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The enriching business of nutrition

Market-based partnerships and regional approaches to nutrition: what role for CAADP?

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foodsecurity

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Key messages

Market-based partnership models are being promoted to address under-nutrition in developing countries. Each partner can play a role in sharing risks, costs and technology bringing a range of direct, indirect and enabling approaches to what is a broad and complex issue.

Targeting consumers and producers while aligning the interests of businesses, NGOs, development partners and ultimately citizens, relies on awareness-raising and education around the importance of nutrition. Some business models also require enforcement of nutritional standards and larger, potentially regional markets.

Neither the commercial viability of pilot projects nor their impact on those most at need and outside the reach of markets is clear – but pilots remain just that, and perhaps too small scale to draw genuine conclusions. Base of the Pyramid approaches by definition need large markets, while developing countries remain difficult for doing business.

A better understanding of the lessons from existing projects addressing nutrition and dialogue among stakeholders on how partnerships can be more effective may help to bring further clarity and support to an approach likely to remain and expand. CAADP offers a framework to maximise the development benefits from these partnership models.

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Acronyms

AGPM	Agriculture Pull Mechanism
AIM	Amsterdam Initiative for Malnutrition
ARNS	Africa Regional Nutrition Strategy
ATYS	Africa Ten Years Strategy
AU	African Union
AUC	African Union Commission
BoP	Base of the Pyramid
CAADP	Comprehensive Africa Agriculture Development Programme
COHA	Cost of Hunger in Africa
CSO	Civil Society Organisation
CSR	Corporate Social Responsibility
DSM	Dutch Life Sciences Company Royal
EC	European Commission
ECA	Economic Commission for Africa
EU	European Union
FAFS	Framework for African Food Security
FAO	Food and Agricultural Organization
GAIN	Global Alliance for Improved Nutrition
GDP	Gross Domestic Product
HANCI	Hunger And Nutrition Commitment Index
HGSF	Home Grown School Feeding
IDH	Dutch Sustainable Development Initiative
IFPRI	International Food Policy Research Institute
MDGs	Millennium Development Goals
MOA	Ministry of Agriculture
MOE	Ministry of Education
MOH	Ministry of Health
NAFSIP	National Agriculture and Food Security Investment Plans
NEPAD	New Partnership for Africa's Development
NL	Nutrition Lens World Food Programme
PANI	Pan Africa Nutrition Initiative
PM	Pull Mechanism
PPP	Public-Private Partnership
PPPHW	Public-Private Partnership for Hand-washing with Soap
REC	Regional Economic Community
SADC	Southern African Development Community
SUN	Scaling Up Nutrition
UNICEF	United Nations Children's Fund
UNSCN	United Nations System Standing Committee on Nutrition
USAID	United States Agency for International Development Vitamin and Mineral
WB	World Bank
WFP	World Food Programme
WHO	World Health Organization
WICBT	Women Informal Cross-Border Traders
WSP	Water and Sanitation Programme
ZHC	Zero Hunger Challenge

Executive Summary

Africa and Asia lose a widely cited 11% of GDP every year due to malnutrition, a figure expected to remain the same for Africa until 2050 unless action is taken. It is with this in mind that international development policy-makers are increasingly underlining the importance of food and nutrition security.

It is not only the quantity of the food that matters, but also the quality, and having a healthy body to benefit from it. Families that are "food secure" in terms of calorie intake can still be deficient in nutritional intake, with long-term negative effects on health, particularly for children, as well as ability to learn and contribute productively to society.

Rather than narrowing the policy focus however, this distinction between "food security" and "nutrition security" broadens it, with important implications for government policy.

Food security and nutrition are the focus of renewed interest with the Comprehensive African Agricultural Development Programme (CAADP). However, many newly prepared CAADP national investment plans still ignore nutrition interventions.

The lack of progress on nutrition is partly due to its broad, multi-sectoral nature. Tackling under-nutrition relates to food production and trade, social care, health care, water and sanitation, and education.

Growing attention to nutrition is being accompanied by an increasing focus on engaging the private sector for development. This raises questions about the degree to which market-driven models can be used to meet goals for reducing under-nutrition in developing countries.

The main questions addressed in this study are the following: *in the context of promoting nutrition through the CAADP framework i) what are the main characteristics, drivers and constraints of multi-stakeholder partnerships including governments, business and CSOs that address nutrition, ii) what are the potential benefits of a regional approach, and iii) what are the implications for policy-makers and donors?*

Addressing under-nutrition is about the *availability* of, and *access* to nutritious food.[1] But it is also about *awareness* of the importance of nutritional choices, storage and cooking choices, and general health and hygiene – all within the scope of personal food preferences. Ensuring food or nutrition security is therefore about production, consumption, personal behaviour, and supporting frameworks.

In parallel to nutrition discussions, there is increasing awareness of the commercial interest of operating at the Base of the Pyramid (BoP). The BoP approach is about how international companies can adapt or introduce new business models that combine small margins with large markets of low-income consumers.

The BoP approach is based on the four principles of Awareness, Availability, Access and Affordability, bringing clear parallels with the framework for addressing under-nutrition. This framework is used to examine aspects that can be addressed through market-based multi-stakeholder partnerships.

This non-exhaustive overview is based on desk-research and interviews with stakeholders from a broad cross-section of actors as well as African and international initiatives. To highlight the issues, we provide

[1] While over-nutrition and obesity is a growing problem in developing countries, the focus of this paper is on under-nutrition, which relates more to rural populations and agriculture.

two short case studies from Royal DSM, a multi-national science company active in health, nutrition and materials; and BASF The Chemicals Company.

Our main findings are as follows:

African Governments & CAADP:

1. While CAADP offers a clear overarching policy framework for addressing food security and under-nutrition, ***concrete nutrition interventions*** should be envisaged to move beyond food quantity to food quality, while lessons from existing business-CSO partnerships need to be fed into CAADP compacts and investment plans at the national and regional levels.
2. CAADP can also provide a framework for ensuring that multi-stakeholder partnerships also ***work towards local private sector development and employment*** in African countries - economic transformation is a basic precondition for improving nutritional outcomes.
3. ***Nutritional and regional standards, certification, and the actors and institutions who enforce them*** are fundamental to market-based models addressing under-nutrition: the broader development objective of institutional strengthening is therefore crucial to ensure better nutrition.
4. There is a clear ***need for broader awareness, discussion and buy-in*** at all levels of national and local governments for market-based approaches to nutrition to maximise demand and therefore the benefits, but also to overcome mistrust among partners and ensure a developmental focus.
5. While regional CAADP compacts are increasingly more explicit on taking a regional approach, e.g. the recently launched SADC Regional Agricultural Plan, a ***regional business-CSO partnership approach*** may offer additional opportunities for governments to address under-nutrition and coordinate different complementary efforts in a region.

Private sector:

6. ***Business environment constraints*** remain an overriding constraint to any kind of investment, whether carried out as part of a multi-stakeholder partnership, targeted at the BoP, for nutrition or otherwise.
7. ***BoP models need scale by definition, something that a pilot project does not provide***. This makes it difficult to extrapolate from projects to gauge the viability of addressing under-nutrition through BoP approaches.
8. Similarly, ***new business ventures inevitably face a period of discovery and some uncertainty*** about what works in their market, again hindering what can be learnt about market-based models for under-nutrition more generally;
9. The current lack of experience and knowledge, and the high levels of risk and uncertainty around addressing under-nutrition through market-based approaches underline the ***need for multiple stakeholder involvement to share risk, costs and knowledge.***
10. The ***target market is fundamental in defining the type of partnership***, the roles of partners and the likely sustainability of the model within different economies i.e. whether the clients are consumers, governments or other businesses.
11. The role of ***education and knowledge is complementary to standards*** to ensure there is demand for nutritious food; but there is a fine line of credibility between independent information and marketing.
12. Our case studies suggest that existing CSO-business partnership approaches to nutrition are not necessarily based on core business but ***more motivated by Corporate Social Responsibility (CSR) concerns*** as long as projects do not lose money. This may raise questions about their commercial viability and sustainability and erode trust from those donors who are sceptical of the private sector;

13. Nonetheless, the ***potential for profit in the long-term may be a determinant of project sustainability*****,** particularly allied with business desire to learn about future business opportunities, promote employee motivation and retention, and positive image effects.
14. Existing initiatives are often ***led by international business with local companies involved at a basic level*** in agro-production, mixing micronutrients or trading enriched foods. Using local knowledge of tastes and markets, the local private sector might be supported to engage more in tackling under-nutrition while donors might facilitate greater technology transfer to local firms.

Development partners:

15. Among some people in development partner organisations there is still an ***apparent lack of trust in engaging the private sector food industry*** and supporting business-CSO partnerships, symbolised and, to some extent, justified by the controversy around promoting baby milk substitutes in violation of the WHO/UNICEF code, but also relating to developed country concerns around food content and quality. Partnerships may provide a channel to ensure accountability.
16. Even with growing recognition of the potential benefits of private sector engagement, partnerships with business for nutrition remain in their infancy. That is slowly changing with the greater focus on engaging the private sector more generally, led by movements such as GAIN and AIM, but would benefit from ***more in-depth analysis and lesson sharing about the drivers and constraints to different partnership models***.

Multi-sectoral approach to Nutrition:

17. Education, training, water & sanitation, universal health coverage, cultural habits, agricultural techniques and personal behaviour are all key for nutrition outcomes, highlighting the ***need for broad communication and partnership across civil society organizations, businesses, government Ministries and donor organisation departments.***
18. ***Business approaches are generally not multi-sectoral or holistic*** but target one particular market opportunity. There is therefore a potential gap between this approach and broader policy objectives that needs filled through partnerships.

Regional approach to Nutrition:

19. While the regional integration agenda in Africa faces its own implementation challenges, there are ***potential opportunities in a regional approach*** to i) marketing fortified foods in expanded markets, ii) working with suppliers along regional value-chains, iii) adopting new technologies that require economies of scale, iv) intervening in emergencies or acute food crises, and v) recognising and reinforcing the role of women in cross-border trade.
20. The increasing ***use of regional growth or agricultural corridors*** that link business investments with small-holders and infrastructure investments offer opportunities for scaling up efforts to tackle under-nutrition.

Overall, the role of multi-stakeholder partnerships is likely to grow in coming years, targeting under-nutrition and other development objectives. In order to maximise the benefit of these partnerships, it will be increasingly important to ensure greater knowledge and understanding around what works and does not in particular sectors and through particular approaches. Regular multi-stakeholder dialogues to share lessons among the full range of partners will be important to build trust, and understand how best to support such partnerships. These need to take place at the national, regional and international level, something that ECDPM will aim to support.

1. Introduction

Food and nutrition security

Malnutrition is the underlying cause of death for at least 3.1 million children a year, accounting for 45 per cent of all deaths among children under the age of five and stunting growth among a further 165 million. As a consequence, Africa and Asia lose a widely cited 11 per cent of GDP every year due to malnutrition, a figure expected to remain the same for Africa until 2050 unless action is taken. It is with this in mind that international development policy-makers are increasingly underlining the importance of food and nutrition security.

While "food security" has never been off the global development agenda, there is growing recognition that food security is not enough, with increasing reference to food security and *nutrition*. It is not only the quantity of the food that matters, but also the quality, and having a healthy body to benefit from it. So policy discussions are increasingly about "food *and* nutrition security"; perhaps even heading towards just "nutrition security". Rather than narrowing the policy focus however, this distinction broadens it, with important implications for government policy – for example while South Africa scores second highest in a recent index for *hunger* commitment, it scores only 36th for *nutrition* commitment (te Lintelo et al., 2013).

The growing focus on malnutrition in developing countries, and particularly under-nutrition (i.e. not including obesity), is driven by a number of factors. These include the high and volatile food prices that led to a serious food crisis in 2008. But there is also increased acknowledgement of the extent of "hidden hunger" and its implications, with stunting rates (low height for age) increasing steadily, particularly in Africa where they surpassed those for Asia in 2000 (Cuesta, 2013). It relates to the recognition that families that are "food secure" in terms of calorie intake can still be deficient in nutritional intake, with long-term negative effects on health, particularly for children, as well as ability to learn and contribute productively to society. It therefore impacts on the overall welfare of society through its economic impacts. Although nutrition was an implicit target under the first Millennium Development Goal, nutrition did not receive the same level of attention as hunger and poverty and it was not holistic addressed (Lancet Series, 2013).

Policy responses have been wide-ranging, but have been relatively narrow and focused more on agriculture and food security than nutrition. Interviewees broadly outlined four phases that the nutrition agenda has been through: the first phase, beginning some ten years ago, focused on food fortification but was recognised as addressing only some specific gaps; a second phase beginning around 2006 brought to attention the importance of the first 1000 days of a child's life, including the pregnancy period; this has been somewhat succeeded by a third phase that looks at the value-chain and focusing on production; while a fourth "emergent" phase is focused on the "whole life cycle".[2]

In Africa, the focus of this paper, food security and nutrition are the centre of renewed interest with the Comprehensive African Agricultural Development Programme (CAADP). Countries and regions prepare 'CAADP compacts' that provide a framework for policy directions, and 'investment plans' to guide corresponding public and private investments. These are produced at the country and regional level, where regional compacts and investment plans offer the benefits of economies of scale, harmonised procedures, and potentially widened markets.

[2] As outlined in an interview with GAIN.

The third of CAADP's four pillars focuses on three dimensions of food insecurity: inadequate food supply, widespread hunger and malnutrition, and food crises due to crisis or emergency situations.[3] However, many newly prepared CAADP national investment plans still ignore nutrition interventions, or have "weak programmes with no inclusion of nutrition-related impact indicators" (Hendriks, 2013). If plans are not lacking goals, "most are lacking concrete actions needed to ensure nutrition security" (NEPAD, 2013). International aid for basic nutrition came to only 0.4% of total official development assistance in 2011.

In partial response to insufficient action on nutrition, the UK hosted the G8 Nutrition for Growth Summit in June 2013. This yielded a $4bn commitment from donors and businesses for child malnutrition. Further, a total of 24 governments and 28 businesses with science organisations signed a 'Global Nutrition for Growth Compact' that aims to: ensure at least 500 million pregnant women and children benefit from effective nutrition interventions; prevent at least 20 million children under the age of five from stunted growth; and save at least 1.7m lives by reducing stunting, increasing breastfeeding, and treating severe acute malnutrition.[4]

The lack of progress on nutrition is partly due to its broad, multi-sectoral nature. Tackling under-nutrition relates to food production and trade, social care, health care, water and sanitation, and education. As such it often lacks a clear champion within government, underlining the need for what Haddad (2013) calls an "enabling environment for tackling under-nutrition". The multi-sectoral nature of tackling under-nutrition then calls for multi-stakeholder approaches, including the private sector, as increasingly reflected in policies, and indeed in the Nutrition for Growth Compact. How this takes place is likely to be important for achieving the objectives set out at the London conference and elsewhere.

The growing private sector role in development

Growing attention to nutrition is accompanied by an increasing focus on engaging the private sector for development more broadly. While the aims of working with the business sector include promoting investment and employment creation in developing countries, it is also focused on linking developing country producers to international value chains, with a growing emphasis on engaging international businesses. Profit-driven models are increasingly seen as a means to promoting sustainable development projects, providing incentives for market-led solutions and entrepreneurship, as well as bringing novel and more efficient approaches through new techniques and technologies.

All of this raises questions about the degree to which business-driven models can be used to meet goals for reducing under-nutrition in developing countries. While the European Commission's (EC) recent Communication states that "engagement of business is essential in the fight against under-nutrition" (EC, 2013), the idea gets little mention in its Reference Document on Addressing Under-Nutrition in External Assistance (EuropeAid, 2011). Other documents, such as the Leading Group on Innovative Finance Report on Agriculture, Food Security and Nutrition, focuses on ways to *finance agriculture* rather than business or nutrition (Leading Group, 2012). Other initiatives are more advanced in promoting private sector engagement, such as the Global Alliance for Improved Nutrition (GAIN), the Amsterdam Initiative for Malnutrition (AIM), the Sun Business Network, and the New Alliance for Food Security and Nutrition, but remain relatively new.

[3] CAADP Pillar III draws together the central elements of the CAADP vision to ensure that growing agricultural productivity, well-integrated markets and expanded purchasing power of vulnerable groups combine to eradicate hunger, malnutrition and poverty. The pillar focus necessarily intersects with the other three CAADP pillars.

[4] Global Nutrition for Growth Compact: https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/207273/Global-Nutrition-for-Growth-Compact-Final.pdf

Questions therefore remain on what kinds of multi-stakeholder partnerships with businesses are most effective. What are the limits of the models, the different drivers and constraints? What lessons can be drawn for policy-makers, particularly in Africa? What is the importance of a regional perspective, and the implications of different geographical approaches? And given the stated objectives on nutrition in CAADP, the umbrella policy for African agriculture and food security, what role can the CAADP process play in fostering concrete nutrition actions and in making multi-stakeholder partnerships more effective?

Mixing business and nutrition

In addressing these questions, this paper starts from the following accepted definition of food security and nutrition security: "*Food security exists when all people at all times, have physical and economic access to sufficient, safe and nutritious food that meets their dietary needs and food preferences for an active and healthy life*" (World Food Summit Plan of Action 1996). As the definition makes clear, addressing under-nutrition is about the *availability* of, and *access* to nutritious food. But it is also about *awareness* of the importance of nutritional choices, storage and cooking choices, and general health and hygiene – all within the scope of personal food preferences. Ensuring food or nutrition security is therefore about production, consumption, personal behaviour, and supporting frameworks.

The private sector can potentially play numerous roles in addressing under-nutrition. This partly relates to supplying new and greater sources of finance to tackle under-nutrition (e.g. Leading Group 2012). The *New Alliance for Food Security and Nutrition* emphasises this aspect of combining aid and private investments through bringing private capital and expanding access to markets. There are also instruments such as the Medical Levy in Zambia that channel tax revenues from mining companies to fund nutrition actions (Haddad, 2013). Further, agricultural production and food markets are a core part of the private sector and nutrition actions. The private sector is also a key actor when food is procured by international organisations for emergency responses. As such, businesses are increasingly engaging in partnerships with international and local CSOs, local suppliers, donors, and local governments to address under-nutrition.[5]

In parallel to these policy aspects, there is increasing awareness of the commercial interest of operating at the Base of the Pyramid (BoP). Often attributed to Pralahad (2006), the BoP approach is about how international companies can adapt or introduce new business models that combine small margins with large markets of low-income consumers – the base of the income pyramid. It is also about linking value chains with small-scale producers at the BoP. And in Africa where markets are small, it is implicitly about regional integration in as much as this is the only way to create large enough markets.

The BoP approach is based on the four principles of Awareness, Availability, Access and Affordability. Addressing under-nutrition though BoP, business models therefore seem to rest on *Awareness*, *Availability* and *Access* if one takes Affordability as an element of Access to nutritious food. This study considers these three aspects as the overall frame for our examination of examples of where and how businesses have engaged in multi-stakeholder partnerships to address under-nutrition.

The main questions to be addressed in this study are the following: *in the context of promoting nutrition through the CAADP framework i) what are the main characteristics, drivers and constraints of multi-stakeholder partnerships including governments, business and CSOs that address nutrition, ii) what*

[5] In this paper we will refer to market-based partnerships, multi-stakeholder partnerships and business-CSO partnerships interchangeably to refer to the range of different partnership models used by companies in collaboration with some or all of the following: other international firms, international CSOs, local CSOs, local suppliers, donors, national and local governments to address under-nutrition.

are the potential benefits of a regional approach, and iii) what are the implications for policy-makers and donors?

In providing a (non-exhaustive) overview of the issues, the study highlights some key issues in promoting market-based partnership models for tackling under-nutrition. It is based on desk-research and interviews with stakeholders from a broad cross-section of actors as well as African and international initiatives. To highlight the issues, we provide two short case studies from Royal DSM, a multi-national science company active in health, nutrition and materials; and the BASF Chemicals Company.

Main findings

While models for addressing under-nutrition though multi-stakeholder partnerships remain relatively new and hard to draw lessons from, the main findings from our analysis can be related to five different categories.

For African Governments, the CAADP framework offers a clear overarching framework for addressing food security and under-nutrition. However, the lack of progress in harnessing this for nutrition suggests the need for concrete nutrition interventions to move beyond food quantity to food quality. The CAADP framework can be used to share lessons from existing business-CSO partnerships by feeding these into CAADP compacts and investment plans at the national and regional levels, while the focus on working with markets and the private sector can also ensure greater local private sector development and employment through nutrition- focused models – the work in this paper suggest that there may be a potentially larger role to play for local economic actors.

What the analysis also finds is that while demand is key for making market-based approaches work, in the case of nutrition this is underpinned by nutritional standards. This means there is a need for national (and regional) nutritional standards, certification, and actors and institutions who can enforce them. This implies the need for challenging institutional strengthening. However, given the need for improved quality and standards infrastructures to engage in agricultural value-chains, the current focus on nutrition may be a good way to bring standards and the necessary investments under the CAADP spotlight.

Overall there is a clear need for broader awareness, discussion and buy-in at the regional, national and local level among governments and consumers. This is necessary to maximise the demand for nutritious goods, thus making the market-based approaches viable, but also to hold companies to account and help overcome mistrust among partners and ensure a developmental focus. While regional CAADP compacts are increasingly more explicit on taking a regional approach, a regional business-CSO partnership approach may offer useful complementary approaches that regional CAADP can frame.

For the private sector, business environment constraints remain an overriding constraint to any kind of investment, whether carried out as part of a multi-stakeholder partnership, targeted at the BoP, for nutrition or otherwise. As such, it is difficult to draw lessons from pilot projects that may be commercially unviable due to the general environment, to the specific business model employed, to an inherent problem with marketing nutritious foods in that specific market, or other external markets. Further, while BoP models need scale by definition, a pilot project does not provide this. This makes it difficult to extrapolate from projects to gauge the viability of addressing under-nutrition through BoP approaches.

The weak business environment, the current lack of experience and knowledge of what works, and the high levels of risk and uncertainty around addressing under-nutrition through market-based

approaches reinforce the need for multiple stakeholder involvement to share risk, costs and knowledge. Partnership forms and partner roles differ depending on the target market and whether the clients are consumers, governments or other businesses. The underlying motivation may also be important, with our case studies suggesting that existing CSO-business partnership approaches to nutrition are more motivated by Corporate Social Responsibility (CSR) concerns than core-business - as long as projects do not lose money they are seen as good projects for staff morale and company image. This may raise questions about their commercial viability and sustainability and erode trust from those donors who are sceptical of the private sector, where trust is important in a field where information and marketing around the importance of nutrition are key. Nonetheless, the potential for profit in the long-term may be a determinant of project sustainability if sustainable models can be found.

For development partners there is still an *apparent lack of trust in engaging the private sector food industry* and supporting business-CSO partnerships. Although this is changing, it was symbolised and to some extent justified by the controversy around promoting baby milk substitutes in violation of the WHO/UNICEF code, but also relating to developed country concerns around food content and quality. Partnerships may provide a channel to ensure greater accountability of companies and monitoring of development impacts. This focus is at the heart of movements such as GAIN and AIM, but would benefit from more in-depth analysis and lesson sharing about the drivers and constraints to different partnership models.

Market-based approaches are generally not multi-sectoral or holistic but target one particular market opportunity. There is therefore a potential gap between this approach and broader policy objectives that needs filled through partnerships. So beyond multi-stakeholder approaches to specific projects, broad coalitions are needed to address under-nutrition through education, training, water & sanitation, universal health coverage, cultural habits, agricultural techniques and personal behaviour. This highlights the need for broad communication and partnership across civil society organizations, businesses, government ministries and donor organisation departments.

While the regional integration agenda in Africa faces its own implementation challenges, there are potential opportunities in a regional approach to under-nutrition. These include: i) marketing fortified foods in expanded markets, ii) working with suppliers along regional value-chains, iii) adopting new technologies that require economies of scale, iv) intervening in regional emergencies or acute food crises, v) recognising and reinforcing the role of women in cross-border trade, and vi) ensuring complementarities across interventions and approaches across regions. The increasing use of regional growth or agricultural corridors that link business investments with small-holders and infrastructure investments may also offer opportunities for scaling up efforts to tackle under-nutrition.

While some of these findings reflect a mix of broader development challenges and nutrition-specific issues, the key challenge is to understand how business partnerships operate in practice. There is a clear request from businesses for donors and African governments to share the risk of financing partnerships, even where there is a risk of failure, while donors need to be prepared and flexible enough to do so while also safeguarding development objectives. This is no easy challenge. While we scratch the surface of two cases here, there is a need for more in-depth research on the functioning of CSO-business partnerships.

Overall, the role of multi-stakeholder partnerships is likely to grow in coming years, targeting under-nutrition and other development objectives. In order to maximise the benefit of these partnerships, it will be increasingly important to ensure greater knowledge and understanding around what

works and does not in particular sectors and through particular approaches. Regular multi-stakeholder dialogues to share lessons among the full range of partners will be important to build trust, and understand how best to support such partnerships. These need to take place at the national, regional and international level, something that ECDPM will aim to support.

Outline of the study

The remainder of the paper is organised as follows: Section 2 provides an overview of the relevant literature relating to tackling under-nutrition; Section 3 analyses broad issues linking nutrition with private sector engagement, with reference to two short case studies presented in Section 4; and Section 5 concludes with the main policy lessons with a focus on the potential role of CAADP.

2. The Nutrition Agenda

2.1. Food security and nutrition - the problem to be addressed

A large-scale problem with socio-economic impacts

Malnutrition can take the form of under-nutrition or over-nutrition. Under-nutrition indicates a lack of the necessary energy, protein or micronutrients for a healthy life, while over-nutrition is linked to obesity through too much energy, fats or specific micronutrients.[6] The focus in this paper is on under-nutrition which is particularly prevalent in developing countries even though obesity has been increasing in developing countries in recent years, especially in urban settings.

Within the under-nutrition agenda, the three main concerns in public health are vitamin A, iron and iodine intake. Micronutrient deficiency, also known as "hidden hunger" still affects over 30% of the world's population, with impacts that appear only within 6-10 years after the period of deficiency. Overcoming micronutrient malnutrition is simultaneously a result of, but also a precondition for, development (FAO, 2012).

With almost 870 million people estimated to be chronically undernourished, the number of hungry people in the world remains unacceptably high (FAO, 2012).[7] While agricultural growth is necessary in improving nutrition, it is not sufficient if the food produced is not of high nutritional value. For instance, between 1990 and 2010 the United Republic of Tanzania's agriculture sector grew at an annual average rate of 3.8 per cent per year, making the country one of the top 15 performers worldwide of that time. However, the prevalence of undernourishment has remained more or less stagnant over the same 20 years.

Official UN figures indicate that the vast majority of under-nourished people live in developing countries, representing approximately 15 per cent of the population (FAO, 2012). The situation is

[6] Malnutrition is a physical condition related to the body's use of nutrients. There are two forms of malnutrition: under nutrition and over nutrition. Under-nutrition includes: i) intrauterine growth restriction which leads to low birth weight; ii) stunting; iii) wasting and nutritional oedema; and iv) deficiencies of essential micronutrients (EC, 2013). Micronutrients are the "magic wands" that enable the body to produce enzymes, hormones and other substances essential for proper growth and development. As tiny as the amounts are, however, the consequences of their absence are severe. Iodine, vitamin A and iron are most important in global public health terms; their lack represents a major threat to the health and development of populations the world over, particularly children and pregnant women in low-income countries. From WHO: http://www.who.int/nutrition/topics/micronutrients/en/

[7] http://www.fao.org/news/story/en/item/161819/

particularly serious in Sub-Saharan Africa, where NEPAD estimates over 240 million people are undernourished.[8] Despite improvements since 1990, progress achieved in reducing hunger levels has slowed and levelled off in 2007-2008.

Many African countries were particularly affected by the 2007-2008 food price hikes, with limited means to mitigate the negative effects on consumers, and with minimal spreading of the benefits to those producers who gained across the population. The consequences of food price rises and other economic shocks are complex and include the deterioration of diet quality and cuts in other types of consumption that are fundamental for human development and growth (FAO)[9]. With international and local responses to the 2007-2008 food crisis, decades of neglect for agricultural development and food security in the developing world are slowly being reversed.

Children suffering from stunted growth or malnutrition are not only affected in their physical development. Under-nutrition can lead to stunting[10] which characterizes mild to moderate malnutrition, but also extend to micronutrient malnutrition[11], which often co-exists in resource-poor settings where there is inadequate access to food, sanitation and safe water, and to lack of knowledge about safe food handling and feeding practices. An insufficient intake of micronutrients at a young age has an irreversible effect on the development of the brain cells of the infant, and therefore seriously hampers his/her overall development potential.

Under-nutrition can therefore have important economic effects. The preliminary results from the study *The cost of hunger in Africa*[12] (COHA), piloted in four African countries, estimates that more than $7 billion is lost to their economies through additional health and education costs, and lower worker productivity.[13] Uganda alone is estimated to lose up to $899 million due to malnutrition every year. Other estimates put economic losses due to malnutrition as high as 6 to 10 per cent of GDP (NEPAD-CAADP, 2008). More recently a panel of four Nobel economics laureates concluded that in economic terms, fighting under-nutrition is the single most important investment the world could make—a recommendation that was included in the United Nation's post-2015 development agenda.

The socio-economic impact of under-nutrition therefore unites interests across governments, CSOs and businesses given the common interest in having healthier, more productive societies. However, while there is increasing awareness in Africa on the importance to work more on nutrition security, nutritional policies and programmes have not yet been mainstreamed into the development

8 New Partnership for Africa's Development: http://www.nepad.org/

9 There is a need on a reflection on the methodologies utilized to measure hunger, which should fully capture the complexity of food insecurity through also a holistic understanding of undernourishment. For instance, there is a need to develop set of food security indicators to capture other dimensions of food insecurity beyond that of food energy deprivation (FAO).

10 Stunting describes chronic under nutrition, characterised by low height compared to age. The longer timescale over which height-for-age affected makes it more useful for long-term planning and policy development (EC, 2013).

11 Micronutrient deficiencies are the form of under-nutrition related to vitamin and mineral. Deficiencies of iron, iodine, vitamin A and zinc are amongst the top 10 leading causes of death through disease in developing countries (EC, 2013).

12 The results presented are preliminary and are therefore subject to change. An official report will be published before the completion of the 2013 calendar year.

13 The four countries are Egypt, Ethiopia, Swaziland and Uganda and the study was done by the African Union and NEPAD supported by the World Food Programme (WFP) and the UN Economic Commission for Africa (ECA). The March 2013 study update revealed that Egypt is losing $3.7 billion which is equivalent to 1.9% of GDP to the problem; Ethiopia is losing $4.5 billion, 16.5% of GDP; Swaziland $76 million equivalent 3.1% of GDP; and Uganda $899 million, or 5.6% of GDP. The study is underway in eight additional countries, Botswana, Burkina Faso, Cameroon, Ghana, Kenya, Malawi, Rwanda, and Mauritania. See http://www.wfp.org/videos/cost-hunger-africa

planning and investment processes, and particularly into implementation, not least due to the complexity and multi-sector nature of doing so.

Differences across groups

At present, the under-nourished tend to be located primarily in agricultural areas, particularly among the landless, pastoralists, smallholders and hired agricultural workers (Southgate et al., 2007). These segments of the population do not have access to improved technologies and are beyond the reach of markets, the focus of CAADP Pillars I and II.[14] Approximately two-thirds of the population in Africa is rural and therefore relies directly or indirectly on agriculture (e.g. FAOSTAT, 2006). Their nutrition security therefore relies on own-production and access to markets for income to acquire the nutrition they are unable to produce themselves. This is therefore a challenge for market-based approaches to under-nutrition.

Children under 2 years, pregnant women, and individuals living with HIV are amongst those most particularly at risk of malnutrition. Despite the scale of the problem discussed above, the total percentage of underweight children (low weight for age) is declining, from 25 per cent in 1990 to 16 per cent in 2010 worldwide. Stunting (low height for age) in children less than five years has decreased globally from 39 per cent to 26 per cent over the same period.

As well as differences in malnutrition among population groups, substantial regional differences reflect a number of different factors, including differing capacities across countries to react to economic shocks. For instance, in sub-Saharan Africa, even the modest progress in improving nutrition outcomes achieved over the period 2002-05 has been reversed, with hunger rates rising by 2 per cent annually since 2007, while in South-East Asia hunger reductions have accelerated from 3.1 per cent per year before 2007 to 4.6 per cent since then. Sub-Saharan Africa still faces the highest rates of underweight children and infant and child mortality[15]. In the case of iron deficiency, anaemia prevalence has not changed substantially and has even increased in some countries[16].

The complex causes of under-nutrition

This paper starts from the following accepted definition of food security and nutrition security: "Food security exists when all people at all times, have physical and economic access to sufficient, safe and nutritious food that meets their dietary needs and food preferences for an active and healthy life" (World Food Summit Plan of Action 1996). As the definition makes clear, addressing under-nutrition is about the availability of, and access to nutritious food. But it is also about awareness of the importance of nutritional choices, storage and cooking choices, and general health and hygiene – all within the scope of personal food preferences. Ensuring food or nutrition security is therefore about production, consumption, personal behaviour, and supporting frameworks. The concept of food security in the CAADP Pillar III "Framework for African Food Security" (FAFS) concerns physical and economic access to food of sufficient quality and quantity.[17]

The causes of hunger and under-nutrition are interrelated and complex. These include: low incomes; inadequate access to food; high food prices; lack of education; weak health systems; poor vaccination

[14] CAADP, Pillar III, Framework for African Food Security

[15] Childhood malnutrition is an underlying cause of death in an estimated 35 % of all deaths among children under the age of five (WHO, 2012 Global Health Observatory, (GHO).

[16] United Nations System Standing Committee on Nutrition (UNSCN), 2010, Sixth Report on the World Nutrition Situation: Progress in Nutrition. Geneva,

[17] Comprehensive Africa Agriculture Development Programme, Pillar III: http://www.nepad-caadp.net/pdf/CAADP%20FAFS%20BROCHURE%20indd.pdf

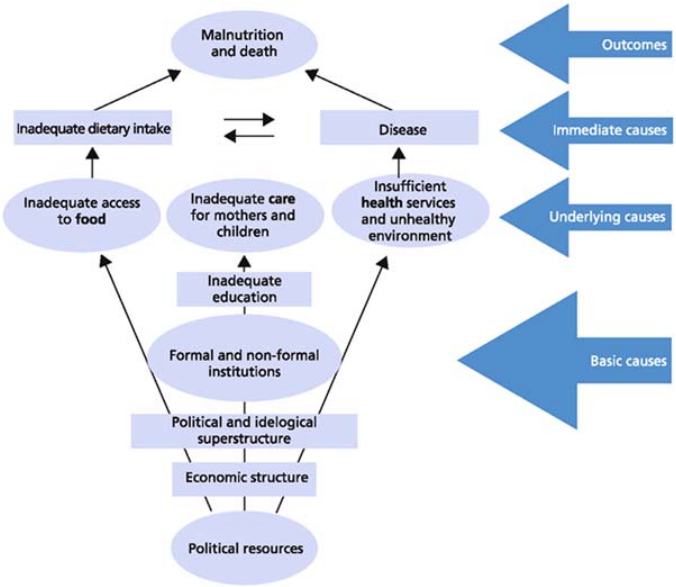
coverage; lack of access to clean water; increased birth rates; inappropriate maternal and child caring practices; burden of diseases such as HIV/AIDS; Malaria and TB, as well as climate change, conflicts and wars. Other diseases such as diarrhoea, respiratory conditions, measles also impact on nutritional absorption.

The dimensions of under-nutrition are best understood by distinguishing three levels: immediate causes; underlying causes and basic causes. These are based on the UNICEF's 1990 conceptual framework used by the FAO the EC and recalled by the Lancet Series in 2008. Immediate causes relate to individuals and relate to dietary intake and health status. The underlying causes operate at household and community level: household food security; care for children/women; and health environment/health services. Finally, basic causes include a range of factors operating at sub-national, national and international levels, ranging from natural resource access, social and economic environments and the political context.

As the Hunger and Nutrition Commitment Index (HANCI) underlines, whatever the role of the private sector, governments have a whole range of responsibilities in tackling under-nutrition (te Lintelo et al., 2013). These include Vitamin A coverage, complementary feeding, access to improved drinking water, access to improved sanitation, skilled birth attendance, and in broader terms, nutrition in the national development policies/strategies, a national nutrition plan, multi-sectoral/stakeholder coordination mechanisms, and time-bound nutrition targets.

The complexities and multi-level nature of under-nutrition therefore require multi-sectoral approaches to prevent the long-term effects of under-nutrition. This approach is as valid for 'development approach' over the long-term as in a shorter-term humanitarian context, although assistance in the latter tends to prioritise life-saving interventions focused on immediate rather than underlying causes (EC, 2011).

Box 1 The causes of under nutrition



Source: UNICEF, 1990

The challenge of multi-sectoral responses

But taking a multi-sectoral approach has been a challenge. For decades many nutritional initiatives supported individual programs in isolation from one another, concentrating on providing food aid, food production, health services, clean water and sanitation or encouraging behaviour change in isolation (PANI; 2008). But since none of these approaches is enough by itself, policies increasingly aim for an all-encompassing, multi-stakeholder approach that requires planning and coordination among different policies relating to all areas.

A multi-sectoral approach implies working with and through multiple actors. This entails inter-agency coordination among developing country government ministries and agencies, donor agencies, multi-lateral agencies, the private sector and other non-state actors. Governments and donors have often failed to sufficiently understand the importance of advocating for and supporting a multi-sectoral approach and the related integration of nutrition interventions in different agendas. This has resulted in poor coordination among ministries, UN agencies, NGOs and poor coordination between food security and nutrition activities with a lack of clarity in the responsibilities. Different partners have challenges in understanding each other, with some interviewees pointing out that the language used by the "nutrition community" is often too high level or too technical/scientific, while agronomists work more on the field where they operate and where the real people live.

A multi-sectoral response assigns a clear role to the private sector. While this reflects broader attention to engaging the private sector in the development agenda, the CAADP framework also highlights the need for integration of both public and private sectors to provide a strategic mix of food production, health care, water & sanitation and other "enablers" of good nutrition. A recent assessment also points out that little attention has been given to the role of the private sector in generating demand for nutritious food, getting these foods to households through markets, and the use of market-based strategies to feed undernourished populations (GAIN, IDS, 2013)[18].

2.2. Approaches to tackling under-nutrition

Like its causes, interventions to tackle under-nutrition can be categorized as direct, indirect or enabling. These are also the categories used in the recently launched Hunger and Nutrition Commitment Index (HANCI) on government interventions (te Lintelo et al, 2013). The remainder of this section discusses some of the main approaches to under-nutrition under these headings before the following section looks specifically at the role of multi-stakeholder partnerships.

Direct approaches

Direct approaches to under-nutrition directly target the nutritional status of the population. They attack under-nutrition in its narrowest sense through specific interventions such as feeding programmes, provision of micronutrients supplements or support for infant feeding**.** This approach is often related to the 1,000-day window of opportunity - the pregnancy and first 2 years of a baby that are identified as being key in a child's long-term development - but also emergency situations where short-term solutions are required.

In 2008, the Copenhagen Consensus declared food fortification as the number one way to cost-effectively, directly deliver the greatest benefit to local people. This implies enriching staple foods through the mixing in of micro-nutrients, or planting especially developed micro-nutrient enriched crops. A series of nutrition interventions were also identified: micronutrient supplementation (Vitamin A and Zinc),

[18] GAIN-IDS, 2013, Discussion Paper, *Nutritious Agriculture by Design: A Tool for Program Planning*.

micronutrient fortification (iron and salt iodization), de-worming, nutrition programmes at school and community based-nutrition programmes. The cost per capita of these interventions was estimated at less than $10 per person. NEPAD also considers food fortification as a good approach, though not a long-term solution (Gyiose, 2013).

As will be discussed below, there are clear potential roles for the private sector to participate in direct interventions tackling under-nutrition through production and fortification of foodstuffs.

Indirect approaches

Indirect approaches to under-nutrition target intervention areas that can support better nutrition or be made to be "nutrition-sensitive". These include sustainable agriculture and rural development, education, public health, water & sanitation, social protection systems and women's empowerment.

Smallholder farmers can play a key role in tackling their own and others' under-nutrition. More investments and innovation are key as well as more diversified food production, especially for access to energy-rich foods. Many strategies promote "home-gardens" with small livestock and fish production along with special attention to communications for nutrition, health and childcare. Storage is also very important to preserve nutrition security during hard times, as is access to rural markets, especially for inputs, insurance and finance for smallholders and their terms of engagement in such markets.

Education is considered essential at any level in the nutrition agenda (Dufour, 2013). There are several approaches to bringing education into the nutrition agenda including: Behaviour Change Communication (behavioural interventions focused on adjusting personal practices and habits); access to school for all, especially for girls; nutrition counselling for example for people with HIV/AIDS. Communication is costly and its impact is hard to measure, but it remains important and can cover multiple social issues (De Vanssay, 2013).

Other indirect approaches include the strengthening of primary health care (PHC), access to health services and investments in health infrastructures, vaccines etc. Clean water supplies, education on childcare hygiene, and investment in irrigation can play a key role in some regions in Africa (ReSAKKS, 2011).

A broader range of indirect food security and social protection instruments are also available. For example, agricultural input subsidies promote food availability. Various cash and in-kind transfers boost access to food (Devereux, 2013). The FAO report 2012 also emphasizes the role of social protection systems which should be human-rights based (for instance recognition and protection of the rights of the small farmers to their land) target the poor, promote gender equality enhance long-term resilience and allow sustainable graduation out of poverty (FAO, 2012). The expansion of social protection systems is also underlined in the CAADP (FAFS, Pillar III) where there is a strong recommendation to institutionalize policies and programmes that protect against shocks and promote livelihoods and the welfare of poor and vulnerable people.

Research has shown that when women have more control over household income, more money tends to be allocated on items that improve nutrition and health, representing the basis of another indirect approach to under-nutrition (FAO, 2011[19]). Despite the key role of women in fighting under-nutrition, there are several challenges, which still affect them such as the access to the markets and the

[19] FAO, 2011, The state of Food and Agriculture 2010-11. Women in agriculture: closing the gender gap for development. Rome

control of land. Theoretically women must have access to: land, market, micro-insurance, education (at least a secondary education), clean water supplies and access to health services.

Again, the broad range of indirect interventions for under-nutrition provide broad scope for private sector engagement in agricultural techniques, water and sanitation, and other approaches to improve the health status of employees.

An enabling environment for nutrition

Both direct and indirect approaches need to take place in an enabling environment to have a positive impact. This includes good governance in the form of political stability, rule of law, respect for human rights, control of corruption and government effectiveness (FAO, 2012). The approach must be conducive to support legislative frameworks for: conditioning mandatory participation of women in antenatal and postnatal care and nutrition; education programs for children; nutrition monitoring programs; food fortification standards designed to increase the micronutrient intake of mothers and children; regulating the quality and marketing of breast milk substitutes; governing maternity leaves and mother-friendly working hours (SUN 2012).

As part of this, tackling under-nutrition must be seen as a concern for all sectors, for example the Ministries of Health, of Agriculture and of Education, highlighting again the need for a multi-sectoral approach. For instance in Mozambique there is poor dialogue between the Ministry of Agriculture and the Ministry of Health which hampers the efforts to improve nutrition security, underlining the challenge of taking a more holistic approach to nutrition across multiple government agencies and actors (Musatti, 2013). Moreover, there are deeper challenges to be overcome such as child labour and sexual harassment which are linked to nutrition but are still neglected (IDH, 2013).

In general, an "enabling environment" is a good pathway for the private sector to apply its own strategies, increase investment, and explore new markets. Opportunities for engagement in nutrition-specific interventions and in nutrition-sensitive programmes also need a suitable "business environment", something that has proven to be a long-term challenge in many African. Asking for good institutions and a good business environment for nutrition may be akin to asking for 'development'.[20]

2.3. Policy initiatives to tackle under-nutrition

Nutrition within the CAADP Process

The CAADP framework outlines a holistic and multi-sectoral approach for agricultural development to address food and nutrition security through direct, indirect and enabling interventions, thus in principle addressing some of the challenges laid out above. Within *CAADP Pillar III* documents there is specific attention given to the chronically food-insecure and populations who are vulnerable and affected by crises and emergencies.[21] The CAADP Pillar III principles are summarised in Box 2.

[20] The lack of proper baseline studies and impact analysis contribute to the deterioration of the status of the population. For instance IDH is working closely with GAIN to assess some data and figures. They realized that in West Africa the households working on cocoa plantations are highly under-nourished. So IDH and GAIN are working together to support training for these households with the aim of making them less dependent on cocoa crops by supporting other strategies such as livestock (poultry). Once again the holistic approach is fundamental (IDH, 2013).

[21] The pillar focus is linked with the other three CAADP Pillars as nutrition is in principle a cross-cutting theme throughout all four Pillars framework documents.

Pillar III is intended to be implemented through four flagship programmes: i) Food fortification; ii) Home Grown School Feeding; iii) diet diversity; and iv) maternal and child health. Pillar III is complemented by the Framework for African Food Security (FAFS) to better address food security and hunger. Other strategies that relate to the CAADP process include the Pan African Nutrition Initiative (PANI)[22], the African Regional Nutrition Strategy 2005-2015 (ARNS)[23] and the Africa Ten Year Strategy for the Reduction of Vitamin and Mineral Deficiencies 2008-2011. All of these aim to be complementary, but clearly are also subject to the challenge of institutional coordination when it comes to implementation.

Box 2 CAADP PILLAR III PRINCIPLES

Principle 1: Protect the right to food for all citizens of Africa.

Principle 2: Focus on the chronically hungry and malnourished, particularly women and children, in order to address short-term crises and in the long term integrate them into broad agricultural development.

Principle 3: Ensure that all parties and players automatically seek to understand and address hunger and malnutrition.

Principle 4: Mainstream considerations of human diseases such as HIV/AIDS, malaria and TB.

Principle 5: Ensure that emergency responses promote growth and reduce chronic hunger (i.e. do no harm to the overall CAADP Agenda).

Principle 6: Protect and promote the resilience of the livelihoods of the vulnerable.

Principle 7: Ensure that gender dimensions of hunger and malnutrition are addressed.

Principle 8: Promote intra-regional trade, particularly in food staples to raise food supply, food quality and moderate price volatility.

Principle 9: Integrate regular review and broad-based dialogue to ensure successful implementation of this Pillar.

Principle 10: Be in coherence with the MDGs, especially MDG1 to cut extreme poverty and hunger.

Principle 11: Integrate lessons from success stories in cutting hunger and malnutrition.

CAADP National Agriculture and Food Security Investment Plans (NAFSIPs) are currently undergoing revisions in many countries and regions. Although most plans include nutritional goals, many newly prepared CAADP national investment plans still ignore nutrition interventions, or have "weak programmes with no inclusion of nutrition-related impact indicators" (Hendriks, 2013). According to a NEPAD (2013) report, "most are lacking concrete actions needed to ensure nutrition security". This reflects the lack of priority and awareness around nutrition outside global discussions, but also and the presence of other political priorities.

To address this gap, NEPAD is currently organising regional workshops to revise the NAFSIPs by making the investments plans more "nutrition oriented". The first workshop was held in Dakar, Senegal in November 2011 with others following in East, Central and Southern Africa in 2012 and 2013. During the workshop in Tanzania there were two main achievements: i) the countries revised the investment plans by inserting nutrition not only in the agricultural sector but with a broader approach; ii) the countries were encouraged to define their own road maps in order to implement the investment plans.

This revision process is an opportunity for the CAADP to ensure that countries fully integrate nutrition in their agricultural policies and investments. Nonetheless, unanswered questions remain.

[22] In particular, PANI aims to catalyse multi-sectoral investment planning, capacity building and resource mobilisation. Through the so-called "Nutrition Lens" nutritional perspectives and expertise are intended to be integrated into investment planning processes in line with the CAADP vision of linking food production and improved nutrition. The Nutrition Lens is an investment-planning tool, which applies nutrition perspectives, methodologies, expertise, and outcome criteria to systematically assess national development investments, as presented in the Africa Ten Year Strategy for the Reduction of Vitamin and Mineral Deficiencies.

[23] The ARNS was endorsed by the AU Ministers of Health, and represents a renewed commitment to the improvement of the nutrition situation in Africa and to the achievement of the MDGs. It is the result of the revision of ARNS 1993-2003.

Will inclusion in plans necessarily lead to genuine mainstreaming and implementation? Countries such as Ethiopia have nothing about nutrition in the current CAADP compact and investment plans, reflecting the difficulties in changing the mentality of governments towards the fact that nutrition is a concern for all. Thus, in Ethiopia for instance, it is still difficult for a politician or the Minister of Education to understand nutrition issues that are very low profile in the Cabinet. The best approach according to some is to have nutrition under the responsibility of the Prime Minister Office, as is the case of Tanzania. A clearer champion in government may serve as a way for CAADP to better perform on the nutrition agenda.

Without this greater integration into plans and adoption by a political champion, some fear that CAADP will become focused more on 'maximising yields' than on the nutrition-content of those yields. Indeed, the over-arching focus of the CAADP is seen by some as being on value-chains and large-scale production rather than small-scale production, although this is potentially a reflection of African government priorities and policy choices.

Despite these considerations, the general trend of the CAADP process towards the nutrition agenda is largely positive and the revision of the investment plans may reflect this pro-nutrition attitude. What remains is to turn the several documents that have been produced alongside the CAADP Process (PANI; FARFS; ARNS) into concrete actions. The development partners on their side should continue to support this process and channel their efforts to improve nutrition within these CAADP investment plans.

Major development partner initiatives on under-nutrition

Recent years have seen a surge in international meetings and summits drawing attention to nutrition. These include the 2012 G-8 Summit and the Child Survival Call to Action, and the Zero Hunger Challenge (ZHC) launched in 2012 at the Rio+20 Summit by the UN Secretary General, which initiated high-level advocacy to advance global efforts on food and nutrition security. At the close of the 2012 Olympic Games, the UK Prime Minister hosted a summit on global child malnutrition with the objective of slashing the number of stunted children by 25 million before the 2016 Olympic Games in Brazil. In April 2013, the Irish government inaugurated its Presidency of the European Union with the hosting of a conference on Hunger, Nutrition and Climate Justice.

More recently, the UK hosted the G8 Nutrition for Growth Summit in June 2013. This led to a $4bn commitment from donors and businesses for child malnutrition, with a $3.5bn commitment from the European Commission. A total of 24 governments, including 17 African governments, and 28 businesses with science organisations signed a 'Global Nutrition for Growth Compact' that aims to: ensure at least 500 million pregnant women and children benefit from effective nutrition interventions; prevent at least 20 million children under the age of five from stunted growth; and save at least 1.7m lives by reducing stunting, increasing breastfeeding, and treating severe acute malnutrition.[24] The commitments mean that funding on nutrition will effectively double from about $418m to about $900m a year between now and 2020. Despite this large increase, it is only a small part of the $9.6 billion per year that the latest Lancet Series concluded was needed in total.[25]

These summits and events around nutrition complement a growing body of policies and initiatives that promote the joining of forces to tackle under-nutrition among different partners. The role of the private sector is growing in prominence in these, as summarised in Box 3 below.

[24] Global Nutrition for Growth Compact: https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/207273/Global-Nutrition-for-Growth-Compact-Final.pdf

[25] http://www.thelancet.com/journals/lancet/article/PIIS0140-6736(13)60996-4/fulltext

Box 3 Development Partner policies and initiatives on nutrition

The EU issued a policy communication on nutrition in March 2013 "*Enhancing Maternal and Child nutritional in External Assistance: an EU Policy Framework*" The EU has often expressed its commitment to fight malnutrition but did not offer a specific policy framework to follow and guide all European actors including the private sector. The approach is donor-driven with a perception of nutrition as a local issue. The document nonetheless expresses a desire to engage with business although it is less clear about how. A long-term perspective is emphasized with a shift from food security centrality to the integration of nutrition into programmes. In fact, the EC is said to be preparing an analysis to identify food insecure countries and see whether nutrition is integrated in other programs (De Vanssay, 2013).

The *Scaling Up Nutrition (SUN) movement*[26] was established in 2010. The Movement embraces more than 100 key stakeholders who signed the SUN framework and subsequently the SUN road map. Rather than an operational initiative, SUN is a movement led by countries with the aim of supporting National Nutrition Plans (Fracassi, 2013) including the promotion of cross-sector coordination. SUN suggests specific nutrition interventions (feeding programmes; food fortification; micronutrient supplementation and treatment of severe malnutrition) and "nutrition sensitive approaches" (agriculture, education & employment; health care; support for resilience and women's empowerment). Within SUN, a Sun Business Network[27] has been set up for providing a platform for business to support improved nutrition. The EC is the largest donor with a contribution of 40% of the costs of the SUN secretariat. Other donors are mainly USAID, DFID, Canadian, Irish and German Development Cooperations, and the Gates Foundation.

The Global Alliance for Improved Nutrition (GAIN) was created in 2002 at a Special Session of the UN General Assembly on Children to support public-private partnerships in increasing access to the missing nutrients in diets necessary for people, communities and economies to be stronger and healthier. GAIN works in partnership with governments and international agencies with a goal of reaching 1 billion people by 2015 with nutritious foods that have a sustainable nutritional impact. The Alliance works through three main mechanisms: i) sustain Food Fortification initiatives in the markets (e.g. fortified flours); ii) target support to the "1000 days" (children need more nutrients and require specific diets and products); iii) link agriculture and nutrition (e.g. value chain; diversification of food). GAIN is also supporting National Fortification Alliances (NFAs), which are platforms to promote public-private partnerships at country level. The private sector considers this role of GAIN as a way to enter in the markets. In terms of supporting "baby food", GAIN faces several challenges due to the international code on breastfeeding which is strictly followed by several countries amid concerns about the impact on infant survival rates. GAIN has received funding from a number of public and private sector donors (Gate Foundation; the Canadian International Development Agency, the Children's Investment Fund Foundation, Dubai Cares, the UK's DfID, the Government of the Netherlands, Irish Aid etc.).

The Amsterdam Initiative for Malnutrition (AIM) is a platform of donors and CSOs, including GAIN, launched in The Netherlands in 2009. There is currently increasing international interest in AIM as a new model for market-based interventions to improve nutrition for poor consumers. The main approach is to seek sustainable models for nutrition solutions by mobilizing business to deliver products as part of their normal commercial or "core business". The approach is multi-sectoral, based on the use of know-how in The Netherlands. AIM is also a promoter of multi-stakeholders partnerships. AIM has a monitoring and evaluation budget (process and impact) and represents a transparent process (at least so far) so could become one of the most effective channels to fight under-nutrition. Although still at an early stage, there are several risks in engaging in multi-stakeholder partnerships involving the private sector that have been highlighted—financial, reputation, and livelihood risks. As such, there is a need for strategies for sharing, pooling, and managing those risks (Haddad, 2013).

The G20 is advocating for nutrition through the Agriculture Pull Mechanism (AGPM). This initiative is supported and developed by a core group of countries such as Canada, United States, United Kingdom and Australia in partnership with the Bill and Melinda Gates Foundation, the World Bank and the global development advisory firm Dalberg. The goal of the AGPM is to enhance food security and food safety, increase smallholder incomes and promote better health and nutrition in developing countries by stimulating private sector agricultural innovations, through bridging the gap that often exists in developing countries between the need for new products and actual market demand.[28]

Through Feed the Future and the Global Health Initiative, the United States supports country-owned programs to address the root causes of under-nutrition. This includes helping countries build the technical capacity to manage nutrition programs over the long term. One of the goals of Feed the Future is to use investments (key role of the private sector) more effectively as a means of enhancing food security, and more specifically, reducing under-nutrition. Feed the Future aims to

[26] Also the SUN movement was inspired by Lancet series published in 2008 on maternal and child malnutrition that identified 13 cost effective nutrition interventions to address child malnutrition. Movement is organized around a Secretariat which include five networks of constituencies, namely private sector, civil society, United Nations, country network and donors' network. http://scalingupnutrition.org/

[27] http://sunbusinessnetwork.org

[28] *Pull mechanisms* are results-based incentives designed to overcome market failures and encourage innovation and engagement. Pull mechanisms reward successful innovations *ex post*, compared with —push mechanisms, which fund potential innovations *ex ante*. As such, pull mechanisms are commonly used to bring advanced projects to market. http://siteresources.worldbank.org/CFPEXT/Resources/AGPM_OVERVIEW_March.pdf

coordinate and integrate agriculture and nutrition investments. As part of its commitment to Feed the Future, the U.S. also supports the Scaling Up Nutrition (SUN) movement.

Grow Africa was launched in 2011 by the African Union Commission, the NEPAD Agency and the World Economic Forum to promote private sector investment for sustainable growth in African agriculture. Seven countries joined initially – Burkina Faso, Ethiopia, Ghana, Kenya, Mozambique, Rwanda, and Tanzania – seeking private-sector investment aligned to CAADP national plans. Efforts accelerated in early 2012, when the African Union asked Grow Africa to help generate company commitments for the New Alliance for Food Security and Nutrition – a G8 initiative. An eighth country, Nigeria, joined in early 2013. Grow Africa is a country-led, multi-stakeholder platform aligned with CAADP process**.** 2012 witnessed a historic shift in the quality and quantity of private-sector engagement, with companies announcing over $3.5 billion of planned investment across Grow Africa countries. All this was explicitly aligned to national development goals and embraces inclusive business models, especially for smallholder farmers. The initiative is pioneering a constructive way to closely involve governments, the private sector, global partners and smallholder farmers.[29]

The UN FAO seems to be quite focused on the direct and indirect approaches to under-nutrition. As such, FAO is mostly oriented towards supporting small-holder farmers than food fortification initiatives, while also participating in the CAADP revision of the investments plans for better integrating nutrition. This process is considered key to overcoming the gap within CAADP due to its perceived focus on large-scale investments (Dufour 2013). The organization promotes the expression "food and nutrition security" which embeds nutrition into food security thereby ensuring nutrition is not forgotten.

Through the P4P "Purchase for progress" programme, the World Food Programme (WFP) is supporting smallholder agriculture by purchasing food commodities (maize, beans, sorghum, pigeon peas and cow peas) from small holder farmer organizations and small traders. In Kenya, for instance, P4P has partnered with other organizations active in the agricultural sector. These include the Cereal Growers Association (CGA), Academic Model for Access to Healthcare (AMPATH), Agricultural Marketing trust AGMARK, FAO and Kenya Agricultural Commodity Exchange. In all these partnerships, Memoranda of Understanding are entered into, by clearly indicating the role of each party (Renartivila, 2013). The WFP is the most advanced among the UN Family in terms of its relations with the private sector, and they emphasise partnership with private sector corporations. The organization is currently pursuing a greater balance in its approach to different types of private sector, non-governmental and individual actors (WFP, 2012).

UNICEF has been dealing with child nutrition through a range of different approaches and strategies, including a role for the private sector, especially for food fortification and fundraising activities. UNICEF is also chair of the SUN network business and partner of GAIN. The main concern of engaging with companies is related to the marketing for breast-milk substitutes and in fact UNICEF has a monitoring system for large companies. However, at country level, the staff members are often hesitant to get involved with the private sector because they might lack knowledge on the potential partner (Noel, 2013). UNICEF is engaged with the private sector in countries such as Ethiopia and Tanzania in food fortification initiatives (e.g. flower fortification initiative). Usually UNICEF controls that the fortification process of staple foods (flower; oil; sugar etc) is in the hands of highly qualified companies or "approved companies" (Noel, 2013).

The World Health Organisation (WHO) is strongly engaged in the fight against malnutrition. During the 2012 World Health Assembly (WHA), a 13-year comprehensive implementation plan (2012-2025) to address maternal, infant and child nutrition was endorsed with the inclusion of six global nutrition targets[30].

Significantly, not only donor organizations but also other development actors are engaged in the fight against under-nutrition. The international organization OXFAM for instance, is supporting a campaign on the rights of smallholder farmers to ensure access to water, land, investments etc. They recognise the growing interest in public-private partnerships despite the lack of clarity on the added value of such initiatives (Craynest, 2013). Oxfam is concerned with land grabbing where farmers are losing their capacity to ensure food and nutrition security to their families. The agriculture sector is very attractive in terms of investment opportunities thus it is crucial to regulate these opportunities (Craynest, 2013).

The discussion above suggests that nutrition is, to some extent, the new "mantra" in the international development debates. Increasing numbers of global initiatives are supporting: *A multi-sectoral approach* based on an integrated agriculture-nutrition-health-education agenda including social protection and safety nets; *a key role for the private sector* through production of high quality foods—

[29] More than $60 million were invested in activities that incorporate smallholder farmers into commercial, market-based activities; approximately 270,000 MT of commodities sourced within partner countries – the vast majority from smallholders, and the equivalent of around $300 million in sales from these farmers fed into the market system; and almost 800,000 smallholders reached with a mix of training, sourcing, and service provision (Grow Africa Secretariat, 2013).

[30] Child stunting, wasting, and overweight; anaemia in women of reproductive age; low birth weight; and exclusive breastfeeding.

including those fortified with micronutrients and through food production, employment and income generation; and *A key role for public-private partnerships*, including National Fortification Alliances.

However, there is a sense that this international movement has only filtered down to a limited number of countries and regions while the potential role of businesses is not yet institutionalised among some development partners. This includes the UN Family where interviewees highlighted the lack of dialogue with the private sector as a challenge to understanding the underlying motives, needs and contributions of different actors. This may be linked to a donor-driven mentality that is traditionally sceptical of private sector initiatives, potentially leading to missed opportunities despite growing recognition that the private sector has a role to play.

A regional approach to nutrition is not yet present in most policies and strategies, despite its importance often being highlighted within the CAADP framework and some companies do recognize the future potential of regional markets for their products.

3. The growing role of the business in nutrition

3.1. Drivers for business for development

The business sector is increasingly present as a potential key actor in implementing the above policy initiatives and achieving development outcomes more broadly. While private-sector led economic growth is a basic factor in addressing development issues, under-nutrition included (Fan et al., 2013), commitments made at the Busan High Level Forum on Aid Effectiveness, by the G8 and in the EU's recent Agenda for Change go further towards involving the private sector in designing and implementing development policy, "leveraging" private sector activity and finance, and improving the environment for businesses in developing countries. Policy-makers are increasingly willing to accept that profit is not anti-developmental, and that development challenges can be reduced by engaging with business. Businesses are therefore engaging in growing numbers of multi-stakeholder partnerships to address specific development issues with businesses, civil-society organisations, national and local governments, associations, local entrepreneurs, donors and other actors.[31]

While difficult to know what is driving private sector interest in engaging in development, a number of factors seem important. In the food and agriculture-related sectors there is a growing sense of the need to secure supply chains, partly reflecting recent supply shocks and fears of supply shortages. This has raised the importance of establishing closer relations with producers in order to raise productivity, ensure standards are met and secure longer-term contracts. This is also reflected in business engagement in addressing under-nutrition - as much as under-nutrition is a constraint to socio-economic progress due to its impact on growth and learning abilities, it is also a constraint to business relying on developing country workers.

An additional dynamic is the growing pressure for companies to show their "good conscience" through Corporate Social Responsibility (CSR). Interpretations of what CSR means vary from micro-scale projects such as local schools or charity contributions near production plants, to grander schemes that deal with development but outside the core business of the company. But CSR is also about securing

[31] See, for example, Byiers and Rosengren, 2012.

the reputational risk of multi-national companies which can easily be damaged by perceived irresponsible or exploitative practices. Nonetheless, the view of CSR is increasingly going beyond 'minimising damage' to 'maximising benefits' through closer engagement in developing countries.

By no means less importantly, there is growing recognition of Africa as a growth market of consumers. This relates to the growing middle class of consumers but also builds on models targeting the Base of the Pyramid (BoP). Epitomised by Pralahad (2006) the BoP model focuses on the relatively low-income consumers who nonetheless also consume, requiring firms to adapt or introduce new models that combine small margins with vast markets of low-income consumers. This includes markets for agricultural inputs such as fertilizers, for example. The key principles for commercial success laid out by Pralahad (2006) are Awareness, Availability, Access and Affordability, to which we return below.

A key aspect in this is the recognition of the need for multi-stakeholder partnerships. Whether addressing supply-chain issues, CSR or targeting BoP markets, the challenging conditions in developing countries that hinder private sector investment in the first place are increasingly addressed by bringing public, private and civil-society partners together to work jointly to overcome regulatory weaknesses, coordination failures, government policy implementation failures, geographical isolation, and other challenges. Given the need for multi-sectoral approaches to address under-nutrition, there are again some clear potential opportunities.

3.2. Nutrition-related business models

Tackling under-nutrition through market-based multi-stakeholder partnerships can satisfy development policy and business objectives and strategies. The questions then relate to the aspects of nutrition that can be addressed through profit-based models, the types of private sector actors involved, the forms partnerships take, the target of such partnerships, the limits of the models, and the implications of different approaches.

With *Availability*, *Access* and *Awareness* as the basis for addressing under-nutrition and essentially the basis of Pralahad's BoP approach, we take these as the frame for examining business roles in nutrition. Availability refers to the adequate supply of the good, in this case nutritious foods from the household to globally; access then refers to the distribution and affordability of nutritious foods; while awareness relates to marketing and information about BoP products, for nutrition this relates to behavioural concerns regarding food handling and preparation, health and hygiene and consumption choices etc.

Business-focused approaches can be further categorised as targeting *production*, *consumption* or *supporting frameworks,* such as sanitation and hygiene. In doing so, approaches can be 'direct', 'indirect', or 'supporting an enabling environment for nutrition', the categories employed above for nutrition interventions.

Within these, Chevrollier et al. (2012) identify five main types of business model to address nutrition. They defined these as: a) farmer development services; b) secured sourcing schemes; c) BoP intermediaries; d) food product adaptation; and e) hybrid market creation. The first two of these operate through smallholders as consumers and producers of goods and services, the third through intermediaries, while the latter two focus on reaching BoP consumers with nutritious foods.

Business and nutrition *availability*

Nutrition through consumption

Making nutritious food *Available* clearly has food consumption as its objective, regardless of who produced the food. This direct approach to under-nutrition is used for emergency relief through the distribution of fortified foods, or for longer-term market-based approaches through the marketing of fortified foods, particularly staple goods enriched with additional micro-nutrients.

A fundamental factor for commercial models in this line is the degree to which demand for fortified foods can be created through regulatory reforms. Chevrollier et al. (2013) call this approach a "hybrid market creation" as while the model can only work with sufficient demand, fortified food that is ostensibly the same as unfortified food implies a need for additional factors to create that market – this may be through marketing if indeed demand can be created through product differentiation and highlighting the health benefits although the marketing may need to be carried out on an independent basis. While pilot projects such as those discussed below illustrate that there is *some* demand for fortified food, challenges remain to further increase demand.

Fostering demand often requires regulation and legislation for minimum fortification standards as well as enforcement of these. This requires that governments have the capacity to pass the regulations, potentially against the interests of some in the private sector, and that they be able to enforce such legislation. To some degree, this is again behind the reasoning that tackling nutrition must be multi-stakeholder, but also represents broader institutional challenges that face development in the first place – how to have well-functioning public administrations that apply and enforce legislation and punish non-compliance.

One doubt around the food fortification model is the level of involvement of the local private sector. As micro-nutrient production takes place in major chemical plants in developed countries, the local private sector is generally only involved in mixing micro-nutrients into staple goods, or iodising salt, and in distribution through the sales of staples and salt. SUN Business Network mentions some "clear examples of locally-originated models" at a small scale although they also note the need for more momentum at a local level, an important factor given the underlying drive to promote development more broadly while tackling under-nutrition.[32]

Some of these issues are addressed in programmes such as NEPAD's Home Grown School Feeding (HGSF) programme. This is based on the principle of providing fortified foods to students and families as a social protection element based on a mix of nutrition and health education (Gyiose, 2013). In this case the private sector has a role to play in providing inputs (so production rather than consumption) while the role of communities is also emphasized by development partners, highlighting the need for complementary approaches and different partners playing different roles.[33]

Other approaches to consumption of fortified foods are through intermediaries who add micronutrients to food preparations. This includes the KeBAL model, discussed below, where fortification mixtures are added and sold as street food in Indonesia although the project there has yet to show clear results. In an evaluation report of the World Food Programme's (WFP) Private Sector Partnership and Fundraising Strategy (2012), the WFP stated that the private sector was found to have particular comparative advantages in specialist areas of technical expertise and provision of technology, where nutrition is a clear example. Corporations were also sometimes found to have facilities and access

[32] SUN Business Network Launch, 10-11 December 2012.

[33] Innovative delivery strategies – especially community-based delivery platforms – are promising for scaling up coverage of nutrition interventions and have the potential to reach poor and difficult to access populations through communication and outreach strategies. Lancet Series, 2013

on the ground that WFP did not have, including in sudden-onset emergencies. The company Royal DSM has also recently signed an agreement with the development aid organization World Vision to provide extra vitamins and minerals to the food for young children in Tanzania[34].

While food fortification is receiving increasing attention, for example under GAIN, a key question is whether this is due to its effectiveness or its commercial potential. While most are in favour of market distortion for a good cause, the fortification model is based on multi-national companies working closely with international donor agencies and governments, suggesting to some that these are being co-opted to increase the profits of the international private sector partner. The degree of competition to supply multi-nutrients in such projects may therefore be worth studying and making more transparent.

Nutrition through production

While the consumption of nutritious food is the objective, availability of nutritious food is essentially a result of the production and distribution of nutritious foods. Given the importance of agricultural employment in Africa, addressing under-nutrition through production-targeted interventions is therefore a priority even if it is means approaching the problem more indirectly than the consumption-targeted approaches mentioned above.

Availability of nutritious food can be analysed at the global, regional, national and household levels. Despite persistent food shortages in specific areas, some suggest that agriculture can meet future global food demands without any increases in real food prices (Pintsrup-Andersen, 2013). Farmers have proved that they can significantly improve yields if assisted by interventions to overcome external constraints such as lack of fertilizers, excessive fertilizer prices, excessively high transportation costs of marketable output, lack of effective competition in the output market and poorly functioning institutions. However, such assistance is often "temporary, and usually ends with the completion of the projects", providing a "bandage solution rather than structural changes in the external constraints" (Pinstrup-Andersen, 2013). The suggestion then is that availability should not be an issue at a global level even if, as seen above, regional disparities in under-nutrition are high.

At a regional level, Regional Economic Communities (RECs) are faced with a number of trade-offs affecting the availability of nutritious food. Policies to promote "national food security" and value-added within countries often put barriers to trade between countries within a region, reducing trade flows and thus the availability of certain food products. While CAADP and other initiatives in Africa promote greater intra-African trade and there is a growing focus on "growth corridors" to improve regional access to inputs and infrastructures (Byiers and Rampa, 2013), these are still at an early stage, with businesses continuing to face difficulties.

At the micro level, the production business model is what Chevrollier et al. (2013) call "farmer development services". This is essentially about supplying inputs and technical assistance to help to boost production, whatever the crops, as well as to diversify production towards more nutritious crops.

In promoting more nutritional own-consumption, one approach is the use of bio-fortification of seeds. This approach has been used, for example, in encouraging the planting of high-carotene sweet potatoes (Hotz et al., 2012) and iron-enriched beans in Rwanda (e.g. see HarvestPlus). An important

[34] The so called Miller's Pride project in Tanzania's Dar es Salaam will work with millers to fortify maize flour with essential micronutrients, reaching a population of over 22 million people. In addition to the fortification, World Vision and DSM will work with the millers to build business expertise, improve food safety and increase the millers' markets and profits http://www.childhealthnow.org/world-vision-and-dsm-announce-partnership-nourish-millions-world-s-most-vulnerable-children

aspect of these models is to improve access to inputs, potentially requiring complementary investments and regulations on fertilizers and improved seeds. The SUN Business Network, for example, highlights "opportunities around agriculture, product development, infrastructure systems, distribution channels, or research and innovation", through partnerships based on mutual benefit, transparency and equity.[35]

In Ethiopia, for example, efforts are being made to improve the supply, quality, and competitive pricing of improved seed for smallholder farmers. Public-private partnerships are helping to scale up a network for sustainable seed distribution while an agreement between the Government, USAID and the multinational seed company DuPont, targets 35,000 smallholder maize farmers to increase productivity by 50 per cent and reduce post-harvest losses by 30 per cent in three years. Although contract farming effectively links smallholder farmers to end markets, as well as increasing their ability to access credit to procure quality inputs and capture a larger product-value share, the concept is relatively new to Ethiopian producers and buyers (Grow Africa Report, 2013).

For those engaged in cash-crop production, the channel from farmer development services to better nutrition is through higher productivity and incomes. However, how farmers spend additional income depends on their own preferences that may not serve the nutritional needs of the individual or household. Given that international firms are increasingly concerned about securing supply chains and therefore about the productivity of their suppliers, initiatives such as the Dutch Sustainable Development Initiative (IDH) work with companies to promote better nutrition among farmers by encouraging so-called "home gardens" for own-consumption of high-nutrition crops, an approach also promoted by the World Bank (2007) among others. Wiggens and Keats (2013) cite literature that finds these have had positive effects where attempted. They also find that cash crops are not bad for nutrition, and can even increase food production.

Supporting factors - water and sanitation

As underlined above, water and sanitation are key factors in the body's ability to maximise the impact of nutritious foods. These more indirect approaches to nutrition security are carried out by businesses such as Unilever by marketing individually packaged, low-cost soaps targeted at low-income households, commonly touted as a clear example of the potential and success of BoP models. Other examples include water purification treatments (e.g. Banerjee and, 2011).

For all of the above approaches, it is fundamental that individuals and households understand the benefits of nutritional choices, thereby creating a market for commercial models to work. This underlines the need for awareness, discussed below.

Awareness about nutrition

Nutrition through consumption

Even if individuals have sufficient availability of nutritional food, better nutritional outcomes rely on behavioural choices. As experience shows, including in developed countries, behaviour can be hard to change, running up against traditions, cultural norms, beliefs, taste and individual preferences. As such, any intervention aimed at under-nutrition must rely on education and information.

Nutrition awareness is particularly focused on ensuring that pregnant women and children up to the age of two have sufficient intake of micro-nutrients to avoid irreversible effects – the 1000 days approach. While this is clearly about access and availability, it is also about awareness of the need for better nutrition during pregnancy and the early years of a child's life. This is why many call for a greater

[35] Taken from SUN Website, SUN Business Network: http://scalingupnutrition.org/business-network#countries_reveal

focus on women for any nutrition programme to work, and for time available to women as a key factor in determining nutrition outcomes.

Business approaches to under-nutrition through consumption must balance marketing and independent information, underlining the need for multi-stakeholder partnerships. The profit motive may conflict with nutritional objectives where consumers demand food of low or negative nutritional value, or companies promote such foods (Pinstrup-Andersen, 2013). At the same time, independent promotion by international development partners of a specific consumer good, even if of nutritional value, can be construed as providing undue support to a single private company, particularly given the limited evidence about the emerging impact of the contributions of the private sector to the fight against under-nutrition. Despite increasing rhetoric about engaging the private sector, there remains a widespread lack of trust among many donors with David Nabarro, the UN Special Representative on Food Security and Nutrition, suggesting the need to create "the documentation of impact by independent credible third parties" to build evidence and trust (David Nabarro at AIM Conference, 2013).

Nutrition through production

In promoting production-focused nutritional outcomes, awareness relates to information about farming techniques, the nutritional value of specific crops, and the importance of a diversified diet. In Tanzania, for instance, farmers are said to benefit from the African Farming Academy run by Syngenta, a company specializing in plant breeding, crop protection and seed care, which trains large and small farmers on best practices in farm management and agronomy. The first course took place in early 2013 in Nairobi, with 42 large farm managers from across the continent taking part, including several from (Grow Africa, 2013).

Nutrition through water and sanitation

Numerous studies highlight the impact of education on basic behaviour changes such as hand-washing, with positive indirect impacts on nutrition levels. As such, even without additional or more nutritional food, nutrition levels can be improved by improved sanitation and hygiene. This is the basis for initiatives such as the Global Public-Private Partnership for Hand-washing with Soap (PPPHW).[36] This is a coalition of international stakeholders, established in 2001, whose focus is hand-washing and child health to give families, schools, and communities in developing countries the power to prevent diarrhoea and respiratory infections by supporting the universal promotion and practice of proper hand-washing with soap at critical times. Member organisations include major producers of soaps such as Unilever, Procter and Gamble, and Colgate-Palmolive and a major part of the work is based on marketing campaigns through radio and other media about the benefits of hand-washing.

Even with availability and awareness, engaging the private sector to address under-nutrition requires that the target groups have access to these goods through markets.

Access to nutritional food

Production

Producing the right amount of food at a global level is only one consideration in ensuring nutrition security. Availability at a global level does not take into account local distribution issues which clearly determine the level of availability for individuals and households, nor does it take into account intra-household distribution which may not meet individual needs, for example for pregnant mothers and young

[36] http://www.globalhandwashing.org/

children (Pinstrup-Andersen, 2013). This distribution relates to availability in terms of trade patterns, but also to access, which for many can only be achieved through social protection mechanisms.

Even if there is implicit demand for nutritional food from consumers, real prices and the relative prices of nutritious to less nutritious foods are both key. As is now broadly recognised (e.g. Wiggens and Keats, 2013; Pinstrup-Andersen, 2013), the Green Revolution in Asia resulted in a decrease in the price of wheat and rice relative to fruits and vegetables, causing a dietary shift. As such it was successful in expanding consumption of dietary energy and reducing hunger, but nutrient deficiencies remained. This is partly about awareness, but a lot about access to nutritious foods based on price levels. By affecting price levels, price volatility therefore exacerbates issues of access as well as production decisions.

Consumption

As raised above, the problem of under-nutrition is focused, even if not exclusively, on rural communities which are not major consumer markets. This raises the question of how commercially viable a consumer-focused model can be in less-developed economies. One interviewee for this study talked about the "out of reach" at the base of the pyramid, referring to those whose income still does not allow access to minimally priced goods. This highlights the limits of the profit-driven model, but also the importance of the target market given that scale is a key requirement for most BoP programmes to work – price is key, so margins must be low across a large market.

Water and Sanitation

Clearly access to improved water and to sanitation are key indirect components of promoting better nutrition. Business-focused models here are less well publicised but include programmes such as the Water and Sanitation Programme (WSP), a multi-donor partnership administered by the World Bank to support poor people in obtaining affordable, safe and sustainable access to water and sanitation services, working directly with governments and companies at the local and national level in 25 countries. Other initiatives focusing on water and sanitation include the Netherlands Water Partnership and Partners for Water initiatives that help to network businesses, government agencies, NGOs and knowledge institutes who can apply for subsidies to fund water projects abroad.[37] Other private sector-involved initiatives are run much more as traditional public private partnerships to provide public services.

An enabling nutrition environment

Beyond these direct and indirect private sector approaches to under-nutrition, it is also important to have an "enabling environment for tackling under-nutrition" and political commitment (Haddad, 2013). Promoting nutrition through food fortification requires strong regulations and their enforcement, underlining the importance of the multi-sector, multi-stakeholder approach but also the need for considerable intervention, government capacity, and sufficient interest in pushing an agenda that does not necessarily promote all interests in a similar way. Some private sector operators are likely to oppose regulations that increase their costs while there is no discernible market.

But engaging with the private sector for nutrition in particular needs to be about working with the local private sector if it is to be genuinely sustainable, requiring that local actors also operate in a favourable environment. Vermeulen and Cotula (2010) propose looking at different types of smallholder contracts through the four lenses of *ownership* (who owns the assets?), *voice* (who makes the decisions?), *risk* (how is the risk divided between partners?) and *reward* (the division of earnings). This is important given the growing discussion of partnerships based on mutual benefit, transparency and equity (for

[37] With its "Working with Water Worldwide" subsidy scheme, the programme supports the projects of cooperating parties from the Dutch water sector in 26 countries around the world.

example in the SUN Movement), but where ensuring that ownership, voice and risk are fairly distributed requires a relatively strong institutional background if they are not to rely purely on benevolent companies.

Regardless of nutrition-targeting, the way that markets work more generally may impact on nutrition security and the viability of commercial models. Business growth and investment, whether in food production, processing or other sectors, is often subject to corrupt officials, poor supporting infrastructures, lack of access to finance and burdensome regulations. Even if this is changing, the wider policy environment nonetheless affects investment decisions, and this includes those sectors that are nutrition-relevant.

Regional approaches

A key element underlying the viability of market-based approaches to nutrition is the need to operate at a suitably large scale. As discussed, the BoP market requires low margins across a large population, and finding ways to scale-up pilot projects is a widely discussed topic. But there is an inherent difficulty in that pilots may be unsuccessful precisely because they are small-scale, a problem that is exacerbated in Africa where large-scale markets generally require regional approaches. Although the regional approach does not yet feature strongly in strategies to market fortified foods, potential benefits include not only a larger regional consumer base but also, for example, working with food fortification technologies at a regional level by supporting/setting up regional laboratories systems.

There is a growing awareness within CAADP of the need to work more on the regional dimensions of agriculture and food security. Regional approaches may also be important for nutrition through the establishment of regional stocks (food reserve systems) for emergencies and acute food crisis, but also to promote and facilitate regional markets and establishing regional regulatory institutions. A regional approach to nutrition can therefore bring indirect effects, but also provide an element of the enabling environment to better distribute nutritional foodstuffs.

The CAADP Pillar III (FAFS) recommends utilising regional markets to link surplus and deficit production zones by creating a sort of "food without borders". This would aim to increase regional trade opportunities and rapid market-based regional responses to food emergencies. However, beyond the idea, no concrete actions have yet been undertaken, whereas it is true that there is a limited use of local and cross-border trade to stabilize food supplies during crises.

Informal cross-border trade in agricultural goods is an important characteristic of regional agricultural markets that might be institutionalised. A 'Rapid Impact Assessment of the Global Economic Crisis on Uganda' conducted by the ILO (0209) showed a dramatic increase in informal exports from Uganda to neighbouring countries (DRC, Kenya and Sudan) while official exports declined from US$854 million to US$714 million between the first half of 2008 and the first half of 2009, a reduction of 16 per cent. The report notes that informal exports of industrial products increased from US$475 million to US$963 million between the first half of 2008 and the first half of 2009, and that agricultural exports including beans, maize, sugar, and other grains also expanded across the board. This suggests that even with continuing barriers to trade in agricultural products between many African countries, trade is still taking place and could be further harnessed for improving nutrition across the continent.

Although still 'invisible' to a large extent, 'Women's Informal Cross Border Traders' (WICBT) may have potential for a regional approach to nutrition security. In the SADC region, informal cross-border trade contributes 30 to 40 per cent to intra-SADC Trade while 70 per cent of informal cross border traders are women (UN Women). Of 2000 informal cross-border women traders surveyed by UN Women in 2007-

2009 in Cameroon, Liberia, Mali, Swaziland, Tanzania, Zimbabwe, a great majority stated that: the proceeds from their trading activities is the main source of income for the family; women traders use their income to buy food and other items for the household, pay for school fees, health care services and rent, save in banks and reinvest in their businesses. The role of women in nutrition is accentuated when they are a key earner within households.

The role of WICBT could be given greater attention in the process of preparing CAADP compacts and investment plans, so to better integrate nutrition within CAADP. WICBT face several challenges that need to be addressed. These include the need for i) better services (trade facilitation); ii) government accountability; and iii) more visibility for their contributions to society (Mvimbi, 2013). UN Women suggests that partnerships with Regional Economic Communities (RECs), government institutions, the African Union and the United Nations Economic Commission for Africa might enhance leadership, commitment, and accountability to address issues facing women informal cross border traders, and mainstream gender issues in trade agreement and processes. By doing so, this would again provide more of a supportive environment for promoting nutritional outcomes.

Another approach with potential benefits is the creation and strengthening of cooperatives and related regional networks. A recent Rabobank report states that "small local cooperatives can only survive if they are organized in regional business network as soon as possible after their establishment" (Cooperatives and Rural Financial Development, Rabobank 2012).[38] In this case, they can optimally allocate their scarce resources and achieve the necessary scale, and appoint an adequate professional management for carrying out daily business.

CAADP Pillar III also recommends disaggregating Africa into geographical "food security domains". These would be areas with similar food security problems or opportunities and would help to better understand the issues related to cross national borders. If expanded to nutrition security, this sort of mapping exercise could be fruitful and help to identify and recognize the critical role of cross-border traders in scaling up efforts to combat under-nutrition.

Despite the growing recognition of the potential benefits of a regional approach, interviewees for this study suggest that development partners are perhaps not ready yet to invest in the nutrition sector at a regional level. Similar to the nutrition agenda more generally, creating and expanding markets at a regional level needs information campaigns, but also a more wide-ranging awareness about nutrition-related issues among relevant stakeholders. Additionally in East Africa, for example, there are still regular import and exports bans that block markets. Therefore potential regional markets exist but policy improvements are slow to let them emerge. The WFP P4P initiative sources food stuffs locally and then distributes them in Ethiopia and the neighbouring countries however this is more a "regional procurement approach" than a "regional market approach".

GAIN has tried to expand markets at a regional level but due to several political and practical barriers has preferred to work at the national level. From our interviews, the Dutch chemical and materials company, Royal DSM, also recognises that it is important to strengthen regional markets and that this would be an incentive for potential investors although this is seen as a longer-term goal. On the other hand, Rabobank (Hein Aders, 2013) is supporting countries in bridging the gap between local, national and regional stakeholders and large and small-scale enterprises within the global food value chains.

[38] Rabobank Group is a cooperative bank that provides a full-range of financial services in the Netherlands and its internationally focused on the food and agribusiness sector.

4. Case Studies

While the above discussion highlights some of the key issues around business-focused approaches to nutrition, this section provides more specific details on two short illustrative examples. Both case studies are analysed through the lenses outlined above.[39]

4.1. Case 1 – The Strategic Alliance for Fortification of Oil and Other Staple Foods (SAFO)

SAFO is a partnership between BASF, the German chemicals company, and GIZ, the German agency for technical development cooperation. Gradl (2012) describes SAFO as "A project based alliance with a private aim to strengthen inclusive ecosystems for food fortification in developing countries, and the public objective to reduce malnutrition". This is specifically intended through fortifying basic staple foods with Vitamin A, a lack of which causes blindness and weak immune systems. The project is underway in Tanzania as well as in Bolivia and Indonesia.

Although the cost of fortification remains relatively low there are some requirements for the model to work. These include: fortification standards to stipulated mandatory levels; labelling, to distinguish fortified from unfortified staples; testing to ensure that labels are correct; and enforcement of standards and legislation. According to interviewees, mandatory fortification standards are required in order to ensure a large enough market to make the model viable. Without it, and accompanying awareness, consumers will not necessarily choose more nutritious food options. Partnerships such as SAFO then require that government departments effectively play these roles, while in reality many mandatory measures in Sub-Saharan Africa suffer from weak application and enforcement. While Gradl (2012) recognises the challenges faced, for example, by the Tanzania Standards Bureau, targeted support and work with a limited number of major companies can help overcome these.

The SAFO model therefore targets consumers of processed staples through formal marketing networks. In this aspect, it is important that SAFO focused on edible oils, which are locally processed, widely consumed and for which the market is broadly controlled by two large firms. With BASF in control of the technology for creating micro-nutrients capable of being invisibly and tastelessly mixed with staple crops in a stable form, their direct client is staple food processors such as millers or marketers and packagers, not consumers.

However, even if the two main companies control 80 per cent of the market as Grad (2012) suggests, those most at risk from under-nutrition may remain outside this market if they rely on self-produced foodstuffs. As such, the study highlights the need to go beyond formal networks to understand informal networks and relationships. This seems particularly important in Sub-Saharan Africa where such a large part of agricultural production and parts of processing (milling etc.) is also carried out informally. Donors may operate as purchasers to resolve this as the "next step" in Tanzania for SAFO, with

[39] The 'Access to Nutrition' Index judges 25 of the world's largest manufacturers on their nutrition-related commitments, practices and performance globally. This judges firms on the prominence of nutrition in their corporate strategy and products; the delivery of appropriate, affordable and available products; responsible marketing and support for health lifestyles, labelling and engagement with policymakers and other stakeholders.[39] While offering an important tool, such an index ignores the work of companies operating in the production and distribution of micro-nutrients, the focus of the two case studies presented here. See the Access to Nutrition Website at http://www.accesstonutrition.org/

DfID funds being used through the Helen Keller Foundation to procure fortificants for industry (Gradl, 2012).

By also focusing on education and awareness, the SAFO project implicitly attempts to build accountability relationships between consumers, suppliers and government. If consumers know the benefits of fortified foods, they will demand them so the logic goes. If they pay a premium (and perhaps even if they do not) they will expect that their food is indeed fortified, and if it is not, will demand better performance from government and from suppliers. Transparency will therefore have a role to play and may help to overcome government implementation constraints.

As such, this model is still to prove itself in reaching the most needy, even if any steps towards better nutrition are to be welcomed. A further conclusion from Gradl (2012) is that in the process of SAFO so far, "resources should be allocated rather generously in order to keep the momentum". This may require further confidence in the viability and desirability of the model before it can take place.

Both Gradl (2012) and our interviews confirmed that an important aspect to the SAFO programme from a BASF point of view is about brand recognition and BASF employee motivation. In some respects this is enough to ensure that they are engaged in making the programme work, even if in reality it is a small part of their core business.

4.2. Case 2 – The KeBAL street project

The KeBAL-street project in Jakarta is a partnership between the international NGO, Mercy Corps, Royal DSM, the multinational chemical and materials company and the Rabobank Foundation[40]. The model is a franchise business model based on selling nutritious food through two central cooking centres, where micronutrients from Royal DSM are mixed during food preparation, and 22 vending carts run by local street vendors where the food is sold.

Within the categories of approach discussed above, this is a direct approach to under-nutrition with a focus on the BoP market segment. The target is children under five years old living in urban slum areas of Jakarta who eat street-food, with each partner playing its own role within the ambitious goal of reaching hundreds of thousand of children. The potential success of the model is dependent on nutritional standards for food for children under five children, the management of the cooking centre and the provision and storage of DSM fortificant for food.

The KeBAL's best-selling products (with DSM micronutrient) of children under five include the following: bubur (porridge) is a popular breakfast meal in Indonesia and meets the nutritional requirements for six-month-old babies beginning to eat solid foods. KeBAL currently has seven varieties of bubur: meat, fish, chicken, mix potato & broccoli, red beans, mix vegetables and beef liver; Nasi Tim (rice dish) is also a popular meal for babies who are starting to eat solid food and for babies starting to teethe; Fruit jellies are also popular snacks for children containing many of the tropical fruits that are available in Indonesia.

[40] Rabobank Foundation is an independent not-for-profit entity funded by the Local Member Bank and the Rabobank Group. In addition to its activities in the Netherlands, the foundation is active in 25 countries in Africa, Latin America and Asia. The support of the Foundation focuses on member-based organizations, facilitating access to finance and stimulating agricultural development.

The model is illustrative of some of the mutual benefits possible from collaboration between the development sector and the business sector. Mercy Corps gains access to the micronutrient products and expertise of DSM including promotion and branding activities, with Rabobank assisting on aspects such as the business plan, while DSM is able to test a model for marketing its micronutrients more widely, while benefiting from the positive press associated with addressing a serious humanitarian concern. In this regard, Mercy Corps has been key in helping Royal DSM in identifying the need and street-vendor distribution model, and in bringing credibility and the marketing required to reach the target clients.

While the KeBAL project has had some success in terms of impact, its financial sustainability remains ambiguous. Rabobank Foundation refers to challenges such as the sustainability of the business for the street vendors, the lack of managerial skills and logistic problems for nutrient storage warehouse as well as pricing strategies that mean the model is not yet fully self-sustaining. On the other hand, the KeBAL project is still young and the impact the project is having leads to a general sense of enthusiasm from participants despite the challenges. Furthermore, as raised above, although KeBAL is apparently not yet commercially viable, it is difficult to separate out what may be natural periods required to set up and successfully establish business in Indonesia, and failures in the business model that inherently mean the model does not work for fortified foods.

Key lessons

While it is perhaps too early for a comprehensive evaluation of either of these projects some aspects stand out. Key features highlighted by interviewees included cost-sharing among partners, the need for government support for the quality and standards infrastructure, and education for consumers. This needs public support through government commitment; social engagement which can be facilitated through the role of the NGO to identify and understand the market, and private capital and know-how for the business venture itself. In going beyond such pilot projects, there may be a need for greater support from development partners in promoting the formation of the necessary coalitions. Something that the initiatives discussed above may be well suited to do.

5. Conclusions

5.1. General Lessons

The international development community is paying increasing attention to under-nutrition as a key objective for development policy. Recent years have seen a cascade of nutrition summits, events, compacts and statements, with increasing commitments to work across governments, development partners and the private sector. In Africa, the CAADP emphasizes the need to link agricultural promotion with nutrition, while also envisaging a key role for the private sector. While these high-level initiatives and strategies are creating useful momentum, it is important to examine the implications of working across public and private institutions to address under-nutrition and support African governments in leading these initiatives.

Although there is increasing attention on the private sector and its potential role, there remains some resistance to linking profits with development outcomes. While this is changing, and while it is important to ensure that development outcomes are not secondary to profit motives in supporting partnerships, the examples suggest the potential for linking market-based models with tackling under-nutrition while partnerships can ensure that development remains the core focus.

The complexity of scaling up nutrition security in any case necessitates working in a multi-stakeholder partnership, with the private sector clearly able to play an important role. The multi-sectoral nature of promoting nutrition security requires interventions that address under-nutrition directly, through measures to improve and increase access and availability of a nutritious food supply; indirectly, through production and education measures to raise awareness of the importance of nutrition; and through an enabling environment that brings institutional support as well as better rural infrastructures, property rights to ensure land tenure; equal land distribution access to education; and gender balance in participation in markets.[41] Neither public nor private actors can address these single-handedly.

To engage in such an agenda then requires collaboration and coordination across a wide range of governmental and non-governmental actors. This needs complementing by better information, education, marketing, support institutions and markets. Increasing private sector attention to business at the base of the pyramid appears to offer opportunities to link private sector interests with development objectives, including around nutrition.

Lessons remain limited about the different roles and models for different partners and particularly the process for making partnerships work. The discussion above suggests these will depend very much on the approach being taken to address under-nutrition. A focus on consumption requires different forms of support from different partners than a focus on production – in the former, governments are required to provide a regulatory framework around nutrition standards; while also important for addressing under-nutrition through production, the main role of government is facilitating access to inputs and education. By better understanding the differences between different approaches through further case analysis, it will be possible to form a body of evidence on what works and how in addressing under-nutrition and other development challenges through market-based approaches.

In addressing under-nutrition through market-based multi-stakeholder approaches, creating demand is key. Long-term benefits without immediate results may not be sufficient to trigger healthy consumption and production behaviour if there is insufficient information and incomes remain low, pointing to the need for multiple actors to work towards greater awareness as well as an enabling environment for nutrition promotion.

BoP models generally require large-scale markets, further underlining the need to 'promote' demand, but also the potential role of regional approaches. In Africa most markets are relatively small, underlining the need to link approaches to link agriculture, business, and government policies to promote greater regional integration around this theme. At present the potential benefits of a regional approach to tackling under-nutrition are recognized but not being actively pursued by the private or public sectors, something that might be further explored in upcoming key events on Nutrition (e.g. ICN+21).

While demand is key, access to nutritious foods for the poorest remains a challenge for market-based approaches to under-nutrition. Since the BoP does not necessarily include the "foundations" of the pyramid, the very lowest income levels may be "unreachable" through a market-based approach. This may be due to physical isolation from markets for nutritious food, or lack of resources to purchase food. For this group, education through radio and communities may be the only way to address under-nutrition, with public procurement or subsidies ensuring access.

[41] Evidence suggests that targeted agricultural programmes are more successful when they incorporate strong behavior change communications strategies and gender-equity focus, *The Lancet on Maternal and Child Nutrition Series 2013.*

5.2. Policy Implications

African Governments & CAADP – providing a framework and leadership

Given the prominent role of CAADP in guiding policy on food security and nutrition in Africa, there is an opportunity to raise the profile of approaches to under-nutrition in CAADP Compacts and Investment plans. This might include more explicit efforts to work with and learn from existing partnerships as well as ensuring that nutrition objectives are met through greater awareness and concrete actions with the maximum involvement of the local private sector, at the very least in agriculture and in food processing. This also includes learning from models to tackle under-nutrition from outside the region and building trust among potential partners from different sectors.

The CAADP framework might also be used to emphasise the need for an underlying support framework for nutrition and agriculture more generally. Standards, certification and enforcement are key for nutrition as they are for integrating agricultural production into value chains. CAADP might therefore be a useful framework for harnessing current international attention to nutrition for further buy-in at all levels in promoting the establishment of effective quality and standards infrastructures. Without this, market-based approaches to nutrition rely on information and awareness alone.

While regional CAADP compacts increasingly emphasise regional linkages to address food security, this could be further emphasised for nutrition. Whether addressing under-nutrition through consumption, production or supporting systems, a regional approach can in theory bring many benefits. Again, the growing attention to nutrition as a policy target may also be an opportunity to garner support around taking a regional approach to agriculture and food security more generally.

Private sector: exploring new markets in partnership with other stakeholders

Regardless of the focus of the partnership, engaging the private sector for development must overcome the inherent challenges of operating in a difficult business environment. This is particularly important in addressing under-nutrition, for the reasons given above, while the BoP approach also brings its own challenges in small markets. Given the various risks involved in market-based approaches, it may be difficult to draw concrete lessons from pilot projects, where lack of commercial sustainability may be due to the business environment, the business model or the specifics of working with nutritional foods. Private sector partners must therefore also work with the public sector and CSOs to try and draw out relevant lessons for policy. This may relate to greater knowledge and dialogue around existing knowledge, or better-adapted instruments for financing such partnerships.

Given the mistrust of the private sector in some quarters, there is a continuing need to build communication and understanding. The examples analysed for this paper suggest that rather than forming a part of their 'core-business', food fortification was seen by companies as a valuable contribution to society that also brings benefits to the company through reputation effects and the effect it has on employee motivation and retention, 'as long as they don't lose money'. This raises questions about the commercial viability, sustainability and ultimate development impact of such models, feeding those who are sceptical of engaging the private sector in the first place. Greater attention to working with the local private sector might also engender greater trust in the development community.

Development partners: working more and better with the private sector

Even with the growing recognition of the potential role of the private sector, partnerships and lessons from these for donors remain in their infancy. The Global Alliance for Improved Nutrition (GAIN) and AIM appear to offer a good platform for taking the agenda forward. Their focus on mobilizing

business to deliver nutritional products as part of their normal commercial or core business remains an important goal but as the discussion above suggests, it may be important to understand how to go beyond CSR to core business approaches given the challenges we have highlighted. As the GAIN and AIM models are also seen by the private sector as a way to enter into new markets and experiment, these may offer the best focal points for lessons that can be learnt from existing partnerships.

A useful dialogue within the donor community is needed on the nature of public-private partnerships. The contributions and benefits may not be equal but as long as the net gain exceeds the net cost to each partner, the partnership is justified (WFP, 2012). Some key issue to be further explored are: i) how do partnerships facilitate and stimulate innovative behaviour? ii) How do they reduce the costs of innovation? iii) How do they help public, private and civil society organizations reach out to marginalized sectors of rural society that are otherwise excluded from innovation processes and market dynamics?

If donors are to engage more with the private sector on nutrition, an important role might be in building trust and credibility around multi-stakeholder partnerships by supporting research and baseline studies to assess the impact of the engagement of the private sector. More analysis is needed on the determinants of these successes and the organizational, institutional, and policy options for scaling them up to the regional and national level, and for enhancing their impact on small-scale, resource-poor farmers and other marginalized social groups.

Donor support might also help in linking different market-based approaches to nutrition. Multi-stakeholder partnerships are generally targeted at a particular niche or market opportunity, while the discussion above highlights the need for broad, multi-sectoral approaches. There may therefore be a role for coordinating and ensuring not only that the broad supporting environment is in place, but also coordinating different multi-stakeholder projects to mutually support one-another.

Regional approaches

As referred to above, regional approaches are widely recognised as being beneficial in practice, but have yet to be translated into concrete actions. Given the role of informal trade in agricultural products, particularly by women, these aspects of regional integration are gaining awareness more broadly but might also usefully be targeted to address under-nutrition. But more importantly, there is a need for more understanding of the constraints to expanding and increasing the benefits from existing and potential regional agricultural value chains. Addressed in the context of CAADP and with nutrition as a focus, this may again be a way to promote multiple objectives around the goal of improving nutrition. This might include analysis and case studies on the impacts of cross-border trade and their impacts on the nutritional status of populations around development corridors, for example.

Overall, the role of multi-stakeholder partnerships is likely to grow in coming years, targeting under-nutrition and other development objectives. In order to maximise the benefit of these partnerships, it will be increasingly important to ensure greater knowledge and understanding around what works and does not in particular sectors and through particular approaches. Regular multi-stakeholder dialogues to share lessons among the full range of partners will be important to build trust, and understand how best to support such partnerships. These need to take place at the national, regional and international level, something that ECDPM aims to support.

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ECDPM was established in 1986 as an independent foundation to improve European cooperation with the group of African, Caribbean and Pacific countries (ACP). Its main goal today is to broker effective partnerships between the European Union and the developing world, especially Africa. ECDPM promotes inclusive forms of development and cooperates with public and private sector organisations to better manage international relations. It also supports the reform of policies and institutions in both Europe and the developing world. One of ECDPM's key strengths is its extensive network of relations in developing countries, including emerging economies. Among its partners are multilateral institutions, international centres of excellence and a broad range of state and non-state organisations.

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