

THE FOOD SYSTEM OF GHANA: A SMALLHOLDER PERSPECTIVE

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OUTLINE

- Introduction
- Research areas and Methods
- Components of the food system – broadly - production, distribution and consumption
- Drivers of the system
- Conclusions
- Policy advocacy

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Introduction

- This research examines the food systems in Ghana with a view of identifying policy interventions that can lead to increased opportunities for smallholder farmers, drive sustainable production and create opportunities for livelihood diversification.
- There is global search for an ideal food system that is capable of providing enough quality food to meet the demands of a growing population.
- As in other African countries, food production is a topical issue in Ghana where agriculture is a major economic activity, contributing about 20.1% to Gross Domestic Product (GDP) and employing about 44.60 % of the population, (MoFEP, 2017).
- Smallholder farmers produce over 80% of food in Ghana
- Despite the merits that comes with smallholder farming, SSA farmers are constrained by limited capital, difficulty accessing credit facilities, markets access, agricultural extension services and government agricultural policies that favour investment in large scale farming (AGRA, 2016).
- The need for more efficient and sustainable food systems that satisfies both local demands as well as national and global context has become ever more important.

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Main Highlights

- Small holder farmers produce a variety of food for their own consumption and for sale into local and regional markets, thereby enhancing their livelihoods, food security and foreign exchange of the country.
- Though food production is still not optimal, the main constraints of the food system is at the level of marketing and distribution with consequent shifts of consumer demand towards imported foods.
- State policies and global trends are altering the food systems beyond the conventional simplistic drivers of such changes.
- Our findings challenge the dominant current narrative that prioritizes medium and large scale commercial agriculture and concentrates mostly on production to the neglect of other equally important components of the food system.
- We argue for a pro-smallholder policy architecture that aims at bringing government and the private sector to playing critical roles in improving the food system of Ghana, particularly in increasing productivity, improving marketing and processing, developing transport infrastructure, delivering good quality and acceptable foods to consumers.

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Research Methodology

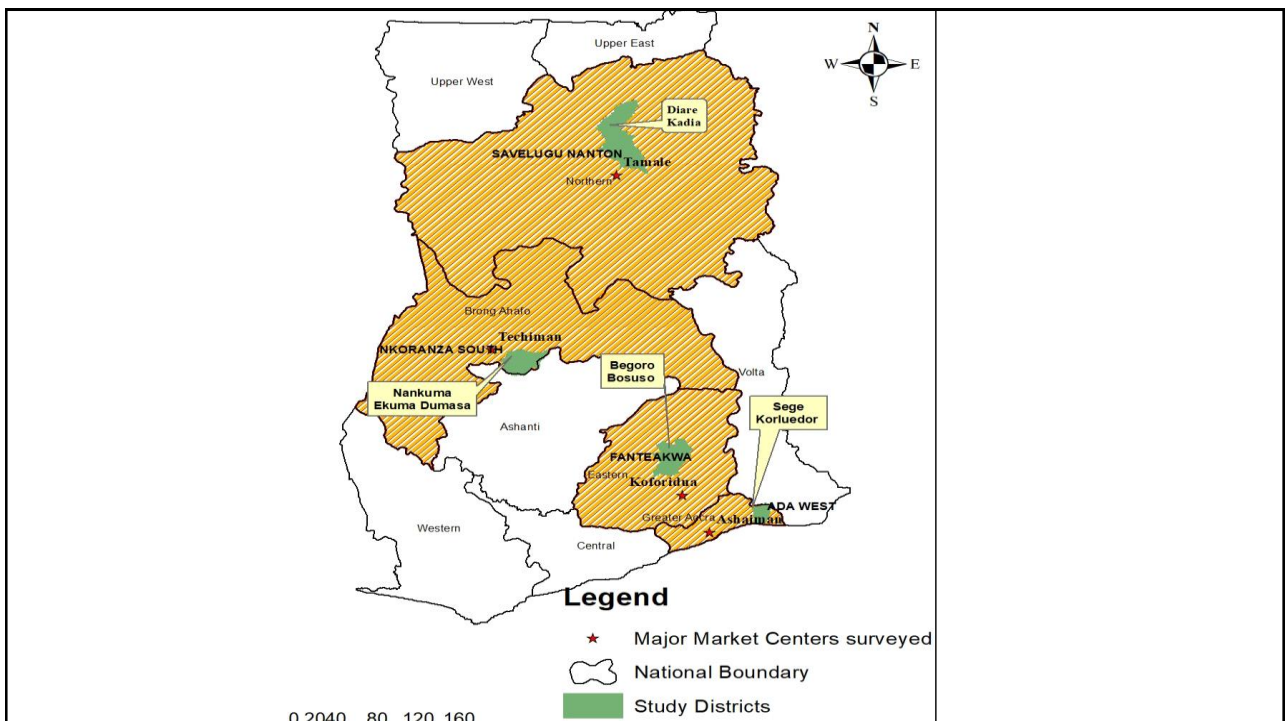
- Data sources
- (a) Documentary analysis of agricultural policies and food systems
- (b) Collection and analysis of primary data

Primary Data

- Concurrent mixed methods design - survey, focus groups and in-depth interviews
- Study sites

Greater Accra, Northern, Brong Ahafo and Eastern regions of Ghana to represent 4 main agro-ecological zones of Ghana.

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Agricultural policy terrain of Ghana

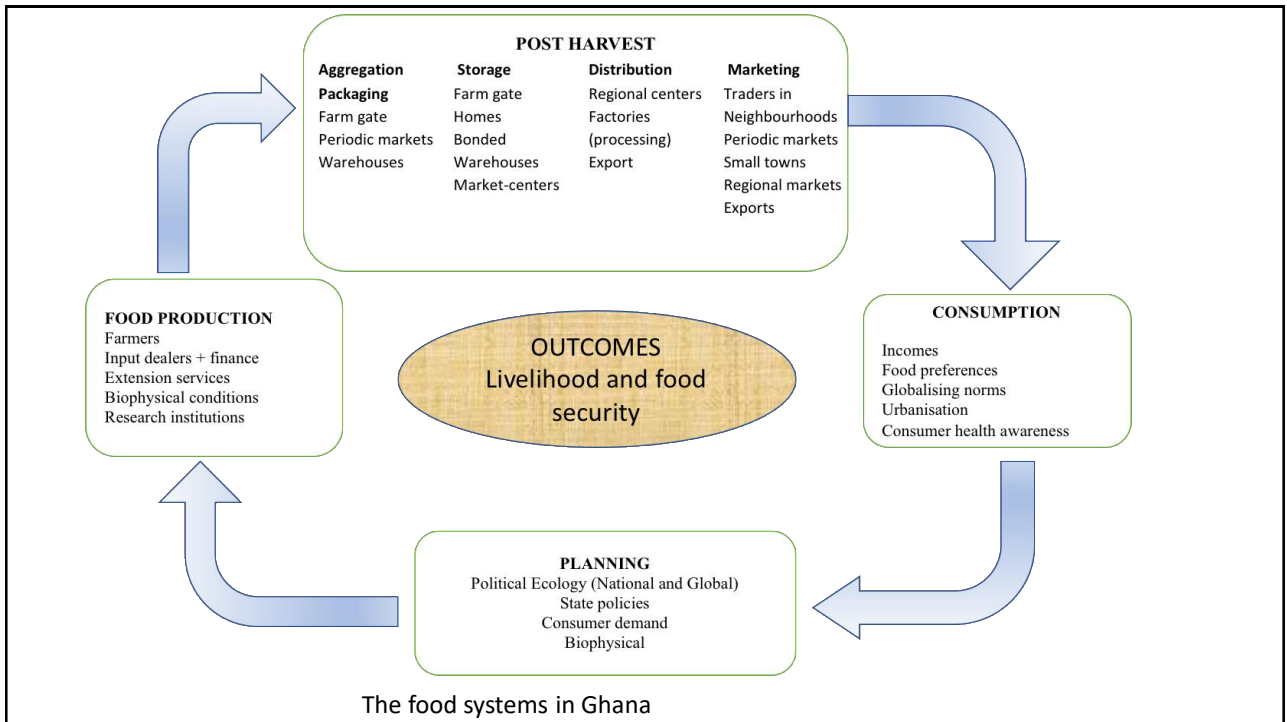
- The government of Ghana has implemented a number of policies in the agriculture sector, most of these policies have targeted government inputs supply and infrastructure development.
- Policies which are usually directed by donors unintentionally tend to favour large scale farmers producing for export or small-scale farmers producing cash crops.
- Recent agricultural policies have recognized the need to support small-holder farmers producing food crops, but there is a stronger focus on the production segment of the food system, with little emphasis on enhancing small-holder farmers' access to the market.
- The non-prioritization of marketing and the over-emphasis on production shows that the government is preoccupied with an older productivist discourse.
- The recent Planting for Food and Jobs (PFJ) programme is equally associated with inappropriate inputs and poor access to markets and storage technologies.
- The recent emphasis on large scale farming, the call for increasing use of biotechnology, naïve liberalization, and the heavy application of external chemical inputs, may be misguided dimensions of Ghana's agricultural policies that require a critical informed debate.

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The Food System in Ghana

- A food systems approach encompasses the set of institutions, enterprises, individuals, activities, norms, and relationships that govern and deliver inputs to the farming sector, produce commodities, and handle, process, transport, market and distribute food and food-related products to consumers.
- The food system in Ghana comprises of activities from food production, distribution, consumption which feed into farmers planning for production.
- The bulk of food in Ghana is produced by smallholder farmers located across the different ecological zones that offer the food variety the country enjoys.
- There are few large farms and increasingly many medium size holdings due to rising incentives from urban markets.
- Open air markets are critical for the food systems in Ghana

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PRODUCING FOOD IN GHANA

- The average age of the farmers interviewed was 42.1 years and does not significantly vary across regions.
- Generally low level of education: Proportion with no formal education was highest in the Northern Region (71%), followed by the Brong Ahafo region (44%), Greater Accra region (28%) and Eastern Region (12%).
- Multiple sources of income (trading, casual labour, keeping of animals etc) but 92% of the farmers ranked crop production as the most important source of income.
- Smallholder farmers produce a variety of food for their own consumption and for sale into local and regional markets, thereby enhancing their livelihoods, food security and foreign exchange of the country.
- The major factors that determine the types of crops farmers produced include: good ecological conditions (climate, soil etc.), ease of production, and marketability. **However, marketability was considered the most important factor within each region.**

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Region	Major food crops produced in various regions in order of importance
Northern Region	Maize, Groundnut, Rice, Soya Beans, Watermelon, yam
Greater Accra Region	Tomatoes, Pepper, Watermelon, Cassava, Maize, Okra, Garden Eggs
Eastern Region	Pepper, Plantain, Tomato, Maize, Garden Eggs, Cassava, Beans, Cocoyam, Cocoa
Brong Ahafo Region	Maize, Yam, Watermelon, Cassava, Potato, Pineapple, Cocoa, Rice, Groundnut, Banana, Cashew, Carrot, Cabbage

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Land Acquisition and Inputs

- Short-term lease/hire was the dominant land acquisition system in the Brong Ahafo region (78.46%), Eastern region (75.71%), and Greater Accra (53.71%). However, in the northern region the dominant form of land acquisition was rather inheritance (81.69%).
- Some farmers use their own lands for the cultivation of food crops consumed by the household, while hiring land for the cultivation of vegetables: *“I rent land for all my vegetable production. I pay Ghc 150.00 per acre for 6 months. However, all my food crop farms are on family lands”* (Josh, Begoro).
- The seed industry in all the communities studied is largely traditional, with a majority of farmers obtaining seeds and other planting materials from their own harvest or other farmers.
- Fertilizer application was quite low with only 59% of the farmers interviewed
- The proportion of farmers who adopt a form of mechanisation was higher in the savannah zones (i.e. 99% for Greater Accra and 96% for Northern Region) than the forest zones (43% for BA and 0% for Eastern region).

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Type of support received from government/NGOs

Type of support received from government	Greater Accra	Eastern	Brong Ahafo	Northern	Total (N=400)
Financial assistance/ Loan	34	18	1	2	13.8
General Extension services	7	64	46	7	31.0
Training on pests and disease control	6	65	37	7	28.8
Training on marketing	1	46	17	5	17.3
Training on preservation of seeds	2	48	21	6	19.3
Training on use of fertilizers and chemicals	4	66	39	7	29.0
Post-harvest management training	2	69	30	8	27.3
Quality control	2	85	20	6	28.3

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Percentage of farmers who received Support under Planting for Jobs and Food

Support under Planting for Jobs and Food	Region				All Farmers (N=400)
	Greater Accra	Eastern	Brong Ahafo	Northern	
Indicator					
Support received	13	19	19	20	17.75
No support received	87	81	81	80	82.25
Total	100	100	100	100	100
Pearson $\chi^2(3) = 2.1063$ P-value = 0.551					

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Gender distribution of farmers who received support under the planting for food and job programme

Gender	Received support	No support received	Total
Male	61	217	278
	21.94%	78.06%	100%
Female	10	112	122
	8.2%	91.8%	100%
Total	71	329	400
	17.75%	82.25%	100%
Pearson chi2(1) = 10.9735 Pr = 0.001			

- The support under this flagship programme is limited to input subsidies with almost nothing on marketing.

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Farmers ranking of constraints

Challenges	Rank								Total
	1	2	3	4	5	6	7		
	260	59	14	27	22	5	13		400
Lack of market access	65	14.75	3.5	6.75	5.5	1.25	3.25		100
	42	262	58	18	11	6	3		400
Low prices of food products	10.5	65.5	14.5	4.5	2.75	1.5	0.75		100
	14	15	179	52	35	45	60		400
Bad Transport network	3.5	3.75	44.8	13	8.75	11.25	15		100
	13	23	43	182	51	47	41		400
Lack of storage facilities	3.25	5.75	10.8	45.5	12.75	11.75	10.3		100
	33	19	27	40	177	53	51		400
Post-harvest losses	8.25	4.75	6.75	10	44.25	13.25	12.8		100
	8	8	29	29	53	204	69		400
High cost of transport	2	2	7.25	7.25	13.25	51	17.3		100
	30	14	50	52	51	40	163		400
Lack of standards and weighing	7.5	3.5	12.5	13	12.75	10	40.8		100

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Opportunities

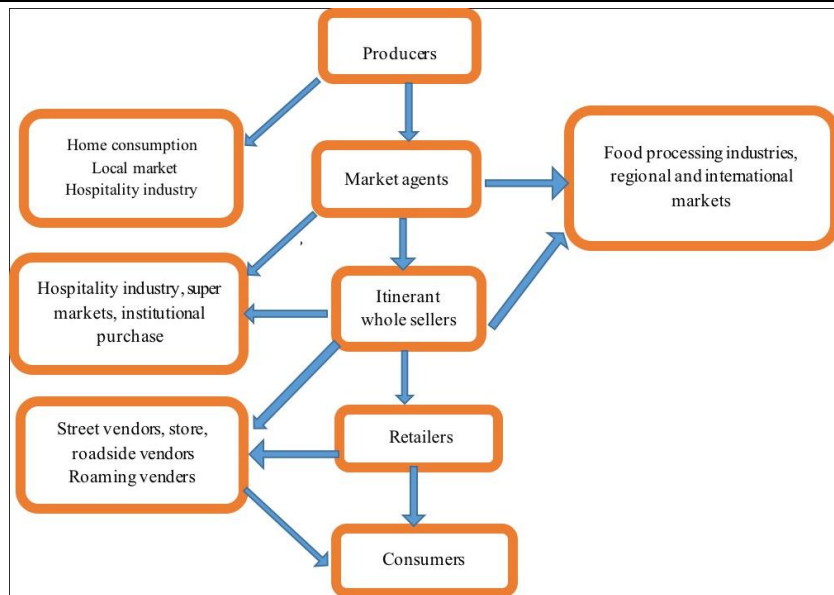
- Opportunities that can be leveraged upon by policy makers, NGOs and the private sector to enhance agricultural productivity.
- Ghana has vast fertile lands which can naturally support the cultivation of many crop varieties
- The differences in climatic conditions mean that huge crop diversity can be supported by the four major ecological zones.
- Large population in rural areas where farming takes place -
- The wage levels in the rural communities are also low – production cost low
- Opportunities for farm mechanisation also exist in many rural areas in Ghana.
- Despite the complaints about declining prices, a majority of farmers believe that profitability of farming has either somewhat improved or improved significantly.
- Increasing urban populations has increased demand for food - exotic foods such as vegetables and fruits.

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DISTRIBUTING FOOD IN GHANA

- Food distribution in Ghana is performed by different actors
 - aggregators, itinerant traders, market queens, retailers and street vendors or hawkers etc.
- Middlemen facilitate the distribution process by purchasing food crops directly from farmers at their farm gates, from aggregators, regular source markets, from periodic markets and supply to other wholesalers and market queens at destination markets.
- Agents also supply to hotels, restaurants, chop bars, processing companies such as Nestle Ghana, Guinness Ghana Limited and the poultry feed processing companies.

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The Food distribution chain in Ghana

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Exploitation and survival

- Market agents in the quest for profit and survival exploit farmers by:
 - Price fixing
 - Flexible oral contracts
 - Primitive strategy of waiting for produce to rot – arm twisting
 - Pre-financing with conditionalities – enslaving the farmer
 - Dual weighing system – bush weight and ‘Accra’ weight
 - Quality downgrading to decrease prices or defy contracts
 - Barring farmers from selling in major markets

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Challenges in distribution

- Poor road networks – high cost of transport
- Perishability – high losses between farm gate and consumers
- High interest rates
- Storage
- Police extortion/harassment
- Inaccessible international markets – bans etc

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Opportunities

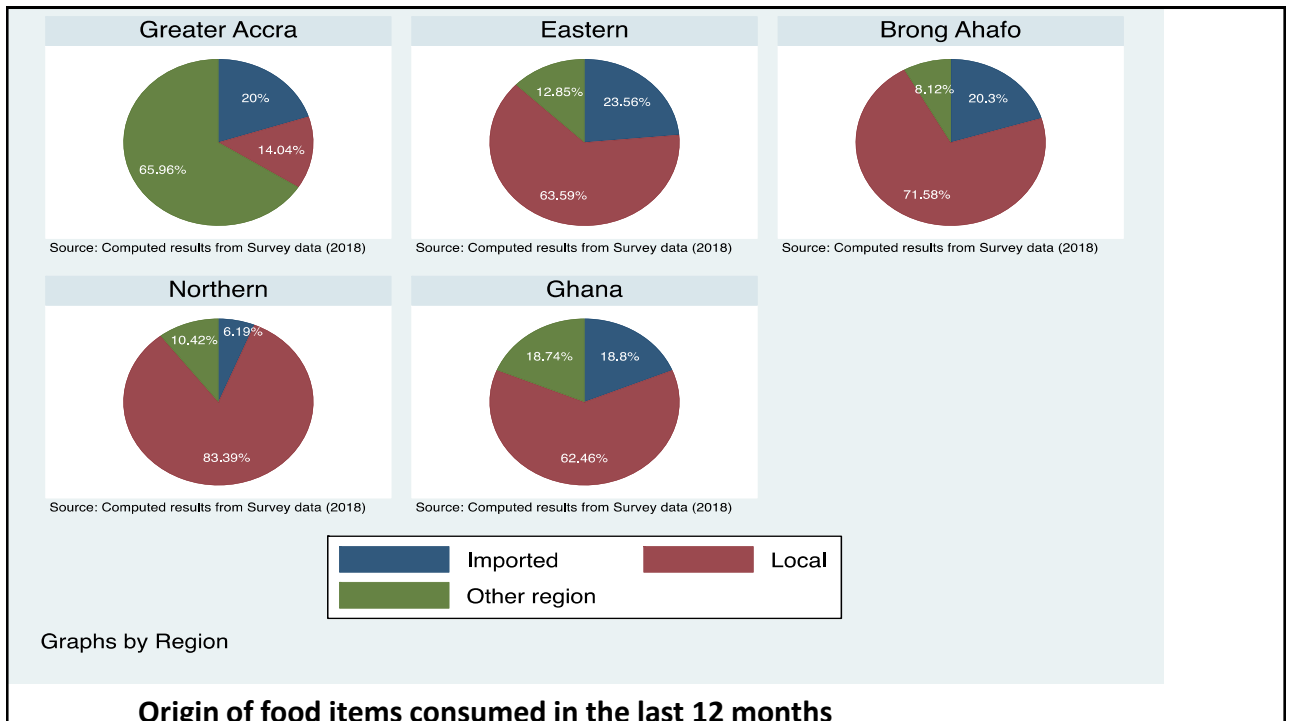
- Distribution promises the most employment opportunities attractive to educated youth
- Storage systems constitute a huge business potential
- Processing – developing the agro-industries
- The emergence of hospitality industries, and high value markets requires a consistent supply
- Greater export possibilities: the EU and USA – Less/more regulation
- There is however a strong need to regulate the markets and streamline relations between farmers, traders and transporters

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FOOD CONSUMPTION PATTERNS

Crop type	Greater Accra	Eastern	Brong Ahafo	Northern	Overall
Roots & Tubers/Sucker	88	249	178	84	599
%	37.45	41.02	38.03	27.36	37.04
Grains	117	188	134	174	613
%	49.79	30.97	28.63	56.68	37.91
Vegetables	29	158	140	43	370
%	12.34	26.03	29.91	14.01	22.88
Fruit	1	12	16	6	35
%	0.43	1.98	3.42	1.95	2.16
Total	235	607	468	307	1,617
	100	100	100	100	100

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Consumers' dislike for locally produced crops

Indicator	Region				Overall
	Greater Accra	Eastern	Brong Ahafo	Northern	
Poor Taste	9	2	5	18	34
	26.47	5.88	14.71	52.94	100
Poor packaging	3	26	37	50	116
	2.59	22.41	31.9	43.1	100
Poor quality (Unattractive)	24	23	18	22	87
	27.59	26.44	20.69	25.29	100
High Cost	4	14	10	4	32
	12.5	43.75	31.25	12.5	100
Unreliable Availability	16	3	11	2	32
	50	9.38	34.38	6.25	100
Quicker Perishability	44	32	19	4	99
	44.44	32.32	19.19	4.04	100
Total	100	100	100	100	100

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Consumption patterns

- Consumers provide the incentives for changes in Ghana's food systems from a subsistence to commercial orientation.
- Eating local is an important characteristic of food consumption landscape as cultural affinities define local food dishes which often demand foods that are environmentally determined.
- In Greater Accra Region, agriculture is of less importance, which makes reliance on food from other regions more important.
- The source of food for most Ghanaians is therefore their own regions followed by those from other regions - An inter-regional system of dependence
- The consumption of imported foods is limited to a few set of products, mostly meat and dairy, vegetables and some cereals especially rice and wheat
- Changing dietary patterns, Poor national capacities and seasonality account for importation.
- The reasons for consumers preferring imported products are mainly the high quality, very good packaging, standardization and reliability.

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Drivers of Ghana's food system

- The Global political economy
 - The orientation of Ghana's economy towards more openness that links farmers to global vertical market networks
 - Naïve assumptions and disastrous consequences amidst palliative gains for large farmers and export agents
 - Reforming institutions for benefit of capitalists agents
- National political economy drivers
 - Most government policies are reflections of the desires and dictates of external forces – transforming local agriculture to 'dock' with international food systems
 - The modern productivist model of agriculture silently prioritizes medium and large-scale producers to the neglect of smallholders who receive limited support
 - Piecemeal interventions – inadequate resources for holistic programs
- Local social drivers
 - Food norms, culture, routinized
 - Shifting diets – globalized citizens – young educated elite
 - Providing the demand that shapes most production planning

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Drivers of Ghana's food system – Cont'

- Urbanisation and Demographic changes
 - Increased urban populations and rising incomes – high production pressure
 - lifestyle changes - Changing dietary needs – fast foods, eating out, eating healthy
- Environmental change
 - Degradation of vegetation, soils and water resources
 - Climate change – huge challenges but great adaptability
 - Biophysical determinants of farming – balanced by technology
- Technological advances
 - Mechanization, improved seeds, irrigation, transport
 - Appropriate technology and simple equipment – not sophisticated technologies

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CONCLUSIONS

- The food system of Ghana has changed dramatically in accordance with changing global and national exigencies
- Smallholder farmers are navigating their way within these changes often with lots of difficulty in production and marketing
- The distribution system holds promise as the catalyst of growth for both agriculture and industry with huge employment potentials
- Policies to enhance smallholder farming should tackle more of the distribution component – dealing with transport, processing, storage, pricing and harmonizing relations in marketing
- Careful reconceptualization of the ‘one district one factory’ program is urgent – recognize economies of scale and also advocate big industry in regions

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POLICY ADVOCACY

- Deal with subordination of national sovereignty to globalised systems
- **future policies should deal specifically with different scales/levels of farmers**
- **Building farmer capacities to deal with Productivity, Quality and Food safety**
- Smart government policies need to necessarily incorporate aspects that reduces the threats of international trade and its rules and regulations on Ghana’s agriculture
- Value chains needs regulation from the national level that seeks to help both farmers, purchasing agents, and factories.
- Streamline the exploitative arrangements that enslave local small producers
- We need an **‘Eat Ghana Act’** which makes sure state resources are only used to purchase locally produced food items. (there is a **‘fly America Policy’**)

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THANK YOU