



Food and Agriculture Organization
of the United Nations

APPROACHES FOR THE LEVERAGING OF SMALL AND MEDIUM ENTERPRISES TO IMPROVE NUTRITION

A net-map assessment of actors and activities in Ghana

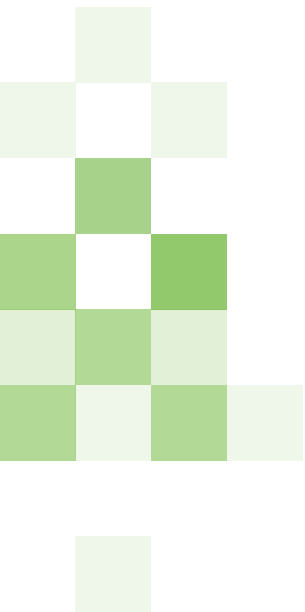


INTERNATIONAL
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CONTENTS

| | |
|--|-----------|
| Tables and figures | iv |
| Preface | v |
| Acknowledgements | vi |
| Abbreviations and acronyms | vii |
| <hr/> | |
| 1. Introduction | 1 |
| <hr/> | |
| 2. The potential for SMEs to contribute to healthy diets: literature review | 2 |
| <hr/> | |
| 3. Needs assessment: a rapid survey of SMEs | 5 |
| <hr/> | |
| 4. Net-map workshop: mapping actors and activities | 7 |
| <hr/> | |
| 5. Conclusions and recommendations | 14 |
| <hr/> | |
| References | 15 |
| Annex | 16 |

TABLES

| | |
|---|----|
| Table 1. Challenges faced by SMEs: underlying causes | 14 |
| Table 2. List of actors involved in SME capacity building and consumer awareness raising | 16 |

FIGURES

| | |
|---|----|
| Figure 1. Challenges for SMEs, by number of mentions | 14 |
| Figure 2. Net-map of funding links | 17 |
| Figure 3. Net-map of training links | 18 |
| Figure 4. Net-map of disaggregated training links | 19 |
| Figure 5. Net-map of the influence of the efforts by various actors (indicated by node size)..... | 20 |
| Figure 6. Net-map of champions (circles) and potential champions (stars) for better nutrition..... | 21 |

PREFACE

The initiative “Nutrition-sensitive agriculture and food systems for Ghanaian SMEs: leveraging small and medium enterprises to improve nutrition” is an initiative organized by the Food and Agriculture Organization of the United Nations (FAO) and funded by the Ministry of Agriculture, Forestry and Fisheries of Japan (MAFF). The initiative involved a needs assessment to determine how small and medium enterprises (SMEs) can be encouraged and supported to deliver nutritious food. As part of this assessment process, FAO and the International Food Policy Research Institute (IFPRI) held a stakeholder workshop on 14 August 2018 at the FAO Ghana office, to discuss the key needs the initiative could fill. Training SMEs on how to improve the nutritiousness of food and raising awareness as to the value of nutrition among low-income consumers were identified as especially critical for SME success in improving nutrition. These two lines of action become the focus of the stakeholder mapping workshop that was organized on 15 August to examine the enabling environment for SMEs to improve nutrition. The key objective of this second workshop was to identify key opportunities for helping SMEs deliver nutritious food. More specifically, participants at the workshop examined the actors, activities and investments that could bolster SMEs’ capacity to improve the nutritiousness of food and raise consumer awareness. The workshop’s participants included SMEs active in food and agriculture, as well as key representatives from the Ghanaian government and partner development organizations (see the annex to this report for a list of participants).

The net-map method was used to achieve the workshop’s objectives. This method is described in detail below. A review of the current literature on leveraging SMEs for nutrition, as well as a rapid needs assessment for SMEs working on nutritious foods were undertaken to complement the results of the workshop. This report presents and analyses the results of the three complementary activities.

ACKNOWLEDGEMENTS

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Additional support was provided by the Dutch Government through the SNV Netherlands Development Organisation and its Voice for Change Partnership programme.

The report was developed under the project “Strengthening capacities for nutrition-sensitive food systems through a multi-stakeholder approach”, which is funded by the Ministry of Agriculture, Forestry and Fisheries of Japan (MAFF) and coordinated by FAO’s ESN.

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ABBREVIATIONS AND ACRONYMS

| | |
|---------------|---|
| AfDB | African Development Bank |
| AGI | Association of Ghana Industries |
| BMGF | Bill & Melinda Gates Foundation |
| CSO | Civil society organization |
| DANIDA | Danish International Development Agency |
| ESN | Food and Nutrition Division (FAO) |
| FAO | Food and Agriculture Organization of the United Nations |
| FDA | Food and Drugs (Ghana) |
| GAIN | Global Alliance for Improved Nutrition |
| GES | Ghana Education Service |
| GHS | Ghana Health Service |
| GIZ | Deutsche Gesellschaft für Internationale Zusammenarbeit |
| GSA | Ghana Standards Authority |
| HACCP | Hazard analysis and critical control points |
| IFC | International Finance Corporation |
| IFPRI | International Food Policy Research Institute |
| INGO | International non-governmental organization |
| JICA | Japan International Cooperation Agency |
| MAFF | Ministry of Agriculture, Forestry and Fisheries (Japan) |
| MOFA | Ministry of Food and Agriculture (Ghana) |
| MOTI | Ministry of Trade and Industry (Ghana) |
| NBSSI | National Board for Small-Scale Industries (Ghana) |
| NDPC | National Development Planning Commission (Ghana) |
| PPP | Public-private partnership |
| SMEs | Small and medium enterprises |
| SUN | Scaling Up Nutrition |
| USAID | United States Agency for International Development |
| WIAC | Women in Agricultural Development (Ghana) |
| WFP | World Food Programme |



1. INTRODUCTION

It is widely acknowledged that small and medium enterprises (SMEs) play a pivotal, direct role in poverty and hunger reduction, industry growth and job creation. Nevertheless, the development of an enabling policy environment for small food enterprises is often overlooked, falling between the crevices of policies on agriculture and agro-industries, food safety, nutrition and trade.

Improving nutrition by making nutritious food available, affordable and desirable requires actions from all stakeholders involved in food systems, including producers, processors, retailers, consumers and private and public institutions. SMEs have a great potential to play a particular role in making food systems more nutrition-sensitive. The Food and Agriculture Organization of the United Nations (FAO) is committed to supporting SMEs through the creation of an enabling environment that encourages the prioritization of nutrition as a business opportunity and incites policymakers to collaborate with multiple stakeholders, including the private sector, development agencies, civil society, non-governmental organizations and academia.

Food systems play a significant role in determining the diets of the population. Farmers produce food, partly for their own consumption. What is not consumed by farmer enters the food system, which takes food from farm to fork. This system includes the people and organizations involved in the many processes and activities along the value chain: production, processing, storage, transportation, trade, transformation and retailing (Global Panel on Agriculture and Food Systems for Nutrition, 2016).

In Ghana, problems related to nutrition are diverse and geographically varied. A food systems approach to assessing these problems helps capture and leverage this complexity. A food systems approach considers the varied drivers of and barriers to improving diets and helps identify market-based opportunities for improving the diets of low-income consumers. Furthermore, a food systems approach helps identify the roles of actors in different sectors and develop a common language for coordinated action. Improving links within food systems requires interventions to address the circumstances and needs of actors engaged in the production, processing and marketing of food, as well as the preferences and tastes of consumers.

2. THE POTENTIAL FOR SMEs TO CONTRIBUTE TO HEALTHY DIETS: LITERATURE REVIEW

There is ample literature on the leveraging of the private sector to deliver nutrition. Much of this literature focuses on incentivizing large national and multinational companies to contribute to better nutrition and on designing effective public-private partnerships (PPPs) that leverage the strengths of the public and the private sector. Meanwhile, the leveraging of SMEs is less discussed, in spite of the important role that SMEs play throughout the food system, especially as producers, processors and preparers of food (Eskesen *et al.*, 2014). To overcome this literature gap, this section applies a number of lessons from the broader literature on private sector action on nutrition to the topic of leveraging SMEs.

Humphrey and Robinson (2015) identify a number of challenges that must be addressed for the private sector to deliver on nutrition. These include:

- ▶ develop products with a high nutrient content that is sustained throughout processing, storage and distribution;
- ▶ ensure that food reaches – and is affordable to – the population groups that need it most;
- ▶ prevent fraudulent products from being marketed as nutritious, and find ways to differentiate nutritious products from others;
- ▶ ensure consumer awareness on nutrition;
- ▶ ensure that consumer preferences (regarding taste, texture and packaging) are met.

The Global Alliance for Improved Nutrition (GAIN) is a leader in leveraging the private sector to deliver nutrition. Multiple reports by GAIN make a business case for private sector involvement in nutrition, describing the benefits to companies who invest in nutrition as well as the requirements for commercial investment (Freeman *et al.*, 2014, Jenkins and Gilbert, 2018).

These reports advocate the creation of social enterprises and inclusive business models. Social enterprises are enterprises that allow investors to reap reasonable profit margins while at the same time achieving a social objective (e.g. providing nutritious food to a target population such as pregnant women or children). Inclusive business models integrate low-income people in value chains as employees, entrepreneurs, suppliers, distributors, franchisees, retailers, customers or sources of innovation (Ghosh *et al.*, 2014). Eskesen *et al.* (2014) identify the compounded challenges that social enterprises in agriculture face in resource-constrained contexts; they also describe the significant positive social impacts that social enterprises may have, if managed well. For SMEs to contribute to the delivery of nutrition, it is crucial to decrease the costs, risks and uncertainties faced by private businesses in the food sector (Maestre, Poole and Henson, 2017).

The public sector can help create a strong enabling environment for the private sector, and SMEs in particular, by providing incentives to the delivery of nutritious food through regulation, taxation and investment (Maestre *et al.*, 2017). Policymakers must understand and work to ease the regulatory challenges to the delivery of nutritious foods faced by private actors. Incentives may also be created by providing credit, grants or subsidies, investing in public infrastructure or offering advance purchase commitments (Maestre *et al.*, 2017). In addition, public awareness campaigns, either on nutrition in general or on particular nutrient-dense foods produced or marketed by SMEs, can increase the demand for nutritious foods (Hoddinott, Gillespie and Yosef, 2015). Access to finance is a critical barrier for SMEs (Eskesen *et al.*, 2014). Initiatives by the government or development organizations

to provide finance are therefore critical to the creation of an enabling environment for SMEs. Hoddinott, Gillespie and Yosef (2015) discuss two main mechanisms — push and pull — to encourage private sector innovation in nutrition, either by building upon existing products or by developing new ones. Push mechanisms include interventions aimed at encouraging the private sector to undertake research and development, for example by providing direct funding or offering tax credits. Pull mechanisms are contracts and advance purchase agreements that encourage the production of specific products (Hoddinott *et al.*, 2015). A common example of a pull mechanism is the provision of free or subsidized food to vulnerable subpopulations. For instance, the school meals programme in Ghana offers contracts to local caterers to provide healthy foods to schoolchildren (Gelli *et al.*, 2019).¹

PPPs are another way for the public sector to help the private sector contribute to nutrition. In PPPs, public and private sector actors engage in open discussions to identify joint interests and opportunities for joint investment (Gillespie *et al.*, 2013; Hoddinott, Gillespie and Yosef, 2015). Sustainable PPPs must identify and boost opportunities for private actors to make profits (Hoddinott, Gillespie and Yosef, 2015). The PPP approach is increasingly popular; Hoddinott, Gillespie and Yosef (2015), however, warn that good governance — for instance, the clear definition of roles, transparent monitoring and the discussion of

potential conflicts of interests — is critical to their functioning; in addition, involving multiple businesses in a PPP can be problematic as competitors are asked to collaborate. The authors find that PPPs are most suited to situations where public solutions are not readily available, but the potential benefits to nutrition of intervention are very high (and risks are low). Koko Plus, a fortified flavour packet that is added to porridge for weaning, is an example of a PPP in Ghana that has both nutrition and profit objectives (Ghosh *et al.*, 2014). KoKo Plus is a product of the Ghana Nutrition Improvement Project launched in 2009 by the Ajinomoto Group to improve nutrition in the country. While the Koko Plus project was effective when a pull mechanism ensured a subsidized market, as a social enterprise — using women entrepreneurs to market the product — it has been unable to recover costs.

Although private actors can be motivated (through PPPs and by other means) to prioritize nutrition, it is first and foremost the market forces associated with autonomous, profit-driven activities that determine the food environments of the majority of the world's population (Gillespie *et al.*, 2013; Maestre *et al.*, 2017). Many sources argue that traditional value chains have so far failed to make nutritious foods such as fruit and vegetables, meat, fish, dairy products and pulses commonly available and affordable to low-income consumers in Ghana (Anim-Somuah *et al.*, 2013, Maestre *et al.*, 2017). Gomez and Ricketts (2013) point out how food

¹ Caterers involved in the programme reported challenges related to seasonal price variations that are not considered in payments, increased enrolment throughout the school year that is not reflected in payments, and late payments that make it difficult to buy in bulk and negotiate lower prices (Gelli *et al.*, 2019).

manufacturers producing nutrient-rich or fortified products can make use of traditional wholesale and retail networks to market their products, describing this as a modern-to-traditional food value chain. They argue that manufacturers can benefit from using these existing networks (rather than dealing with large supermarkets) and, through them, better reach low-income consumers. SMEs producing shelf-stable nutritious products and using small informal distributors may be better placed to reach low-income consumers (Maestre *et al.*, 2017). SMEs may partner with larger businesses to obtain raw materials, packaging or marketing support for nutritious products. The supply of nutraceuticals may particularly benefit from these types of partnerships.²

Maestre *et al.* (2017) note that a key challenge of the marketing of nutrient-dense foods is their credence characteristic – that is, their nutrient values are not observable by consumers. The demand for these foods therefore depends upon distinctive quality labelling and marketing. Governments must monitor, evaluate and regulate to ensure that nutrition claims are accurate and reliable. The successful marketing of multi-nutrient powders to

tackle the risk of anemia in China and of iron and vitamin A deficiency in western Kenya is described in Gillespie *et al.* (2013) as cited in Maestre, Poole and Henson (2017).

In urban areas, consumers frequently rely on street food, which are often high in fat and low in micronutrients. An initiative in Kenya piloted a venture to introduce a new healthy street food with affordable packaging and locally available ingredients – pizza (Sun *et al.*, 2015). However,

while most people showed an interest in having a healthy choice, pizza is seen as an elite food, and consumers prefer to pay more and sit at a table rather than eat it at a street food stand. Furthermore, even at half the price of similar local pizza products, it was largely considered too expensive as a street food.

Anim-Somuah *et al.* (2013) (as cited in Maestre, Poole and Henson, 2017) identify a number of nutrition-related challenges in Ghana, such as the insufficient nutrient content of complementary foods. Indeed, the production and distribution of complementary food products (mainly cereal-legume mixes) present an opportunity for private actors, and particularly SMEs. Foods containing groundnuts also have a high potential, if aflatoxin contamination is mitigated. These two categories of products were identified by the researchers as being available, acceptable and affordable to low income earners in Ghana, and thus as having a high potential for reducing undernutrition.

Women have a particular role to play in initiatives to promote nutritious foods through SMEs. Women in Ghana are more likely to be involved in off-farm activities such as the trading of agricultural and non-agricultural products and food processing, whereas men are more likely to be involved in crop farming. This can largely be attributed to the gendered stereotyping of skills, rather than to differences in the access to resources or training (Kramer and Lambrecht, 2019). However, women may face more barriers to success in business than men. In Ethiopia, businesses operated by women were found to be more likely to fail than those operated by men, largely as a result of differences in access to financing (Bekele and Worku, 2008).

² Nutraceuticals are products enhanced with vitamins and minerals aimed at particular population groups.

3. NEEDS ASSESSMENT: A RAPID SURVEY OF SMEs

Prior to the net-map workshop, a small sample of SMEs involved the production and processing of nutritious foods was surveyed to help understand their activities and challenges. The commodities produced by these SMEs include mushrooms, peppers, tomatoes, maize, cassava, eggs, poultry (chickens and guinea fowl), sheep and goats. Some respondents are involved in the processing of raw materials that are either purchased from other growers or produced in-house. The processed and packaged foods they produce include mushrooms, dressed poultry, gari (cassava flour), kokonte (a dish made of pounded dried cassava or yam powder), powdered peppers, powdered ginger, and tom brown (a porridge based on roasted corn flour).

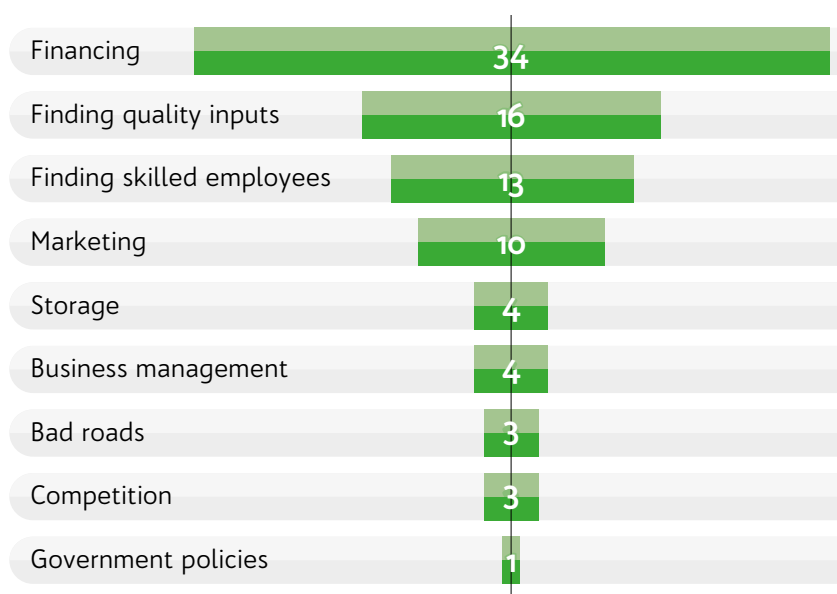
All respondents sell their commodities to urban dwellers; only a few also sell to consumers in rural areas (suggesting a lack of food choices in these areas). The scale of operations ranges from 3 to 52 employees; some SMEs employ casual workers when needed.

SMEs were asked to rank their top three challenges. Figure 1 shows these challenges, ranked according to the number of times they were mentioned.

The factors causing the challenges are listed in Table 1. Obtaining financing from banks ranks as the top challenge. Other challenges mentioned include obtaining quality inputs, organizing adequate warehousing, finding qualified employees, and consumers' awareness of, and willingness to pay for, nutritious foods. Marketing was found to constitute a particular weakness. Most respondents do not communicate about the quality of their products to potential consumers at all; only a few advertise their products through public communication channels (e.g. on the radio).

One SME informs potential customers of the fact that it adheres to food safety standards (including hazard analysis and critical control points (HACCP) and Ghana Standards Authority (GSA) standards), while another conducts market research amongst existing clients to better understand their needs.

FIGURE 1 CHALLENGES FOR SMEs, BY NUMBER OF MENTIONS



Source:
developed by the author.

TABLE 1 CHALLENGES FACED BY SMEs: UNDERLYING CAUSES

| CHALLENGE | UNDERLYING CAUSES |
|--|-------------------|
| Limited access to finance (loans) | |
| Lack of skilled employees | |
| Inadequate warehousing (storage) | |
| Difficulties to procure quality inputs | |
| Absence of marketing and competition | |

Source: developed by the author.

4. NET-MAP WORKSHOP: MAPPING ACTORS AND ACTIVITIES

To better understand the enabling environment for SMEs in Ghana, a net-map exercise was undertaken during the second workshop. Net-mapping is a participatory research method combining stakeholder mapping, social network analysis and power mapping. It is unique in its ability to illustrate complex connections. A net-mapping process allows participants to gain a more concrete understanding of the network to which they belong. The visual and tangible interview methodology enables the discussion of complex topics.

The net-map exercise focused on understanding how the capacity of SMEs to deliver nutritious foods can be strengthened, and how consumer demand for nutritious foods can be boosted. The exercise specifically aimed at answering the question: “Who is influential in improving the capacity of SMEs to deliver nutritious foods in Ghana, and who is influential in promoting consumer awareness about nutrition?”

The specific steps of the net-map exercise aimed at answering the following questions:

- Step 1** ▶ Who are the relevant stakeholders?
- ▶ Who are the actors involved in awareness raising and capacity development?

- Step 2** ▶ How are actors connected?
- ▶ Who is currently providing funding for nutrition capacity building and awareness raising?
- ▶ Who is currently providing technical/ educational information, and to whom?

- Step 3** ▶ To what extent can the various actors influence the activities and investments necessary to meet the objectives of the initiative?
- ▶ How influential are actors in the promotion of greater nutrition awareness and capacity?

- Step 4** ▶ Who are the opinion leaders?
- ▶ Where are the bottlenecks?
- ▶ Where are the opportunities?

The resulting net-map contains 15 main actors, plus an additional ten who are currently not connected but are still seen as having a potential to play an important role (see Table 2). Among the connected actors are two non-governmental actors, two private actors, six governmental actors and one civil society actor. The actors targeted by training or awareness raising efforts are SMEs, farmers and farmer associations, and urban and rural consumers. The complete list of actors discussed during the mapping session are shown in Table 2.

TABLE 2 LIST OF ACTORS INVOLVED IN SME CAPACITY BUILDING AND CONSUMER AWARENESS RAISING

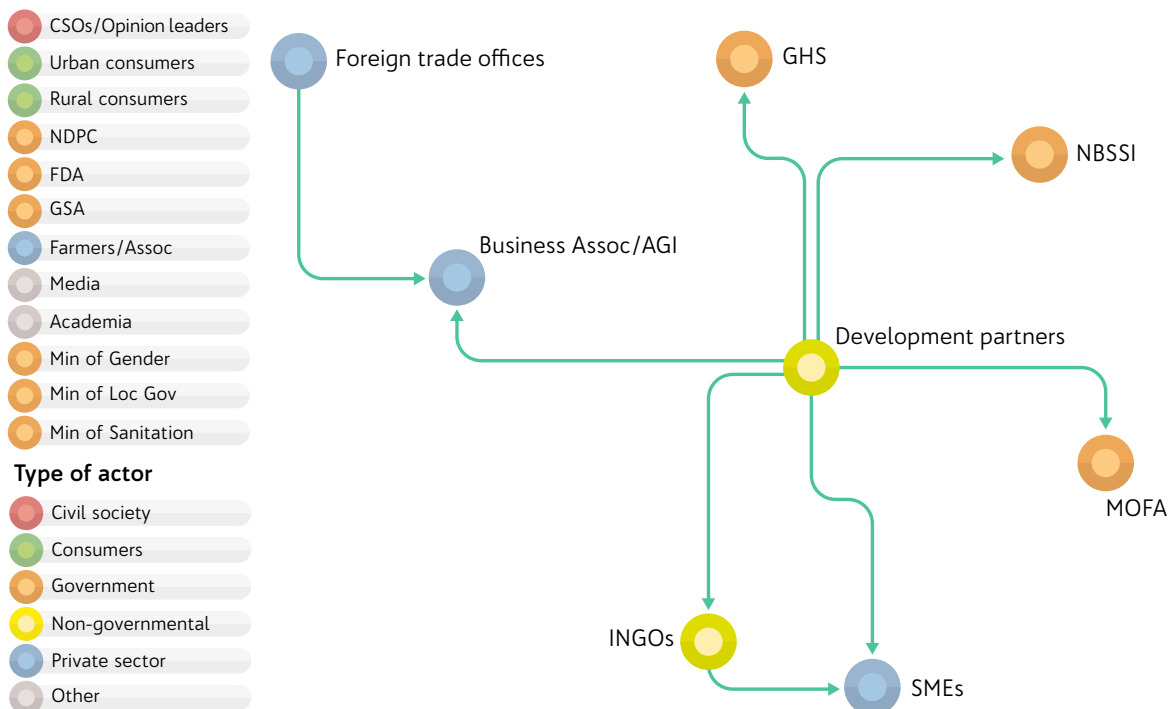
| ACTOR (Abbreviation) | UNDERLYING CAUSES | TYPE |
|----------------------------|---|-------------------|
| Academia | Universities and research institutes | Research |
| BUSAC | BUSAC Fund | Non-governmental |
| Business Assoc/AGI | Business associations, especially Association of Ghana Industries | Private sector |
| CSOs/Opinion leaders | Civil society organizations and local opinion leaders | Civil society |
| Development Partners | Bilateral and multilateral organizations | Non-governmental |
| Farmers/Assoc | Farmers and farmer associations | Private sector |
| FDA | Food and Drugs Authority (Ghana) | Government |
| Foreign trade offices | Other government trade offices, especially Catalan Trade Office | Private sector |
| GES | Ghana Education Services, Ministry of Education | Government |
| GHS | Ghana Health Service, Ministry of Health | Government |
| GSA | Ghana Standards Authority | Government |
| IFC | International Finance Corporation | Intergovernmental |
| ILSI | International Life Sciences Institute | Non-governmental |
| INGOs | International NGOs | Non-governmental |
| Local government/ MMDAs | Ministry of Local Government and Rural Development; metropolitan, municipal and district assemblies | Government |
| Media | Print, electronic and radio media | Other |
| Ministry of Gender | Ministry of Gender, Children and Social Protection | Government |
| Ministry of Sanitation | Ministry of Sanitation and Water Resources | Government |
| WIAD/MOFA | Women in Agricultural Development, Ministry of Food and Agriculture | Government |
| NBSSI | National Board for Small-Scale Industries, Ministry of Trade and Industry | Government |
| NDPC | National Development Planning Commission | Government |
| Politicians | -- | Government |
| Rural consumers | -- | Consumers |
| SNV | SNV Netherlands Development Organisation | |
| SMEs | Small and medium enterprises | Private sector |
| Urban consumers | -- | Consumers |

Source: developed by the author.

Figure 2 shows ongoing funding of efforts related to SME capacity strengthening and consumer awareness raising. The figure shows that several development partners and donors fund such activities, including the Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ), the Japan International Cooperation Agency (JICA), the United States Agency for International Development (USAID), the International Finance Corporation (IFC), the Danish International Development Agency (DANIDA), the Bill & Melinda Gates Foundation (BMGF), the World Food Programme (WFP) and the African

Development Bank (AfDB). In addition, some international non-governmental organizations (INGOs) provide funding, as do a number of foreign trade offices, such as the Catalan Trade Office in Ghana. Recipients of funding include actors that implement training and other projects, including business associations and government bodies such as Women in Agricultural Development (WIAD) of the Ministry of Food and Agriculture (MOFA), the National Board for Small-Scale Industries (NBSSI) of the Ministry of Trade and Industry (MOTI) and Ghana Health Service (GHS) of the Ministry of Health.

FIGURE 2 NET-MAP OF FUNDING LINKS

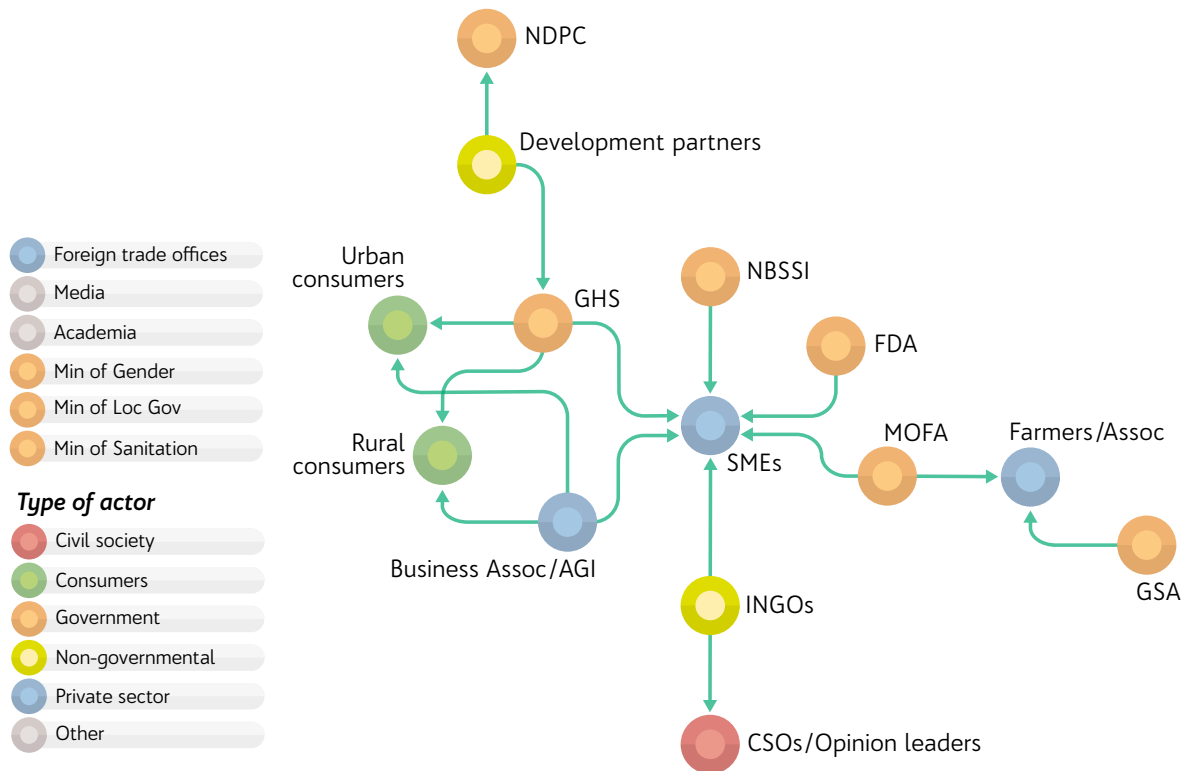


Source: developed by the author.

Figure 3 maps the capacity strengthening and awareness raising activities (training) undertaken by the various types of actors in Ghana. Certain development partners provide training to government entities, while other actors undertake efforts to strengthen the capacities of SMEs and farmers. The bulk of these activities focus on food safety in handling or packaging; a few focus

specifically on nutrition, such as the activities of the Association of Ghana Industries (AGI) and the Ghana Standard Authority (GSA) (through the OBAASIMA initiative) and those of the JICA (on rice farming). Business associations and the GHS raise consumer awareness on nutrition; one INGO provides training to civil society organizations (CSOs) on nutrition.

FIGURE 3 NET-MAP OF TRAINING LINKS

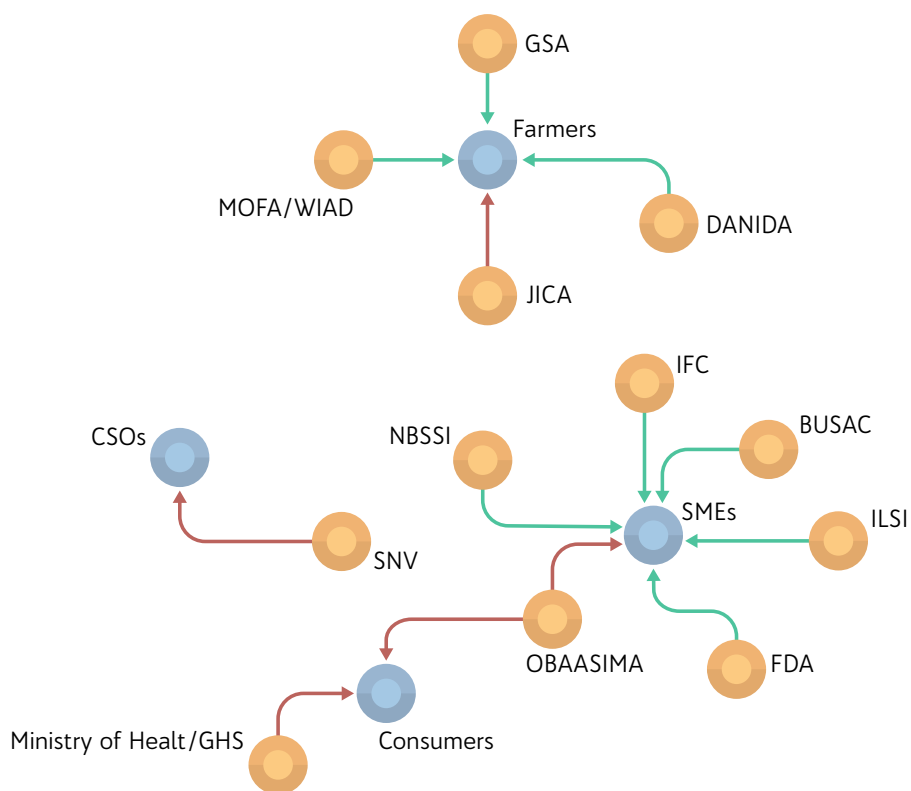


Source: developed by the author.

Figure 4 shows the capacity strengthening and awareness raising activities in more detail, depicting actions undertaken by individual bodies or institutions to train farmers, SMEs, CSOs and consumers. Only one scheme, the OBAASIMA scheme of AGI and GSA, provides training to both SMEs and consumers. Activities focusing on food safety are denoted by black arrows; the

red arrows indicate efforts focusing on nutrition. Yellow dots indicate providers of training; blue dots indicate receivers of training. Many of the SMEs receiving training thought their practices had been altered for the better. Some SMEs noted that it was difficult to know which training opportunities were available to them.

FIGURE 4 NET-MAP OF DISAGGREGATED TRAINING LINKS

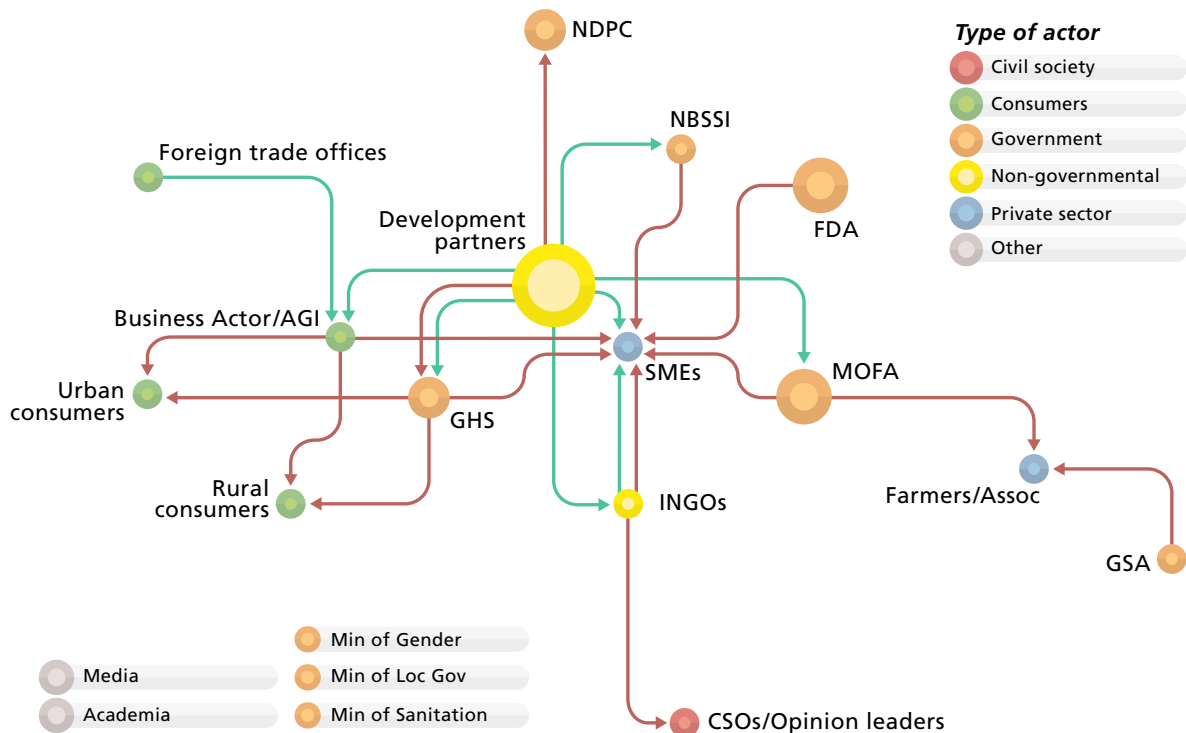


Source: developed by the author.

Figure 5 indicates the perceived impact of the actions of the various players in terms of improving the capacity of SMEs to deliver nutritious foods and raising consumer awareness about and demand for nutritious foods. The figure shows that the actions of non-governmental development organizations were considered the most influential, as they drive activities with their funding. MOFA and the Food and Drugs Authority (FDA) were also seen as highly influential in boosting SMEs' capacities and raising awareness

about food safety. Meanwhile, the GHS is considered somewhat less influential; however, it remains a key player in terms of raising nutrition awareness among consumers. The media and academia are also considered to be influential. The media are considered a key mechanism to disseminate nutrition messages to the public. Academia is considered influential in terms of their contribution to nutritious crop production (e.g. through the development of biofortified crops) and food composition diagnostics.

FIGURE 5 NET-MAP OF THE INFLUENCE OF EFFORTS BY VARIOUS ACTORS (INDICATED BY NODE SIZE)

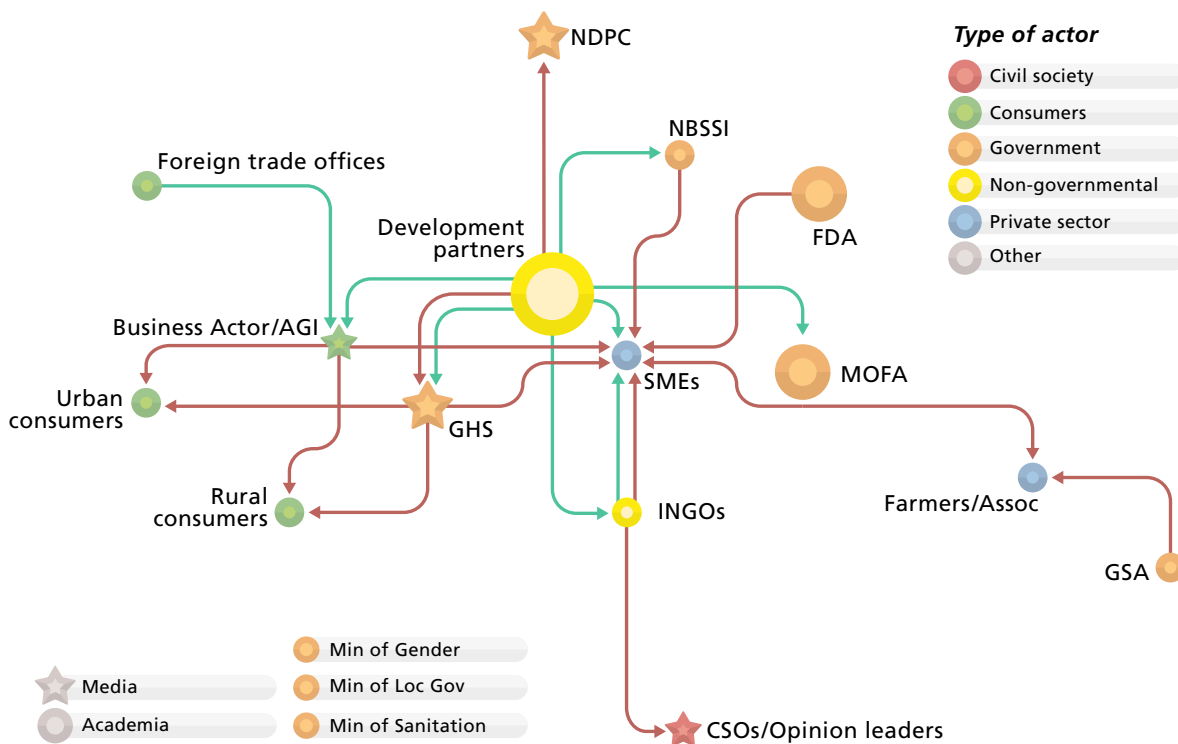


Source: developed by the author.

Figure 6 presents not only actors who already are influential in terms of capacity building and awareness raising, but also actors who have the potential to play a stronger role than they currently do in terms of promoting the supply and demand of nutritious foods (indicated by stars). CSOs, local opinion leaders and the GHS are seen as offering a great potential to raise consumer

awareness about nutrition. It was also argued that the media could be better leveraged as a tool to disseminate nutrition messages. The National Development Planning Commission (NDPC), in its role as the convener of the Scaling Up Nutrition platform (SUN), is seen as another potential champion for nutrition issues, and especially cross-sectoral issues.

FIGURE 6 NET-MAP OF CHAMPIONS (CIRCLES) AND POTENTIAL CHAMPIONS (STARS) FOR BETTER NUTRITION



Source: developed by the author.

5. CONCLUSIONS AND RECOMMENDATIONS

The outcomes of the net-map workshop illustrate several opportunities to boost both the supply of nutritious foods by SMEs and the demand for those foods by consumers. The mapping shows that there are many ongoing activities aimed at strengthening the capacity of SMEs; most of these activities focus on food safety issues. While food safety is indeed an important aspect of healthy food systems, more actions focusing on the nutrient contents of diets are needed. Many of the SMEs participating in the mapping workshop had received training, and a number of SMEs thought their practices had been altered for the better. Some SMEs noted that it was difficult to know which training opportunities were available to them and how to take advantage of them. Concerns were raised that SMEs operating in more remote areas and serving low-income consumers may have limited access to training. Indeed, the mapping exercise showed that the consumers served by the SMEs participating in both the needs assessment workshop and the net-map workshop are mostly middle- and high-income consumers. This finding demonstrates the need to target training efforts towards SMEs operating in remote areas. It also proves that improving the availability of nutritious foods to low-income consumers presents many challenges.

A possible entry point for further actions towards better nutrition that emerges from the net-map exercise is the NDPC, which as the convener of the SUN platform can raise awareness about nutrition among stakeholders. The NDPC is seen as a potential leader in food systems approaches to nutrition driven by the private sector. Another potential line of action that emerged from the mapping is improving the understanding of nutrition of business associations, which have the capacity to reach a great number of SMEs.

In addition, the management of district-level markets may raise awareness on healthy diets and act as promoters and enforcers of safe food handling practices and practices aimed at avoiding nutrient losses. Public awareness campaigns aimed at consumers buying food at markets may incite them to demand that vendors adopt such practices, and build trust. The feasibility of using various media outlets to disseminate messages on nutrition may also be explored.

Lessons from the literature on leveraging SMEs for better nutrition reinforce some of the outcomes of the stakeholder mapping. The literature emphasizes the need to carefully adapt the chosen approach to leveraging SMEs for nutrition to the specific context and product. If direct support is provided to SMEs, the food product in question must be carefully examined for its availability, its affordability to low-income consumers, its acceptability to local tastes and its ability to maintain nutrient levels from processing to purchase. Networks of local suppliers and sellers may provide valuable information about consumer demands. Efforts to improve the enabling environment for SMEs can be undertaken in combination with, or instead of, the provision of direct support to SMEs. The government must address challenges related to the credence characteristics and differentiation of nutritious products through regulation and monitoring. In addition, the government must undertake other strategic actions to build an enabling environment for SMEs working to deliver nutritious foods, depending on the particularities of the value chain or product in question. Women in Ghana have the potential to play an important role in the promotion of healthy diets through SMEs, as gendered social norms generally consider off-farm enterprises in food processing and preparation as a women's domain.

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ANNEX

Participants in the net-map workshop organized by FAO to identify the needs of SMEs in Ghana to deliver nutrition, on 14 and 15 August 2018 at the FAO Ghana office.

| NAME | | ORGANIZATION | POSITION |
|---------------------|---|---|------------------------------------|
| Tomoko Kato | f | FAO | Nutrition and food systems officer |
| Moses Agyemang | m | Private Enterprise Foundation | Senior economist |
| Wemegah Yao | m | Kofi Vingo & Company | Marketing manager |
| Nana Yaw Asare Addo | m | Kofi Vingo & Company | Marketing officer |
| Peter Aboagye | m | Women in Agricultural Development Directorate, Ministry of Food and Agriculture | Assistant director |
| Boakye A Godfred | m | National Board for Small Scale Industries (NBSSI) | Project officer |
| Ama Agyemang | f | Goona Services | Head of operations |
| Stephen Agyemang | m | Konka Farms | Managing director |
| Beatrice Quarcoo | f | Ghana Traditional Caterers' Association (GTCA) | Regional Secretary |
| Meg | f | Japan International Cooperation Agency (JICA) | Nutrition officer |
| Shota Takahashi | m | Japan International Cooperation Agency (JICA) | Intern |
| Paulina Addy | f | Women in Agricultural Development Directorate, Ministry of Food and Agriculture | Assistant director |

