

Food & Business Global Challenges Programme Third Call Midterm Workshop and Public Seminar

Accra, Ghana
January 15-17, 2019



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List of Acronyms

F&B	Food and Business
F&BKP	Food & Business Knowledge Platform
GCP	Global Challenges Programme
FSA	Food Systems Approach
MTR	Midterm Review
IP	Integrated Projects
FTR	fast track projects
NOW	Netherlands Organisation for Scientific Research
WOTRO	A division within the Netherlands Organization for Scientific Research (NWO) funding Science for Global Development

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Executive Summary

This report captures proceedings of the Global Challenges Programme (GCP-3) Midterm Review Joint Meeting and the research-practice exchange on the food systems approach that took place on January 14-17, 2019. It was a conference of presentations, group discussions, plenary discussions, panel discussions and interactive exchanges.

Overview of the Midterm Review joint Meeting

The third Global Challenges Programme Midterm Review Joint Meeting organized by the Netherlands Organisation for Scientific Research (NWO-WOTRO) and the Food & Business Knowledge Platform (F&BKP) took place on January 14-17, 2019 in Accra, Ghana. The event convened a total of eight Global Challenges Programme Research groups working on issues related to food and nutrition security. The meeting aimed at promoting shared learning and exchange on rising key issues in global and regional food security and its impact on local food security. The international multi-stakeholder groups of the Global Challenges Programme Call 3, presented on their projects with best practices, challenges, research findings, key activities conducted and results of their studies. External stakeholders participating on Thursday afternoon also shared lessons learned and gave recommendations.

Emerging results on Food Systems from GCP-3 projects

With regard to the focus on food systems that cuts across the projects, interesting results were shared. Research findings shared included a 'diagnosis' of horticultural food systems in Chile and Uruguay, in which it was found that five systems co-exist in the studied areas. The consortium of the HortEco project aims to strengthen the organic vegetable system by finding a niche for it to scale up. The Fish4Food project identified the mainly informal systems through which cities in India and Ghana are provided with nutritious fish for poor urban consumers. Interestingly, the conclusion is that the informal systems function well and that formalization may imply higher costs and thus lower access for such consumers. Concerns exist about the finding that adulteration of fish leads to food safety issues: a matter, amongst others, that the project will focus on in the second phase. The MarketSafe project concluded after the first rounds of Randomised Control Trials that Aflasafe as a treatment for Aflatoxin finds adoption amongst farmers if a premium price is offered for maize. A market that offers a premium price is, however, too remote from the area in which Aflatoxin is most prevalent. In the second phase of the project, the focus is on whether and how consumers are willing to buy safe maize and thus whether a market can be created.

Further, the project focusing on Nutrition Sensitive Agriculture (NSA) interventions in remote mountainous areas in Lao and Vietnam shared baseline findings on health implications of malnutrition. Such as that stunting amongst children is high (48% in Lao and 58% in Vietnam) and a substantial percentage (62% in Lao and 77% in Vietnam) of households is food insecure. The project monitors NSA interventions, such as provision of nutritious lunches in schools, in which micro-entrepreneurship plays a key role. The inter-sectoral approach taken in the NSA interventions, and the engagement of the consortium with the relevant Ministries of Agriculture, Health and Education, offers promising pathways for achieving scaling of the interventions. The Cocoa project in Ghana and Ivory Coast is in the process of developing models for pruning and shading of cocoa trees as well as for monitoring carbon footprint of cocoa production. The project promotes cocoa production that provides farmers with a living income, which includes sufficient income to buy nutritious meals, to afford school fees, housing, health insurance. A major spin-off of the project is the COCOSOILS project, in which a wide range of cocoa corporations are involved and that seeks to share information on cocoa globally in accessible ways.

Final results of Fast Track projects

The Fast Track projects are nearing their end dates and they presented same key findings as well. The ADIAS project has identified the market for dairy in Kenya and Ethiopia and is developing transformation pathways for safe and affordable dairy production, that aligns with local demand. This implies that it not necessarily seeks to promote pasteurized dairy, as is common in development intervention, which sees very low adoption. The PASMI project has studied the production of Tiger Shrimp and Blue Swimming Crab, which play a role in sustainable aquaculture production that helps restore mangrove in Indonesia. In the last months the project seeks to link this with the findings on Chain Innovations, which will inform how farmers can raise their income, such as by harvesting crab at

a later stage in its life cycle. The Allotment Gardens project has studied two pilot allotment plots in urban areas in Benin and sees results that show increased nutrition amongst producers. The availability of land has appeared to be a major issue, however, which will be further studied, the findings of which will feed the Site Allocation Tool that is under development.

Comprehensive food systems approach in the GCP-3

In a session on the Food Systems Perspective the participants shared their approaches on this perspective, in response to an input paper formulated by the consortium of the HortEco project (based on an (Open Access) published article of the consortium). Some conclusions of this session were:

- Normativity and political orientation/preference towards certain food systems must be made explicit in research and the (policy) systems they connect to.
- However, it was considered better to think about creating synergies between different food systems.
- Indicator-based systems can be useful to stimulate discussion, but should not be seen as a panacea.
- The many components of food systems may create trade-offs (e.g. food access versus nutritional value) in short and long term.

These findings were also shared with a wider Ghanaian audience during the public event that was organized in the afternoon at the last day of the event, organized by the Food & Business Knowledge Platform (F&BKP). More information about this public event is included in this report. Additionally, videos including one on how it was presented in the Ghanaian news and one with the participants reflecting on the afternoon, as well as a news item, can be found at the website of the F&BKP.

1. Midterm Meeting



The Midterm Review workshop organized by the GCP secretariat (NWO-WOTRO) was intended to serve twofold objectives which were:

1) Assessment of progress for the GCP-3 projects through a scheduled interview with each consortium as well as discussions during the meeting.

2) Joint learning where bottlenecks and challenges in project execution identified through the self-assessments were addressed through plenary exchanges, group discussions and breakout sessions.

The joint learning was structured in a systematic way to develop practical suggestions through the

research findings that would contribute to the improvement of approaches for inclusive agribusiness. During the workshop's opening on the evening of January 14, all research groups pitched their projects.

1.1. Day One: Research findings

DATE: Tuesday January 15, 2019

FACILITATOR: Dr. Huub Löffler – Member Steering Committee F&BKP (Strategic Advisor WUR)

1.1.1. Introduction and background

Introduction of NWO-WOTRO science for development Food and GCP: Monika Brasser - NWO-WOTRO

NWO-WOTRO Science for Global Development funds and monitors innovative research on global issues with a focus on sustainable development and poverty. The NWO-WOTRO research projects are realized by interdisciplinary teams of researchers and in collaboration with non-academic stakeholders. Part of the objectives of NWO-WOTRO is to facilitate solutions for development challenges and strengthen the bridge between research, policy and practice. GCP-3 focuses on improving food and nutrition security with a food systems approach. GCP-3 brought together a total of five Integrated Projects (IPs) and three Fast Track projects (FTRs). The [background of the Global Challenges Programme](#) was presented by Monika Brasser. A video by GCP coordinator Corinne Lamain, about [NWO-WOTRO's vision on Research for Impact](#) was available for the participants in preparation of the meeting.

Introduction to the Food & Business Knowledge Platform: Vanessa Nigten – Food & Business Knowledge Platform

In [her presentation](#), knowledge broker Vanessa Nigten explained that the Food & Business Knowledge Platform (F&BKP) is one of the five knowledge platforms initiated by the Dutch Ministry of Foreign Affairs in the field of global development. It is an independent knowledge brokerering space for food and nutritional security linking businesses, science, civil societies and policy. It connects knowledge supply and demand of various stakeholders by jointly developing knowledge, synthesizing and disseminating knowledge and professional learning to adapt policy and practices. A main activity of the platform in food and nutrition is to strengthen research impact of NWO-WOTRO F&BR projects. Besides giving input for the development of scope definition, the platform facilitates enhancing

knowledge sharing and research uptake through information exchange and co-creation with the F&BKP networks, and strengthening research uptake skills of project members.

1.1.2. Research findings - presentations

During this session, representatives of eight GCP-3 projects presented their key research findings. Key themes were identified for further discussions in the ensuing plenary session.

Presentation 1: Sustaining food supplies and improving Health: Integration of small farmers into modern value chains with food safety standards in Kenya (Market Safe) - Vivian Hoffmann, Wageningen University & Research

Unsafe food is a major and under-recognized cause of ill health and deaths globally. This study aims to shed light on how market forces can be leveraged to improve the safety of food in contexts where the enforcement of food safety regulations is weak. The research is based in Kenya, where maize, the staple grain, is often contaminated with a cancer-causing toxin, aflatoxin. The researchers conducted an experimental study involving 160 pre-existing groups of maize farmers in a region of Kenya where maize is commonly contaminated with this toxin. The primary aim of the study was to evaluate how market incentives for safer maize affect farmers' purchase and use of a new technology – Aflasafe – to control the toxin. Findings show that 18% of the farmers in targeted groups purchased the product, and that the volume purchased increased by close to 50% when a price premium was offered for maize that met the associated food safety standard. Results also indicate that a lack of demand among bulk maize buyers is a constraint to the development of markets that support food safety. Future work through the project will address this challenge.

Discussion: Does Aflasafe work on other toxins?: Though Aflasafe is spread on the field when sowing the maize, it does not have impact on any other toxins.

Presentation 2: Horticultural food systems based on ecologically intensive production and socio-economically sustainable value chains in the transition economies (Chile and Uruguay) - Daniel Gaitan Cremaschi, Wageningen University & Research

Both in Chile and in Uruguay HortEco researchers identified local organic and agro-ecological food systems and their actors as showing promise for scaling out of low-or-no pesticide food systems. For this purpose a scientific framework was developed that enabled characterizing combinations of production systems, value chain systems and the embedding innovation support systems. The information from these mapping activities is being used to provide actors with a new perspective on developing low-or-no pesticide activities.

Scientific approaches revealed that there is little or no relation between (the on average high) pesticide and fertilizer use and crop productivity for 4 major horticultural crops in Uruguay, and suggested that just replacing chemical pesticides by biological ones is insufficient for key pest control, calling for systems redesign. Analysis of current producer organizations (POs) showed that an economic focus was associated with small size, a product focus, member investment and high horizontal and vertical coordination. Such coordination was much lower in POs with value-driven objectives.

Using a co-innovation approach to project design and implementation HortEco developed network-weaving activities to bring together previously disconnected actors of local organic and agro-ecological food systems, and enhance sharing of scientific and non-scientific knowledge, experiences and skills.

Presentation 3: Assessing and supporting input and advisory service systems for resilient market-oriented smallholder dairy systems in the Ethiopian and Kenyan highlands (ADIAS) - Laurens Klerkx, Wageningen University & Research

With the high demand of dairy product in most cities in Ethiopia and Kenyan Highlands and the decline in farm sizes in these two countries, ADIAS project assessed how the transition process of small-scale dairy production system to meet the growing demand would be for farmers and how they can benefit from the process.

Discussion: How does the model help small scale farmers increase their income? Through this model farmers get quality feed for their cattle thereby making them produce quality milk which is then processed for consumption so most consumers are assured of good milk which helps the farmers expand their urban market which in turn generates much income for them.

Presentation 4: sustainable aquaculture to support mangrove forest restoration in Indonesia (PASMI) - Roel Bosma, Wageningen University & Research

Pasmi focuses on restoring destroyed mangrove areas at North Java in Indonesia, which are being cleared to pave way for coastal developments. To do this Pasmi together with stakeholders enhanced sustainable – rural urban food systems by designing environmentally friendly alternatives for shrimp culture, which was destroyed. In the preliminary findings it was identified that to improve water quality for the shrimp growth there is the need to provide technology to cultivate multi-species ponds, such as seaweed, green mussels, tilapia and milkfish in the IMTA approach. Policy makers are expected to develop policies that will support aquaculture innovations that are adapted by small-holders.

Discussion: What is the income of fish farmers used for? Most small-scale farmers use income to upgraded production to a larger scale.

Presentation 5: Fish for food security in city regions of India and Ghana: An interregional innovation Project (Fish4Food) - Amalendu Jyotishi & Benjamin Bettey, Amrita Visha Vidyapeetham University and Kwame Nkrumah University of science and technology

The Fish4Food project – that aims to understand and improve low-price fish chains in West Africa (Ghana) and South Asia (India) – is now moving from the research to the innovation phase. The studies conducted by three PhD students, augmented with research by students from three universities and inputs from senior researchers, has generated a basic understanding of the functioning of low-price fish chains as they lead from the shore to coastal and inland urban consumers. This knowledge base has been complemented with a survey among low-income households, in order to identify their seafood-related food security and their views on impediments with regard to the availability, accessibility, and quality of seafood. The combination of research findings constitutes the starting point for a set of innovative pilot projects in both countries, which were identified in a series of workshops. The Ghanaian team will now concentrate on seafood adulteration through chemical additives, and on fish processing technology development and dissemination. In India, an action plan is being developed to support small-scale women traders serving low-income groups and to highlight the increasing diversion of fish for fishmeal production. In both locations, buy-in has been obtained from national and international governmental actors.

Discussion: When cities are far away from coastal areas, there is reliance on importation of fish. Such as in the hinterland like Tamale in Ghana, which is far away from the coastal area. Consequently, the region relies on imported frozen foods, which may be bad for health because of colling issues in the chain.

Presentation 6: Cocoa crop improvement, Farms and markets; a science – based approach to sustainably improving farmer food security in West Africa - Maja Slingerland, Wageningen University & Research

Together with cocoa companies and cocoa producing countries the researchers have identified a common problem: lack of knowledge on cocoa nutrition in full sun and shaded production systems. This knowledge gap prohibits the productivity increase needed to provide cocoa farmers with a living income and makes it difficult to develop cost-effective ways to support farmers with technical advice. To investigate the problem the project has established a new pruning-shading trial on a research facility of a company and uses an existing plot with older cocoa trees on the research station of the national research partner in Ivory Coast. The project developed a first version of a 3D model that builds cocoa tree architecture in response to shading and will allow to demonstrate the effect of pruning in the future. Both models serve to identify new research questions. The project developed a cocoa version of the COOLFARM model to assess the carbon footprint of different cocoa management practices. Building trust and fostering credibility the project has helped to spark the CocoaSoils partnership (see www.CocoaSoils.org) in which major cocoa and fertiliser companies, national research institutes from Ghana, Ivory Coast, Cameroun, Nigeria and international research centres will generate knowledge by sharing resources collaborating in experimentation and postgraduate capacity building.

Discussion: No mention of nutrition in project findings?: Much research on this is available in this regard, therefore we decided to focus elsewhere. However, it will be considered along the way.

Presentation 7: Enhancing urban food security through development of allotment gardens in and around the cities of Benin – Donald Housessou, *Actions pour l' environnement ET le Development Durable*

This project focused on the developing integrated framework to enhance urban food security through the encouragement of allotment gardens in and around the cities of Benin. With the urban population growing as the years pass, by making access to quality and nutritious foods difficult, allotment gardens can be a source of fresh and healthy food for the urban poor. Preliminary findings show that one of the main difficulties is to find suitable land for the gardens but that, once established, there is a lot of interest to participate by the target group.

Discussion: The inability of urban poor to consume nutritious food cannot be blamed on income level, but relates to a lack of education on nutrition, rich consumers for the same reason may still not consume healthy meals.

Presentation 8: Scaling up Nutrition-sensitive agricultural initiatives in poor mountainous areas in Vietnam – Jacqueline Broerse, *Vrije Universiteit Amsterdam*

Insights from the qualitative and quantitative baseline and retrospective studies conducted the past year confirm the severity and complexity of food and nutrition insecurity among upland, remote populations in Vietnam and Laos. Together with stakeholders, and based on insights from studies and the broader literature, the project developed context-specific, multi-component and multi-sectoral interventions for both Laos and Vietnam. Community groups, local governments from education, agriculture and health participated in the design and selection of interventions. In both countries the interventions are implemented and monitored (Vietnam since January 2018; Laos since August 2018). For example, in Vietnam social entrepreneurship initiatives are undertaken to provide nutritious porridge in nursery schools. In Laos school education programs utilizing newly set-up school gardens are amongst the first interventions piloted. The potential for horizontal and vertical scaling up in both Vietnam and Laos is the ultimate objective of the project. In Vietnam, together with the local government, a legal framework for scaling up of NSA will be developed. In Laos, the new projects directly allow for horizontal scaling and promising collaboration with governments will contribute to vertical scaling.



1.1.3. Research findings – thematic discussions

In this session, group discussions were held based on nine thematic issues emanating from presentations and discussions in the research findings session. These themes were: 1) food safety 2) role of consumers 3) transformation pathways 4) input and output markets 5) nutrition security 6) resilience 7) urban issues 8) trade off intensive system and 9) measurement of common property resource. Group representatives pitched the feedback in plenary.

1. Food safety

Food safety is a difficult issue for consumers, producers and even the government. Consumers do not prioritize food safety, making it difficult to ensure the system works. Farmers are primarily concerned with yields and food safety is a byproduct of investments. For consumers affordability could be a trade-off of food safety, without this connection strengthened it will be difficult to ensure food safety improvements.

2. Role of Consumers

Information about the needs of consumers is key in production. For this reason, value chains must be structured to make access to this information easier. If the value chain is unstructured it becomes difficult to know what exactly consumer preferences are. Consumer information is mostly aggregated at the higher level but consumers are very diverse making it difficult to identify their specific needs. If there is more information about consumers then farmers can actually produce to meet consumer target.

3. Transformation pathways

It was considered that many projects focus on incremental problem-solving while others look more on existing changes when it comes to transformation. Often change takes place fast when powerful players in the field force the transformation pathway. Also, the kind of partners one is working with can either help the régime or destroy it. Prior to implementation, in the development stage of the project the system may appear more malleable. But when activities are undertaken barriers in the régime are encountered. Long term transformations of the system may take place outside the duration of projects, which speaks to aligning with other initiatives. A key question remains whether evidence actually matters when it comes to transformation pathways or whether other factors are more dominant?

4. Input and output Markets

Most farmers produce for themselves and for commercial purposes, therefore it is very important for them to get their produce closer to consumers for purchases. To be able to achieve this farmers must be mindful of requirements for transitions to achieve alternative market linkages. They are:

- Public sector support
- Access to market
- Awareness of consumer demands
- Justification of price differences
- Time and stamina.

5. Nutrition Security

Food and nutrition are not playing prominent roles in projects, which could be strengthened by raising attention for this in the interdisciplinary constellations. Most research seems to focus on measuring the types of food consumed, more than measuring nutrition. For instance, the group that worked on food and security in relation to fish, mainly measured whether fish supply is secured, which may not necessarily enhance nutrition security. Nutritional questions should be raised among projects.

6. Resilience

When it comes to Resilience there is the need to develop tools and indicators to quantify and assess resilience. This requires more clarity on what resilience is about, for instance in relation to market failure, crop failure or climate change. A provocative statement resulting from the discussion was that resilience is an illusion.

7. Urban issues

When people move more to urban areas, there is the need for higher productivity to feed the growing population. Increase in productivity per person and of course per unit land area. That also means that value chains must be more effective and work efficiently in order to satisfy the growing urban population. One thing about urbanization is break down of social cohesion in both rural and urban areas. People may be working in rural areas and when you have urbanization taking place then the social cohesion breaks down. Urbanization also brings about intensification of urban agriculture because there is less area to use to cultivate to feed the population.

8. Trade off quality and affordability

Quality goods is quite expensive making it impossible for people to purchase therefore there is need for government interventions to help reduce some prices and make it affordable. Higher demands might lower prices. There is need for knowledge about incentives within the system to address these challenges. One such an issue is the increasing use of fish for fish feed instead of commercial fish for food. Consumers have different definitions of quality of products as they come from different backgrounds.

9. Measurement of common property resource

Management of the commons is motivated by ecosystem properties thus eco systems cannot easily be divided and cannot be excluded from external users. Commons can be managed if they are properly regulated by users. Currently many of those ecosystems are under high pressure and the challenge is to define public and private interventions that can sustain common properties. An example of an issue with commons appeared in the allotment gardens project, where it appeared impossible to find neighbours who were interested in joining forces to make a fence.

1.1.4. Best practices and challenges

Presentation 1: Sustainable aquaculture to support mangrove forest restoration in Indonesia (PASMI) – Roel Bosma, Wageningen University & Research

Best practice: Working with 'fields schools and alumni; Pasmi team members contributing to the introduction of findings and experiments with farmers.

Challenge: Fluency in English to access PhD at WUR; convince farmers to apply the more complicated IMTA; Have GO extension services disseminate PASMI findings.

Presentations 2: Enhancing urban food security through development of allotment gardens in and around the cities of Benin – Donald Hosseou, *Actions pour l' environnement et le Développement Durable*

Best practice: Tailored capacity-building to urban poor can successfully help them develop allotment gardens and improve food security and income.

Challenge: i) it took several months to find land to develop gardens ii) difficult to secure support of policy makers to encourage development of allotment gardens.

Presentation 3: Assessing and supporting input and advisory service systems for resilient market-oriented smallholder dairy systems in Ethiopian and Kenyan highland – Laurens Klerkx, Wageningen University & Research

Best practice: When studying food system transition processes, carry out comparative studies between areas in two countries with comparable agro-ecological conditions. This brings out more clearly differences in transition stemming from market and context factors.

Challenges: Difficulties in access to farmers and cooperate institutions due to expectations for direct benefits for them.



Presentation 4: Cocoa crop improvement, Farms and markets a science-based approach to sustainably improving farmer food security in West Africa – Faustina Obeng, Wageningen University & Research

Best practice: Relationships with national boards and research stations in both countries were built, as well as with private companies within the cocoa value chain; analysing what smallholder farmers within the chain really desire.

Challenges: Getting partners to commit to and act on the project and its outputs was a problem, for major cocoa companies access to already collected data and experimental sites was an issue, on the part of farmers. Furthermore matching of insights with farmers' wishes was difficult.

Presentation 5: Horticultural food systems based on ecologically intensive production and socio – economically sustainable value chains in the transition economies Chile and Uruguay – Daniel Gaitan Cremaschi, Wageningen University & Research

Best practice: Focusing on multiple domains and disciplines and common planning to research, farmers' extension services, and public companies.

Challenge: To align the focus of the project with pre-existing activities of farmers.

Presentation 6: Fish for food security in city regions of India and Ghana: an inter- Regional innovation project (Fish4Food) – Joeri Scholtens, University of Amsterdam

Best practices: (i) The use of a mixed market methods approach to understand the working of the value chain ii) Ethnographic research in different nodes of the chain

Challenges: Transdisciplinarity in innovation Pathways: it was difficult to get business, governments and other stakeholders truly interested in improving the functioning of fish value chains to benefit poor consumers.

Presentation 7: Scaling up nutrition – sensitive agricultural initiatives in poor mountains areas in Viet Nam and Lao PDR – Dirk Essink, Vrije Universiteit Amsterdam

Best practices: Contributions to nutrition specific issues in target region with health practitioners.

Challenge: Because they wanted to do a robust analysis of the data, they were not able to conduct a detailed analysis before the start the intervention otherwise it would not have been possible to measure the effect of the intervention.

Presentation 8: Sustaining food supplies and improving Health: integration of small farmers into modern value chains with food safety standards in Kenya – Sarah Kariuki, Wageningen University & Research

Best practice: For the future to break through the area of baseline survey, participants and non-participants must be surveyed in order to have a backup. It is important to know how much to survey research subjects when designing your research project.

Challenges: Challenge was about methodology, which is the baseline survey, but most people surveyed maybe biased with treatment effects. Interviews may shift focus towards the needs of what will be studied. For instance, in our study those surveyed are 52 percent more likely to adopt Aflasafe compared to those who were not; this result was likely to bias our treatment.

1.1.5. Thematic discussions on best practices and challenges

Five thematic areas were identified in the challenges and best practices presentation session for further discussion. These were: 1) end user perspective 2) methodologies including baseline 3) political Economy of change 4) sustainability of result and activities; and 5) building Partnerships. Representatives of the groups shared their discussion in panel plenary presentations.

1. End-user Perspective

It is imperative when you study social change or phenomenon process to include the end-user perspective. The group specifically mentioned also including perspectives of NGOs.. It gives legitimacy, it informs interventions and supports implementations. When you want to understand the phenomenon, it is better you collect data with stakeholders as well as do analysis together, because doing the analysis alone can be misleading.

2. Methodologies including Baseline

When it comes to Methodologies, it is important to follow what works and change the approach when it does not work and there is an outcome you want to understand. This means interventions are not static. It is very interesting when interviews channel research towards what stakeholders really want. Research is supposed to make a difference and not produce what is expected.

3. Political Economy of change

Some projects build on the assumption that the developed technologies will be adopted by farmers and that their income and wellbeing will increase. The premise of most of the projects seems to be that the supporting companies are genuinely interested in contributing to poverty alleviation. However, practice shows their motivation is dominated by two other interests: Continuous supply of

their raw material (or increased demand for, or profit from, their products); reduce farm-gate prices. For this reason, farm gate prices might be reduced, therefore companies are not willing to pay more for the services of farmers to allow them invest into their works.

4. Sustainability of result and activities

Researchers in general want their projects to be sustainable and should always take measure to ensure sustainability. It is appropriate to test the findings right after the project. Researchers must select partners who can institutionalize the findings of the project. They also need policy support and therefore must seek contact to different actors and find out how they are each related to each other and what dynamics are playing.

5. Building Partnerships

Partnerships are key in research as they can help smooth the process. The choice of partner is very important. All parties should have a clear and shared understanding of the aims and objectives of a project and ideally also share a vision beyond the project level. It is also important to retain partners and build trust with them.

1.2. Day Two: Sustainability in food systems

DATE: Thursday 17, 2019

FACILITATOR: Dr. Huub Löffler – Member Steering Committee F&BKP (Strategic Advisor WUR)

On January 16, the research teams had interviews with NWO-WOTRO and the F&BKP. On Thursday January 17 in the morning, the Midterm Review Joint Workshop continued with a session consisting of a key note, followed by pitch presentation by representatives of the eight GCP-3 projects on food systems aspects of their project.

1.2.1. Key note presentation on food systems by Laurens Klerkx

Food system can be defined as the network of actors and activities that interact with one another within an economic environment. The food system is influenced by conditions such as food security policies, food loss/waste policies, economic models, food subsidies among others.

Certain analytical aspect of food system includes political economy perspective, nutritional perspective and environmental perspective.

What is the intended use of the food system approach? To co-design with stakeholders by way of presenting and discussing with them in order for them to make choices as to which direction they want food system to be approached.

1.2.2. Project pitches

Projects were asked to react to a [three-pager outlining the theoretical background of the food system approach](#) which was shared beforehand.

Presentation 1: Sustaining food supplies and improving health: Integration of small farmers into modern value chains with food safety standards in Kenya – Vivian Hoffmann

The aspect of food system practiced in this project is the hybrid system where smallholder farmers cultivate crops that are not home-grown in a disorganized market without a lot of integration. Due to this disorganization in the market and informality, food systems are not well observed and it creates problems of increasing food safety hazards.



An approach to handle this problem is to build formalization and to connect the smallholder farmers to industries and processors that have the capacity to test food safety. This would also be used to create incentives to smallholder farmers for them to improve safety. Another approach is the use of local democratic structures of farm groups (group of about 30 farmers that already exist in villages). They aggregate farm produce and test for food safety contaminant. This approach is cost effective unlike having to test individual farm produce which costs as much as the produce.

Presentation 2: Scaling – up nutrition – sensitive agricultural initiatives in poor mountains areas in Viet Nam and Lao PDR – Dirk Essink

This presentation focuses on nutrition sensitive paradigm and consumer exchange. Rather than looking into the food and security assess and main attractors of money the focus was on the agro industrial perspective of food system. Research shows that 70% of households are food insecure and 50% of children are stunted which has an effect on productivity and health.

Researcher and producers shouldn't only look at the value chains and the support systems but also center their interest on consumers. The health of consumers, what drives what they purchase and why they do not purchase healthy ecological foods? If consumers are taken into consideration and the drivers of their food choices, a better food system can be practiced through a more nutrition sensitive and ecological sensitive approach.

Presentation 3: Food Systems Approach. Response by the Fish4Food project – Joeri Scholtens

The food system approach has developed primarily with the agriculture sector in mind more than the fishery system. There are sure elements that are applicable to the fishery system.

The current value chain in Ghana and India possess great qualities that are functioning well for the poor. In the sense that poor people have access to affordable highly nutritious fish and that the food value chain provides livelihoods for poor women. These contributions result from high levels of informality that prevent commodification, concentration and vertical integration, and simple smoking technologies that allow the preservation of fish without adding much to the price. A way to improve this is by strengthening the organization of these women, and addressing worrying signs of fish adulteration. But otherwise, the question of how to nurture the current system and prevent interventions that undermine the current system becomes important. Such worrying trends include, for example, a heavy governmental focus on aquaculture, a government allowing industrial fishers to squeeze small-scale fishers, and focus on developing technologies that allow more fish to be exported. It also requires acknowledging that there may be a trade-off between fish quality and fish affordability: hence interventions to make fish products more hygienically need to be carefully weighed against affordability.

Presentation 4: HortEco contribution to the Conceptual/thematic exchange: Food System Perspective – Carlos Huenchuleo Pedreros

Agricultural food products have generally been shaped by agricultural and food policies that follow the productivity paradigm to favor an agro-export model that relies on technical innovation, efficiency and productivity. Vegetable food systems that observe this paradigm are produced using agrochemicals. Regardless of whether they contribute to broader goals of food and nutrition security, environmental security and social welfare. The use of this vegetable food systems approach have often resulted in soil pollution, water pollution and biodiversity loss, economically unsustainable smallholder livelihoods and problems on human health, as the population is forced to buy vegetables for home-consumption

that often contain high amounts of pesticides, in many cases exceeding the legal maximum residue levels.

An alternative research was initiated and conducted on typology vegetable food system approach with weedicide in focus. Based on this typology, the project decided to zoom in on locally-embedded organic and agro ecological vegetable food systems, as these were deemed promising niches for transition to low-or-no-pesticide systems. This means that current attention is on actors involved in these systems, the value chains and the technical advisors and public institutions of both countries. Less attention has been given to actors involved in dominant vegetable systems such as large-scale agricultural producers and large-volume traders or retailers.

Presentation 5: Cocoa crop improvement, farms and markets: a science-based approach to sustainably improving farmer food security in Ghana and Ivory Coast – Maja Slingerland

The cocoa project considered much of agro – industrial paradigm. Government and companies play a role in improving productivity at farm level. The project aims for sustainable intensification of cocoa production which assures high production under climate change and policy scenario. Other aim of the project is to focus on farmers income increase. However, the project does not aim at going towards large scale plantations with hired labour or mechanization nor at increasing corporate power which is often associated with this paradigm. It focuses on smallholders as independent entrepreneurs cultivating cocoa as one of their livelihood strategies, reaching at least a living income. Smallholders can be a part of cocoa supply chains more or less strongly linked to cocoa buyers.

Some transition strategies considered are:

- improving the production of cocoa per hectare in a sustainable way. When this is done, Increase in yield may decrease the need for deforestation. Nonetheless, government law enforcements are needed to support forest protection.
- Evaluating the importance of cocoa at farm household level and its potential to generate or contribute to a living income.
- increasing resilience of cocoa production facing climate change by investigating the potential of shade trees as adaptation measure, to protect cacao crop against high temperatures without decreasing cocoa yields through inter tree competition and as mitigation measure improving carbon footprints.
- Improving access to knowledge and inputs fitting the diversity of cocoa farms.

Presentation 6: ADIAS project on Food System – Anne Kingri

The dairy project looks at mixed crop livestock farming systems and market arrangement in the highlands of Kenya and Ethiopia. It is dominated by smallholder actors who are transitioning towards an intensive and more market oriented system. A common market arrangement in both countries is the traditional territorial market arrangement that has to do with supply of raw milk from the producer to the consumer through a retail system. Also, there is a more advanced agro industrial supply chain where the milk is processed and packaged and delivered to consumer.



Transition pathways that are analyzed are:

1. Farming system transition pathways
2. Transition of sales arrangements
3. Transition of support service
4. Interactions between the three above

Presentation 7: Enhancing urban food security through development of allotment gardens in and around the cities of Benin – Donald Houessou

The project aims at Improving urban food security by developing allotment gardens in an ecological friendly way in and around the cities of Benin for direct consumption and coming up with an integrated framework for urban gardens to improve food security of urban poor. The project examines the impact of allotment gardens on food security and income of targeted groups and also develops a site selection tool that supports policymakers in their choice for appropriate prospective interventions that maintains development of urban agriculture. The main focus in the urban gardens is on the production of fresh foods and leafy vegetables. Therefore, the project is closely aligned to the territorial and ecological paradigm, by training urban poor to produce fresh foods in an environmentally sustainable way while enticing policymakers to upscale similar initiatives.

Presentation 8: The food system in which PASMI operates – Roel Bosma

The project focuses on the production of shrimp and milkfish. PASMI uses a territorial/ecological based food system. It aims to support the transition from the exploitive production of the natural resources towards a food system that respects and has a more solid base in the local ecological resource base. The production component of this food system has been ruined by unsustainable practices, but producers and the government have started to become aware of the need to recover its ecological basis. The extensive method of production using few external inputs, dominates by far regarding the spatial occupation. However, whether this system produces more shrimp compared to the few intensive farms is unknown. Although the intensive farms produce more per hectare, they use more feed, groundwater, energy, plastics and other chemical inputs having trade-offs for sustainability and the local ecology. The production of feeds requires natural resources in other locations, as well as transport, and water and energy for processing.

1.2.3. Thematic discussions on cross cutting issues on food systems approach.

Food systems in GCP-3 projects

- Some take a very holistic perspective, e.g. mapping food systems and characterising food & nutrition security and food safety aspects of value chains.
- Some are more focused on the production system and work from there, e.g. in integrated shrimp systems and cacao.
- Some are really focused on a certain transition with a certain perspective (e.g. towards agro-ecology), whereas others are more focused on incremental improvement in production systems and chains.
- Some are transitioning 'informal' systems towards more formalized commercial systems, whereas other aim to create or maintain more informal grassroots based systems.

A number of cross-cutting themes were identified, on which break out-groups discussed in more detail. Themes identified include 1. Trade-offs intensive system 2. Weighing perspectives 3. Role of Entrepreneur 4. Project contribution pathway 5. Transition or maintain.

1. Trade-offs intensive system

When addressing this a lot of factors comes to play. Farmers reduce price of their farm produce just to increase sales but this action compromises on the quality of the goods which then will not attract high income. These farmers are usually smallholders. However, trade off in food system cannot be analyzed without stakeholders since they inform practical decision making. Integrated approaches can improve future trade off analyses.

2. Weighing perspectives

This basically is about weighing perspective within the team, in teams different people have different perspective on how food systems ought to be. Among the different stakeholders who come together in interdisciplinary projects, some may have a view of how the future food system ought to be and therefore may have a general ideal of how the production system should look like, some may also be a little bit neutral because of their experience in other systems. In all this the context in which the projects are operating in is very key when it comes to weighting perspectives. Probable taking on debates to find out what the country views as good food system and the contribution the project is likely to add to the debate. Certain actors who have dominant values in systems may not be

compactible for this reason trade off's will be made to pave way for synergies. Synergies will allow people who have similar failures on different projects share findings and enrich their knowledge.

3. Role of the entrepreneur

This is very crucial when considering food safety. Informal food safety practices may be dangerous. However, informal systems may function very well to: food sellers value relationships with their customers so much that they find their own ways to prevent their produce from going bad. Adulteration can be problematic. For instance, sellers smoke fish to preserve it but when all the fishes are not sold over a period, they go bad but they will still be at the market for sale. For fresh fish, sellers use ice to preserve them but how safe will the produce be after some hours? For milk it is very easy for customers to know it gone bad because the smell and color changes, it is important to give these actors formal education on the appropriate measures to ensure food safety is full adhered to in the execution of their duties.

4. Project contribution pathway

For each project, developing a clear contribution pathway is important. Using the aquaculture system project in Indonesia as a case study, it was shown that grass roots farmers were educated on good practices when it comes to nutrition and food safety. This also helped change production practices of the farmer in home gardens with mixed crops. The project also generated evidence to influence the development of policy. In Vietnam income from cash crops was raised through the research findings. The private sector was also involved in moving the product to the market and taking of surveys for the products and process. Projects that encourages capacity building of stakeholders are mostly appreciated when addressing this element of capacities required for achieving transformations.

5. Transition or maintain

When addressing food systems producers, consumers and various actors that fall in between , such as policy and value chain actors and intermediaries must be taken into consideration. A desired food systems will:

- give producers a fair price that will be profitable for them
- a dependable market for farm produces.

Food within this system must be affordable, nutritious, safe and easily accessible for consumers.

For the actors that fall in between, the process of conveying the food from the production context to the consumption context should:

- be profitable for the entrepreneur in the middle
- Provide be quality assurance by policy makers
- provide efficiency within the chain.

The following aspects are crucial in movement of the food:

- coverage of risk
- support for farmers in terms of input services
- research extension
- guaranteed quality for consumption
- all these must be safe for the environment.

If we want to consider all these things is it an issue of transitioning or maintenance? Maybe it is not an issue of transition of the entire system, but having space for diversity within the food system. This space must come with support in terms of policy, research , structures and resources that make room for co-existence. This requires that and within the more dominant system there must be a redistribution for power among actors. Taking all these to consideration researchers need to identify where the project will be most impactful that in order to decide where research is needed. So it might not be a question of transitioning or maintaining, but about which of these factors must be the focus.

Summary: Some key issues discussed in the session

- Normativity and political orientation/preference towards certain food systems must be made explicit in research and the (policy) systems they connect to
- However, better to think about to create synergies between different food systems
- Indicator based systems can be useful to stimulate discussion, but should not be seen as a panacea
- The many components of food systems may create trade-offs (e.g. food access versus nutritional value) in short and long term



2. Public Seminar “Future food systems for Ghanaian food security”

FACILITATOR: Ama Kudom-Agyemang – Environmental communication expert and journalist
ASSISTED BY: Dr. Huub Löffler – Member Steering Committee F&BKP (Strategic Advisor WUR)

After the internal exchange days between the consortia, an interactive session was held between the Dutch international multi- stakeholder research groups of the GCP Call 3 and professionals working in Ghana on the central theme food systems. The agenda for the conference was to develop recommendations on how to improve food and nutrition security in Ghana from a food system approach. Exchanges were driven by findings from the Global Challenges Programme (GCP) international researchers and Ghanaian professionals to improve food and nutrition security. Professional Ghanaian bodies that were invited to reflect on these experiences and findings and develop recommendations included local and international non- governmental organizations (NGOs), private sector, government agencies and, donors. The exchange was structured as follows: the first part was an introduction to the afternoon and an explanation of the Food & Business Knowledge Platform and the NWO-WOTRO Global Challenges Programme (GCP) followed by an introduction presentation on food system by a rep from the GCP call 3 and a presentation by Ghanaian professionals on food system in Ghana. The second part was a panel reflection on sustainable inclusive food systems from Ghanaian companies, NGO and policy perspective and lastly an interactive exchange between professionals working in Ghana and the GCP call 3 research groups In line with the central theme. Recommendations were developed with practical suggestions that contributes to the improvement of future proof food systems in Ghana.

2.1. Introduction



Vanessa Nigten started the mini-conference with a brief an introduction of the Food & Business Knowledge Platform. The platform was set up by the Ministry of Foreign affairs in the Netherlands as an independent global development initiative that will aid in the creation and sharing of knowledge and also making knowledge adaptable for use. They work jointly with partners from NGOs, academia, policy and private sector on pressing issues in the field of food and nutrition security.

The NWO-WOTRO GCP-3 research groups, that are supported by the F&BKP, have been working within

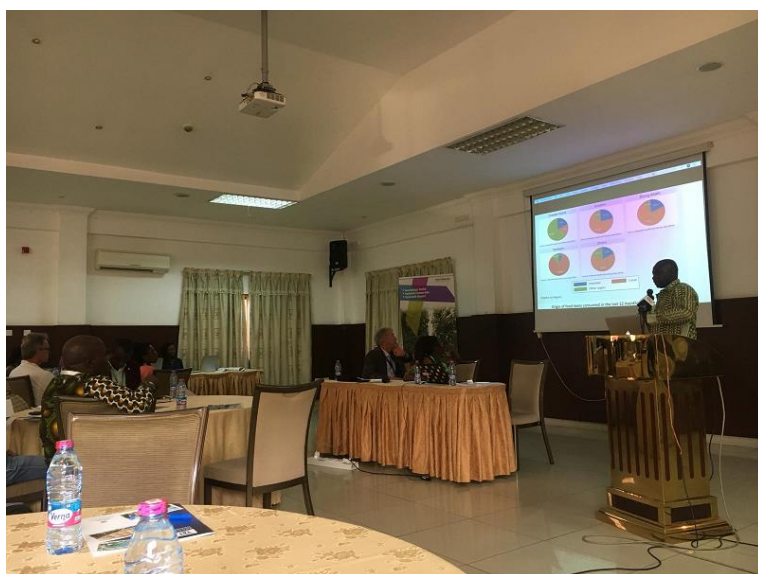
the frame of of improving food systems and are now half way. They aim at attaining impact on food security. Food systems thinking within the F&BKP focusses on actors ion food chains from production to consumption from local to international level. and surrounding factors that can influence the improvement of food security, for example social, political, and economic contexts in particular trade-offs and synergies. The GCP-3 projects from around the world were in Accra for their midterm this week, and would this afternoon exchange with Ghanaian food and agri professionals to on the one hand get nourished by practical examples for their upcoming research work and on the other hand to see if they can feed discussions on those Ghanaian practices from their research experiences. Please download the presentation of Vanessa Nigten [here](#).

2.2. Presentation on GCP-3 food systems findings

Professor Laurens Klerkx gave an insights research findings of the NWO-WOTRO GCP call 3 projects on sustainable food systems. Underlining the F&BKP presentation, he stated that food systems could be defined as the network of actors and activities that include growing, processing, distributing, consuming, and disposing of foods, from provision of inputs to waste and recycling. Some of the food system approaches looked at in the GCP projects focused on a certain transition with a specific perspective for example towards agro-ecology, whereas others are also focused on incremental improvement in production systems and chains. He mentioned that normativity and political orientation/preference towards certain food systems must be made explicit in research likewise the policy systems used.

Please download the presentation of Professor Laurens Klerkx [here](#).

2.3. Presentation on Ghanaian food systems



An introduction to Ghanaian food systems was given professor Joseph Awetori Yaro, assisted by associate professor Joseph Kofi Teye. It was stated that the government of Ghana has implemented a number of policies in the agriculture sector and most of these policies have targeted government inputs supply and infrastructure development only. Policies which are directed by donors accidentally favor large scale farmers producing for export or small-scale farmers producing cash crops. They continued to say the food system in Ghana includes activities from food production, distribution and consumption which

delves into the production strategy for farmers. 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. In Ghana there are few large farms and increasingly many medium size holdings due to rising incentives from urban markets. In line policy advocacy, it was concluded that there is the need for an 'Eat Ghana Act' policy which will make sure state resources are only used to purchase locally produced food items and also meet the demand of Ghanaian farmers.

Please download the presentation of Professor Joseph Awetori Yaro [here](#).

2.4. Panel discussion: Reflections on sustainable inclusive food systems from Ghanaian company, NGO and policy perspective

This session presents reflections on the theoretically shared insights in inclusive food systems from a practical stakeholders in the public, private viewpoint. Panelist that were asked questions by facilitator Madam Kudom and the public, were:

- George Abeiku Whyte (GAW) Chief Executive Officer, Farmers Market
- Eric Zunuo Banye (EZB) Sector leader Agriculture, SNV Ghana
- Faustina Vimariba Tour (FVT) Greater Accra regional Nutrition Officer, Ghana Health Service

What stakeholders are involved in policy development processes, moving via implementation to enforcement?

GAW: Ministerial bodies such as Ministry of Health and Ministry of Food and Agriculture are the active stakeholders involved in policy development process but there is lack of coordination between these bodies. It is only when they come together that they can achieve enforcement.

EZB: Civic society organizations do not develop policies in Ghana, they only trigger the policies development process, only as a stakeholder. Thereby they can only influence the content and hold the implementors responsible.

Is the school feeding programme a good example of being tailored to meet the policy objectives of the Ministry of Health and Agriculture?

FVT: The goal of the school feeding program when it first started was to increase school enrolment. Yet, we at Ghana Health service also influence the kind of food prepared for the children. We try to educate the cooks on adequate diets, but due to financial problem, most of them prepare the meal they can afford thereby making it difficult for them to fully ensure food safety and nutrition. We are also working with Ghana Education Service to develop a curriculum that will help sensitize the children on healthy eating.

How can stakeholder activities help consumers to sustainably access affordable and nutritious food?

GAW: At farmers market, we mostly try to work with farmers on minimal pricing terms; We educate them on good agronomic practices and provide them with good agro seedlings, which helps them cultivate good and healthy yields. Due to this farmers are able to give out their produces at a more reduced price. This helps the consumer to get access to healthy and affordable produces.



How far is the reach of Ghana Health service in terms of food security education and awareness?

FVT: We are working with women in agriculture to educate people on the need to eat healthy by developing recipes for a balanced meal. Besides, working directly with cooks of the nationally running school feeding program to produce foods in balanced diet for children, we educate farmers themselves on the need to eat healthy.

Also, production and packaging of local foods will help people in Urban areas reduce the intake of junk foods.

Does evidence matter in policies development in Ghana?

EZB: In Ghana policy implementation is a big problem because evidences are not fully used to guide the process. But development is a different thing and so is the implementation of the policies. The current national development policy has 6 to 7 ministries responsibility there by making it difficult to know which body to hold accountable in case something goes wrong in the policies development .

How does Ghana Health Service ensure that only qualified farmers are allowed to produce for the country?

FVT: Ghana Health Service does not have the mandate to decide which farmer is qualified to produce for the country. However we give pamphlets containing food safety measures to the Ministry of Agriculture so that they can educate the extension officers to educate the farmers on awareness for food nutrition and safety.

How do you ensure foods for the school feeding program are prepared under hygienic condition?

FVT: This is a challenge but we are trying our best to work with the Food and Drugs board authority to ensure cooks caterer cook under hygienic conditions. We cannot arrest them, we can only reason with them to do the right thing.

The country is running a food nutrition campaign to encourage farmers to be mindful of producing healthy produce, but truth be told they have bills to pay....

EZB: I agree farmers need money, that is why the Planting for Food and Jobs campaign of the Ministry of Food and Agriculture aims to increase production not only for nutritional value. When production is done on a large scale, farmers will earn more income while being conscious of nutritional security. For this production diversification is very important.

Ama Kudom-Agyemang concluded from the exchange between the research insights and the practical lessons in Ghana that:

- i. As in the GCP-3 programme, there is a need for researchers to do context specific work in order to facilitate implementation of research findings and to identify its impact on the community.
- ii. As in the GCP-3 programme, researchers are encouraged to involve other sectors than agriculture, such as Health in the research process as that will help to generate concrete information from different views f.e. when it comes to educating the public on healthy eating.
- iii. Policies must be influenced by evidence.

2.5. Exchanges on the role of the Ghanaian research communities

Most research works are being handed to farmers as public books in Ghana, what in your view can be done to change this?

In the Netherlands, research works are done with academic partners, farmers organizations, NGOs, and farmer themselves, among others. Having them involved in the entire research process is to make them view the research findings as their own and not something someone else is imposing on them. Also, research findings are made available for users. Ghanaian Researchers can adopt this process.

How can Researchers in Ghana use their findings in a manner that it is not politicized as most policies end up not fully implemented because most manifesto's do not allow them?

Research findings need the support of society for it to be widely accepted. In Asia the press is well used in this direction, so most political parties cannot easily "dump" research findings as the whole nation will ask for its implementation. Politicians are thus mostly forced to comply with that. Maybe in Ghana the press can help achieve this.

Which ICT technologies is the government of Ghana using to communicate with farmers in order to inform them on suitable knowledge and information?

Some companies in Ghana are already using technology in dealing with small groups of farmers across the country. They use short message systems (SMS) to educate farmers on how to access information on weather, the appropriate time to sow their produce and the time to prepare their lands.

Do researchers in Ghana really care about getting their research findings implemented?

Most researchers wish to get their works implemented but we do not have a system that encourages that. If researchers get startup funding to finance the implementation of their work, most of the research work will indeed not be locked up in drawers. When research findings are piloted, we can tell which findings can be trusted and which cannot. This can also help reduce the repetition of research work on the same topic. Ghanaians need to learn from the Dutch and encourage implementation of research findings.

Most researchers keep working on topics that have already been worked on, either implemented or not. What can we do to change this situation?

We should create a platform, such as the Dutch, where most research findings can be uploaded for other researchers around the globe to access, when this is done research topics will not be repeated, rather they will be built upon. Such a platform can also play a role in revisit the research that was implemented but could not be sustained and handle it in a different way that it might work. Donor Institutions will also know better where to take their information from.

To round up the discussion, Josephine Ecklu, policy officer agribusiness at the Netherlands embassy in Ghana fully endorsed this by stating that the need to change the Ghanaian food system should be addressed by changing attitudes. According to her, researchers blame the private sector, and the private sector blames researchers not to contribute to development and food security. Instead of wanting to apply all the money to themselves, research institutes and partners should come together

when a new project is starting up. “Looking at things as it is all about ‘me’ is a systemic problem.” There needs to be a focus on the (common) interest before focusing on the financial gain. Furthermore, people need to understand that farming is a business, whether small- or large-scale. What is also of importance is knowledge transfer. Dutch policy is also about transferring knowledge and technology - that are needed for progress. Research should be commercialized and researchers and private sector should start collaborating. These systemic changes that are needed require a collective effort, such as the Food & Business Knowledge Platform facilitates.

2.6. Concluding recommendations and encouragements

Hereafter Ama Kudom-Agyemang concluded the afternoon with the following future recommendations:

- i. To make implementations easier and fast, national and company policies must be localized to the district level;
- ii. To achieve sustainability, successful policies must be documented for future uses;
- iii. To make a huge impact on most of the community, Ministries of Health, Education, and Agriculture are encouraged to work together on projects from donors;
- iv. To ensure sustainability, donors are advised to ensure projects they invest in are private sector-led as most of the government-led projects end after a year or two of existence;
- v. To create a knowledge exchange platform, where research findings can be shared, revised, handled, implemented and sustained to make them work in practice.

And for this she encouraged participants to:

- i. Share knowledge among themselves as that will help address global and Ghanaian food & agricultural issues;
- ii. Use the press to disseminate knowledge and information related to the Ghanaian food system;
- iii. Be very practical by involving key stakeholders and collaborate with each other in order to make research findings implementation very impact-full to serve its purpose.

Agrofood Broker of the Year 2018 award

The four days conference came to an end, with a presentation of the winner of the Agrofood Broker of the Year 2018 Award. Since last year, the Food & Business Knowledge Platform annually awards a professional in the field of Food and Nutrition Security, who has undertaken significant brokering activities. The three finalists of this year were Donald Houessou, an agricultural economist working for ACED Benin, Kwaben Asubonteng, a PhD candidate at the University of Amsterdam and Zuhura Abdalla, a food processor and seller at Kisumu's Kibuye market. Almost 1000 people voted for their favourite Agrofood Broker. With more than half of the votes, Kwabena



Asubonteng was the winner of the Agrofood Broker of the Year 2018 Award. Kwabena received a cheque to set up a knowledge brokering activity together with the Food & Business Knowledge Platform, which will be arranged in the coming months.