural and related acts and regulations is presented in Appendix 7.

PART FOUR: THE SUPPORT BASE FOR AGRICULTURE

Chapter 4: Land Acquisition, Management and Regulation

Land ownership in Ghana is based on the underlying principle that land is a natural resource which originally belonged to a particular community or group, normally represented by a stool (or skin in the Northern Region of Ghana) as the acknowledged symbol or identity of the group. Land was also perceived as a communal property that defined a community's geographic extent, its economic strength and its socio-cultural heritage.

4.1 Land ownership in Ghana

There are four categories of land ownership in Ghana governed by both customary practices and enacted legislation.

- i. State Land: is compulsorily acquired by the government through the invocation of appropriate legislation and held in trust for the entire people of Ghana.
- ii. Vested Land: belongs to stools or skins but vested in the state in trust for the people of the stool, skin, or family from which it was vested.
- iii. Private Land: belongs to stools, skins, or family communities and held in trust on the behalf of the community by chiefs, *tendana* or family heads
- iv. Individual Land: land owned by individuals, corporations and institutions.

4.2 Responsible authority and legal framework

Ministry of Lands and Natural Resources (MLNR) has overall responsibility for land issues as well as for mines and forestry. Customary authorities (stools, skins, clans and families) are the allodial title holders of more than 80 percent of the land in the country, and are responsible for the allocation, administration and management of these lands.

The Lands Commission is responsible for ensuring that land development is effected in conformity with the nation's development goals. Other land sector agencies are the Office of the Administrator of Stool Lands, which is responsible for collecting rents, royalties, compensations and other payments for stool and skin lands, and the Town and Country Planning Department which is responsible for land use planning and development. The Lands Commission has been restructured by the Lands Commission Act (Act 767), under which 4 separate functional divisions have been established, namely: Survey and Mapping Division, Land Registration Division, Land Valuation Division, and, Public and Vested Lands Management Division.

There are two types of land registration systems in Ghana: the Title Registrations and the Deeds Registration Systems.

4.2.1 Title Registration System

According to the Land Title Registration Law 1986, (PNDCL 185), and the Lands Commission Act (Act 767), the Lands Commission receives an application for land title registration in order to issue a land certificate. An application, containing a site plan, is preceded by a preliminary search on the land at the Lands Commission in order to ascertain the past record of transactions on the land, to check current ownership of the land, and to ensure the status of payment of property tax. A “*Deed Document*” is prepared to confirm past history of transactions on the proposed land. Once a preliminary search is completed without any encumbrance, the applicant pays the land owner and the deed document executed concurrently.

An applicant then submits an application attached with “*Deed Document* (including a site plan)” to the Land Valuation Division with payment of stamp duty. The Land Valuation Division sends the set of documents to the Land Registration Division for processing and registration. The Land Registration Division reviews the documents, and issues the “*Acknowledgement Card (Yellow Card)*” once the documents are accepted. After this, the Land Registration Division asks the Survey and Mapping Division to confirm the submitted site plan of the applied land. There are two types of a site plans (a “*Parcel Map*” and a “*Cadastral Map*”) depending on the status of development for the applied area. A “*Parcel Map*” is prepared for areas that are already developed while a “*Cadastral Map*” is prepared for undeveloped areas. In case of a Cadastral Map, a surveyor of the Survey and Mapping Division undertakes surveying of the site. Once the site plan is confirmed, the Land Registration Division gives Public Notice of 14 days duration in order to allow for receipts of any objections from concerned stakeholders.

In parallel, the Land Registration Division requests the Public and Vested Land Management Division to check “*the Record of Information*”, which is retained in the Registration Division, for re-confirming past records on the proposed land. If no objection is received from the public and no defect is identified from the record of information, the Land Registration Division issues the Land Certificate to an applicant. In case of leasing the land from a landowner through the transfer of registered-ownership for agreed durations, a *Public Notice* is not given to the public since it is regarded as second registration.

4.2.2 Deeds Registration System

Land registration in other regions (apart from Greater Accra Region and Kumasi in the Ashanti Region) is regarded as “Deeds Registration” in which case a *Public Notice* is given if the area of land exceeds 50 acres. The Regional Public and Vested Land Management Division Office is in charge of the registration in this instance.

4.3 Stool/ Skin Lands-Registration Procedures

- i. The applicant/developer negotiates with the chief and his principal elders concerned with management of communal land or with clan or family heads and principal clan/family elders.
- ii. Three copies of the document executed between the chief, *Tendana*, clan or family head and the application are submitted to the Lands Commission.
- iii. A solicitor of the Supreme Court (a practicing lawyer) must sign the back of each copy with his/her stamp duly affixed.
- iv. Each copy of the document must have a certified site plan attached. Two extra site plans, making five in all, must accompany the documents.
- v. The back of the site plans are endorsed by the granter (lessor)/seller and the applicant (lessee)/buyer.
- vi. Each site plan is certified by the stamps of a licensed surveyor and the Regional Surveyor and duly dated.
- vii. At least two principal Elders of the stool (with status) or principal family/clan members must sign as witnesses.
- viii. The witnesses of the applicant (lessee) /buyer must write their full names and provide addresses and signatures.
- ix. The documents are submitted to Lands Commission for processing and registration fees payment.
- x. The Chairperson of the Lands Commission grants concurrence.
- xi. The documents are released for stamping at the Land Valuation Division of the Lands Commission
- xii. The applicant obtains Tax Clearance Certificate at Internal Revenue Service.
- xiii. The document is registered at the Deeds Registry at the Lands Commission.
- xiv. The applicant pays the first year's ground rent.
- xv. The original copy of the document is released to the applicant.

4.4 State and Stool Vested Lands-Registration Procedures

- i. Applications go to the Lands Commission for the plot of land.
- ii. The Applicant completes application form (form 5) and questionnaire with two passport size pictures.
- iii. The Lands Commission gives approval, if a plot is available.
- iv. The Applicant pays the requisite fees and charges.
- v. The documents are prepared by the Secretariat of Lands Commission.
- vi. The Applicant is invited for the execution of the documents by the Chairperson of the Lands Commission.
- vii. The Applicant pays ground rent processing and registration fee.
- viii. The documents are released for stamping at Land Valuation Board.
- ix. The Applicant obtains Tax Clearance Certificate at the Internal Revenue Service.
- x. The document is finally registered at the Deeds Registry at Lands Commission.
- xi. The original copy of the document is released to the Applicant.

4.5 Model Commercial Agriculture Lease Agreement⁷

There are various drafts of land lease and “indenture” agreements in Ghana that have presumably been construed to have worked well in the context of traditional transactions. However, these draft documents have not been tailored to address the unique issues and challenges posed by large-scale commercial land transactions which can, if not handled appropriately, have significant negative consequences for whole communities. To forestall this likelihood, MoFA through GCAP has produced a specialized ‘Model Lease Agreement’ (MLA) document that aims to facilitate socially responsible land investment practices by proactively addressing the specific challenges that investors, landowners and affected communities often encounter in commercial agricultural land transactions in Ghana. The MLA contains unique and innovative provisions that distinguish it from traditional lease forms, including: (a) mechanisms for clarifying the rights granted to investors and specific rights reserved by landowning communities, so as to minimize misaligned expectations on all sides, (b) different options for monetary forms of compensation paid under the lease, and (c) inclusion on the lease form of signature lines for witnesses representing a broad range of community interests.

Also, the Land Commission has developed guidelines for large-scale land transactions in the country to guide investors and customary land owners and their communities in addressing the challenges posed by speculative large-scale commercial land transactions which negatively impact land owning communities.

⁷ Visit www.gcap.org.gh for full document

Chapter 5: The labour market

National development policy and programmes aim at ensuring availability of jobs for all. However, unemployment persists. The unemployment and under-employment rates stand at 4.6% and 5.1% respectively in 2013. Youth unemployment was at 8.7% in 2013, with a slightly higher rate among females. Up to 300,000 workers are introduced to the pool of jobseekers every year but only about 2.0% find jobs in the formal sector; the majority end up in the informal job market.

National Employment Policy aims to structurally transform the Ghanaian economy through more employment-intensive production processes and public investment programmes.

Ghana has a unified trade union movement with a relatively high density at 7.5% of the total labour force. Ensuring decent work in the informal economy is receiving increased attention by the Trade Union Congress (TUC) and several unions are working to extend their services to workers in the informal sector. An estimated 58,000 workers of the informal economy are affiliated members of trade unions.

5.1 Agricultural labour market

The Ghanaian economy is broadly categorized into three sectors: agriculture (including forestry and fishing), industry and service. In terms of the distribution of labour force by economic activity, agriculture contributed 44.7% of total employment with the service and industry sectors accounting for 40.9% and 14.4%, respectively (GLSS6, 2014).

5.2 Trade Unions in Ghana

Ghana has about 25 trade unions organized under two national trade union centers, the Trades Union Congress of Ghana and the Ghana Federation of Labour with a total workforce of around 11,058,000. Table 8 presents some characteristics of trade unions in Ghana.

5.2.1 Ghana Trade Union Congress (TUC)

The TUC was founded in 1945. It comprises 18 member national unions and nine associate members in the informal sector economy. The TUC has a membership of about 500,000 workers but membership has been decreasing in recent years due to declining formal sector employment. However, due to the decision to affiliate associated members from informal sector economy workers, membership is beginning to rise again. TUC estimates that about 300,000 workers belong to unions outside TUC that can potentially increase its membership. Table 8 presents some descriptors of the trade union situation in Ghana.

Table 8: Indicators of Trade Unions in Ghana 2014

Number of trade unions	25
Members of trade unions ¹	800,000
Trade union members share of labour force	7.5 %
Trade union members to waged workers	48 %
Female member share of trade unions ²	30 %
Affiliated trade unions from the informal economy	58,000
Waged and salaried workers covered by CBAs(2006) ³	70 %
Share of workers covered by CBA	N/A
Labour force (2013) ⁴	11,058,000

Source: Ghana TUC, 2012 and ILO 2013

5.2.2 Trade Unions in the Agriculture Sector

Two main national unions operate in the agriculture sector: the General Agriculture Workers Union (GAWU), the Timber, and Wood Workers' Union (TWU).

5.2.2.1 General Agricultural Workers' Union

The GAWU was formed on 5th February 1959. Initially, it derived almost all its membership from state-owned plantations in the formal segment of the agriculture sector. Currently, GAWU organizes workers in both the formal and informal sectors of the economy. The total membership of GAWU rose from 27,017 (comprising 47.4% wage earners from the formal sector and 52.6% own-account workers in the informal economy) in 2005 to 50,323 in 2011. Females constitute just about 20% of the total membership but the union has recently adopted measures to promote gender balance in its membership and leadership, including the appointment of a National Women's Coordinator in July 1986 – the first union to do so.

5.2.2.2 Ghana Timber and Wood Workers' Union (TWU)

The TWU was formed in 1952 to unionize all non-managerial employees of sawmills and other woodwork industries in the country. Its current membership of over 25,000 is drawn from both the formal and informal sector associations. Major challenges facing the union include the threat of labour retrenchment, as companies struggle to survive due to the dwindling rainforest and low demand for timber, especially from the OECD countries since the 2008 recent global economic and financial crises.

5.3 Employers' Organizations

Employers in Ghana also associate to enhance their interest through the collective forum of the Ghana Employers' Association (GEA) which was formed in 1959, two years after Ghana's independence. The association currently represents over 1,500 employers and aims to consolidate employers into an effective body to represent, promote and defend their interests in their dealings with organized labour and government. It seeks to promote good working relations between employers and their employees, and to assist employers in negotiating collective-bargaining agreements with organized labour. The GEA is structured into the Annual General Meeting, the Council, the Executive Committee, the Advisory

Committee, the Administrative and Finance Committee, the Education and Training Committee and the Secretariat.

5.4 National labour legislation

The 1992 Constitution of Ghana establishes the right to satisfactory, safe and healthy work, equal pay for equal work, adequate resting periods, maternity leave and protection from child labour.

Also freedom of association is guaranteed and workers are free to join and form unions. The Constitution also encourages participation of workers in labour related concerns at workplaces.

5.4.1 Labour Act 2003 (Act 651)

The Labour Act of 2003 applies to workers and to employers, except the Armed forces, the police services, the prison services and security and intelligence agencies specified under the security and intelligence agencies Act 1996 (Act 526). The Labour Act 651 regulates various working conditions, including the freedom of association, prohibition of anti-union, discrimination and the protection of employment. The Act also addresses issues of the employment of young persons, including women, and has special provisions relating to temporary workers and casual workers. The Act also established the Labour Inspection Commission and the National Labour Commissions. Table 9 provides information on labour-related legislation and regulations in Ghana.

Table 9: Labour related Acts and Regulations in Ghana

Act	Website
Children's Act 1998(Act 560)	http://www.ilo.org
Commission on Human Rights and Administrative Justice Act 1993 (Act 456)	http://www.ilo.org
National Vocational Training Act 1970 (Act 351)	http://laws.ghanalegal.com
National Pensions Act 2008 (Act 766)	http://www.ilo.org
Human Trafficking Act 2005 (Act 694)	http://www.protectionproject.org
AIDS Commission Act 2002 (Act 613)	http://www.ilo.org/aids
National Health Insurance Act 2012 (Act 852)	http://www.nhis.gov.gh
Free Zone Act 1995 (Act 504)	http://www.ilo.org
Fair Wages and Salaries Commission Act 2007 (Act 737)	http://www.ilo.org

5.5 The Central Tripartite Structure

The Central Tripartite structure in Ghana comprises the National Tripartite Committee, the National Labour Commission and other organs.

5.5.1 The National Tripartite Committee (NTC)

The NTC is composed of the Minister for Labour and five representatives each of government, employers' organizations and trade unions. The committee sets the national minimum wage and advises on employment and labour matters, including labour laws, labour standards, industrial relations and occupational safety and health.

5.5.2 National Labour Commission (NLC)

The NLC is composed of a chairperson and two representatives each of government, employers' organizations and trade unions. The Commission settles industrial disputes, investigates labour complaints and promotes effective labour cooperation. If settlement fails, the Commission can appoint a mediator; and if mediation fails, an arbitration panel is formed, with the consent of the parties.

5.6 The Daily Minimum Wage

The daily minimum wage in Ghana was pegged at GH¢ 9.68 (US\$2.18) per day effective from January, 2018. However, the daily minimum wage is subject to renewal, depending on the prevailing economic conditions in the country.

5.7 Employment in the national economy

5.7.1 Levels of unemployment

The most recent data estimates on unemployment and underemployment stand at 4.6% and 5.1%, respectively. In terms of the unemployment rate, the trend has been stable since 2005. Unemployment is mostly in urban areas while underemployment is predominant in rural areas. Table 10 presents the status of unemployment in 2013.

Table 10: Unemployment, youth unemployment and under-employment in Ghana (2013)

Variable	Unemployment	Youth unemployment	Under-employment*
Total	4.6%	8.7%	5.1%
Male	4.3%	7.4%	4.6%
Female	4.8%	10%	5.6%

Source: ILO (2013)

**Under-employment is the proportion of those who work less than 35 hours a week and want to work more. The estimates are slightly higher for those who work 40 hours or less.*

5.7.2 Labour force distribution in Ghana

Despite the declining share in GDP, the agriculture sector continues to be a significant source of employment in the national economy. In 2014, the Ghana Labour Force Report by the GSS shows that the sector accounted for 44.7% of total employment of persons aged 15 and older. Appendix 8 shows the distribution of employment by sector, location and sex.

5.8 Development of human resources in agriculture training institutions

The agriculture sector requires a large number of trained personnel with the requisite skills and qualification to provide the human resource needs for the development of the sector. Several institutions in Ghana provide services in training agriculture sector workers at all level. These include both public and private universities, the polytechnics and new technical universities, training colleges and agricultural training institutes. The range of qualifications available from some of these institutions is presented in Appendix 9.

Chapter 6: Agricultural Infrastructure

Agriculture infrastructure, including storage facilities, irrigation infrastructure and transportation systems are in place or under development to support investment in the sector.

6.1 Perishable Cargo Center at Kotoka International Airport

The perishable cargo center is a MiDA-funded facility which allows for handling and temporary storage of perishable cargo enroute for export. The 1200 meters square facility has a packing area of 350 meters square capable of handling a minimum of 20,000 Mt of products annually. It is currently managed by the Air Ghana Perishable Cargo Center (APCC) on concession.

6.2 Irrigation schemes in Ghana

The Ghana Irrigation Development Authority (GIDA) is the lead public sector organization set up to promote agricultural growth through the provision of irrigation infrastructure and other Agricultural Water Management (AWM) techniques. The total area under irrigation in Ghana is estimated at about 221, 000ha, out of which 11,582ha fall under 56 public irrigation schemes in Ghana (appendix 11). As part of efforts to improve irrigation management, Government is introducing private sector participation - Scheme Management Entity (SME) and increases farmer involvement - Water User Association(WUA) GIDA is currently undergoing restructuring and modernization to effectively provide oversight of these SMEs and WUAs. Additionally, the Authority will set up a one-stop-shop to support potential investors in the irrigation sub-sector.



Figure 4: Types of Irrigation Systems

The river systems of the country and the Volta Lake provide significant opportunities for investment in irrigated agriculture in Ghana. Currently, the Ghana Commercial Agriculture Project (GCAP), a project under MoFA being implemented with the support of World Bank and USAID, is in the process of rehabilitating the Kpong Irrigation Scheme (KIS) and the Kpong Left Bank Irrigation Project (KLBIP), both located in the Accra Plains. Similarly, the Tono and Vea schemes in the Upper Eastern Region are also being considered for rehabilitation and modernization to bring more area of land under irrigation.

6.3 Warehousing in Ghana

Storage is an important marketing function involving holding and preserving goods from the time they are produced until they are moved on in the value-chain or utilized for consumption. There is a burgeoning warehouse receipt system operated by the Ghana Grains Council (GGC) with a number of certified warehouses in the country for storage of agricultural produce. Figure 5 shows some warehousing facilities operated by the Ghana Grains Council while Table 12 lists the locations and capacities of the GGC warehouses.



Figure 5: Ghana Grains Council GGC Warehouses

Table 11: Ghana Grains Council certified warehouses

No.	Warehouses	Capacity (MT)	Location
1	Savanna Marketing Company (MIDA ABC)	1,000	Chanzeni
2	Gundaa Produce Company	500	Datoyili
3	Presby Agric. Services	1,000	Walewale
4	BUSAKA ABC	1,000	Savelugu
5	Karaga ABC	1,000	Tolon
6	AMSIG Resources	1,000	Tolon
7	Wienco Ghana Limited	18,000	Tamale

Source: Ghana Grains Council

Furthermore, under the GCAP Matching Grants Scheme, 18 warehouses with total storage capacity of 15,790MT have been added to Ghana's agricultural storage capacity. Sixteen (16) of these warehouses are located in the SADA Zone and the other 2 are in the Accra Plains (Appendix 12).

Addition to these warehouses, the Government through the Ministry of Food and Agriculture has initiated plans to construct 160 new warehouses and rehabilitate 202 existing warehouses across the country between 2018 and 2020

6.4 Transportation networks

6.4.1 Feeder road network

Over the years, Government has undertaken projects to improve and increase road networks in farming communities and to link them to market centers. One such project, the Export Marketing and Quality Awareness Project (EMQAP) rehabilitated, surfaced and constructed feeder roads to link major horticultural produce growing areas in the Volta, Eastern and Central Regions. The government is also implementing projects in the northern part of the country to also reduce the road network deficit in the three Northern Regions and to better link farming communities to market centers in those regions. Further, a number of feeder roads have been constructed under the Afram Plains District Agricultural Development Project to improve the road network in districts covered by the project.

⁸In Ghana, the transport sector is well developed. Major road indicators show Ghana is doing well. The Rural Access Index which measures the percentage of rural people living within 2 km of an all season road is 61%.

6.4.2 Aviation/air transport

Ghana is at the hub of an extensive international and national airline network that connects the country to Africa and the rest of the world. Most major international carriers fly regularly to Kotoka International Airport (KIA) in Accra, the main entry point to Ghana by air. International airlines that operate in the country include British Airways, Egypt Air, Emirates Airlines, Ethiopian Airlines, KLM, Lufthansa, South African Airways, Afriqiyah Airways, Kenya Airways, Air Namibia, Royal Air Maroc, Air Nigeria Virgin Atlantic and Turkish Airlines. The country also has several domestic airports, including those at Kumasi, Sunyani, Takoradi and Tamale that are serviced by domestic airlines such as Antrak Air, Starbow and Africa World Airline.

The Ghana Civil Aviation Authority (GCAA) is responsible for the planning, development, operation, management and maintenance of all public airports and airstrips in the country. Ghana is working to position herself as the gateway to West Africa. The Kotoka International Airport remains the leading

⁸ World Bank 2009

and preferred airport in the country as well as the sub region, having attained Category One status from the US Federal Aviation Administration (FAA) as part of their International Aviation Safety Audit (IASA) programme.

The Kotoka International Airport (KIA) has 1,200 m² perishable cargo centre which consist of 200 m² cold room, a shaded packing area of 350 m² and a work room of 600 m². This facility provides handling and temporary storage for perishable produce such as fruits and vegetables for export.

6.4.3 Sea ports and Internal Water transportation

There are two main seaports in Ghana located in the southern cities of Tema and Takoradi. Port services at these harbours include vessel handling, stevedoring, shore handling, transit storage facilities and related services. Many development programmes such as the Container Terminal Project are underway to modernize these ports for more effective and efficient operations.

The Volta Lake is the major means of inland water transportation of passengers and cargo. Interventions are planned for the rehabilitation of existing fisheries facilities and provision of 11 new fishing landing sites and harbours along the coast and the Volta Lake. The main transport service provider on the Volta Lake is the Volta Lake Transport Company Limited (VLTC), over which the Ministry of Transport and the Volta River Authority jointly exercise oversight responsibility. There are a total of about six ferries in the country that offer water transport services.

6.5 Complementary infrastructure

6.5.1 Communication systems in the country

The country has fairly developed communication systems with various communication modes, including telecommunication services, television broadcasting services, radio broadcasting services and postal services. There are many mobile telecommunication providers (including MTN Ghana, Vodafone Ghana, Tigo Ghana, Airtel Ghana, Glo Ghana and Expresso Ghana) and internet service providers (including Africa Online, Busy Internet, iBurst Africa, Zipnet, and Surfline Ghana) operating in Ghana. The country also has 412 radio stations which are fairly distributed across the country and about 30 television stations broadcasting on air.

The National Communication Authority (NCA) was established by the National Communications Act 524 of 1996 (now repealed by the National Communications Authority Act of 2008, Act 769) to regulate communications by wire, cable, radio, television, satellite and similar technologies for the orderly development and operation of efficient communications services in Ghana.

6.5.2. Electricity

Ghana generates electric power through public and private sector operators but the distribution is solely done by the public sector: the Electricity Company of Ghana and the Northern Electricity Department (NED). The Public Utilities Regulatory Commission (PURC), under the Public Utilities Regulatory Act 1997 (Act 538), regulates the provision of utility services in the electricity and water sectors. It also examines and approves water and electricity rates or tariffs.

Chapter 7: Financing of agriculture in Ghana

7.1 Financing schemes for the agriculture sector

Several types of financial institutions provide financial services to the agriculture sector. According to the Bank of Ghana, there are 35 registered Commercial Banks in Ghana, 50 companies operating as Money Lenders, 347 Microfinance Companies as at August, 2017 and 140 Rural and Community Banks (April, 2016).

To address the financing gap, several interventions are put in place by Government, with the support of development partners. These include grants, soft loans, matching grants, and business advisory services to assist operators in the agriculture sector. Some of these schemes, which are summarized in Table 14, include: Out-grower and Value Chain Fund (OVCF), GCAP matching grants, Rural Enterprise Development Fund and Matching Grant Fund by the Rural Enterprise Project (REP) and the Agricultural Fast Track Facility, which is a grant for project preparation provided by the African Development Bank (AfDB).

7.2 Other Financial Services

The following entities also provide some form of finance to small and medium scale agricultural businesses in Ghana.

7.2.1 EXIM Guaranty Company Limited

Exim Guaranty Company Ghana Ltd exists to support SMEs, who ordinarily have challenges providing collateral, to receive bank financing through the provision of the necessary guarantees required by banks, thereby mitigating credit risk exposure to banks.

7.2.2 Ghana Agriculture Insurance Pool (GAIP)

The Ghana Agricultural Insurance Programme (GAIP) was launched in 2011 to lead the development of the market for agriculture insurance. It has developed several agricultural insurance products for Ghana. Nineteen Ghanaian insurance companies form the Ghana Agricultural Insurance Pool and provide a solid financial foundation for the market. The categories of insurance products for agriculture and target beneficiaries are shown in Table 15.

Table 12: Financing Schemes for farms and agribusiness/agro-processing companies

NAME	TYPE OF FACILITY	POTENTIAL BENEFICIARIES	TARGET AREA	OBJECTIVES	CONDITIONS OF FUNDS (FUND SIZE, INTEREST RATE, REPAYMENT PERIOD, COLLATERAL, ETC.)	RESPONSIBLE INSTITUTION
A. Existing Lending Schemes by the Government						
A-2 GASIP	Matching Grant	1. Smallholder farmers and resource-poor rural people 2. Private sector-led pro-poor agricultural value chain developer.	Targeted Value chains which currently are maize, rice, soya, cassava and vegetables.	To enhance smallholders profitability and climate change resilience.	A total of US\$ 71.6 million from IFAD over six years (two cycles) of three years each.	MoFA
A-3 Out-Grower Value Chain Fund (OVCF)	Value Chain and Out grower Credit Facility	1. Group of small holders (out-growers) 2. Technical operator (such as processors, exporters, traders/ buyers) 3. Financial institutions	Targeted value chains.	1. Provide improved access to medium to long-term financing for agriculture & agribusiness investments 2. Finance the development and promotion of out-grower scheme	1. Loan amount: No specific upper limit is set; based on the business plan. 2. Interest rates: 20~25 % depending on the proposed business. 3. Loan provided through intermediate bank. 4. Intermediary bank is entitled to ask for collaterals from both parties (out-growers and technical operator)	MOFA (KfW/GIZ)
A-4 Rural Enterprise Development Fund (REDF)	Credit Facility	Rural Micro and Small Enterprises (MSEs)	1. Micro Enterprise (Employee: 1~5 persons, Assets: about USD 10,000) 2. Small Enterprise (Employee: 5~29 persons, Assets: about USD 100,000)	To facilitate access of rural MSEs to finance. Improve the livelihoods and incomes of rural SMEs	1. Maximum amount: USD 6,000 for individuals, USD 30,000 for group enterprises. 2. Available for acquiring short-term working capital; procuring production and procession equipment is a longer-term loan. 3. Terms and conditions of loans (interest rates, collateral requirement, repayment period, etc.):	REP Ministry of Finance

NAME	TYPE OF FACILITY	POTENTIAL BENEFICIARIES	TARGET AREA	OBJECTIVES	CONDITIONS OF FUNDS (FUND SIZE, INTEREST RATE, REPAYMENT PERIOD, COLLATERAL, ETC.)	RESPONSIBLE INSTITUTION
					subject to operational criteria of the intermediate bank	
B. Matching Grant Schemes by Projects						
B-1 Ghana Commercial Agriculture Project (GCAP)	Matching Grant	Producers cultivating maize, rice, soybeans, fruits and vegetables	1. SADA Zone 2. Accra Plains (Located in the Accra Plains, including areas along the east bank of the Volta River & Downstream of the Kpong dam)	1. Provide financial assistance to readily implementable activities of targeted crops 2. Facilitate integrating smallholders into the output, inputs, and farm equipment services markets	1. Max. grant award: USD 500,000 per business 2. Each selected beneficiary is expected to contribute a minimum of 20% of the cost of the business 3. Show verifiable evidence of an existing nucleus-outgrower scheme or contract farming arrangement. 4. Be supported by a business or farmer-based organization registered in Ghana.	GCAP (USAID/ World Bank)
B-2 Financing Ghanaian Agriculture Project (FinGAP)	Business Advisory Services	Small/medium/large scale local/foreign agribusinesses	1. SADA Zone 2. Value chain development of rice, maize and soybean. 3. Companies that use raw materials produced in northern Ghana for processing are eligible to receive support from FinGAP no matter where the company or factory is located	1. Increasing access to finance for agribusinesses 2. Increasing the competitiveness of rice, maize, and soy sectors in northern Ghana by using technical assistance and incentives to unlock significant financing for agribusiness.	1. FinGAP covers 50% of the guarantee charge for the agricultural loan provided from partner financial institutions. 2. Contracted with 22 business development service (BDS) advisors to provide support for agribusiness companies.	FinGAP (USAID)

NAME	TYPE OF FACILITY	POTENTIAL BENEFICIARIES	TARGET AREA	OBJECTIVES	CONDITIONS OF FUNDS (FUND SIZE, INTEREST RATE, REPAYMENT PERIOD, COLLATERAL, ETC.)	RESPONSIBLE INSTITUTION
B-3 REP	Matching Grant Fund (MGF)	Micro and Small Enterprises (MSEs)	All sectors 1. Micro Enterprise (Employee: 1~5 persons, Assets:10,000 USD) 2. Small Enterprise (Employee: 5~29 persons, Assets:100,000 USD)	Capitalize trained SMEs to purchase production and processing equipment to progressively establish and grow their business.	1. Covers up to 30% of the cost for equipment, while a client pays 10% of the cost and the remaining 60% is covered by a loan provided by the bank. 2. Maximum amount of MGF: USD 6,000 considered as “low value” that does not require due diligence by REP. 3. Values greater than USD 6,000 are considered, subject to due diligence by REP. 4. Business Advisory Centres supported by REP supports clients to prepare an application and a business plan.	REP Ministry of Trade and Industry (MoTI)
B-4. Export Development & Promotion Grant Facility		Companies, organizations and persons providing services to the export sector	All sectors (Use of grants: research and product development, capacity building, and minor infrastructure development for public use)	Support development and promotion of non-traditional exports	Max. grant: Cedi equivalent of USD 100,000	Ministry of Trade and Industry (MoTI)
GHANA EXPORT-IMPORT BANK (EXIM BANK GHANA)	Exim Bank Ghana acts as the principal export finance institution of the country, supporting and enhancing existing trade and investments activities. The Bank provides the following products and services: <i>Short term loan, Import Finance facility, Warehouse financing, Export receivable finance, Buyer credit facility, Supplier credit guarantee, Letters of credit, Loan guarantee, Asset finance facility, Agric. Export finance, Project finance, Cross-border investments finance product, Project export, Export Advisory services</i>					

Note: Grant components are available to only Ghanaian firms

Table 13: Available Agricultural Insurance Products

Product	Target beneficiary
Weather index	Nucleus farmers Financial institution Input suppliers
Area yield index	Nucleus farmers Financial institution Input suppliers
Traditional indemnity	Nucleus farmers Financial institution Input suppliers

Source: GAIP presentation at Ghana Agribusiness Investment Summit, 2015

7.2.3 Ghana Alternative Market (GAX)

The Ghana Alternative Market (GAX) is a parallel market operated by the Ghana Stock Exchange that focuses on providing stock market services for businesses with potential for growth by accommodating companies at various stages of their development, including start-ups and existing enterprises, both small and medium.

7.2.3.1 Benefits of the GAX

There are many benefits that accrue to listing on the GAX. These include:

- easier access to long term capital
- access to long term capital at a relatively lower cost than the main list on GSE. Total costs do not exceeding 5% of the total amount raised and the listing fee on GAX is also a fixed flat amount.
- improvement in the financial position of the GAX listed company
- enhanced status in the business community -listing on the GAX raises the level of the investing community's awareness of the company and its products.
- realization of value of investments
- reduced risk, improved liquidity from a broader investor base, and increased liquidity financing.

7.2.3.2 Incentives

Companies may enjoy other incentives including:

- Waiver of the cost of listing and applications - a GAX listed company only pays an annual fee of ₵ 2,000.00.
- Underwriting -mandatory underwriting of the minimum offer directly or indirectly by sponsors, thereby eliminating failures of Initial Public Offers.

- iii. GAX-SME Listing Support Fund - access to a revolving fund to support the cost of raising capital and deferment of up-front fees. Companies listing on GAX can apply for funds under this facility to fully or partly pay for the cost of advisory services.

7.2.3.3 *Key listing requirements*

A company applying for listing on the GAX is expected to meet the following requirements:

- i. Stated Capital - a company applying to list on the GAX must have a minimum stated capital of GH¢250,000 at the time of listing. The stated capital of GH¢250,000 shall be the capital after the company's initial public offer but prior to listing.
- ii. Public Float- the public float of the applicant must constitute a minimum of twenty-five percent of the total number of issued shares. There shall be a minimum of twenty public shareholders.
- iii. Period of Existence - Admission may be granted to a start-up company, provided the applicant submits a 3-year business plan to the GAX, clearly demonstrating the viability of the application.
- iv. Profitability - the company seeking admission to the GAX need not have recorded profits historically but must have the potential to make profit at least at the end of its third year of listing.
- v. Sponsorship of Applicants for Listing - licensed Dealing Members, Investment Advisors or Issuing Houses shall sponsor an application for listing on the GAX.

7.2.4 **Venture Capital Trust Fund (VCTF)**

The Venture Capital Trust Fund was established by the Government of Ghana through the Venture Capital Trust Act 2004 (Act 680) to provide low cost financing to SMEs and to promote the growth of venture capital in the country. This is done through provision of credit and equity financing to enable Venture Capital Finance Companies (VCFCs) to support SMEs. Currently, the VCTF has six Venture Capital Finance Companies (VCFCs) managed by fund managers licensed by the Security and Exchange Commission (SEC). These are listed in Table 16.

Table 14: Fund types

Fund Name	Fund Manager	Sector Served
Fidelity Equity Fund II	Fidelity Equity Partners	Generalist
Gold Venture Capital Limited	Boulders Advisors	Generalist
Ebankese Venture Fund	Oasis Capital	Predominantly Real Estate
Bedrock Venture Finance Company	VCTF	Generalist
Activity Venture Capital Finance	VCTF	Generalist
Actus VC Fund	Bullion Advisors	Agriculture

The objective of the Venture Capital Trust Fund is to provide financial resources for the development and promotion of venture capital financing for SMEs in priority sectors of the economy. VCTF invests in all eligible sectors of the economy except direct imports for selling. Currently the funds have made investments in ICT, tourism, agriculture, real estate, health care and pharmaceuticals sectors. Over the last ten years the Trust Fund has invested in 48 companies in several sectors through its six funds. It has

also supported six nucleus farmer groups (over 4500 individual farmers) in the soya, sorghum and yellow maize value chain through its Special Purpose Vehicle (SPV) platform.

Investments in SMEs by Venture Capital Finance Companies are by equity or quasi- equity and companies may be granted working capital loans on case by case basis. Total assets of SMEs that qualify to apply for funding support should not exceed the cedi equivalent of US\$ 1 million in value. All applications are assessed by Fund Managers. SMEs seeking for funding would have to initially submit the following documentation to any of the VCFCs:

- i. A comprehensive business plan with three -year projections
- ii. Audited financial reports for the past three years (where applicable)
- iii. Tax Clearance Certificate (obligatory)
- iv. Incorporation papers (if applicable)

Fund Managers follow their own evaluation processes; hence, the speed of processing depends on the responsiveness of the application to the information requirements of the Fund Manager.

PART FOUR: BUSINESS ESTABLISHMENT IN THE SECTOR

Chapter 8: Process for Establishing Firms and Agribusiness

8.1 Legislations guiding business investment in Ghana

The Government of Ghana recognizes that attracting Investment in agricultural sector requires an enabling environment conducive to promoting business. The GIPC Act 2013 (Act 865) states that all enterprises, whether Ghanaian or foreign owned, should register with the Center after incorporation of the company/enterprise at the Registrar-General's Department in order to enjoy benefits and investment incentives.

The key investment-related legislation in Ghana is the Ghana Investment Promotion Centre Act 2013, Act 865. Other legislation and regulations also guide business investment in Ghana. These include the Technology Transfer Regulations, 1992 (LI 1547) and others listed in Table 17.

Table 15: Legislations Guiding Business Investment in Ghana

i.	The Companies Act, 1963 (Act 179)
ii.	GIPC Act 2013 (Act 865)
iii.	Ghana Free Zones Act, 1995 (Act 505)
iv.	The Internal Revenue Act, 2000 (Act 592)
v.	Fisheries Act, 2002 (Act 625)
vi.	Forestry Commission Act, 1999 (Act 571)
vii.	National Communications Authority Act, 1996 (Act 542)
viii.	Petroleum (Exploration & Production) Law, 1984 (PNDCL 84)
ix.	The Minerals Commission Act, 1993 (Act 450)
x.	The VAT Act, 1998 (Act 546)
xi.	Banking Law, 1989 (PNDCL 225)
xii.	Environmental Conservation Act
xiii.	The Labour Act, 2003 (Act 651)
xiv.	Foreign Exchange Act, 2006 (Act 723)

8.2 Processes for Registering Businesses in Ghana

8.2.1 Registrar-Generals Department

All companies should be registered at the Registrar Generals' Department (under the Ministry of Justice and Attorney General). Registration procedures take five working days (as at January, 2018).

- i. Requirements for the company registration
- ii. Assignment of an independent auditor who is a member of the Institute of Chartered Accountants.
- iii. Submission of the company's regulations.
- iv. Submission of "declaration" and "consent letter from qualified auditors" after completion of the registration.
- v. Place and method for submission of application
- vi. Place: Register Generals' Department in Accra or Regional Offices located in Kumasi (Ashanti), Sekondi (Western), and Tamale (Northern). On-line registration of businesses is also available.
- vii. Documents issued by the Register Generals' Department
- viii. Certificate of Incorporation
- ix. Certificate to Commence Business

8.2.2 Internal Revenue Service (IRS) Registration

After completing formalities at the Registrar-Generals' Department, the business should be registered at the nearest office of the Ghana Revenue Authority (GRA).

8.2.3 GIPC registration

The GIPC is responsible for registering all enterprises in Ghana, including for the purpose of administering applicable investment incentives and reliefs. The simplified licensing procedures under the Ghana Investment Promotion Center Act (Act 865) stipulate the details for acquiring authorization both for foreign direct and domestic investments. Businesses registering with the GIPC need to submit the following documents:

- i. Investment registration form (Form GIPC/R1), completed in triplicate
- ii. A copy of the Certificate of Incorporation and the Certificate to Commence Business issued by the Register General's Department
- iii. An original copy of the certified company's regulations

Within five (5) days of the receipt of these forms (and their attachments) the GIPC will formally register the investment⁹.

8.3. Incentives in Ghana's Agricultural Industry under GIPC

Various categories of incentives apply to the sector as follows:

⁹ For pricing or cost for registering a business refer to GIPC

8.3.1 Exemptions on import duties

There are exemptions on import duties on imported agricultural inputs such as plant, machinery or equipment and agro inputs such as fertilizers, and pesticides and feed ingredients.

8.3.2 Tax holidays

Attractive tax holidays that serve as incentives for enterprises engaged in agriculture production and processing are designed to suit different types of agriculture activities: cash crops, tree crops, staple crops, aquaculture, fish and livestock processing. For example:

- i. Tree Crops (coffee, oil palm, sheanut, rubber and coconut) enjoy a tax holiday of 10 years from the date of first harvest.
- ii. Staple crops (such as cassava, yam, rice, pineapple and maize), livestock, and fisheries enjoy a tax holiday of 5 years from the date of commencement of production activities.
- iii. Agro-processing companies established in Ghana will enjoy 5 years tax holiday from the date of commencement of business.

8.3.3 Corporate tax

Location incentives: there is tax rebate for agro-processing companies located in regional capitals and districts within the country. Agro-processing enterprises that use local agricultural raw materials as the main input shall have corporate tax rates based on their locations as follows:

- i. Accra-Tema: 20%
- ii. Other Regional Capitals: 10%
- iii. Outside Regional Capitals: 0%
- iv. 3 Northern Regions: 0%

8.3.4 Exporters of Agricultural Products

- i. Tax on export income: 8% corporate tax on income from export of non-traditional agro-products.
- ii. Transferability of earnings: free transferability of capital, profits and dividends

8.3.5 Labour provisions

Automatic immigrant quotas (i.e. work and resident permits).

8.4 Registration and Incentives from the Ghana Free Zones Board (GFZB)

8.4.1 Registration with the GFZB

The Ghana Free Zones Board (GFZB) was established by the Free Zone Act, 1995 (Act 504), to enable the establishment of free zones in Ghana for the promotion of economic development and to provide for the regulation of activities in free zones and for related purposes. The Board also operates under

regulation (L.I. 1618). An investment is considered to be eligible under the Free Zones Programme, if it satisfies the following conditions:

- i. it is a limited liability company registered with the Registrar Generals' Department
- ii. it is export oriented.
- iii. it adds some value to products/services to be exported.
- iv. it operates in an environmentally-friendly manner.

Free zone investors do not require any minimum capital investment; but investors must indicate their ability to fulfill the minimum 70% export requirement.

New investors are required to go through the following steps to obtain a free zone license: (a) incorporate a company in Ghana with the Registrar-Generals' Department and obtain Certificates of Incorporation and Commencement of Business, (b) Obtain, complete and submit the GFZB Application Form, together with the following documents:

- i. Business Plan
- ii. Copy of Certificate of Incorporation
- iii. Copy of Certificate to Commence Business
- iv. Copy of Companies Code
- v. Evidence of possession or lease of real property or intent to acquire such property
- vi. Memorandum of Understanding (MOU) with prospective clients
- vii. Environmental Protection Agency Permit (where necessary)
- viii. Evidence of Funding/Capital Transfer
- ix. Any other relevant document

The GFZB shall notify the applicant of the status of his/her application for License within 28 working days of receipt of a completed application. A license specifying the category of activity the applicant is authorized to undertake (i.e. Developer, Manufacturer, Commercial or Service Industry) shall be issued to the successful applicant. The investor is required to start operations within 6 months of receiving approval to operate as a Free Zone Enterprise/Developer.

8.4.2 Investment Incentives under the GFZB

The Free Zones Act (1995) provides extensive and generous incentives for investors interested in developing, and operating in, free zone enclaves and single-factory free zones in Ghana. These include:

- i. 100% exemption from payment of direct and indirect duties and levies on all imports for production and export from free zones
- ii. 100% exemption from payment of income tax on profits for 10 years and which shall not exceed 8% thereafter
- iii. Total exemption from payment of withholdings taxes from dividends arising out of free zone investments
- iv. Relief from double taxation for foreign investors and employees
- v. No import licensing requirements

- vi. Minimal customs formalities
- vii. Allowable 100% ownership of shares by any foreign or national investor in a free zone enterprise
- viii. No conditions, requirements, or restrictions: (a) on repatriation of dividends or net profit, (b) payments for foreign loan servicing, (c) payments of fees and charges for technology transfer agreements, and (d) remittance of proceeds from sale of any interest in a free zone investment.
- ix. Permission for free zone investors to operate foreign currency accounts with banks in Ghana.
- x. Authorization for sale of not less than 70% of annual production of goods and services of free zone enterprises in the export market.

Furthermore, free zone investments are guaranteed against nationalism and appropriation.

8.5 Ghana Export Promotion Authority (GEPA)¹⁰

The GEPA was established in 1969 by Act 396 to facilitate, develop and promote Ghanaian exports. It performs these functions through several mechanisms including: coordinating public and private sector bodies engaged in trade, carrying out advocacy services for bodies engaged in exports, developing the trade capacity of exporters through workshops and similar interventions, identifying and promoting products with export potential, and, organizing linkage events with the international market players. All investors targeting the export market should register with the GEPA to comply with procedures for export documentation and its other regulations and to benefit from its programmes, including support, facilitation and advisory services. For example, the GEPA advises that exporters must check the background of the buyer or importer, with its assistance as necessary. Also, a transaction of a secured export order should contain the essential facts about the desired merchandise.

8.6 Other general incentives and attractions/Competitive Advantages

Ghana has fairly good and ever improving infrastructure, peaceful and harmonious environment with high degree of personal safety and hospitable people.

8.6.1 Facilitating programmes and projects

The Government, through the MoFA, is implementing a number of projects and programmes to facilitate agriculture and agribusiness in the country. For example, GCAP offers public-private partnerships for provision of infrastructure in the Savanna Agricultural Development Authority (SADA) zones and Accra plains. GCAP has developed the Model Commercial Agriculture Lease Agreement document to guide acquisition of land by investors.

The Government through the Export Marketing and Quality Awareness Project (EMQAP) constructed a pack house in the Volta Region to boost horticulture exports.

¹⁰ Visit the GEPA website at <http://www.gepaghana.org>

8.6.2 Agricultural mechanization in Ghana

The potential area suitable for comprehensive mechanized agriculture in Ghana is estimated at 8.0 million hectares, of which about 2.4 million hectares are under some form of mechanized cultivation. This relatively low level of mechanization is largely due to limited access to appropriate agricultural machinery and equipment along the agricultural value chain. Currently, there are about 6,200 tractors in Ghana, of which 50 percent are over ten years old. Assuming that a 60 – 70hp tractor can plough 240 Ha/year, about 33,333 agricultural tractors are required to mechanize the area suitable for mechanized agriculture in Ghana.

The various types of agricultural tractors imported over the years have been characterized by frequent breakdown due mainly to low operational skills, mishandling and low machinery management skills. These, together with the non-availability and high cost of spare parts, lead to premature and short life span of the machines. The sources of agriculture tractor supplies in Ghana are shown in Table 18.

Table 16: Sources of agricultural tractor supply in Ghana

No.	Name of company	Agriculture machinery type	Brand
1	Mechanical Lloyd Co. Ltd.	Tractors	Massey Ferguson
2	CFAO Motors Gh.Ltd	Tractors	New Holland
3	AFGRI Ghana	Tractors	John Deere
4	Dizengoff Ghana Ltd	Tractors	Massey Ferguson
5	Agro Africa Ltd	Tractors	Deutz-Fahr, Same
6	Foundries and Agric Machinery	Tractors	Farmtrac
7	West Africa Agro-Tech Company Ghana (WATCO)	Tractors	Sonalika
8	Agrotropics Ltd.	Tractors	YTO
9	Agrimat	Tractors	LS tractors
10	Ghana Heavy Equipment	Tractors	Zetor
11	A & G Agro Mechanical Industries	Tractors	Massey Ferguson
12	C. Woermann Gh. Ltd	Tractors	Same
13	Zoomlion Ghana Ltd.	Tractors	Mahindra

Source: Agriculture Engineering Service Directorate/MoFA

As part of Governments strategy to improve the low levels of mechanization development in the country, MOFA has initiated the establishment of private sector led Agricultural Mechanization Services Enterprises Centers (AMSECs) to provide services to smallholder farmers for mechanized agriculture production. Currently, AMSECs have been established in 62 districts across the country and there are plans to have AMSECS in all the 216 districts of the country by the year 2025. To this end, the government has secured financing to import a wide range of agricultural machinery and equipment to support the expansion and development of the AMSEC concept.

PART FIVE: REGULATING INVESTMENT IN THE SECTOR

Chapter 9: Investment Laws and Regulations

9.1 Overview

Ghana has been making intensive efforts to attract private investment (foreign and domestic) since the introduction of its Structural Adjustment Programme (SAP) in 1984. The Ghana Investment Promotion Center (GIPC) is the Government's mandated institution for promoting investment. There are a number of laws and regulations guiding investments in the agriculture sector but the main legislation on investment comprise the Ghana Investment Promotion Centre (GIPC) Act, 2013 (Act 865), which replaces GIPC Act 1994 (Act 478), and the Free Zones Act, 1995 (Act, 504).

Agriculture investment is one of the areas of the economy that Ghana pays much attention. In pursuit of attracting investment into the agriculture sector, MoFA established the Agribusiness Unit (ABU) to facilitate agriculture investment and support local small and medium scale agribusinesses.

Some of the laws, regulations and policies enacted to govern investment in the sector include: Plants and Fertilizer Act, 2010 (Act 803); GIPC Act, 2013 (Act 865); Fisheries Act, 2002, (Act 625); Environmental Protection Act, 1994 (Act 490); Public Health Act, (2012); Land Commission Act, 1994 (Act 483); Seed Policy and Fertilizer Policy. See also Appendix 7.

9.2 The GIPC Act 2013 (Act 865)¹¹

This Act establishes the GIPC as the agency responsible for encouragement and promotion of investments and for coordinating and monitoring all investment activities, except in the mining and petroleum sectors. The Act also makes provision for the creation of an attractive incentive framework and a transparent, predictable and facilitating environment for investment in Ghana.

9.2.1 Foreign participation

Foreign participation is permitted in all enterprises except but not limited to the sale of goods or provision of services in a market, petty trading or hawking or selling of goods in a stall at any place.

In the case of a joint enterprise with a partner who is a citizen, the non-Ghanaian must invest a foreign capital of not less than two hundred thousand United States Dollars (USD 200,000.00) in cash or its equivalent worth of capital goods relevant to the investment or a combination of both in equity participation. In this case, the Ghanaian partner must have not less than ten percent (10%) equity participation in the joint enterprise. Where the enterprise is wholly owned by a foreigner, there must be

¹¹ This section must be read in conjunction with the relevant sections of Chapter 8 of this Guide

an investment of foreign capital of not less than five hundred thousand United States Dollars (USD 500,000.00) or its equivalent worth in capital goods by way of equity capital.

In the case of a trading enterprise, owned either wholly or partly by a non-Ghanaian, that is engaged only in the purchasing and selling of goods (including food and agricultural related produce and products) there must be investment of foreign capital of not less than one million United States Dollars (USD 1,000,000.00) by way of equity capital. Additionally, the enterprise must employ at least twenty (20) skilled Ghanaians.

9.2.2 Registration under the GIPC Act

The GIPC Act requires all enterprises to register with GIPC after incorporation or registration under the applicable law. In practice however, the procedures for incorporation and those for registration at the Centre take place simultaneously.

The enterprise must submit an application form supported by a certificate of incorporation or registration and evidence of a bank transfer or investment in capital goods to satisfy the foreign equity requirements. Where GIPC is satisfied that all documents for registration are in order and the minimum foreign equity capital requirement has been met, it must register the enterprise within five (5) working days from the date of receipt of the registration form. All enterprises are required under the GIPC Act to renew their registration with the Centre every two (2) years.

9.2.3 Incentives under the GIPC Act

An enterprise registered with GIPC is entitled to custom duty exemption for agricultural and agro-industrial plant, machinery and equipment imported for investment purposes as contained in chapter 82, 84, 85, and 92 of the Customs Harmonized Commodity and tariff Code Schedule to the Customs, Excise and Preventive Service (Management) Act, 1993 (P.N.D.C.L. 330). However, with the exception of goods imported specifically for selected sectors in agriculture, all import duty-exempted goods attract the relevant processing and/or other related fees or levies.

9.3 The Environmental Protection Agency (EPA) Act, 1994 (Act 490)

This Act establishes the EPA as the agency responsible for the control of generation, treatment, storage, transportation and disposal of industrial waste; prevention of discharge of waste into the environment and the protection and improvement of the quality of the environment. Every undertaking or project that may have an impact on the environment must register with the EPA. The EPA has the mandate to require an Environmental Impact Assessment (EIA) in respect of any undertaking which it considers potentially detrimental to the environment and no licenses, permits or approvals required from other government departments relating to the project will be issued unless there is compliance with this requirement. The Environmental Impact Assessments are to be conducted in accordance with the Environmental Assessment Regulations, 1999 (LI 1652). The EPA is also empowered to serve an enforcement notice

on any person responsible for any project, requesting them to prevent or cease any activity it considers harmful.

9.4 Biosafety Act, 2011 (Act 831)

To ensure adequate level of protection in the field, the Act regulates safe development, transfer, handling and use of genetically modified organisms resulting from biotechnology that may have an adverse effect on health and the environment. A person shall not conduct any activity involving the development, introduction into the environment or use of genetically modified organisms without the written approval of the Ghana Biosafety Authority. A person wishing to introduce a genetically modified organism into the environment shall submit an application to the Authority describing the activity for which the approval is sought. Further, a person shall not import or place on the market a genetically modified organism without prior written approval of the authority. Persons intending to export genetically modified organisms shall provide the authority with a written advance informed agreement or the appropriate certification from the competent authority of the importing country.

9.5 Plant and Fertilizer Act 2010 (Act 803)

The Plant Quarantine Division (PQD) of PPRSD works closely with the Customs Excise and Preventive Services (CEPS) at all the official entry points and issues phytosanitary certificates and import permits that are required for the importation of (a) commercial quantities of cereals, pulses, bulbs and other plant materials for consumption, (b) commercial plants, ornamental plants, plants parts and seeds for cultivation and propagation for personal use, and (c) plants and plant products used for processing or for any other purpose.

All imported consignments of plants, plant products and regulated articles shall be substantively free from pests and accompanied by phytosanitary certificate patterned after the IPPC format and issued by an authorized officer of the exporting country and an Import Permit issued by PPRSD. There are special requirements for the importation of live insects, microbial cultures, algae, bio-control agents and mushrooms, soil, peat and other growing media of plant origin and genetically modified organisms for research purposes. However, a person shall import plants, plant products and regulated articles without a permit when the Minister determines that the import does not present risk.

An application for an import permit shall be made at least seven days prior to the importation of the consignment at the nearest regional agricultural office or official entry point of the country or the PPRSD headquarters. To ensure compliance with the phytosanitary requirements of importing countries, all exporters of plants, plant products and regulated articles shall be officially registered and their registration annually renewed by PPRSD.

9.6 Water Resources Commission Act 1996 (Act 522)

The Act provides regulation of use of water resources which is vested in the President on behalf of, and in trust for, the people of Ghana. Under the Act any person may apply to the Commission in writing for

the grant of water right. The Commission shall on receipt of an application make such investigations as it considers necessary including consultations with the inhabitants of the area of the water resources concerned. The Commission shall publish in the Gazette notice of an application and the area in respect of which the application is made. A person who claims that his/her interest will be affected by the grant of water right may notify the Commission within three months of the notice in the Gazette of his objection to the grant of the water right and shall specify the grounds of the objection.

9.7 Fisheries Act 2002 (Act 625)

This Act provides for the regulation and management of fisheries, the development of the fishing industry, the sustainable exploitation of fishery resources and attention to connected matters. This Act establishes the Fisheries Commission to regulate and manage the utilization of the fishery resources of Ghana and to coordinate the policies in relation to them.

The Fisheries Act requires that a person shall not use a local industrial or semi-industrial fishing vessel for fishing in the fishery waters except under a license issued by the Ministry of Fisheries and Aquaculture under this Act for the vessel. The Act provides that, a local industrial or semi-industrial vessel shall be a fishing vessel owned or controlled by a citizen of Ghana, the Government or owned or controlled by a company or partnership registered by law in Ghana which has its principal place of business in Ghana. Also, the shares must be beneficially owned wholly by the Government, a citizen, or a public corporation established by law in Ghana or a combination of any of them. In the case of a tuna fishing vessel, at least fifty percent of the shares in the vessel should be beneficially owned or controlled by persons specified above and registered in Ghana.

A person who acts contrary to the Act commits an offence and is liable, on summary conviction, to a fine of not less than one thousand US Dollars (USD 1,000) and not more than ten thousand US Dollars (USD 10,000) in the case of a local industrial fishing vessel or 50 penalty units and not more than 500 penalty units in the case of a local semi-industrial fishing vessel. Also, the vessel or implement used in the commission of the offence shall, upon conviction, be forfeited to the State.

9.8 Public Health Act 2012 (Act 851)

This Act is to ensure the prevention of diseases and to promote, safeguard, maintain and protect the health of humans and animals, as well as to provide for related matters. The Public Health Act, (Act 851) established the Food and Drugs Authority to provide and enforce standards for the sale of food, herbal medicinal products, cosmetics, drugs, medical devices and household chemical substances.

9.9 Lands Commission Act, 2008 (Act 767)

The Lands Commission, established under article 258 of the 1992 Constitution, acts in accordance with the Constitution. The Lands Commission Act, 2008 (Act 767) provides for the management of public lands and other lands, and addresses related matters. The Act mandates the Lands Commission to, in coordination with relevant public agencies and Governmental bodies:

- i. manage public lands and any other lands vested in the President by the Constitution or by any other enactment, or the lands vested in the Commission,
- ii. advise the Government, local authorities and traditional authorities on the policy framework for the development of particular areas to ensure that the development of individual pieces of land is coordinated with the relevant development plan for the areas concerned,
- iii. formulate and submit to Government recommendations on national policy with respect to land use and capability,
- iv. advise on, and assist in the execution of, a comprehensive programme for the registration of title to land throughout the Republic in consultation with the Title Registration Advisory Board established under section 10 of the Land Title Registration Act, 1986 and
- v. perform any other functions that the Minister may assign to the Commission.

In case of consent and concurrence in disposition of stool lands, the Act provides that:

- i. In accordance with clause (3) of article 267, a stool land shall not be disposed of or developed by a person unless the Regional Lands Commission of the region in which the land is situated has certified that the disposition or development is consistent with the development plan drawn up or approved by the planning authority of the area.
- ii. The grant of consent and concurrence by the Regional Lands Commission shall be communicated by it to the office of the Administrator of Stool Lands and the regional office of the Administrator of Stool Lands.

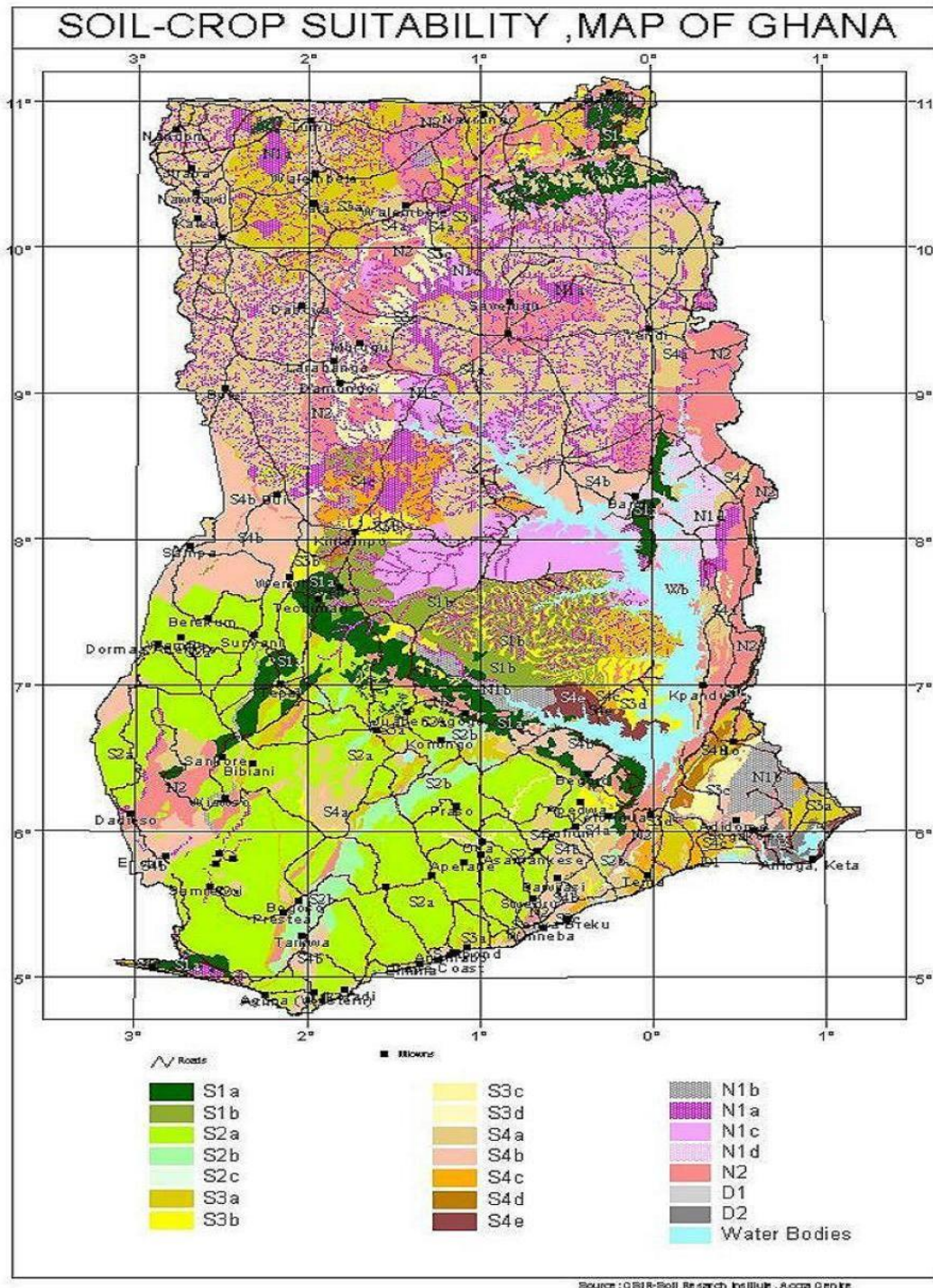
Where the Regional Lands Commission fails or refuses to give the consent and concurrence under this section, a person aggrieved by the failure or refusal may appeal to the High Court.

9.10 List of Government Regulatory Authorities and other Relevant Institutions

Several government agencies guide and regulate agriculture activities in Ghana. Appendix 10 provides a list of some of the key institutions that provide developmental and regulatory services to the agriculture sector.

APPENDICES

Appendix 1: Soil-Crop Suitability Map



Legend

S1	Highly suitable areas for extensive mechanized cultivation of export and food crops, (cashew nut, sunflower, pineapples, maize corn, guinea corn, soybean, cassava, yam, cocoyam, plantain, beans etc.).
S1a	Highly suitable soils, non-gravelly medium to moderately heavy textured. Suitable for cocoa, coffee, black pepper, sweet berry, ginger, citrus, cocoyam, banana, rice, sugarcane and vegetables.
S1b	Have same characteristics as S1a above, but are situated in Savanna-transition vegetation zone. These areas are suitable for soybean, maize, yams, guinea corn, millet and groundnuts.
S2	Suitable areas for extensive mechanical cultivation of export and food crops.
S2a	Crop suitability same as S1. Limitation to crop production may be due to gravelly subsoil horizons.
S2b	Crop suitability same as S2a above. Limitation to crop production may be due to either light or heavy textured soils.
S3	Fairly suitable areas for the cultivation of crops such as maize, cassava, vegetables etc.
S3a	May consist of heavy plastic clays mostly imperfectly to poorly drained soils good for mechanized irrigation of rice, sugarcane, vegetables, maize and millet.
S3b	Mostly alluvial soils suitable for maize, guinea corn and vegetables.
S3c	Includes gravelly and moderately shallow soils. Could be hand cultivated for cassava, vegetables and maize.
S4	Fairly to marginally suitable areas for the cultivation of crops.
S4a	Consist of gravelly, moderately shallow to shallow, imperfectly drained soils. Limited to hand cultivation of cassava, citrus, palm oil and mangoes. Soils may occur on upland or undulating of very steep slopes. Problem of soil erosion is predominant.
S4b	Soil may be imperfectly drained sands to loamy sands developed over beach sand or may have clay pan beneath the topsoil. Sandy areas may be used for groundnut and tiger nut cultivation.
S4d	Soils are mainly loose sands developed on coastal sand dunes. Suitable for coconut cultivation. May be mixed with organic manure for vegetable cultivation as in Anloga areas.
N1	Unsuitable areas for upland arable and tree crops.
N1a	Predominantly poor to very poorly drained soils, which may be developed for rice, sugarcane and vegetables.
N1b	Terrace derived alluvial soils, which are dominated by rounded pebbles rendering them unsuitable for mechanized agriculture. May be suitable for maize, cassava, and pepper cultivation.
N1c	Terrace derived soils, which contain surface pebbles and an undurated subsoil horizon. Soils may be left to prevailing grass vegetation for rough grazing of livestock.
N1d	Soils dominated by ground water laterites rendering them imperfectly to poorly drain. May be developed for paddy rice cultivation or vegetation should be left for rough grazing by livestock.
N2	Very unsuitable areas for crop production. Soils are very shallow, gravelly, occurring on steep to very slopes. Should be reserved for forestry, wildlife and watershed protection.
D	Very unsuitable areas for crop production. Soils are very saline and may be utilized for mining of edible salt.

Appendix 2: Agriculture and Related Research Institutions

Name	Location	Areas of Research	Website/ Contact Details
Council for Scientific and Industrial Research (CSIR)			
Crops Research Institute (CRI)	Kumasi	Crops- Rice, Cowpea, soybean and groundnut. Others are Cassava, Yam, Cocoyam, Sweet potato, Vegetables and Fruit crops, plantain and bananas	www.cropsresearch.org
Savanna Agricultural Research Institute (SARI)	Nyankpala, Tamale	Rice	www.csirsari.org
Water Research Institute (WRI)	Accra	Water and related resources	www.csir-water.com
Forestry Research Institute of Ghana (FORIG)	Fumesua, Kumasi	Forestry	www.csir-forig.org.gh
Animal Research Institute (ARI)	Accra	Animals and related issues	www.csir-ari.org
Food Research Institute (FRI)	Accra	Food processing technologies	www.foodresearchgh.org
Soil Research Institute (SRI)	Kwadaso, Kumasi	Soil survey, soil chemistry, plant nutrition, soil microbiology, agro-climatology, soil testing, soil conservation, hydrology and soil physics	www.csir-soilresearch.org
Oil Palm Research Institute (OPRI)	Kusi-Kade	Oil palm	www.csir.org.gh
Plant Genetic Resource Research Institute (PGRRI)	Bunso	Plants and related resources	www.csir.org.gh
Institute for scientific and technological information	Accra	scientific and technological information	www.csir.org.gh
Science and technology policy research institute (STEPRI)	Accra	technology utilization, transfer and development	www.csir-stepri.com
Institute of Industrial Research (IIR)	Accra	Renewable Energy Technologies, Industrial Processes, New Materials,	www.csir-iir.org

		Improved Sanitation, local Equipment Fabrication and Information/Communication Technology	
Other Research Institutions			
Cocoa Research Institute Of Ghana (CRIG)	Bunso, New Tafo, Afosu and bole	Cocoa, kola, coffee, sheanut and cashew	www.cocobod.gh
Biotechnology And Nuclear Agriculture Research Institute (BNARI)	Kwabinya, Accra	Nuclear Agricultural Research, Biotechnology, Radiation Technology, Radiation Entomology and Pest Management, Technology Transfer Centre	www.bnari.gaec.org
Marine Fisheries Research Division (MFRD)	Tema, Accra	Fish and related resources	www.MoFAd.gov.gh

Appendix 3: Annual production of major food crops, ('000MT)

Crop	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
Maize	1,189	1,220	1,470	1,620	1,872	1,683	1,950	1,764	1,769	1,692
Millet	165	113	194	246	219	183	180	155	155	157
Rice (paddy)	250	185	302	391	492	463	481	570	604	641
Rice (milled)*	150	111	181	235	295	278	332	393	417	443
Sorghum	315	155	331	351	324	287	280	257	259	263
Cassava	9,638	10,218	11,351	12,231	13,504	14,240	14,547	15,990	16,524	17,213
Cocoyam	1,660	1,690	1,688	1,504	1,355	1,299	1,270	1,261	1,299	1,301
Plantain	2,900	3,234	3,338	3,563	3,538	3,619	3,556	3,675	3,828	3,952
Yam	4,288	4,376	4,895	5,778	5,960	5,855	6,639	7,075	7,119	7,296
Groundnut	520	302	47	485	531	465	475	409	427	417
Cowpea	167	119	180	205	219	237	223	200	201	203
Soya bean	54	50	75	113	145	165	152	139	141	142
Total	21,146	21,662	23,871	26,487	28,159	28,496	29,753	31,495	32,326	33,277

Source: Regional and District Cropped Area, Yield and Production Estimates (2006 – 2015) - Statistics, Research and Information Directorate (SRID), MoFA.

*Note: *Milled rice from 2006 to 2011 used extraction rate of 60%; from 2012-2015 extraction rate of 69% of paddy was used (based on revised industry records). The total annual production for all major crops does not include milled rice.*

Appendix 4: List of Some Agro-processing Companies in Ghana

Manufacturer	Product	Contact	Tel. numbers
Avnash Industries Ghana Ltd., Tema	Delyte Pure Vegetable Oil	PMB 338, Tema	054 010 1144
Essaar Agro West Africa Ltd, Tema	Essaar Poultry Feed Concentrate 5%, 20%	P.O. Box 1317, Achimota	020 922 9141
Cosmo Seafoods Co. Ltd. Tema, G/R	Cosmo Fish Meal	P.O. Box MS 157, Mile 7, Achimota	030 241 5001
Flour Mills of Ghana Ltd, Tema, G/R	Sankofa Feed Mash Layer , Grower, Broiler Finisher, chick	P.O. Box CE 11345, Tema, G/R	024 432 6040
Promasidor (Ghana) Ltd	Yumvita Infant Cereal with Milk (Maize and Wheat, Wheat)	P. O. Box KA 30530 Accra,	030 243 6649
Brazil Agro-Business Group. Sogakope, V/R.	Champion Long Grain Perfumed Jasmine Rice	P. O. Box SK 139, Accra	054 830 6996
Nestle Ghana Ltd., Accra, G/R	Nestle Milo Nutrilfill Ready-to-eat Cereal Nestle Cerelac Infant Cereal With Milk (Wheat, Fruit, Rice, Honey) Nestle Cerelac Infant Cereal with Milk (Maize)	P. O. Box 8350,Tema	054 433 5484
Olam Ghana Ltd., Accra	Festi Tomato Mix Tasty Tom Tomato Mix Tasty Tom Tomato Paste with additional ingredients	P.O .Box GP 1847, Accra	030 341 3157
Cocoa Processing Company Ltd.	Golden Tree Vitaco Drinking Chocolate, Golden Tree Choco Delight chocolate spread, cocoa cake, cocoa liquour, royale natural cocoa powder, Golden Tree All Time, instant Drinking Chocolate	Private Post Bag, Tema	030 320 2914/ 030 320 2914/ 030 320 6375/ 030 321 2154/ 030 321 2153
Blue Sky Products Ltd.	Blue Skies Freshly Squeezed Juice	P. O. Box CT 3506 Cantonments	024 466 7073
Unilever Ghana Ltd.	Frytol Vegetable Oil, Royco Abepa Palm oil	P. O. Box 1648, Accra/ Box 721 Tema	030 321 8100

Manufacturer	Product	Contact	Tel. numbers
Ghana Nut Ltd	Akoma oil, Groundnut, Cashew nut, Shea nut, Soybean meal, Sesame Seeds	Ghana Nuts Ltd Business Development Office P. O. Box 825 Techiman - Brong Ahafo Region	+233 (0) 35 209 1112 +233 (0) 35 209 1114/5 +233 (0) 35 209 1689

Source: SRID, 2014

Appendix 5: List of key Agriculture-related Policies

Name of Policy	Responsible Agency
National Fertilizer Policy	Ministry of Food and Agriculture
Food and Agricultural Sector Development Policy (FASDEP II)	Ministry of Food and Agriculture
Tree Crops Policy	Ministry of Food and Agriculture
Ghana's Seed Policy	Ministry of Food and Agriculture
Agricultural Extension Policy	Ministry of Food and Agriculture
Livestock Development Policy	Ministry of Food and Agriculture
The National Fisheries and Aquaculture Policy	Ministry of Fisheries and Aquaculture Development
National Irrigation Policy, Strategies and Regulatory Measures.	Ghana Irrigation Development Authority
Ghana Shared Growth Development Agenda (GSGDA II)	National Development Planning Commission
Ghana National Climate Change Policy	Ministry of Environment, Science and Technology
National Science, Technology and Innovation Policy	Ministry of Environment, Science and Technology
National Environment Policy	Ministry of Environment, Science and Technology
The National Science, Technology and Innovation (STI) Development Programme of Ghana (STIDEPI)	Ministry of Environment, Science and Technology
Environmental Sanitation Policy,	Ministry of Environment, Science and Technology
National Health Policy	Ministry of Health
Policy on Traditional Medicine Development	Ministry of Health
Transport Policy	Ministry of Transport
National Nutrition Policy	Ministry of Health
National Energy Policy	Ministry of Energy
Ghana Forest and Wildlife Policy	Ministry of Lands and Natural Resource
National Water Policy	Ministry of Water Resource, Works and Housing
Trade Policy	Ministry of Trade and Industry
Land Policy	Ministry of Lands and Natural Resource
National Gender Policy	Ministry of Gender and Social Protection
The Cultural Policy of Ghana	Ministry of Tourism, Culture and Creative Arts
National Land Policy	Ministry of Lands and Natural Resources

Source: MoFA, 2016

Appendix 6: Alignment of national policies and regulations with CFS RAI principles

	Principle 1	Principle 2	Principle 3	Principle 4	Principle 5	Principle 6	Principle 7	Principle 8	Principle 9	Principle 10
The National Fisheries And Aquaculture Development Policy	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
National Nutrition Policy	✓	✓	✓							
Medium Term Agricultural Sector Investment Plan (METASIP)	✓	✓	✓		✓			✓	✓	
Land Policy	✓				✓	✓				
Ghana National Climate Change Policy	✓		✓		✓	✓			✓	
Ghana Shared Growth Development Agenda (GSGDA II)	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Food And Agricultural Sector Development Policy (FASDEP II)	✓	✓	✓		✓	✓				
National Gender Policy		✓	✓	✓	✓	✓	✓			
The Cultural Policy of Ghana							✓			

***CFS RAI - Principles for Responsible Investment in Agriculture and Food Systems**

Key:

Principle 1: Contribute to Food Security and Nutrition

Principle 2: Contribute to Sustainable and Inclusive Economic Development and Eradication of Poverty

Principle 3: Foster Gender Equality and Women's empowerment

Principle 4: Engage and Empower Youth

Principle 5: Respect Tenure of Land, Fisheries and Forests, and Access to Water.

Principle 6: Conserve and Sustainably Manage Natural Resource, Increase Resilience and Reduce Disaster Risk

Principle 7: Promote Safe and Healthy Agriculture and Food System.

Principle 8: Promote safe and healthy agriculture and food systems.

Principle 9: Incorporate inclusive and transparent governance structures, processes, and grievance mechanisms.

Principle 10: Assess and address impact and promote accountability.

Appendix 7: List of Agricultural and related Acts and Regulations

Wild Animals Preservation Act, Act 43, 1961
Wildlife Conservations Regulations, LI 685, 1971 (and Amendments)
Timber Resource Management Act, Act 547, 1998
Biodiversity Strategies and Action Plan, 1998
Environmental Protection Agency Act 490_1994
Environmental Assessment (Amendment) Regulation 2002, LI 1703
Pesticides Control and Management Act, Act 528, 1996
Management of Ozone Depleting Substances and Products Regulations, LI1812, 2005
Water Resource Commission_Act_522, 1996
Water_use_regulations_LI_1692, 2001.
Drilling License & Groundwater Development Regulations, LI 1827, 2006.
Irrigation Development Authority Act, 1977.
Irrigation Development Authority (Water Users Association) Regulations 2016, LI 2230
Ghana Water and Sewerage Corporation Act, Act 130, 1965
Ghana Water Company Limited (GWCL) Act, Act 4611, 1999
Community Water and Sanitation Agency (CWSA) Act, Act 564, 1998
Irrigation Development Authority Regulations, LI 1350, 1987
Survey Act, Act 127, 1962
Wetland Management (Ramsar sites) Regulations, 1999
Fire Precaution (Premises) Regulations, LI 1724, 2003
Energy Commission Act 541, 1997(1)
Labour Act 651, 2003
Labour Regulations, LI 1833, 2007
Children's Act, Act 560, 1998
National Health Insurance Act, 2003
National Health Insurance Regulations, LI 1809, 2004
Land Planning Soil Conservation Act, 1953.
Land Title Registration Law, PNDCL 152, 1986
Administration of Lands Act, At 123, 1962
Lands Commission Act, Act 767, 2008

Appendix 8: Industry of currently employed persons aged 15 and older (%)

(Disaggregated by sex, rural and urban)

Industry Group*	Urban			Rural			Ghana		
	Male	Female	All	Male	Female	All	Male	Female	All
Agriculture, forestry and fishing	19.70	14.20	16.80	74.50	67.90	71.10	48.20	41.40	44.70
Mining and quarrying	2.50	0.30	1.40	3.00	0.80	1.90	2.80	0.60	1.60
Manufacturing	11.20	12.60	11.90	4.50	8.10	6.40	7.70	10.30	9.10
Electricity, gas, steam and air conditioning supply	0.60	0.10	0.30	0.10	0.00	0.00	0.30	0.00	0.20
Water supply, sewerage, waste management	0.50	0.30	0.40	0.10	0.10	0.10	0.30	0.20	0.20
Construction	10.00	0.20	4.80	3.60	0.20	1.80	6.70	0.20	3.30
Wholesale and retail trade	17.20	43.10	30.90	4.00	13.30	8.80	10.30	28.00	19.50
Transportation and storage	12.30	0.50	6.10	3.50	0.00	1.70	7.70	0.30	3.80
Accommodation and food service activities	1.40	9.60	5.70	0.40	3.80	2.10	0.90	6.70	3.90
Information and Communication	1.20	0.30	0.70	0.10	0.00	0.00	0.60	0.20	0.40
Financial and insurance activities	1.70	1.00	1.40	0.20	0.10	0.10	0.90	0.50	0.70
Real estate activities	0.20	0.00	0.10	0.00	0.00	0.00	0.10	0.00	0.10
Professional, scientific and technical activities	2.40	1.20	1.80	0.20	0.30	0.30	1.30	0.70	1.00
Administrative and support service activities	2.60	0.90	1.70	0.50	0.20	0.30	1.50	0.50	1.00
Public administration and defense	2.00	0.80	1.40	0.30	0.00	0.20	1.20	0.40	0.80
Education	6.40	4.60	5.50	2.60	1.20	1.90	4.40	2.90	3.60
Human health and social work activities	1.50	1.80	1.70	0.40	0.50	0.40	0.90	1.10	1.00
Arts, entertainment and recreation	1.40	0.10	0.70	0.30	0.00	0.20	0.80	0.10	0.40
Other service	4.60	7.10	5.90	1.10	2.40	1.80	2.80	4.80	3.80
Activities of households as	0.60	1.10	0.90	0.70	1.10	0.90	0.60	1.10	0.90

Industry Group*	Urban			Rural			Ghana		
	Male	Female	All	Male	Female	All	Male	Female	All
employers									
Activities of extraterritorial organizations and bodies	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00

Source: GSS (2014).

**Industry: Refers to type of product produced or service rendered at the respondent's place of work (irrespective of the occupation the person has).*

Appendix 9: Qualifications Provided by some Agricultural Training Entities in Ghana

Entity	Qualification offered		
	Diploma	Undergraduate	Graduate
Kwame Nkrumah University of Science and Technology (KNUST)		BSc (Agriculture, Agribusiness Management, Agricultural Biotechnology, Dairy and Meat Science and Technology, Landscape Design and Management, Post-Harvest Technology)	PhD/ M.Phil. (Agricultural Economics), Ph.D. (Agricultural Extension, Animal Nutrition; Reproductive Physiology; Animal Breeding and Genetics. Postharvest Technology) M.Phil. (Postharvest Physiology, Postharvest Technology, Crops Production)
University of Cape Coast (UCC)		BSc. (Agribusiness, Agricultural Extension, Agricultural Extension and Community Development)	M.Phil. (Agricultural Economics, Agricultural Extension, Non-Governmental Studies and Community Development) Ph.D. (Agricultural Economics, Agricultural Extension)
University of Ghana (UG)	General Agriculture, Diploma in Animal Health	Bachelor of Science in Agriculture (Agricultural Economics & Agribusiness) Bachelor of Science in Agricultural Extension Bachelor of Science in Engineering	MSc (Fisheries Management, Aquaculture, Food Science) MPhil/PhD Nuclear Agriculture MSc Extension & Livelihood Studies M.Agric/MPhil/PhD (Agricultural Extension, Animal Science , Crop Science, Soil Science Agricultural Administration), MPhil (Home Science, Agricultural Economics) PhD (Agricultural Economics) MPhil/PhD (ARPPIS) Entomology
Central University College (CUC)		BSc. Agribusiness management	
Ho Polytechnic	HND Agricultural Engineering	B.Tech, Agricultural Engineering	Masters in Agricultural Engineering
Accra Polytechnic	HND Agricultural Engineering		
Ohawu Agricultural College	Diploma in General Agriculture		
Kwadaso Agriculture College	Diploma in General Agriculture		
Ejura Agriculture college	Diploma in General Agriculture		

Entity	Qualification offered		
	<i>Diploma</i>	<i>Undergraduate</i>	<i>Graduate</i>
Damongo Agriculture college	Diploma in General Agriculture		
Animal Health and production college (Pong-Tamale)	Diploma in General Agriculture		
Adidome Agricultural College	Diploma in General Agriculture		

Appendix 10: List of government regulatory authorities and other relevant institutions

No.	Name	Location	Contact/website	Main functions
1	Ghana Investment Promotion Center	Ministries, Accra	+233 (0)30 266 5125-9 www.gipcghana.com/ info@gipcghana.com	Investment promotion Issuance of investment license
2	Ghana Revenue Authority	Off Starlets' 91 Road, Accra	+233 (0) 30 267 5701-10 www.gra.gov.gh	Revenue mobilization for national development.
3	Registrar Generals Department	Ministries, Accra	030 266 4691 www.rgd.gov.gh	Registration of companies.
4	Ghana Free Zones Board	5 th Link Road East Cantonment	0302780535 www.gfzb.gov.gh/info@gfzb.gov.gh	Administration and promotion for the free zones.
5	Environmental Protection Agency	Ministries, Accra	030 266 4697-8 www.epa.gov.gh	Formulation of environmental policies to protect environment. Ensure compliance with EIA procedures in the planning of implementation of development projects.
6	Land Commissions	Cantonment, Accra	030 277 7322/3 landscom@ncs.com.gh	Manage public land and other lands vested in the president by constitution or by any other law. Provides surveying and mapping services where necessary.
7	Ghana Export Promotion Authority	Republic House Annex, Tudu Accra	030 268 9889 www.gepaghana.org/gepa@gepaghana.org	Promotion and development of export.

No.	Name	Location	Contact/website	Main functions
8	Ghana Immigration Service	Independence Avenue, Accra	030 225 8250 www.ghanaimmigration.org	Create conducive environment, through the establishment of regulatory frameworks that 10 facilitate the entry, residence and employment of foreigners in Ghana.
9	Food And Drugs Authority	Shiashie, Off Legon Madina Road	030 223 3200 fda@fdaghana	Ensure adequate and effective standards of food, drugs, cosmetics, household chemicals and medical services. Advice on measures for the protection of the health of consumers.
10	National Board For Small Scale Industries (NBSSI)	Ministries, Accra Near National Theatre, Opposite Children's Park	030 266 8641 nbssided@ghana.com	Provide business development services for micro and small enterprises and business associations. Provide financial service through its loan schemes to entrepreneurs
11	Ghana Shippers Authority	Enterprise House, High Street Accra	030 266 6915-7 www.shippers.org.gh	Provide support to shippers in the clearance of goods at the countries entry/ exit points Provide information on the rules and regulations governing the shipping and cargo transport industry
12	Customs, Excise And Preventive Service	Ministries, Accra	030 266 3107 www.cepsghana.org	Conduct monitoring and inspection of export into the country. Impose measures for prevention of smuggling of goods across Ghana's borders

No.	Name	Location	Contact/website	Main functions
13	Ghana National Procurement Agency Limited	Star Assurance Building, Kokomlemle	030 222 8829 gnpa@africaonline.com.gh	Purchase produce and distribute them to relevant destination in the country. Establish export trade houses to specialize in export market, where small and medium enterprises can enter the international market
14	Ghana Grains Council	First Floor A&C Square, 14 Jungle Road East Legon	030 702 1091 www.ghanagrainscouncil.org	Certify warehouse operators to allow issuance of warehouse receipt Monitor operations of warehouse receipt systems
15	Gratis Foundation	Heavy Industrial Area, Tema, Opposite Cocoa Processing Factory	030 320 4243 gratisghana@gmail.com	Design, manufacture and sale of agro-food processing and sanitation equipment
16	Ghana Maritime Authority	No. E354/3, 3 rd Avenue , East Ridge	030 268 4392 Ghanamaritime.org	Implement the provisions of the Ghana shipping act, 2003(act 645) Ensure safety of navigation
17	Electricity Company of Ghana	Ministries, Accra	030 261 1611 http://www.ecgonline.info/	Responsible for the distribution of electricity in the southern part of Ghana namely, Ashanti, Central, Eastern, Greater Accra, Volta and Western Region
18	Public Utilities Regulatory commission of Ghana	No. 51 Liberation Road, Ridge, Accra	Tel: (233-302) 244181-3, 240046 E-mail: info@purc.com.gh Website: www.purc.com.gh	Provide guidelines for rates to be charged for the provision of utility services. Examine and approve water and electricity rates Protect the interest of consumers and provides of utility services

Appendix 11: Public Irrigation Schemes in Ghana

No.	Region	Name of Scheme	Type of Irrigation System	Potential Area (ha)	Irrigable Area (ha)	Crops Cultivated
1	Greater Accra	Ashaiman	Gravity	155	77	Rice, vegetables maize
2		Weija	Pump & sprinkler	1,500	220	Vegetables
3		Dawhenya	Pump & gravity	450	200	Rice
4		Kpong	Gravity	3,028	2,786	Rice, passion fruit
5		Tokpo	Pump	119	90	Rice, vegetable
6	Volta	Aveyime	Pump & gravity	150	60	Rice
7		Afife	Gravity	880	880	Rice, vegetables
8		Kpando-Torkor	Pump & sprinkler	119	40	Vegetables, maize
9		Dodoekope I	Pump	130	110	Vegetables
10		Dodoekope II	Pump	103	103	Rice & vegetable
11		Tordzinu	Pump	4	4	Vegetables
12		Koloe-Dayi	Pump	30	30	Rice & vegetables
13		Agorveme	Pump	109	107	Rice & vegetables
14		Korlor	Pump	206	206	Rice & vegetables
15	Eastern	Amate	Pump & sprinkler	202	101	Maize, vegetables
16		Dedeso	Pump & sprinkler	100	20	Vegetables
17	Central	Okyereko I	Pump & gravity	111	81	Rice, vegetables
18		Mankessim	Pump & gravity & sprinkler	260	17	Watermelon, sweet potato
19		Ekotsi	Pump	207	30	Vegetables
20		Baafikrom	Pump	4	4	Vegetables
21		Okyereko II	Pump	4	4	Vegetables
22	Western	Kikam	Pump & gravity	27	27	Rice
23		Moseaso	Pump	81	81	Vegetables
24		Aponapon	Pump	83	83	Vegetables
25	Ashanti	Akumadan	Pump & sprinkler	100	65	Vegetables, cowpea
26		Anum Valley	Pump & gravity	89	89	Rice, vegetables
27		Tanoso	Pump & sprinkler	64	64	Vegetables, cowpea
28		Sata	Gravity	56	34	Vegetable, maize, cowpea,
29		Adiembra	Pump	65	65	Vegetables
30		Asuoso	Pump	10	10	Rice & vegetables
31	Brong Ahafo	Kokoroko	Pump & Sprinkler	66	66	Vegetables
32		Akomadan	Pump & sprinkler	100	65	Vegetables
33		Subinja	Pump & sprinkler	121	60	Vegetables, cowpea, maize
34		Kaniago	Gravity	66	66	Vegetables

No.	Region	Name of Scheme	Type of Irrigation System	Potential Area (ha)	Irrigable Area (ha)	Crops Cultivated
35		Akurobi	Pump	55	55	Vegetables
36		New Longoro	Gravity	224	190	Rice & vegetables
37		Asantekwa	Gravity	143	143	Rice & vegetables
38	Northern	Bontanga	Gravity	570	570	Rice, maize vegetables
39		Golinga	Gravity	100	100	Rice, maize, leafy vegetable
40		Libga	Gravity	85	20	Rice, maize, vegetables
41		Buipe	Pump	194	110	Rice & vegetable
42		Yapei	Pump	194	194	Rice & vegetable
43		Wambong	Gravity	4	4	Vegetables
44		Karimenga	Gravity	6	6	Vegetables
45		Dipali	Pump	171	148	Rice & vegetable
46		Sogo	Pump	151	125	Rice & vegetable
47		Dinga	Pump	115	90	Rice & vegetable
48	Upper East	Tono	Gravity	3,860	2,490	Rice, soya bean, vegetables
49		Vea	Gravity	1,197	852	Rice, vegetables, groundnut
50		Baare	Gravity	6	12	Vegetables
51		Goog	Gravity	100	100	Vegetables
52		Tiegu-Yarugu	Gravity	190	150	Rice & vegetable
53	Upper West	Sing Bakpong	Pump	116	52	Rice & vegetable
54		Belebor	Gravity	120	120	Rice & vegetable
55		Tizza	Pump	83	76	Rice & vegetable
56		Jawia	Gravity	40	30	Rice & vegetable
	TOTAL			16,523	11,582	

Source: GIDA, 2017

Appendix 12: GCAP Sponsored Warehouses by Location and Capacity

No	Name of Firm/ Organization	Warehouse Capacity (MT)	Warehouse Physical Location	Region	Commodity
1	Mawuko Farmers Association	250	Dadome-Mepe	Volta	Grains
2	Abians Agro Chemical and Rice Mill Enterprise	3000	Asutuare	Greater Accra	Grains
3	Savannah Agric & Trading Co Limited (SATCO)	500	Chereponi	Northern	Grains
4	Kukobilla Nasia Farms Limited	120	Tamale Central	Northern	Grains
5	Amsig Resources	800	Kumbungu	Northern	Grains
6	Kataumi Food Processing Limited	500	Mion	Northern	Grains & Legumes
8	Kharma Farms Enterprise	200	Karaga	Northern	Grains & Legumes
9	Dansman Business Consultancy	5,000	Tamale Metro	Northern	Grains
10	Ariku Company Limited	400	Bazua	Upper East	Grains
11	Yelsumde Ghana Limited	500	Zangoyire	Upper East	Grains
	Yelsumde Ghana Limited	500	Zebila	Upper East	Grains
12	Zebango Royal Farms	200	Binaba	Upper East	Grains
13	Farmer Training Centre (FTC)	500	Bolgatanga	Upper East	Grains
14	Akandem Farms Limited	200	Sandema Builsa	Upper East	Grains
15	Wilphin Enterprise	500	Bolgatanga	Upper East	Grains
16	Sambay Enterprise	120	Navrongo	Upper East	Grains
17	Heritage Business Services	500	Tumu	Upper West	Grains
18	Azimpet Business Empire	2,000	Tanina	Upper West	Grains & Legumes
	Total	15,790			

Source: GCAP, 2017