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Investing in Nutrition-Sensitive Agriculture for Achieving the Goal of Ending Hunger in Africa by 2025: An Overview for Practical Policy and Planning Directions

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Abstract

This article, using the author's insider knowledge and review of literature, attempts to impart a thorough understanding of the rationale and potential of investing in nutrition-sensitive agriculture and related intervention in Africa. Not adopting a standard research-based methodology of data analysis or examination of observations, presentation of findings, discussions and conclusion, the article aims to simply provide agriculture development policy makers with pragmatic overview of nutrition-sensitive agriculture in a systematic way. Using graphical conceptualisation, the article presents the critical paths and realistic actions for integrating nutrition into agriculture; thus instilling confidence toward realising the goal of ending hunger in Africa by 2025, achieving the Sustainable Development Goals and other national targets for ending malnutrition in African countries. The paper concludes by making practical recommendations for scaling up nutrition sensitive programmes across countries and the continent.

Keywords: Food systems; Dietary diversity; Biofortification; Micronutrients; Food quality

Introduction

Malnutrition has continued to pose a major threat to the health, economic and social well being of a large section of African populations, affecting mostly poorer, rural and vulnerable communities in Africa. Under-nutrition and outbreaks of famine on the continent have remained persistent despite the positive achievements registered recently in agriculture and economic growth. Another source of concern is that a significant proportion of our population still remains vulnerable to the challenges of economic marginalization, hunger and malnutrition.

Since the break of the 1990's decade, several high-level platforms addressed the food security and nutrition dilemma on the continent. A number of African Union (AU) decisions were made which aimed at improving food and nutrition security of all Africans through increased agricultural production and productivity, and increased investment and market access of agricultural commodities. A landmark decision of the AU (until 2002 the Organisation of African Unity) was the "Declaration on Agriculture and Food Security" in Maputo, Mozambique in 2003, which endorsed the Comprehensive Africa Agriculture Development Programme (CAADP), which since became Africa's flagship programme(African Union Commission, 2003).

CAADP is a strategic framework for stimulating an agriculture-led economic growth in AU Member States for aligning their agriculture development, poverty eradication and rural development policies and plans. Functionally, CAADP is defined as a 'tool' for guiding country investment and partnerships in the agricultural sector for accelerating economic growth and achieving food and nutrition security, hunger elimination and poverty reduction in Africa. This clearly shows that the letter "P" which One such option that really stands for "Programme", is in fact a misnomer, as CAADP is not a programme in essence and function. A distinguished value of CAADP rests in its focus, common development goal and target, and a set of principles [1].

The focus of this framework is essentially ingrained in two keywords: "Investment" and "Partnership". It inculcates that agriculture must be taken as an investment, rather than just a

way for sustaining livelihood or subsisting. Therefore, it makes it paramount for governments to inject substantial resources into a country developed "Agriculture Investment Plan", otherwise also known as "Business Plan". The other key term "Partnership" gives importance to the need or philosophy of the coming together and working together of stakeholders for the common good. It underscores that importance of multi-sectorality of catalysing the agriculture, food security and nutrition to achieve the goals behind which CAADP was envisaged in the first place.

In order to achieve the vision of restoration of agricultural growth, food security, and rural development in Africa, CAADP sets to achieve the goal of attaining an average annual growth rate of six percent in agriculture sector. To achieve this goal CAADP aims to stimulate agriculture-led development that eliminates hunger and reduces poverty and food insecurity.Another target of CAADP is achieving food and nutrition security, especially for the poor and vulnerable, develop dynamic regional and sub-regional markets, integrate farmers into a market economy, and achieve a more equitable distribution of wealth.

CAADP embraces a set of overarching principles, paramount among these is that countries allocate adequate funds to the development of the agriculture sector with a recommended threshold of 10 percent as a minimum. However, some development experts argue that this threshold is not "a cast in stone" for relatively larger economies or countries basically not deriving their incomes from other sectors such as industry, mining, energy or services (for example, Djibouti and Seychelles). Another overriding principle of CAADP is peer review and dialogue for sharing best practices and mutual learning.

A practical and pragmatic strategy to put into practice the principle of partnership and thus emboldening comprehensiveness of the framework – that is, the "C" in the acronym, is to populate the so-called CAADP Compact. The CAADP Compact is an officially signed document that underlies statements of commitment by each of the key stakeholders. A typical Compact usually contains declarations to commit to actively take part in, resourcing and/or implementing a country's National Agriculture and Food Security Investment Plan. This defining document is then signed in an official high-level ceremony by representatives of key stakeholders, including: key public sectors (agriculture, water, environment, rural development, water and irrigation and trade and industry), private sector consortia, farmer organisations, civil society organisations and development partners.

Despite all this well envisioned agenda for stimulating Africa's development, CAADP did not take off smoothly and expediently! Possibly due to lack of proactive drive from the top of the pyramid - that is by the AU's lead agricultural development institutions and other factors such as inadequate capacity and resources, CAADP did not take off in earnest immediately by its endorsement until 2007 when the New Partnership for Africa's Development (NEPAD) - the Union's development agency- started to engage with the Government of Rwanda that led to signing of the country's CAADP Compact and launching of a process leading to the first ever CAADP-informed National Agricultural and Food Security Investment Plan (NAFSIP or NAIP, in short). Two years later in 2009, twelve countries, mainly in West Africa (Benin, Cape Verde, The Gambia, Ghana, Liberia, Mali, Niger, Nigeria, Sierra Leone and Togo) and East Africa (Ethiopia and Burundi), signed their CAADP Compacts.

From 2009 onwards, when it became apparent that food security without improved nutrition will not deliver the desired inclusive socio-economic outcomes, as the number of those affected by hunger and malnutrition has continued to increase over the past few years, it was decided that agriculture be made to integrate nutrition. In other words, to be nutrition-sensitive. It is based on these arguments that the concept of investing nutrition-sensitive agriculture was born. The initiative gained more attention during and after the second International Conference on Nutrition (ICN 2) took place in Rome, Italy, on 19-21 November 2014.

In addition to the increasing implementation of CAADP, as more and more countries endorsed a multi-sector and multi-stakeholder CAADP Compact, launched their National Agriculture and Food Security Investment Plans, the number of actors and programmes aimed at improving food security and reducing the number of populations affected by hunger increased. However, still little was achieved in proportion to resources spent to reduce undernourishment. Exacerbating the worry, a new problem of obesity due to consumption of diets lacking in quality has surfaced, especially amongst urban populations [2]. Also augmenting to this challenge is the lack of capacity for implementing nutrition and nutrition-sensitive programmes in a number of countries as well as in the regional economic communities and the continental bodies, namely; (African Union Commission (AUC) and NEPAD. Yet, another challenge remains of non-inclusion of nutrition amongst the top priorities in most member states of the African Union; thus low allocation of national resources.

Nutrition-Sensitive Agriculture and its Benefit to Rural Livelihoods

FAO [3] defines nutrition-sensitive agriculture as "a food-based approach to agricultural development that puts nutritionally rich foods, dietary diversity, and food fortification at the heart of overcoming malnutrition and micronutrient deficiencies". It is, therefore, clear from this definition that in order for an agricultural investment to be nutrition-sensitive it must have the benefit of resulting in three essential outcomes; nutrition-dense foods; diverse diets and fortified foods. Food fortification, especially industrial food fortification, is fundamentally aimed at supplementing food produced that lacks diversity and density of micronutrients. However, the most desired or virtual outcome is elimination of micronutrient deficiencies. FAO [3] underlines that the high-end purpose of

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investing in nutrition-sensitive agriculture as being "to make the global food system better equipped to produce good nutritional outcomes".

This understanding one may infer that food markets that are devoid of at least two values of rich food and diverse diets, is an indication that they exist in agricultural system that is not nutrition-sensitive. In other words, the agriculture sector in such setting does not fully address the social dimension of livelihood. In such a case, whatever advancements are made in developing the agricultural sector, malnutrition and its effects on disease and cognitive impairments are bound to thwart whatever gains the sector makes. For arguments in this direction, see Global Panel on Agriculture and Food Systems for Nutrition (2016), African Union Commission [4], Webb & Kang [5].

The United States Agency for International Development (USAID) proposes practical approaches for integrating nutrition into national agriculture development plans. USAID [6] rationalises that nutrition-sensitive agricultural investment planning should done with a "deliberate andappropriateforethoughtand planningto yieldimpacton nutritional status and consequently goodhealth and wellbeing". In general, apart from the USAID, World Bank, the Global Panel for Agriculture and Food Systems for Nutrition and other global development actors such as the International Fund for Agricultural Development (IFAD) have also made strong justifications of the importance of investing in nutrition-sensitive agriculture. IFAD [7] describes nutrition-sensitive agriculture as "(maximizing) the contribution that agriculture and rural development, working alongside other sectors, can make in eliminating malnutrition". This "maximization" of the contribution of agriculture can only come about through a number of policy and strategic actions that continental, regional and national policy makers must make to make agriculture truly nutrition-sensitive and virtually yield the desired outcomes in nutrition and health.

It is estimated that 75 percent of the world's poor live in rural settings and largely subsist on agriculture. The Africa Development Bank Group (2016) estimates that half of the workers across Africa and 7 in 10 of its population rely on agriculture for their livelihoods. Therefore, this connection between poverty and agriculture gives reason to make the sector nutrition-sensitive. This places nutrition at the heart of an agricultural transformation agenda. In their Malabo Declaration on "Accelerated Africa Agricultural Growth and Transformation for Shared Prosperity and Improved Livelihoods", Africa's Heads of State and Government made a bold resolve to boost the agricultural sector so as to contribute at least 50 percent to the overall poverty reduction target [8]. One good reason for targeting the rural populations with nutrition-sensitive agriculture is that they usually tend to consume diets that lack in diversity. Pastoral communities tend to eat or prefer less diets that mainly contain vegetables, whereas crop farming communities eat less of animal diets. USAID [6] posit that rural populations usually consume diets that are "monotonous" and that primarily consist of nutrient poor staple foods. It also points out that rural households have "deep attachment to particular foods" and thus might resist any persuasion to introduce new foods to their diets.

Another reason that motivates the need for investing in nutrition-rich agriculture and ridding the millions of threatened populations of malnutrition and its debilitating effects, is that Africa is blessed with agricultural potential in terms of its natural resources, including fertile land, water, animal wealth, fishery and marine resources [9]. The CAADP Framework outlines a number of areas that present the potential for investing in agriculture, irrigation, water, energy, industrial development and export market [1].

Comprehensive Framework for Nutrition-Sensitive Agriculture Geared to Meeting the 'Zero Hunger Challenge

A comprehensive approach for effectively transforming the agriculture sector to becoming truly nutrition-sensitive is to perceive it through a three-layer pyramid as shown in Figure 1. Enriching nutrition through agriculture must start from high-end policy making levels through to the farms, fields and other value-adding entities for producing nutrient-rich foods. At the top policy making level, there must be policy frameworks for eliciting or even enforcing commitment, resourcing and advocating for implementation of plans which are developed with nutrition-lens, or which integrate nutrition. There must also be legal framework for regulating or enforcing food quality assurance. It is to be borne in mind that many countries are signatories or self-complying with the right to food conventions. The former UN Secretary-General Ban Ki-moon's Zero Hunger Challenge calls for adequate food all year round and 100 percent increase in small holder productivity and income. This urge calls for appropriate interventions to make agriculture become nutrition-sensitive. The expression "adequate food" is unpacked to include nutritious foods. Needless to say, the second Sustainable Development Goal urges "End hunger, achieve hunger and improved nutrition and promote sustainable agriculture". Together with the first Goal ("End poverty in all its forms everywhere"), this goal is placed high up for a good reason that eliminating hunger and malnutrition through sustained agriculture should be the priority of all governments. In other words, investing in agriculture should primarily aim at ending hunger and malnutrition. It should, therefore, attract adequate funding, technical resources, and support and close monitoring of progress. Doing this at the leadership and high-level governance institutions, provides an enabling environment for the lower tier activities for mainstreaming nutrition into agricultural development planning processes, project implementation, food production and value addition (Figure 2).

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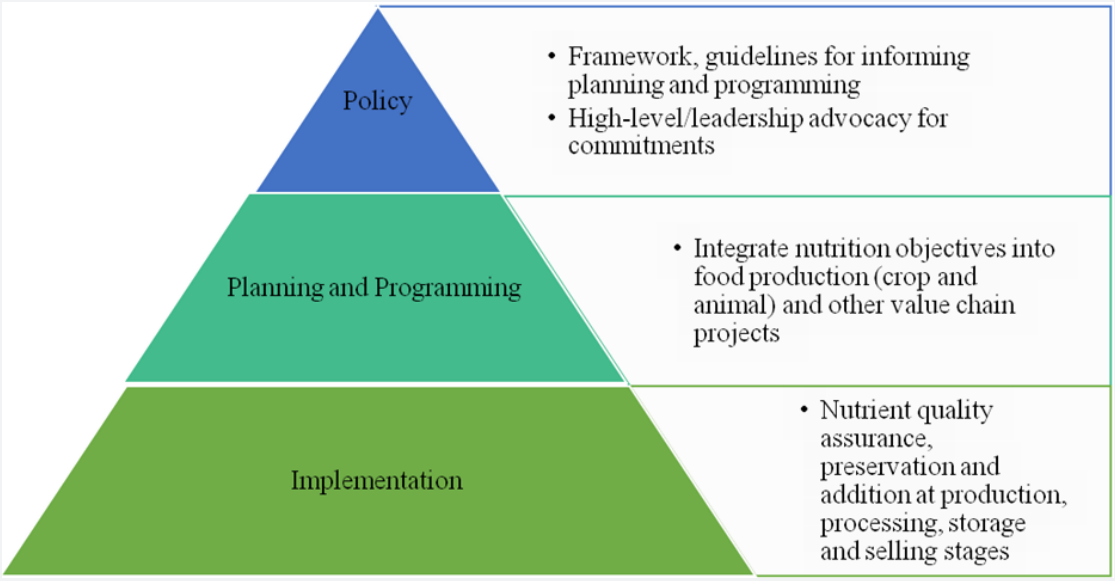

Figure 1: Pyramidal framework for realising nutrition-sensitive agriculture (Author'sconceptualisation).

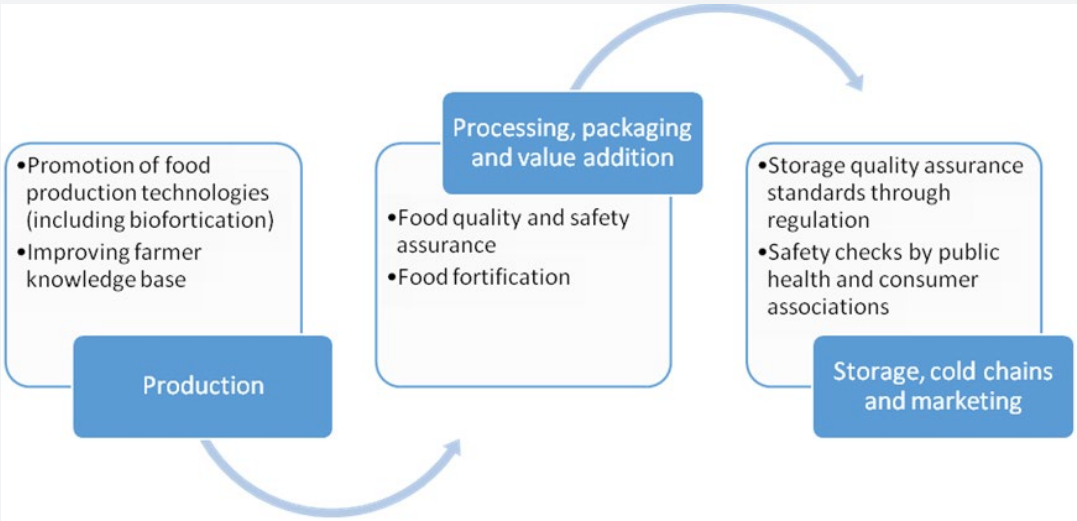

Figure 2: Framework for holistic food quality assurance and nutritive value addition at project implementation level (Author's conceptualisation).

The second tier in the pyramidal frame work covers planning, programming and resource allocation to agriculture and food technology projects. This entails planning and making decisions with a nutrition lens, so to speak. USAID recommends a guide for "promoting nutrient-rich value chain products". Among the recommended actions is to target production of nutrient-rich commodities and ensuring their availability in the local markets. The Framework for African Food Security [10] also outlines immediate, medium-term and long-term priorities and options for improving the quality of diets through diversification of food among vulnerable populations. One such option that really stand out in this direction is the "implementation of large-scale commercial vegetable and fruit production". Countries that plan such types of projects stand to reap the benefits of nutrition-sensitive agriculture. For instance, Rwanda is reported to have gained considerably in improving the nutrition status of its population after implementation of its "one family, one cow" policy. Another really viable option in the Framework for African Food Security which is recommended for improving food utilization is described as "Promotion of indigenous food practices, focusing on storage, preservation and preparation practices that retain the quality of food". This is in coherence with Alphane et al. [11].

The third and terminal tier of the pyramid (the implementation level) is where the bulk of realistic activities for ensuring that food produced, processed, stored, packaged

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and sold should be taking place. Food quality of course means both nutritive value and safety of the food produced, processed and packed for consumption, growth, healthy living, vitality and improved cognitive ability. The following framework describes the actions needed to enhance nutrition-rich agricultural value chains from production to selling points.

Agricultural and animal production projects use technology and innovation to increase productivity and yield per plot of land or animal breed. Similarly, production technologies can be extended to include addition of micronutrients (vitamins and minerals) to new varieties of crops. Improving bioavailability of micronutrients was intensively introduced in Africa thanks to cutting edge crop breeding technologies of research organisations like HarvestPlus. Recent expert discussions concluded by recommending efforts for scaling up investment in biofortification technologies.

Meanwhile, new technologies are emerging for improving availability of protein through increased production of pulses, milk and eggs. Swaminathan [12] states that several crop varieties (mostly staples) which are enriched with micronutrients are becoming available. The Global Pane on Agriculture and Food Systems for Nutrition presents evidence from studies that confirm the nutrition value and cost-effectiveness of some biofortified crops, including high-iron beans [13], vitamin A-rich and betacarotene-dense orange-fleshed sweet potatoes [14-17], beta-carotene-enriched cassava [18] and maize [19,20], rice high in zinc, and pearl millet high in iron and zinc content [21].

Despite the overwhelming evidence supporting viability of biofortification, there still remain a number of challenges facing scaling up. Top among these challenges is limited resources for national agricultural research. However, it is reported that some amount of acceptance of the technology by policy makers and national leadership exists in the few countries implementing projects on biofortification research. The Global Panel on Agriculture and Food Systems for Nutrition reports substantive encouragement of biofortification and gives the example of Nigeria showing including biofortified crops in its national dietary guidelines and in its newly revised National Policy on Food and Nutrition. Meanwhile, Uganda is reported to be rallying consumers for biofortified crops.

Improving farmer knowledge base whether to improve their appreciation of the value of cultivating nutrition-dense crops, or to realise the market value from biofortified crops, has been proactively carried out by policy advocacy organisations like the Global Panel which has a comprehensive policy brief on biofortification [22,23]. IFAD [7] encourages use of evidence for motivating scaling up of nutrition sensitive agriculture and influencing behaviour change. In the animal industry, appropriate interventions for improving animal-based nutritive diets, is to maximize produce and encourage households and smallholders to grow livestock production and involve in fish farming to market scales. Increased production lead to bringing down commodity prices and thus affordability and increased consumption. Poor households are often compelled to consume less or none of the nutrient rich fruits, fish, milk and vegetables not locally grown foods simply because they cannot afford them.

The second stage in mainstreaming nutrition at project implementation level is processing, packaging and value addition. A major challenge facing African for processing is inadequate capital for majority of smallholders to keep to standards of preserving food value, keeping stored food fresh, preserving food . harvest from contamination and pests and using proper packaging materials. This stage of food system requires giving loans to investors in food value chains.

Food fortification is done in reasonably large food processing industries. The organization Global Alliance food Improved Nutrition Gain (GAIN), among others, has been investing in some Africa countries to fortify staple foods and common ingredients or condiments (e.g. salt, sugar and cooking oil) which are consumed by large proportion of populations with essential micronutrients. The most food items featuring in the programme are: vegetable oil fortified with vitamins A and D; wheat and maize flour with fortified with iron, folic acid, other B vitamins and zinc; and soy sauce with iron and salt with iodine.The organisation works in public-private partnerships (PPP) setting, working with food processors and regulators in more than 30 countries, mainly in Africa and South Asia [24].

The third stage in the implementation of nutrition-sensitive agriculture is that of food storage, cold chains and marketing. This is the stage where food quality can be lost if not handled properly and according to scientific standards (temperature, exposure to pests, pathogenic organisms, moisture and toxic substances). In addition, food stored for protracted durations can render it unsafe for consumption and might cause disease. Improved and tested technologies are usually the ideal means for storing, preserving, and preparing food for selling. This is particularly true for fruits and vegetables. However, El-Ramady et al. [25] argue that as such technologies are usually expensive, most poor producers cannot afford them and hence they advocate for use of locally-available and affordable technologies alongside natural and human resource. Finally, food quality and essential micronutrients can be preserved or lost at selling points or market outlets due to handling and exposure to uncompromising weather conditions (extremely hot or damp temperature and other factors). Food quality losses at this stage is the undoing of all efforts to preserve quality done in all other stages from production to packaging and transportation to the markets. It is, therefore, essential that all necessary measures and knowledge sharing must be undertaken to ensure that the entire food system is made to be nutrition-sensitive.

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Recent Policy Developments by the African Union for Boosting Nutrition-Sensitive Agriculture

Awakened by the challenge emanating from persistent outbreaks of famine on the continent coupled with appalling statistics informing about the severity of malnutrition, a few African and International Leaders sounded the call for "Ending Hunger in Africa by 2025" in a high level meeting convened on July 2013. This Declaration was endorsed in Malabo, Equatorial Guinea in June 2014 by the Summit of the African Union Heads of State and Government in which a call was made to bring down stunting and underweight to 10 percent and 5 percent, respectively, by 2025. The Summit further resolved to position the goal of ending hunger as a high-level objective in national development plans and strategies, and to this end establish long-term targets that give all children equal chance for success, by eliminating the additional barriers imposed by child under-nutrition. To translate this commitment into action, the African Union Commission, the NEPAD Agency and FAO who had already been collaborating on implementing recommendations for main streaming nutrition into CAADP and in particular the National Agricultural and Food Security Investment Plans (NAIPs), convened a number of partnership meetings to agree on concrete steps for driving the nutrition in agriculture agenda forward.

Mainstreaming nutrition into agricultural development plans and in CAADP in particular, presupposes that nutrition is embedded in policies, strategies and developmental plans at all governance levels. It is anticipated that by so doing quality nutrition-sensitive programmes are implemented at scale. It also requires that adequate support systems are in place, including generating evidence for monitoring and informing action [26].

Apart from capacity development workshops and expert dialogue sessions coordinated by NEPAD for main streaming nutrition into the CAADP-informed NAIPs, which started in 2011, FAO facilitated multi-sectoral teams in AU Member States with technical instruments and resources for action [27]. Some Member States have since made substantial progress in the process of reviewing their NAIPs with the aim of main streaming nutrition into them. One such country is Ghana which reported, among other things, including nutrition in the country's second edition of the Medium Term Agriculture Sector Investment Plan (METASIP) [28]. Zambia, Gambia, Sierra Leone, Guinea, Togo, Mali, Niger, Guinea Bisau, Burkina Faso reported establishing multi-sectoral food and nutrition committee for mainstreaming nutrition into their NAIPs. Zimbabwe also reported inclusion of nutrition into their NAIP and establishing structures at sub-national levels to coordinate local responses to food security and nutrition.

From early 2016 the African Union resolved to embrace a continental home-grown school feeding (HGSF) programme that aims at integrating smallholder food producers to a market economy [9]. According to the decision the aim of the programme is " enhancing retention and performance of children in schools, and in boosting income generation and entrepreneurship in local communities". This places importance on smallholders to get linked to a readily available local market. Home-grown school feeding can be a typical intervention that links agriculture to child nutrition, provided that nutrition activities such as dietary diversification, food fortification and 'nutritionalisation' of the school menu is mainstreamed into it. HGSF is also a typical cross-sectoral intervention, as it brings together at least three sectors (education, health and agriculture) to play part in it. The programme Partnership for Child Development (PCD) of the Royal College London has been championing HGSF, rendering technical expertise, since 2009. One of its recognised technical products is the 'Global School Feeding Sourcebook: Lessons from 14 countries [29], which is aim to guide governments and development partners on designing and implementing national school feeding programmes based on international standards and provide practitioners with the knowledge, evidence and good practices.

Summary and Conclusion

Making agriculture nutrition-sensitive is worthwhile undertaking, as it is cost-effective [23] and yield the desired results [3]. Evidence from research and experiences shared show the efficacy of the agricultural activities that are potent with nutritional outcomes. It is satisfying to note that the number of actors implementing nutrition-sensitive agricultural projects have been on the rise since the break of this second decade of the Millennium. Equally gratifying is the knowledge that of late that policy for integrating nutrition activities into agriculture (diversification of food, fortification and biofortification) has gained momentum. More so, a number of opportunities currently avail themselves for investing and scaling up nutrition-sensitive agriculture. Twomajor areas of opportunities for taking nutrition-sensitive agriculture to scale can be cited.

First, there is heightened global attention to nutrition-sensitive agriculture. Hunger and malnutrition are fast becoming an issue of international attention and nutrition-sensitive agriculture has been on the agenda of programmes for ending hunger and malnutrition for quite some time. A case in point is the recent initiative pioneered by the President of the Africa Development Bank (AfDB) and the Global Panel on Agriculture and Food Systems for Nutrition dubbed "African Leaders for Nutrition" whose main aim is to help raise domestic resources for nutrition.

The second notable opportunity that might work in favour of mainstreaming nutrition into agriculture is the strong recommendations to promote food systems which are gaining remarkable momentum in high-level development platforms. Development funding organizations such as the AfDB, IFAD, USAID, EU, Bill and Melinda Gates Foundation, among others , have expressed impressive willingness to support nutrition programmes embedded in an agriculture development agenda. AFDB [30] recognises nutrition as the "cornerstone of good human and economic development".

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In addition to the expressed high-level commitments such as those of the Global Panel, good impressions have also been documented on the significance of biofortification for combating malnutrition in Africa and as a buffer for enhancing resilience to malnutrition and other livelihood strains [23]. IFAD [7] and USAID [6], among other stakeholders, have developed plans to scale up nutrition-sensitive agriculture. Besides biofortification,other initiatives such as the home-grown school feeding, family farming (AfDB and FAO), purchase for progress (WFP), the Initiative for Food and Nutrition Security in Africa (IFNA) of NEPAD and JICA, Agriculture to Nutrition (ATONU) of the Food, Agriculture and Natural Resources Policy Analysis Network (FANRPAN) are all geared to contributing to the goal of reducing malnutrition through agricultural interventions.

Six main challenges are noted that post a major impediment to the objectives of mainstreaming nutrition into agriculture. First and foremost, and as noted earlier, the fact that multiple actors are on the stage to implement or are implementing nutrition-sensitive agriculture projects also bring the challenge of established mechanisms for coordinating them so that progress can be monitored and improvements can be made in a timely fashion. This requires substantial resources and strong capacity for coordination which is still quite limited at the moment. Second, funding of the different initiatives is hitherto non-streamlined and exist in piecemeal forms. This causes piecemeal implementation as well. Third, despite some high-level of commitment to nutrition development with the agriculture investment and CAADP agenda, a considerable number of African Union Member States have not translatedthem into resource allocation. This definitely hinders upscaling of projects in depth and breadth to cover more beneficiaries and more geographical areas. Fourth, it has been observed that there has been slow momentum toward accelerated implementation the Malabo Declaration on "Ending Hunger in Africa by 2025" and indeed the second Sustainable Development Goal (SDG 2). Fifth, capacity for coordinating the multiples of development partners implementing nutrition-sensitive projects remains very limited both at the continental level and at the regional economic communities'level. These institutions lack set ups for follow-up of planned activities in their respective member states. Sixth, the has been poor capacity for implementation of massive national programmes even in cases where resources are available. This has made monitoring of progress very difficult due to lack of whom to hold accountable and compiling reports [31-33].

In conclusion, for nutrition-sensitive agriculture to be progressively successful and scaled up, an aggressive capacity building programme must be supported at all levels; continental, sub-continentaland national levels. Realistically, the current set-ups where nutrition capacities are minuscule or subsumed within larger departments with a gamut of other mandates, be they at national or continental levels, are manifestly counter-productive. A massive programme that affects the lives of many that nutrition indeed is, require a dedicated organisation with a specific mandate and one that has supreme authority.The many and emerging agriculture-nutrition initiatives as described above requires concerted efforts and executive decisions. Combating a mammoth problem that affects a large proportion of a population requires high-level and well capacitated institutional setups and governance mechanism. The positioning of governance of nutrition surely need a rethinking.

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