

IMPROVING FOOD AND NUTRITION SECURITY IN GHANA FROM A FOOD SYSTEMS APPROACH

Background document Dutch-Ghanaian Research – Practice exchange afternoon

Mutual research – practice exchange on transitional food systems drivers

On January 17, 2019, professionals working to improve Food and Nutrition Security in Ghana will exchange with Dutch international multi-stakeholder Research Groups of the [Global Challenges Programme](#) (GCP) Call 3 during an afternoon in Accra, [Mensvic Grand hotel](#). Central theme of this exchange will be "food systems". The eight GCP Research groups, that are halfway their research work of four years, focus on such systems as a result of the increasing awareness of the interlinkages in issues relating to Food and Nutrition Security. Some of them specifically look into the Ghanaian context. Their research perspective considers food and nutrition to be the outcomes of interactions between different elements (production, transport, processing, disposal, consumption, etc.) of a food system. They try to understand drivers (from global to local level) that shape the transitions in the food system that are necessary to improve food availability, access, utilization stability and safety. A relevant aspect herein is the policy environment, with its related institutions, at international, regional, national and local level. Drivers also include the production, sharing and exchange of knowledge and information, through skills, science & technology of various stakeholders. The public afternoon aims to set up such an exchange. Not only could knowledge and experiences of GCP-3 groups inspire Ghanaian policy and practical experts, by sharing input from their daily practices, the practitioners on their turn can sharpen the work of the research consortia.

FSA: An emerging approach for interventions for food & nutrition outcomes

The transition to a food secure future sought by [SDG 2](#) means more nutritious food will need to be produced and consumed using fewer natural resources causing less pollution and producing less waste, in a balanced approach to other SDGs. Yet current approaches do not suffice, as shown by the growing number of hungry people in the world¹ and the high global malnutrition² and environmental burden. They ignore the complexities of food consumption and production, related i.e. to informal markets and health, and have limited focus on ecological and social externalities. The idea is rising that complex food and nutrition challenges need to be tackled at systems level to achieve long-term impact at scale.

A useful description of "food systems" is provided by Van Berkum e.a.³: "Food systems are composed of all the processes related to food production and utilisation: from growing and harvesting to processing, transporting, marketing, consumption and disposal. As food systems operate within social, political, cultural, technological, economic and natural environments they also interact with a large number of processes. Food systems outcomes are interlinked with outcomes relating to climate, health and socio-economics, among other nexus areas. Activities in these areas can result in trade-offs with one another. A food systems approach (FSA) therefore focuses on identifying those as well as potential for synergies."

The multi-dimensional problems and the complex interdependencies within food systems, demand systemic solutions. From the global perspective this means looking at the effects of for example global markets on regional development and local Food and Nutrition Security (e.g. price development, loss of jobs and subsistence farming), in order to improve conditions and safeguard interests on regional and local level. This requires insights into the characteristics of participants within the food system (e.g. female/male, smallholders/commercial farmers and traders, consumers, NGOs, and policy makers). Interventions to improve food systems should take local, regional and global perspectives and contexts into account. Alignment is, however, essential for achieving success.

Translating FSA into action means looking at interventions in systems dynamics, particularly focussing on drivers that shape desired outcomes in the food system (e.g. healthier diets, sustainable use of natural resources and/or living wage). From a food chain perspective for instance food systems are shaped by demand and need for quality food in a (informal) "food environment", in particular also children, pregnant women, disabled people and elderly (that are sometimes producers at the same time), rather than supply. Ideally outcomes should be balanced, delivering sustainable and healthy food systems. Yet the existence of trade-offs means that interventions need to address political and policy dimensions inherent to their transformation; therefore participatory multi-stakeholder processes and inter- and transdisciplinary research approaches are at the core of interventions to apply FSA.

Knowledge lessons on food system approaches

Recently in the Food & Business Knowledge Platform network knowledge activities about FSA have taken place in the Netherlands of which the lessons can be used as a stepping stone for this Ghanaian afternoon:

- In November 2016 a multi-stakeholder [workshop on "the future of food systems"](#) was organized by Wageningen University and Research (WUR) and IFPRI. A key outcome was that an FSA could function as an "idea" generator for interventions. Discussed were needs to identify drivers of FSA outcomes as well as trade-offs between them.
- In June 2017 WUR, the Netherlands MoFA and the F&BKP organized a [lunch seminar](#) to discuss how an FSA can help tackling the triple burden of malnutrition (undernourishment, micronutrient deficiencies, over-nutrition) in Africa. According to the key note speaker of IFPRI Ethiopia, an opportunity exists for African food systems to prevent mistakes made in OECD countries, where efforts to reduce undernutrition have led to over-nutrition and environmental degradation. Participants found that multi-sectoral collaboration is a key entry-point.

¹ FAO [State of Food Insecurity in the World](#) (2018)

² [Global Nutrition Report](#) (2018)

³ Wageningen Economic Research [The food systems approach: sustainable solutions for a sufficient supply of healthy food](#) (2018)

- The Wageningen Economic Research (WEcR) advisory report "[The food systems approach: sustainable solutions for a sufficient supply of healthy food](#)", was the basis for a workshop at the WUR SDG conference in August 2018: "[A food systems approach to food & nutrition security – from the theory to the practice](#)". Jointly organized by WEcR, the Ministry of Agriculture, Nature and Food Quality and the F&BKP, during the session participants explored the relevance of FSA in practice. [Two lessons drawn](#) were: 1) Further understanding is needed on how an FSA could help overcoming key bottlenecks with focused, evidence-based interventions; 2) There is a need to develop multi-stakeholder mechanisms for decision making on managing synergies and inevitable trade-offs.
- In October 2018 WEcR organized the [conference "Towards healthy & sustainable food systems... in an urbanizing world"](#). It addressed various elements of an effective FSA: strengthening data, methods and frameworks which focus on (in)formal markets, supporting decision-making at scale, and accounting for multiple outcomes. Game changers are a move away from focusing on production towards outcomes in multi-stakeholder processes, was stated. An additional IFPRI-SNV workshop on urban food systems, bringing together European stakeholders in The Hague, recommended to implement action research alongside "food systems" development interventions.
- End October a [public exchange](#) was organized about the WUR [scoping study on the global implications of the European food system](#) at the European Commission on how the European driven food system effects on people, economies and environments in LMICs. It concluded that EU interventions can be improved to enhance impact on the SDGs, through (better) assessment of economic, ecological and social effects of the European role in food systems in LMICs, yet this demands very new ways of multi-actor cooperation.
- For the last two years, NWO-WOTRO Global Challenges Programme Call 3 projects have studied FSAs. One of the conclusions so far is that most countries have a food (security) policy focused on a few dominant food systems. Those are often not sustainable future proof, nor transformational. Alongside these systems, there are alternative food systems that may harbor promising elements for improving or changing unsustainable food systems and that are creating new contexts of opportunities for a transition process. Therefore, as multiple food systems can coexist, for example at the country level, political steering on food system outcomes as well as on their synergies and trade-offs is needed. For this clear ideas (vision) on food system futures for a country are needed, with ideas on how to optimize synergy between different paths/objectives, and to manage trade-offs. For more insights see [GCP3 project findings](#), in particular [Characterizing diversity of food systems in view of sustainability transitions](#).
- All and additional insights and documents can be found in this [F&BKP FSA knowledge overview of 2018](#).

Ghana's nutritional status and related policies at a glance

Ghana's current population is estimated 29.8 million⁴ and experiencing the double burden of malnutrition. Of all children under five 19% are stunted and 66% between 6-59 months are anaemic. The prevalence of overweight and obesity is 40% among Ghanaian women, compared to 16% in men.⁵ Agriculture remains a key pillar of the Ghanaian economy, employing 45% of the population and is the main source of livelihood for the majority of the country's poorest households. The domestic agricultural sector is largely subsistence based, composed of 80% crop production (with low yields for both staple and cash crops), 10% livestock, poultry and fishery production, and 10% forestry. Despite having made significant strides in transitioning from subsistence-farming to commercial farming⁶, also having comparatively low import tariffs, Ghana still is a net importer of basic foods, with food imports still costing an average of US\$2.4 billion every year⁷. Major agricultural products imported into the country include bulk commodities (rice and wheat) and consumer ready food products such as poultry. With the expected population of Ghana in 2050 being 50 million⁸ the needed amount for (nutritious) food will only increase. Yet, contribution growth of the agricultural sector to the GDP has consistently declined in recent years. Trends in production of major food crops such as maize, rice and sorghum show that on-farm productivity has stagnated. Therefore in 2017, the Ministry of Food & Agriculture (MFA) has initiated the [Planting for Food and Jobs \(PFJ\) campaign](#). It represents a key strategy to overcome the deficits and reduce the importation of basic food commodities. The purpose of the PFJ programme is to mobilize access to both input and output markets and thereby directly motivate farmers to increase their crop yields and indirectly generate employment opportunities along the value chains. Under the PFJ programme, the government intends to enhance productivity of crops of significance for food and feed in Ghana through integrated services on farming and marketing. The programme provides a framework for engaging farmers through private sector-led agricultural value chain development. The programme will be governed by demand and market-driven approaches that will lead to increases in adoption of quality seeds of improved varieties, fertilizers and good agronomic practices, and marketing of farm outputs while building a critical knowledge base and strengthening systems that will further catalyze private sector participation and full engagement in the agriculture sector. The programme will be spearheaded and implemented by the MFA in partnerships with public and private stakeholders.⁹ Besides, the [Ghanaian governments' National Nutrition Policy](#) aims to increase the coverage of high-impact nutrition-specific interventions that ensure optimal nutrition of Ghanaians throughout their lifecycle. Central during the Research - Practice exchange afternoon on January 17 will be the question how, in this Ghanaian context, food systems thinking from an integrated perspective could improve various food value chain interventions and tackle social and ecological spillover effects to contribute to the best nutrition outcomes for the Ghanaian population now and in the future. Please see the Programme document for more details on the afternoon.

⁴ [United Nations](#) (2019)

⁵ [Demographic and Health Survey Ghana](#) (2018)

⁶ [Oxford Business Group](#) (2018)

⁷ [Ghanaian minister of Finance](#) (2018)

⁸ [Population pyramid Ghana](#)

⁹ [Ghanaian Ministry of Food and Agriculture](#) (2017)

For more information

- UNEP [Food Systems and Natural Resources](#) (2016)
- FAO [Introduction to food systems](#)
- FAO HLPE [Food Systems and Healthy Diets](#) (2016)
- GloPan Foresight [Food systems and diets: Facing the challenges of the 21st century](#) (2016)
- WBCSD [FReSH](#) See also [From Fork to Farm: FReSH Framework for Transforming Global Food Systems](#) (2017)
- TiFN [Sustainable food systems program](#)
- CGIAR [Agriculture 4 Nutrition and Health research programme](#)
- PBL, Netherlands Environmental Assessment Agency, [Food system articles](#)
- WUR [Inclusive metropolitan transitions & Transition Support for Food Secure Metropolitan Regions](#) (2017)
- [Ghana zero hunger strategic review](#) (2017)
- [Observing Ghana's food system transformation through an assessment of processed food retail](#) (2017)