AGRICULTURE SECTOR PROFILE

1.0 Introduction

Agriculture sector is an important part of Ghana's economy and contributed 24.5% to Ghana's Gross Domestic Product in 2024. Ghana's agriculture is predominantly smallholder, traditional and rain-fed. According to the Food and Agriculture Organization (FAO), about 60% of all farms in the country are less than 1.2 hectares in size, 25% are between 1.2 to 2.0 hectares with about 15 % above 2.0 hectares.

Ghana's farming systems vary across agro-ecological zones. There are, however, some features that cut across farmland throughout the country. The middle belt of the country holds the forest zone, where tree crops like cocoa, oil palm, coffee and rubber flourish. The major strengths of the sector stem from a diversity of commodities, a well-endowed drainage basin, a well-established agricultural research system and a relative proximity to the European market. Also, Ghana's agricultural land according to Ghana Irrigation Development Authority (GIDA, 2020), is estimated at 13.5 million hectares of which only about 50% is currently under cultivation and 226,908.85 hectares of land are under irrigation (out of an estimated 6.4 million hectares of cultivated area).

Agriculture contributes to Ghana's export earnings, serves as a major source of inputs for the manufacturing sector and it is a vehicle for creating employment. With an estimated 44.7% of the workforce employed in the agriculture sector, farming, forestry and fisheries are not only central activities to Ghana's economy but are key components of society. The sector has a greater impact on poverty reduction than other sectors in Ghana's economy and it is critical for rural development and associated cultural values, social stabilization, environmental sustainability, and serves as a buffer during economic shocks.

Post-harvest losses are major challenges to agricultural value chain actors which is mainly attributed to lack of access to ready markets and storage facilities for crops and seeds. The government has directed its efforts towards attracting private sector investment, improving access to finance for agribusiness and marketing. As part of these efforts, the government has committed GH₵1.5 billion towards its Agriculture for Economic Transformation Agenda, a comprehensive initiative aimed at revitalising the agricultural sector. As part of the initiative, government is introducing multiple programmes, including the Feed Ghana Program, the Ghana Greens Development Project, and the Vegetable Development Project.

1.1 Agricultural GDP Growth Rate

The agricultural GDP growth rate in 2023 was 4.6% compared to 4.2% in 2022. The livestock subsector recorded the highest growth rate at 4.9% while the forestry and logging subsector contracted by 5.0%. The growth rate fell below the medium-term plan's annual growth target of 6% and it is attributed to the performance of the fisheries and forestry/logging sub-sectors as shown in table 1.1.

Table 1.1 Agricultural GDP Growth Rate

	Sub-sector					
	Crops	**Livestock**	**Cocoa**	**Fisheries**	**Forestry/ Logging**	**Ag GDP Growth**

Year						Rate
2020	**8.6**	**5.4**	**1.4**	**14.1**	**-9.4**	**7.3**
2021	**8.9**	**5.5**	**10.4**	**14.2**	**4.4**	**8.5**
2022	**3.8**	**0.9**	**5.5**	**8.8**	**1.7**	**4.2**
2023	**5.0**	**4.9**	**2**	**2.1**	**-1.0**	**1.3**

Source: GSS, 2023 (2013 Rebased GDP Growth Figures)

1.2 Share of Agriculture in Total GDP

The share of agriculture contribution to National Gross Domestic Product (GDP) increased from 20.9% in 2022 to 23.3% in 2023 and lastly to 24.5% in 2024 as indicated in table 1.2. However, it still remains the least share of national GDP compared to the service and industry sectors. This is supported by development theory which predicts that, as an economy expands, more value is added to agricultural raw materials by industries.

Table:1.2 Share of Agriculture to GDP (2020 – 2024)

Year	Sectors		
	Agriculture (%)	**Service (%)**	**Industry (%)**
2020	**20.1**	**48.1**	**31.8**
2021	**21.1**	**48.5**	**30.4**
2022	**20.9**	**44.9**	**34.2**
2023	**23.3**	**46.1**	**30.6**
2024	**24.5**	**42.9**	**32.6**

Source: GSS, 2024 (2013 Rebased GDP Growth Figures)

1.3 Other details about Ghana's Agriculture sector

Ghana's agricultural sector is divided into four main subsectors namely:

- *Crops* where crop production involves the growing of crops for use as food and fibre. This includes the production of cash crops, horticultural crops and tree crops.
- *Livestock*: It includes the rearing of ruminants, non-ruminants and poultry.
- *Fisheries*: It includes the marine, inland and aquaculture production of fish.
- *Forestry*: is the knowledge-based practice of managing the land of the forest, to be used for our protection, recreation, and for commercial and industrial uses as well.

In addition to these subsectors, the agribusiness sector stands out as particularly attractive to investors due to Ghana's vast arable land, favorable climatic conditions, and abundant water resources—making it ideal for the commercial cultivation of staple crops such as rice, maize, soybeans, millet, yam, and plantain.

Agro-ecological zones

Ghana has five (5) distinct agro-ecological zones, which are defined by climate, natural vegetation, and soil conditions. Table 1.3 shows agro-ecological conditions of each zone including mean annual rain, major growing period and minor growing period.

Table 1.3: Conditions of Agro-Ecological Zones

Agro-Ecological Zone	Regions	Mean Annual Rain (mm)	Major Growing Period (Days)	Minor Growing Period (Days)
Forest	• Western North • Western	2,200	150-160	100
Forest	• Ashanti • Eastern • Ahafo	1,500	150-160	90
Savannah Transition Forest	• Bono East • Oti • Bono	1,300	200-220	60
Coastal	• Central • Greater Accra • Volta	800	100-110	50
Guinea Savanna	• Upper West • Upper East • North East • Northern • Savannah	1,100	180-200	N/A
Sudan Savanna		1000	150-160	N/A

Source: SRID, 2021

- **Climate**: The climate of Ghana is tropical. The eastern coastal belt is warm and comparatively dry. The south west corner is hot and humid, and the north is hot and dry. Annual average temperatures range from 26.1ºC in places near the coast to 28.9 ºC in the extreme north. It is usually breezy and sunny. Day time temperatures may rise above 40ºC in the north.

  There are **two rainy seasons** in the south from March to July and from September to October (bimodal rainfall system). The northern part of the country, on the other hand, has only **one rainy season**, from July to September (mono-modal rainfall system). These thus define the farming seasons of Ghana (Major and Minor seasons). Agriculture in Ghana is largely dependent on rainfall and its distribution. Adequate volumes and distribution of rainfall are therefore key determinants of higher yield.

- **Topography**: The topography is predominantly undulating, with slopes less than 1%. Even though the slopes are gentle, about 70% of the country is subject to moderate to severe sheet and gully erosion. The highest elevation in Ghana, Mount Afadjato in the Akwapim-Togo Ranges, rises 880 metres above sea level.

- **Soils:** The soils have predominantly light textured surface horizons in which sandy-loams and loams are common. Lower soil horizons have slightly heavier textures varying from coarse sandy loams to clays. Heavier textured soils occur in many valley bottoms and in parts of the Accra Plains. Many soils contain abundant coarse material either gravel and stone, or concretionary materials which affect their physical properties. Details on this are shown in table 1.3.2 below.

Table 1.3.2: Fertility Status of Soils in Some Regions

Region		Soil pH	% Organic matter	%Total Nitrogen	Available Phosphorus (mg/kg soil)	Available Calcium (mg/kg soil)
Ashanti: Offinso-Ejura Kwadaso, Juaso, Obuasi		5.3-7.8 4.3-7.0	1.5-3.0 1.5-3.0	0.2-0.3 0.1-0.2	0.12-12 0.12-12	50-100 50-100
Western		3.8-7.1	1.03-5.7	0.06-5.4	0.35-11.25	28-420
Brong Ahafo		3.5-6.7	0.34-1.69	n. a	0.12-64.25	16-140.3
Greater Accra		5.4-8.2	0.1-1.7	0.05-0.9	0.8-144	14-470
Upper East		5.1-6.8	1.1-2.5	0.06-0.14	1.75-14.75	43.5-151.5
Upper West		6.0-6.8	0.5-1.3	0.01-0.07	2.0-7.4	52-151.5
Northern		4.5-6.7	0.6-2.0	0.02-0.05	2.5-10.0	45-90

Source: Soil Research Institute, CSIR-Kumasi

Table 1.3.3: Total Area Developed under Irrigation

Area Developed	2018	2019	2020	2021
Formal Area Developed (Ha)	12,977.85	13,008.85	13,008.85	16,908.85
Formal Area Cropped (Ha)	21,861.63	15,236.84	15,627.20	12,136.85
Area Under Informal Irrigation (Ha)	189,000	189,000	189,000	189,000
Informal Area cropped (Ha)	32,461.69	32,599.13	30,698.44	53,180.72
Large Scale Commercial Area (Ha)	21,000	21,000.00	21,000	21,000
Total Area under Irrigation[1]	222,977.85	223,008.85	223,008.85	226,908.85

Source: GIDA, 2021

2.0 Agricultural sector market opportunities in Ghana

- **Commercial agriculture & agro-processing**: Ghana's potential with respect to commercial agriculture and agro-processing are largely untapped, and can be actualized with good policies, sustained public-private investment and strong public-private partnerships backed by transparent procedures and processes along the entire value chain.

- **Crop Production:** Ghana produces and exports a variety of commodities in various climatic zones from dry savannah to wet forest and on irrigable lands suitable for producing foodstuffs such as vegetables, fruits and cash crops.

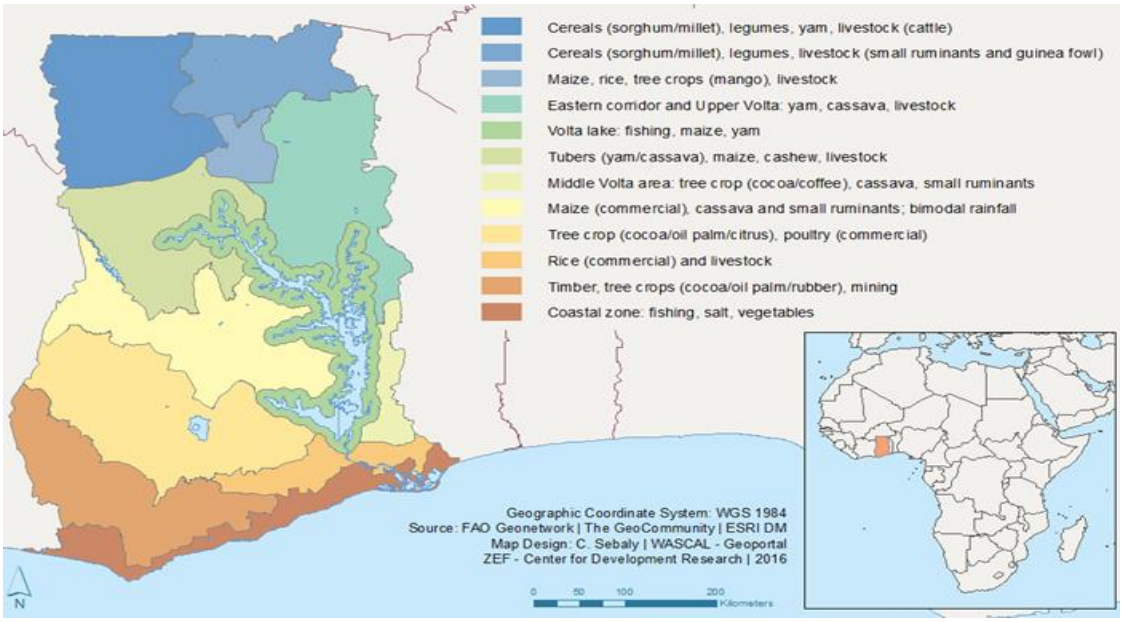
- **Livestock Production:** There are **two** livestock production systems in Ghana namely the mixed farming system which is more prevalent among small holder farmers and the pure livestock farming system, geared towards meat production. The main livestock produced are poultry, rabbits, cattle, sheep, goats and pigs.

- **Fisheries:** The fisheries sub-sector also contributes 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. The sub-sector is estimated to contribute about 60% of the protein requirements of Ghanaians *(FAO 2024).* Fish production involves inland capture and cultured fisheries. The main sources include the Volta Lake, lagoons, reservoirs, irrigation dams and dug outs as well as other inland water bodies.

Table 2.1 : Specific Investment Opportunities in the Agricultural Sector (Primary Production)

Regions	**Specific Areas for Investment**
Upper West	Cotton, Poultry, Soy, Shea, Cattle, Goats, Piggery, Yam
Upper East	Onions, Cowpea, Soy, Poultry
North East	Rice, Soy, Mangoes, Cashew, Goats
Savannah	Cotton, Tomato, Soy, Rice, Maize, Shea, Sesame
Northern	Soy, Maize, Vegetables, Rice, Cashew, Poultry, Piggery, Cattle, Sheep, Goat
Bono	Poultry, Cashew, Cocoa, Chilli, Piggery, Mango, Cassava, Yam, Maize
Bono East	Cassava, Mango, Cashew, Poultry, Honey, Tomato, Soy, Maize, Rice
Ahafo	Avocado, Cassava, Mango, Cashew, Poultry, Sweet Potatoes
Ashanti	Rice, Chilli, Plantain, Poultry, Citrus, Oil Palm, Coffee, Cocoa, Yam, Cassava, Piggery, Cattle, vegetables
Oti	Cashew, Oil Palm, Chilli, Tomato, Onion, Rice, Cassava, Honey
Western North	Cocoa, Oil Palm, Pineapple, Coffee, Citrus, Rice, Soy, Cashew
Western	Coconut, Rubber, Cocoa Oil Palm, Pineapple, Coffee, Citrus, Rice, Soy, Cashew
Eastern	Passion fruit, Cashew, Mango, Coconut, Cocoa, Oil Palm, Coffee, Cattle, vegetables, Avocado
Central	Citrus, Pineapple, Poultry, Piggery, Yam, rice, Coconut, vegetables
Volta	Tilapia, Mudfish, Rice, Cassava, Watermelon, Cashew, Soy, Avocado
Greater Accra	Shrimps, Poultry, Piggery, Sweet Potato, Cassava, Pineapple, Mango, Rice, Passion Fruit, Cantaloupe

Ghana has attractive attributes for commercial farming, with large tracts of land available with excellent soil and climate suitable to produce many crops.



- **Secondary Production**
  - Production of agricultural inputs such as improved seeds and agrochemicals including fertilizers, pesticides and herbicides.
  - Establishment of hatcheries for the production of day old chicks
  - Establishment of factories for the local production of vaccines and feed additives for the livestock sector
  - Establishment of large scale processing facilities for the processing of fruits, vegetables, cash crops, industrial crops, foodcrops, fish and meat
  - Production of leathers from ostrich skin and cow hides
  - Production of dairy products
  - Establishment of commercial pack houses for handling fruit and vegetables
  - Production of jute sacks
  - Producers of fish feed/meal

- **Technological and Supporting Service**
  - Supply of Mechanized equipment for commercial production/land preparation
  - Fabrication and manufacturing of simple replacement parts for agriculture machinery
  - Establishment of Tractors Assembly Plants
  - Establishment of equipment Leasing company or establishment of agriculture mechanization centres
  - Manufacturers and suppliers of irrigation equipment
  - Provision of field and laboratory equipment for quality assurance
  - Establishment of cold storage facilities for fruits and vegetables and livestock products
  - Manufacturers of hatcheries facilities
  - Manufacturers of agro –processing and packing equipment /plant
  - Suppliers and financiers of factory building technology
  - Manufacturers of fishing equipment and facilities
  - Technological and consulting services

- Research and agriculture development
- Inspection and grading, according to international standards
- Capacity building on standards, training and certification
- Establishing greenhouse village comprising training centers with commercial production units
- Greenhouse inputs sales outlet-seed and fertilizer
- Setup of local factory for fabrication of Greenhouse units using local materials
- Greenhouse extension services
- Commodity Exchange operations

- **Marketing and Distribution**
  - Provision of post-production services (transport, packaging, storage facilities and cold vans)
  - Distribution of improved seeds, planting materials and agro –chemicals (fertilizers, pesticides, weedicides)
  - Distribution of veterinary drugs, vaccines and chemicals, feed and feed ingredients
  - The marketing of value –added/processed food in international markets such as the EU, Asia and ECOWAS Market

4.0 Ghana's Competitive Advantage for FDI in the Agricultural Sector

Agriculture production in Africa now accounts for nearly half of the continent's economic activity. According to a report *(Growing Africa: Unlocking the Potential of Agribusiness)* by the World Bank, Africa's farmers and agribusinesses could create a trillion-dollar food market by 2030 if they can expand their access to more capital, electricity, better technology, and irrigated land to grow high-value nutritious foods. These projections indicate that agriculture offers the greatest prospects for a three-fold increase in the GDP of Ghana.

Ghana cannot experience economic growth and structural transformation without the emergence of a productive agricultural sector. Ghana's potential with respect to commercial animal production are largely untapped, and can be actualized through good policies, sustained public-private investment and strong public-private partnerships backed by transparent procedures and processes along the entire value chain.

Some benchmarks for the sector include:

- Ghana ranks 1st in West Africa ahead of its competitors – Mali and Senegal; 3rd in SSA and 83rd globally in in the last edition of the ranking by the Global Food Security Index (GFSI) 2022 on measurement of drivers of food security across 113 countries.

- 3rd Highest recipient of FDI in West Africa in 2023 according to the United Nations Conference on Trade and Development on FDI flows to Africa 2024

5.0 Key Investment Drivers for the Agricultural Sector

- **Government policies**: With agriculture being a great source of wealth for the country, the government of Ghana has initiated several policies to help bolster the sector. In 2025, the

government plans to introduce the Feed Ghana Programme and Feed The Industry programme with the aim of driving rapid expansion in the agriculture sector.

- **People**: There is abundant labour availability who are adaptable and easily trainable

Table 5.1: Number of people engaged in the Agriculture and Agro-processing Sectors

Agriculture Sectors	Number of People
Crops	42,672
Livestock and Poultry	9,335
Fishing and Aquaculture	2,850

MOFA

Table 5.2: Number of people engaged in the agriculture sector by sex and region

Region	Female	Male	Total
Western	2,746	7,071	9,817
Central	1,173	2,619	3,792
Greater Accra	5,466	14,240	19,706
Volta	1,029	2,256	3,285
Eastern	1,780	6,875	8,655
Ashanti	1,377	5,606	6,983
Brong Ahafo	1,298	3,837	5,135
Northern	239	1,371	1,610
Upper East	87	293	380
Upper West	120	410	530

MOFA

6.0 Brief profiles of some players in the agricultural sector with testimonials from top performing companies in the sector

GOLDEN EXOTICS LTD

- **Golden Exotics Limited (GEL)**

A leading producer of bananas and pineapples in Ghana with a track record of over 10 years. GEL runs two plantations which, together, cover a surface area of over 4,700 hectares. One plantation is devoted to pineapples and harvests 10,000 tons per year while the other concentrates on banana production with an annual fresh production capacity of about 50,000 tons. **The company is currently certified under the following Voluntary Sustainability Standards; GLOBAL G.A.P, Fairtrade, Mark and Spencer Field and Fork, SEDEX, Tesco Nature, Certisys, EU Organic and the Rainforest Alliance Sustainable Agriculture Standard.**

Created in 2003, Golden Exotics Limited (GEL) is the leading producer of bananas and pineapples in Ghana. Thanks to the work achieved over 10 years, this country has now achieved its legitimacy as a banana producer in Africa. The presence of water in abundance (with the River Volta) and the dry climate enables the production of bananas of high quality in Ghana.

Export Products are Bananas and Pineapples with **export destinations** being France, Burkina Faso, Senegal, Italy, and Belgium.

- **Vester Oil Mills**

Vester oil mills is a medium scale vegetable oil processing company. The company commenced operations in February 2004 and has been progressing steadily. Vester Oil Mill Limited manufactures and markets soybean, groundnut and palm kernel oils as well as meals. The company is based in Kumasi, Ghana.

Export Products are vegetable oils and Soycake with e**xport destinations** being the ECOWAS region.

-

Neat Foods Company Ltd

Neat Foods range of products are produced from fresh carefully selected farm produce of high quality. NEAT FOODS commenced yam processing in 2009. In addition to yam, it processes a range of flours – cassava flour and plantain flour. The company belongs to a larger holding company, which owns a radio station (Peace FM), which has helped to promote the Neat Fufu brand across Accra. NEAT fufu is made of a mixture of 80% white yam and 20% cassava starch. Neat products save you the time and hassle of preparing your favourite complete local dish the old traditional way. The company was awarded the Food Product of the year in 2013.

Export Products are Neat Fufu, Banku, Neat Abenkwan and Neat Hausa Koko with **export destinations** being Benin, Burkina Faso, Nigeria, The United Kingdom and the USA.

- 

Cosmo Seafoods Company Ltd

Cosmo Seafoods Company Ltd is a leading manufacturer of high-quality and affordable canned seafood products, including tuna, sardines, pilchards, mackerel and saury. It was established in Ghana in June 2011 and operates under the Ghana Free Zones Authority. Through the application of advanced processing and quality-control systems supported by international standards such as HACCP and GMP, the company has consistently delivered premium quality and safe products to consumers around the world.

Export Products are Tuna flakes in oil and export destinations are United Kingdom, Germany, Portugal, The Netherlands and Côte d'Ivoire

6.1 Testimonials



Olam Ghana is one of the leading Agri and ingredients company in the country. **The Country Head, Amit Agrawal,** said Ghana has been a very easy country to operate and do business in because it has massive talent pool that you can tap into.



Golden Exotics Ltd is a leading producer of bananas and pineapples in Ghana with a track record of over 10 years. **The Managing Director, Benedict Rich**, said the location of Ghana is good for banana processing and close place to grow banana to Europe with good access to the port. He added that Ghana has abundant labour force with lot of opportunities. The company has done very well over the last 15 years, Golden Exotics Ltd currently has 4,700 hectares of banana plantation making it the largest in the world.



Guinness Ghana PLC, manufactures and markets a range of alcoholic and non-alcoholic beverages for the domestic market and for international export. **The Corporate Relations Director, Sylvia Owusu-Ankomah** said as a beverage company 55% of their raw materials are source in Ghana from the local farmers, and are now recognized as one of the big players in the manufacturing landscape in Ghana.

Benso Oil Palm General Manager, Samuel Avaala indicated that Ghana is one of the fastest growing economies on the continent and the opportunities along the agricultural value chain is enormous. The conducive business environment in Ghana has enabled them to deliver a better-quality product for their growing markets/consumers.

6.2 Key Companies operating in the Agriculture Sector

Name of Company	Activity	Contact
Mechanical Lloyd Company Ltd	Dealers in Massey Ferguson tractors	No. 2 Adjuma Crescent Ring Rd. West Accra. 0302 229312 0302 229318
Dizengoff Ghana Ltd	Dealers in farm implements, agrochemicals, green houses and irrigation systems	No. 2 Feo Eyeo Street, North Industrial Area 0302 221 815/831
Agricare Ltd	Producers of poultry, feed like concentrates, pellets and mashes	www.agricare-ltd.com 0243 70 05 22 0244 31 21 10
Flour Mills of Ghana Ltd	Producers of flour and animal feed	info@fmgl.com.gh 0560027326/0504012000
Volta River Estates Limited (VREL)	Banana production	P.O. Box 3 New Akrade Eastern Region, (0)251 21068 (0)244 328 380
Cocoa Processing Company Limited (CPC)	Producers of chocolate	Heavy Industrial Area, Private Mail Bag, Tema - Ghana. Tel.: +233-(0)22-212153, 22-212154 info@goldentreeghana.com
Olam Ghana limited	Dealers in agric commodity like rice, cashew, cocoa etc.	P. O. Box 1847, 17 Dadeban Rd., North Industrial Area

		Accra-North, Ghana Tel: +233 302 228461
Interplast Ltd	Producers of farm irrigation systems	P.O. Box AD 330, Accra 0302 819 000 ingreen@interplast.com
Glofert Ltd	Producers of fertilizers	Francis.dei@glofert.com 0242022517/0544339513
Yara Ghana Ltd	Dealers in fertilizers	danquah.addo-yobo@yara.com 0540112137
Avnash Industries Ltd	Rice milling and palm oil production	info@avnash.com david.adikah@avnash.com 0556 625702
Avnash Industries Ghana Ltd Tema	Producers of Delyte Pure Vegetable Oil	PMB 338, Tema 0540101144
Essaar Agro West Africa Ltd, Tema	Manufactures of Essaar Poultry Feed Concentrate 5%, 20%	P.O. Box1317, Achimota 0209229141
Cosmo Seafoods Co. Ltd. Tema	Manufactures of Cosmo Fish Meal	P.O. Box MS157, Mile 7, Achimota 0302415001
Flour Mills of Ghana Ltd, Tema, G/R	Producers of Sankofa Feed Mash Layer, Grower roiler Finisher, Chick	P.O. Box CE 11345, Tema, G/R 0244326040
Promasidor (Ghana) Ltd	Manufactures of Yumvita Infant Cereal with Milk (Maize and Wheat, Wheat)	P. O. Box KA 30530, Accra, 0302436649
Brazil agro-Business Group. Sogakope, V/R	Manufactures of Champion Long Grain Perfumed Jasmine Rice	P.O. Box SK 139, Accra 0548306996
Nestle Ghana Ltd, G/R	Producers of Nestle Milo Nutrilfill Ready-to-eat Cereal Nestle Cerelac Infant Cereal with Milk (Wheat, fruit, Honey) Nestle Cerelac Infant Cereal with Milk (Maize)	P.0.Box 8350, Tema 0544335484
Olam Ghana Ltd, Accra	Producers of Tomato Paste	P.O. Box GP 1847, Accra 0303413157
Cocoa Processing Company Ltd	Manufactures of chocolate, cocoa liquor and cocoa powder.	Private Post Bag, Tema
Blue Sky Product Ltd	Producers of Blue Skies Freshly Squeezed Juice	P.O. Box CT 3506 Cantonments 0244667073
Unilever Ghana Ltd	Manufactures of edible oils	P.O. Box 721 Tema 0303218100

Ghana Nut Ltd	Producers of Akoma oil, Groundnut, Cashew Nut, Shea Nut, Soybean meal, Sesame Seeds	Ghana Nuts Ltd Business Development Office P.O. Box 825 Techiman –Bono East Region +233(0)352091112 +233(0)352091114/5 +233(0)352091689

7.0 Next Steps/Contact

For further information, please contact:
The Chief Executive Officer
Ghana Investment Promotion Centre
Vivo Place, No A1 Rangoon Lane,
Cantonments- Accra
P.O. Box M193
Ministries-Accra
Tel: +233 302 665 125-9
Email : info@gipc.gov.gh
Website: http://www.gipc.gov.gh

8.0 Sources

- GIPC Database
- Ministry Of Food And Agriculture (http://mofa.gov.gh/site/)
- Ghana Export Promotion Authority (https://www.gepaghana.org/)
- Ghana Free Zones Authority (https://gfzb.gov.gh/)
- Council For Scientific And Industrial Research (https://www.csir.org.gh/)