

Factsheet – Vegetables Ghana



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General information Ghana

Ghana is situated on the coast of the Gulf of Guinea. Although relatively small in area and population, Ghana is one of the leading countries of Africa, because of its considerable natural wealth and developed economy. Ghana's administrative capital is the coastal city of Accra. Accra is a prosperous trading hub; today it serves as the commercial and educational center of the country. The Ghanaian economy is a mixture of private and public enterprises. National income is derived primarily from agricultural and mineral output and to a limited extent from manufacturing and services. Most of the cash crops and mineral products are for export.

The climate of Ghana is tropical and there are two main seasons: the wet and the dry seasons. North Ghana experiences its rainy season from March to November while South Ghana experiences its rainy season from April to mid-November. The tropical climate of Ghana is relatively mild for its latitude. Three climate-subtypes can be distinguished: the eastern coastal belt is warm and comparatively dry, the south-west corner of Ghana is hot and humid, and the north of Ghana is hot and dry.

The following tables provide an overview of import economic and social data:

Table 1.1 Economic and social indicators

Ghana (2013)	
Population	25.37 million
GDP	\$ 40.71 billion
GDP growth	7.4 %
Per capita income	\$ 1,550
Middle-class	49.8%
Economic growth (2004-05/2011-2013)	10,6 %
Population living in extreme poverty* (2013)	28.5%
Population living from subsistence agriculture	65%

Source: World Bank, 2014.

**meaning an income below \$1.25 a day*

Table 1.2 Land use and export

Ghana (2011)	
Area	Land: 238,540 sq km
Land use	Arable land: 21.1% Permanent crops: 12.3 % Other: 66.6 %
Irrigated land	0.2% (2010)
Export commodities	Wheat, Soybeans, Coffee, Palm oil, Gold, Cocoa, Cassave
Import commodities	Rice, Grain, Cement, Trucks, Nuts

Source: World Bank, 2014.

Vegetables in Ghana

Ghana's vegetable sector offers great opportunities for growth given the steady increase of high-value domestic markets and export opportunities. The domestic market alone is growing at more than 10% per year and the potential value for export vegetables is estimated at US\$250 million. In order to benefit from these developments, the competitiveness of the sector needs to improve. This requires investments and innovations but also improvements in the business climate, from credit availability to quality inspection services, and from improved export logistics to faster and cheaper importation of agricultural inputs.

Domestic market

Five vegetables rank in the top-20 of crop and livestock products: taro (cocoyam), dried chillies, green chillies, tomatoes and okra. In addition, both fresh and dry onion imports from Togo and Burkina Faso are high.

Crop	Value (1000 US \$)	Production (tonnes)
Taro (cocoyam)	275639	1299650
Chillies and peppers (green)	127105	270000
Tomatoes	125652	340000
Chillies and peppers (dry)	96398	88000
Okra	51159	80000

Overall vegetable consumption in Ghana is still relatively small in comparison with other African countries like Kenya, but is expanding rapidly. Where Ghana's economic growth is more than 7% per year, vegetable production and consumption growth is almost double: 12% per year. Especially the demand for tomatoes and chillies is rapidly growing. The consumption of tomatoes has grown from 175.000 tons in 2001 to 370.000 tons in 2011. The production and consumption of chillies has grown from 235.000 tons in 2001 to 360.000 tons in 2011. The overall turnover of vegetables in Ghana is around US\$ 800 million.

Production of fresh vegetables takes place all around the country and is strongly related to the specific weather conditions and market windows. In addition, irrigated agriculture is on the increase leading to new production areas around the Volta River and Lake Volta, as well as specific irrigated areas in and around Accra.

Ghana's sustained economic growth has led to the emergence of a middle class of consumers demanding higher quality fresh produce. In turn this will lead to greater market segmentation among specialized retail markets, wholesale bulk markets, and local production-consumption systems.

Export market

In terms of exports, Ghana's vegetables show increased potential. While traditionally fruits like pineapple, bananas and mangoes were the main horticultural export crops, recently chillies (capsicum) and Asian vegetables (different types of gourds and okra), have become popular. In addition, baby corn and butternut squash are picking up significantly since the arrival of the multinational VegPro.

In general, exports of vegetables are believed to have a comparative advantage over competitors like Kenya, given climatologic conditions and relative distance to the EU market (WB, 2011). For example, air freight costs to northwestern Europe from Nairobi are on average US\$1.75 per kg, whereas from Accra they are only US\$ 1.05 per kg. Exports rose between 2001 and 2007 from 418 tons to 2947 tons, while EU total imports rose from 25,000 tons to 36,000 tons for the same period.

The 2011 WB report indicates that further growth to 5000 tons should be attainable, reflecting an export value of around US\$10 million. More recently, however, exports declined mainly because of issues related to MRLs (maximum residue levels of pesticides) and Good Agricultural Practices (Global GAP).

Ghana's vegetable value chains

In the horticulture sector roughly four vegetable value chains exist:

- (1) *The export market for peppers, Asian vegetables, butternut squash and baby corn* shows a strong and growing outlook. Most vegetables are exported to the UK and northwestern Europe (Netherlands, Belgium, Germany). Both specialized larger farms with outgrower schemes as well as small-scale individual farmers are targeting this market, focusing on top quality and adhering to Good Agricultural Practices (Global GAP, BRC). The current size is around 3000 tons, mainly capsicum.
- (2) *Supermarkets, hotels and restaurant chains:* an emerging retail and high-level hospitality industry is developing, demanding high-quality vegetables. For example, Shoprite currently has 3 outlets, but will expand in the coming years to 13 outlets. Currently, the demand cannot be met neither in quality nor quantity, and imported vegetables fill the gap. The production systems require high levels of agronomic knowledge and skills, as well as postharvest management, possibly supported by protected horticulture (greenhouse/tunnels). Current market estimate is 3000 kg/day in Accra; 10,000 tons per year.
- (3) The primary market for vegetables, at least for the coming years, will still be dominated by *open markets and small street shops*. The production systems will compete more on price and less on quality. These markets include the large Makola and Tudu markets of Ghana where specific commodity associations manage the market system. Price fluctuations are high according to the different production periods of Ghana (as well as Burkina Faso).

- (4) *The processed vegetable chain*: especially tomato paste and canned vegetables, like eggplant. Though often seen as a last resort market (with low market prices) the chain still requires specific varieties and quality standards. Currently, most factories are idle due to the fact that imported products are cheaper and domestic supply of raw materials is expensive (market prices for fresh produce are higher). It is estimated that (open field) yields of 100 t/ha are necessary to develop a competitive tomato paste industry. The overall competitiveness of this sector is debatable, though for specific processed food products like shito a market exists (Robinson and Kolavalli, 2010c).

Production Process

The vegetables supply process in Ghana involves a number of activities that include: input supply, seed/ variety selection, seed bed and transfer plot preparations, seed multiplication, land preparation, sowing/planting production, farm crop protection, weed and pest protection, harvesting, cleaning from foreign matters/ admixture, proper packing and use of appropriate type of packing material, collection/bulking of the harvested produce, supplying, wholesaling, processing, retailing, and domestic consumption, and exporting to overseas markets (UNCTAD).

Traditionally, vegetables are mostly eaten processed or cooked both as a spicy tomato paste (Shitu) as well as 'soups' with banku or fufu. More recently, the urban population is turning to fresh salads.

GhanaVeg

The GhanaVeg program is implemented by the Centre for Development Innovation (CDI) of Wageningen UR with support from the International Fertilizer Development Center (IFDC) and the Netherlands-African Business Council (NABC).

The program's mission is to establish a sustainable and internationally competitive vegetable sector. GhanaVeg is driven by a strong belief in healthy and quality vegetables from Ghana through new ways of doing business. The initiative targets the high-end domestic and international markets: e.g. high-end supermarkets, hotels, restaurants and exports.

The program has received a €4 million financial support from the Embassy of the Kingdom of the Netherlands and will run till 2017. At least €2.5 million co-financing investments are foreseen from the private sector in order to achieve the program's targets.

Practically, the program aims at:

- Attracting and supporting frontrunner companies in the entire sector: from input supply to processing and from farming to retail and logistics.
- Stimulating technical innovations by the private sector through improving linkages between companies and research centers.
- Assisting the sector with evidence-based information to support investment decisions and facilitate discussions for improving the business climate.
- Encourage more investments and trade in Ghana's vegetable sector from the Netherlands and the EU at large.

The program will issue three Calls for Proposals for the Business Opportunity and R&D Innovation Funds. These funds provide co-financing for innovative business ideas and new technologies that increase productivity and quality of vegetables.

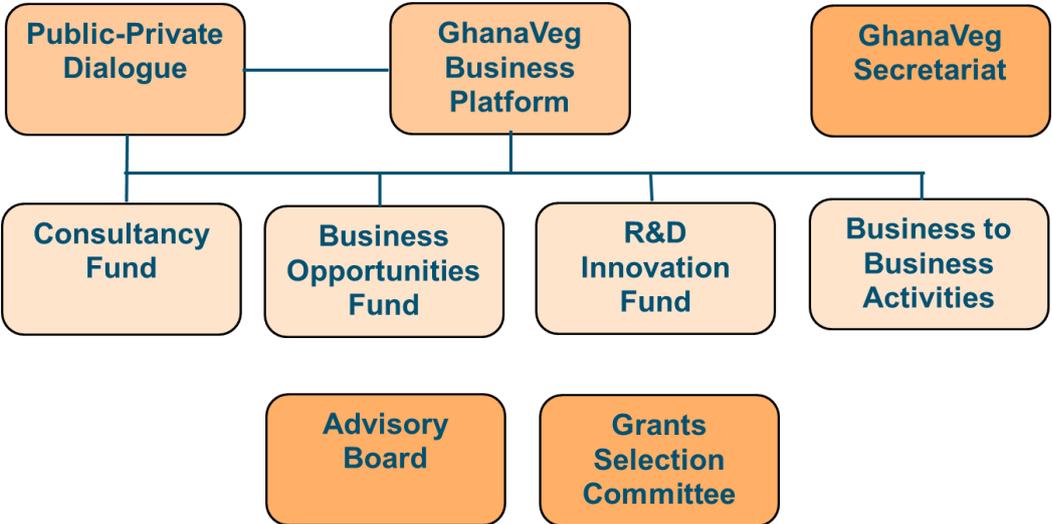
- The first Business Opportunity Call targets proposals from the Vegetable Seed Industry, supporting seed companies to increase the availability of quality seeds in the sector and provide follow-up support to farmers to make the most of the seeds.
- The second Call focuses on supporting companies that want to invest in 'chain Integration'. This call aims at supporting direct chain arrangements between exporters, processors, wholesalers and/or retailers on the one hand and vegetable producers on the other with the aim of building long-term market partnerships.
- The third call, part of the R&D innovation fund, focuses on testing and developing new technologies in the vegetable input supply sector, in terms of: irrigation systems, soil fertility managements, the introduction new crop varieties and support for better crop protection products.

GhanaVeg can support innovative projects with a grant of up to €50.000. Projects require at least 50% co-financing from the private sector and can be implemented over a period of one to three years. An independent selection committee will assess the proposals and a first group of ten grants can be awarded in this first Call for Proposals.

To stimulate further cooperation and investments a set of Business to Business activities is organized. The first one is the vegetables-trade mission to Ghana between the 16th and the 20th of June 2014. This mission is partially combined with the RVO mission of H.E. Minister Ploumen. During this week, the three-monthly Vegetables Business Platform Meeting with round table discussions with Dutch and Ghanaian private sector parties will be held. Next to the GhanaVeg Business Platform a high level Public Private Dialogue with as Ghanaian government representatives will be initiated at regular times. The second Business to Business activity that will be organized is a Vegetable Investment Fair in Accra during the West-Africa Agri-Food Fair, from 2-4 December 2014. Around the time of this event another trade mission will be organized, in order to combine the two programs.

Representing the elements discussed in the last pages in a schematic way provides the following model:

Figure 1.1 GhanaVeg project elements



Testimonials

GhanaVeg, the Ghana Vegetable Sector Commercialization Program, was launched on 8th April, 2014 at the La Palm Royal Beach Hotel in Accra, by the Netherlands Ambassador to Ghana, H.E. Mr. Hans Docter.

In his official press statement Mr. Hans Docter emphasized the changing relations between the Netherlands and Ghana. As Ghana's economy is growing rapidly and has already reached lower middle income status "We are moving away from a traditional aid relationship, towards a regular trade partner". The GhanaVeg program is a case in point for this changing relationship. "In the horticultural sector Ghana and the Netherlands are natural partners. Ghana is interesting because of its rapidly growing demand for high-quality vegetables and huge potential for exports and The Netherlands because it's the second biggest exporter of vegetables in the world. The Netherlands has a lot to offer to Ghana in terms of technology and knowledge which can benefit the entire vegetable sector of Ghana." Another important element of the Dutch program in Ghana is the emphasis on the private sector. The Ambassador stressed that "the private sector will be the key engine of development in Ghana's vegetable sector". Supporting the private sector's capacity to deliver quality products and services is at the heart of the GhanaVeg program.

Mrs. Catherine Krobo-Edusei Benson, Managing Director of Eden Tree, a high-end vegetable wholesaler, emphasized the importance of seeking new ways of doing business. "Business as usual is not going to provide us with quality, healthy vegetables that the market requires. We should move towards new ways of doing business, working closely together with vegetable farmers to ensure good water and pesticide use". Food safety is at the core of GhanaVeg and activities that focus on farm certification can be supported under the program. Mrs. Krobo-Edusei Benson further expressed her enthusiasm about the prospects of Ghana's vegetable sector. "Over the last years we have seen double digit growth in the demand for quality vegetables. We expect that this will continue in the next years due to the economic growth of the country. Currently, I cannot get enough vegetables to supply all my customers".

Challenges:

Moving from 'business as usual' to more commercial vegetable production requires serious efforts.

Currently, the vegetable chains are characterized by:

- (1) Low availability and knowledge of improved inputs;
- (2) limited agronomic skills and practices;
- (3) Poor food safety for both the domestic and export market;
- (4) Poor postharvest management; and
- (5) Weak linkages between producers and buyers.

Translating these characteristics into concrete problems produces the following set of challenges:

Challenges
The cultivation practice and technique are highly based on knowledge that passed from generation to generation, and the production level is low.
In need of an efficient vegetables value chain service delivery mechanism.
Innovate technologies (farm management, drying, storage) and agricultural research needed.
Post-harvest handling of the product is inadequate: poor and re-used packaging, storage in unclean sheds and next to e.g. chemicals, much up- and offloading, bumpy transport.
Irregular supply and variable quality of vegetables
Weak role of private commercial investors in production
Weak business linkage among stakeholders in the chain including farmers, traders, processors and meso-level support institutions and macro level regulatory and enforcement institutions.
Increasing role and importance of unlicensed brokers in the trading of vegetables in the market
Weak marketing system not stimulating production and marketing based on enforceable quality standards
Lack of value addition in terms of major agro processing activities
Price volatility due to changes in demand and supply in local and overseas markets
Lack of organized market information service to the different actors in the farm-to-market chain
Challenges to channel the products to the international market through market promotion and creation of market links.

Opportunities:

Opportunities
Ghana has great potential for increasing export of vegetables due to its favourable distance to the (EU)market and airfreight prices, water availability, climatic conditions
The government of Ghana is promoting commercial agri-projects and has declared agriculture as focus area for development.
Vegetables have a wide possibility of being cultivated in different agro ecological zones of the country.
Financial services by banks and micro-credit institutions and transportation and related logistic infrastructure are necessary.
The vegetables subsector is amongst the important crops that fit within the strategy of commercialization of agriculture.
Crops already widely traded internationally have a high potential for expansion and diversification of export earnings of Ghana.
Support of policy incentives that enable exporters to implement modern processing techniques and machinery starting from Pre Harvesting to Post Harvest processing.
Ghana has great potential for protected agriculture (low-tech greenhouses for the tropical climate)
Solving rather simple problems with infections & diseases, as well as regulating MRL levels will boost the export market

Sources

- Breisinger, C., et al. "Ghana." Strategies and priorities for African agriculture: economywide perspectives from country studies (2012): 141-164.
- FAOSTAT (2014), FAOSTAT Emissions database [Dataset]
- Grow Africa (2013), 'Overview of drivers of growth' http://growafrica.com/wp/wp-content/uploads/2012/04/Investment_Priorities_Ghana.pdf
- Ministerie van Economische Zaken, Landbouw & Innovatie (2011), '*Kansen voor het Nederlands Agro-midden en klein bedrijf in Ghana, Mali en Mozambique*', 30 september 2011 <http://edepot.wur.nl/186731>
- Worldbank (2014), World Bank Open Data [Dataset]