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The first Programme food and nutrition security, impact, resilience, sustainability and transformation: Review and future directions

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ABSTRACT

The FIRST Program – Food and Nutrition Security Impact, Resilience, Sustainability and Transformation, is a partnership between the European Union and FAO. The EU and FAO launched a stocktaking exercise to assess progress in improving food security and nutrition in 24 FIRST priority countries. This paper presents the results of a quantitative analyses, literature review, country reports and a May 2019 consensus workshop that were the basis of identifying issues that must be addressed for FIRST countries going forward. Seven thematic areas were emphasized as essential for meeting the targets in SDG2 – zero hunger. These factors include reinventing agriculture; unleashing the private sector; gender equity; decentralization of programs; multi sector concepts within a sector approach; prioritization; data, and political process and governance.

1. Introduction

There is a clarion call detailed in the Sustainable Development Goals (SDGs) and the 2030 Agenda for Sustainable Development (2030 Agenda) to achieve a world free of hunger and malnutrition in all its forms (UN, 2016). The goals of the 2030 Agenda re-enforce and are strengthened by the Framework for Action of the Second International Conference on Nutrition (FAO/WHO, 2014), and the UN Decade of Action on Nutrition, 2016–2025 (FAO/WHO, 2016). While some might argue that many of the 17 SDGs relate either directly or indirectly to nutrition, it is SDG 2, which focuses most prominently on nutrition, food security and sustainable agriculture.

The FIRST program (Food and Nutrition Security Impact, Resilience, Sustainability and Transformation), a partnership between the European Union and FAO was created to strengthen countries' capacities to address food security and nutrition through more effective policies and investments. The FIRST program focuses primarily on the provision of policy assistance for food security and nutrition (FSN) and capacity development support at the country level.

In 2019, FAO conducted a stocktaking exercise to ascertain the barriers and constraints to achieving food security and nutrition in the

FIRST countries. The objective of the present paper is to summarize the results of the stocktaking exercise in 24 FIRST countries¹ and provide recommendations for accelerating progress towards SDG2 in phase II of the FIRST program.

The paper is organized into six sections: Methodology; What do we know? What got us here? Critical Thematic Areas; Discussion and Conclusions.

2. Methodology

The paper uses four sources of data and analyses to address the overall objective: (1) quantitative analyses; (2) literature review; (3) consensus on critical themes which emerged from a May 2019 workshop; and (4) country diagnostics reports.

2.1. Quantitative analyses

Data were analyzed employing cluster analysis, covering 167 countries (including the 24 FIRST countries) over the period from 1990 to 2015; the analysis was organized around three dimensions: (1) food security and nutrition outcomes (FSN); (2) structural drivers of food

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¹ Afghanistan, Burkina Faso, Cambodia, Chad, Colombia, Côte d'Ivoire, Cuba, Ethiopia, Fiji, Guatemala, Honduras, Kenya, Lao PDR, Liberia, Malawi, Myanmar, Niger, Pakistan, Sierra Leone, Solomon Islands, Suriname, the United Republic of Tanzania, Timor-Leste, the West Bank and Gaza and the Economic Commission of Western African States (ECOWAS).

security and nutrition; and (3) past and present policy interventions in support of food security and nutrition. The analysis sought to obtain a country typology across each dimension. More detail on the methodology is contained in [FAO and IFPRI, 2020](#) concentrating primarily on the FSN component which includes measures of undernourishment (caloric deficit), stunting and wasting for children under five years of age and overweight in the adult population.

2.2. Literature review

A comprehensive literature review was conducted addressing food security, diets, nutrition, poverty, agriculture, sustainability, gender, capacity development, rural development, social safety net programs and targeting, emerging issues (climate change; demographic growth; employment; migration; and crisis countries among others), youth, and political economy issues related to policies and programs focused on food security and nutrition. This is a massive literature. As such, emphasis was placed on global reviews from 2010 to 2019 along with publications for specific countries, filling gaps in our understanding of facilitators and bottlenecks in achieving SDG2.

2.3. Critical themes

Seven themes emerged from discussion at a workshop held in Rome in May 2019. The workshop was attended by policy officers from 24 FIRST countries, FAO Rome based staff, EU, World Food Programme (WFP), International Fund for Agricultural Development (IFAD) representatives and consultants. The identification of these themes was based on discussion and an ultimate consensus on themes or areas that warrant further attention within FIRST countries in phase II of the program as well as priorities for FIRST countries to accelerate progress towards FSN targets of SDG2.

2.4. Country diagnostic reports

A series of country diagnostic reports were developed for the 24 FIRST countries. These reports provide an in-depth country policy effectiveness analysis to capture the experiences and lessons learned in addressing Zero Hunger -SDG2; details on these diagnostic reports can be found at [\(IFPRI, 2020\)](#). Sections of these country reports are extracted in the current paper to illustrate some country-specific examples that emphasize some larger themes.

3. What do we KNOW?

There is a remarkable degree of convergence of results between the literature review, and the quantitative analyses. The overall literature is clear that progress has been made on many key dimensions of food security and nutrition. Worldwide, undernourishment (an FAO and SDG2 indicator measuring caloric energy insufficiency) has decreased and agricultural production has improved, and poverty rates have declined ([Development Initiatives, 2018](#); [FAO/IFAD/UNICEF/WFP/WHO, 2018](#); [FAO/IFAD/UNICEF/WFP/WHO, 2019](#); [Willett et al., 2019](#)).

At the global level, stunting in preschool aged children has shown a steady decrease ([Development Initiatives, 2018](#)). In addition, overall stunting rates have also improved in the 24 FIRST countries with stunting declining from 38.5% in 2012 to 35.1% in 2018. ([FAO and IFPRI, 2020](#)).

Unfortunately, while there have been improvements in several measures of undernutrition, overweight and obesity is increasing in all regions and countries in the world, except for South Korea and Japan ([Development Initiatives, 2018](#)). No country is on track to meet the World Health Assembly targets for obesity. The upward trend in obesity is expected to continue under a business as usual scenario ([Willett et al., 2019](#)).

Based on the quantitative data from the stocktaking exercise, [Fig. 1](#)

shows a graphic presentation of countries classified into six categories ranging from those with high hunger (undernourishment) and high undernutrition (stunting and wasting), at one end of the continuum, to those with no hunger but high adult overweight.

The quantitative analyses allow a tracking of the evolution of the world in terms of FSN performance ([Fig. 1](#)). Over 25 years, the world has achieved a remarkable performance in lifting countries out of extreme hunger and undernourishment and the group [1] countries have shrunk drastically from 28 to 3 countries (mainly in Central and East Africa). Group [4] (low hunger and high undernutrition) has also been reduced in size after 2000. Many developing countries have moved to the group [3]; this group of countries has doubled in size, and counts 30 members with moderate hunger and undernourishment, but still largely far from reaching the SDG 2 targets. The data also suggest a rapid expansion of the most “advanced” group, where emerging countries have cut drastically the level of hunger and undernourishment but have also caught up with developed economies in terms of overweight and obesity.

A key observation from [Fig. 1](#) is that hunger and undernourishment have improved significantly over the past 25 years as reflected in the sharp reductions in undernourishment in most parts of the world.

The classification of the FIRST countries into the same six categories of hunger, undernutrition and obesity is shown in [Table 1](#). The FIRST countries mirror what was observed from the data in [Fig. 1](#). The category with the most FIRST countries is group 3, those countries with moderate hunger and undernutrition. Fiji, Colombia and Suriname, however, fall into the highest category, with high adult overweight. As noted from the 2019 workshop discussions, agriculture in the FIRST countries has placed an excessive emphasis on staples, at the expense of production diversity which could have contributed to improved diet quality. The vexing issue of resolving the tradeoffs between policies to fight undernutrition without at the same time increasing obesity has not been resolved.

The country diagnostic reports were prepared prior to the Covid 19 epidemic. The negative impacts on food security and nutrition in the FIRST countries are likely to be enormous. The country lockdowns have precipitated major negative effects on livelihoods with a concomitant decrease in household income, and in turn, dietary patterns and food security. The true magnitude of these effects will only be apparent as

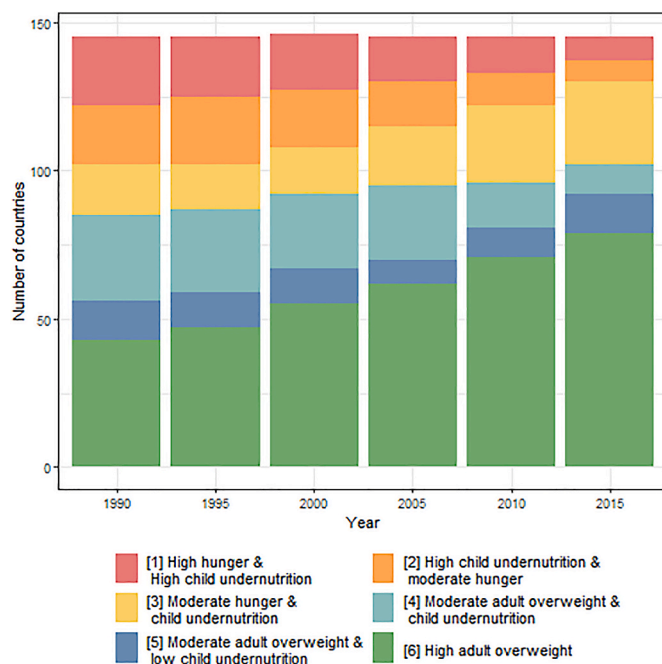


Fig. 1. – Trends in hunger, undernutrition and overweight. FAO and IFPRI, 2020.

Table 1
FIRST Country Group Classification of Hunger, Undernutrition and Overweight. FAO and IFPRI, 2020; based on 20 FIRST Countries for which complete data were available.

High Child Undernutrition and High Hunger
Ethiopia, Liberia, the United Republic of Tanzania
High Child Undernutrition and Moderate Hunger
Chad, Timor-Leste
Moderate Child Undernutrition and Moderate Hunger
Afghanistan, Burkina Faso, Cambodia, Côte D'Ivoire, Kenya, Lao PDR, Myanmar, Niger, Pakistan, Sierra Leone
Moderate Child Undernutrition and Moderate Adult Overweight
Guatemala, Honduras
Low Child Undernutrition and Moderate Adult Overweight
–
High Adult Overweight
Colombia, Fiji, Suriname

monitoring data emerge from the FIRST countries; this will be an on-going process.

4. What got us here?

Not surprisingly, unraveling the determinants of progress in food security and nutrition is complex. For the 117 countries included in Fig. 1, there are, however, several key underlying drivers that help explain trends in food security and nutrition. At the country level, these include economic growth, agricultural growth, poverty reduction, levels and trends in employment and unemployment, education, social protection policies, reduced inequalities and progress in economic and social inclusion of groups such as youth and women. (FAO/IFPRI, 2020). For the FIRST countries, a comprehensive strategy for increasing productivity of agriculture, especially for smallholder farmers, and within the agri-food system in general, properly implemented and resourced, is a necessary first step for reducing undernutrition and rural and overall poverty. For instance, in Cambodia, improvements in FSN are driven by strong economic growth, underpinned, in turn, by an increased performance of agriculture and supporting investments in education, health and infrastructure. Similarly, the National Food Security Policy (NFSP) of Pakistan includes promotion of sustainable food production systems and making agriculture more productive, profitable, climate resilient and competitive. The NFSP also covers the diversification of the food supply, so that a broader range of nutritious foods become locally available at affordable prices rather than simply the staple crops of wheat and rice. These combined strategies have contributed to having Cambodia and Pakistan elevated to category 3 with moderate child undernutrition and moderate adult overweight.

It would be misleading to suggest however, that agriculture as a stand-alone sector will be the only driver of progress in achieving the food security and nutrition-related targets of SDG2. Even where the agricultural sector has experienced growth, some households are often left behind; in these cases, social protection programs combined with agriculture have contributed to improvements in food security and/or nutrition (FAO, 2015; HLPE, 2012). Many of the FIRST countries have some form of social protection programs (IFPRI, 2020); the limiting constraint most often is the ability of the social protection schemes to effectively reach the most vulnerable groups.

Investment in infrastructure including roads, electricity, drinking water, sanitation, improved access to education, reduction in various forms of inequality and reduced gender disparities, along with a productive agricultural sector has produced the most progress in improving food security and nutrition. Such factors have contributed to progress toward improved FSN at similar levels of income and economic growth (Smith and Haddad, 2014). An analysis of 116 countries between 1970 and 2012 found that safe water access, sanitation and women's education, gender equality and quality of food (not just quantity) were significant drivers in reducing stunting (Smith and Haddad, 2014).

The quantitative analyses on 117 countries in Fig. 1 (FAO and IFPRI, 2020) shows that greater public spending on education and health is positively correlated with better FSN performance. In addition, improved coverage of basic services and infrastructure in rural areas (drinking water, sanitation and electricity) is positively correlated with low levels of undernourishment and the progress towards the end hunger goal of SDG2.

There are, however, variations in these improvements across countries as shown in Fig. 1. For example, political stability within a country has a dramatic impact on improving food security and nutrition. Timor L'este is a relatively new democracy that is making progress towards SDG2 but with a stormy past with which to contend. In the violence and destruction that followed independence from Indonesia, 95% of the schools were damaged; current investments are focusing on the educational sector and showing positive results (IFPRI, 2020). Another example is Liberia, a country emerging from a 14 years civil war, that was plagued by the Ebola epidemic in 2014 (IFPRI, 2020). The country has a high dependency on food imports coupled with a low agricultural yield. Areas of Liberia with the high rates of food insecurity have poor roads and a limited access to markets. These two country examples reinforce that context is critical in understanding the barriers to making progress towards SDG2 which are often not captured solely from a quantitative analysis.

5. Critical Thematic Areas

A workshop held in Rome in May 2019 with representatives of the 24 FIRST countries and other stakeholders led to a consensus on the thematic areas that need to be addressed in phase II of the on-going FIRST program. The participants from FIRST countries emphasized that these seven thematic areas will be critical for advancing progress towards SDG2. The consensus on these themes emerged from a discussion of the individual country diagnostic reports, the quantitative analyses and the literature review. These different thematic areas are complementary and interlinked.

5.1. Reinvent agriculture

Economic development is the lynchpin for generating progress in improving food security and eliminating malnutrition in all its forms. As noted previously, countries have used a variety of policies, either alone or collectively, to achieve FSN goals. Agriculture, undoubtedly, is one key sector driving economic growth and poverty reduction. Extensive evidence documents that growth in agriculture is more effective than growth in other sectors in reducing extreme poverty (Anderson et al., 1994; Timmer, 2007). Under a "business as usual" scenario, FAO projects that the world will have to produce 50% more food in 2050 than in 2015 to feed close to a ten billion population. Therefore, agriculture matters!

The emphasis on the agricultural sector and agricultural productivity is, in large part, driven by the fact that in most countries the largest share of the workforce is still involved in agriculture. For example, in the four FIRST West African countries (Niger, Chad, Burkina Faso, and Côte d'Ivoire), agriculture accounts for 20–25% of GDP and employs about two-thirds of the working population (FAO and IFPRI, 2020); similarly, agriculture is the single most important source of employment in Myanmar (70%), Pakistan (47%), and Cambodia (44%).² Not to be overlooked is the fact that agricultural exports in agriculturally based economies are the life blood of increasing GDP and, therefore, heavily dependent on the continued productivity in the agriculture sector.

The large differences between the relatively low share of agriculture

² The difference between the share of agriculture in total GDP and the (much larger) share in the labour force shows also the low labour productivity in the sector.

in GDP compared with its share in the labor force in many developing countries point to low agricultural labor productivity and low returns to labor which tends to perpetuate rural poverty. Over-emphasis on yields often downplays the importance of labor productivity as a driving force out of poverty. However, the determinants of successful, productive agriculture are complex. As shown from the literature review lack of access to inputs and innovations, poor extension services, lack of secure access to assets such as land and water and low social/political capital are just some of the factors negatively affecting progress in both land and labor productivity. This complexity is compounded by the additional challenges to agriculture going forward. For FIRST countries, agriculture has been characterized by insufficient public investment in essential public goods including in extension R and D, inappropriate policies that “tax” the sector relative to other sectors and discourage private sector investment, which is key to agriculture development (IFPRI, 2020). Failure to shift to higher value crops further erodes the prospects of a vibrant sector able to “pull” rural development, the development of down and upstream sectors, employment creation and reduction in rural poverty.

Climate change will play havoc with agricultural production. Indeed, climate change is recognized as a threat to agriculture and livelihoods across all FIRST countries, with wide-ranging current and future impacts including reduced agricultural productivity, increased frequency of natural disasters and higher variability of water availability. FIRST countries are developing mitigation strategies to address climate change. Myanmar, for example is facing the negative consequences of climate change by promoting alternative uses of land to deal with envisioned changes in climate while the country is moving from staple/cash crops to a more diversified agriculture.

Several actions need to be taken to reverse the business as usual trajectory and reinvent agriculture to achieve zero hunger targets of SDG2. First, agriculture should be seen as an integral part of the food system; specific strategies are needed that would leverage the enormous untapped potential of agriculture and food systems to drive agro-industrial development, boost small-scale farmers’ productivity and incomes, create off-farm employment in food supply and value chains, contribute to the eradication of rural poverty, while at the same time helping end poverty and malnutrition in urban areas (FAO, 2019). Food systems as a driving force to development is particularly relevant in countries where prospects of development of growth in the secondary and tertiary sectors are low.

Second, new technologies will need to be developed which are appropriate for smallholder agriculture and those technologies need to be attractive to and be adopted by small scale farmers. Those technologies should include traditional staples but also promote diversification into higher value crops (e.g. fruits, vegetables, fish). Technological innovations and dissemination of technological knowledge is essential and must finally reach a larger segment of farming households. To ensure that no one is left behind, creative strategies are needed to ensure that mitigate risks faced by small producers and other vulnerable groups such as women and youth to close the gap between investments in technology and longer-term payoffs.

Third, agriculture will be expected to contribute to environmental sustainability; rather than being part of the problem, agriculture must be part of the solution. Sustainable agriculture can contribute to mitigate climate change, maintain and increase crop biodiversity, and contribute to the sustainable management of natural resources (FAO, 2017). Thus, it is clear that the litmus test for the success of agriculture is changing dramatically and agricultural policies will be judged against a much more complicated set of factors.

5.2. Unleash the private sector

One of the most contentious issues regarding improving food security and nutrition is the role of the private sector in achieving food security and nutrition targets. This is ironic given that SDG 17 specifically

stresses partnerships and collaborations as an essential tool for making progress in all the SDGs. Indeed, the private sector is seen as critical for achieving SDG2; and the fact that food systems are almost all about private activity and markets. There is, however, lack of agreement on the specific roles of the private and public sectors in different contexts and a lot of it is driven by ideology rather than sound evidence.

Defining the private sector is a critical first step since a large part of the confusion relates to what is meant by the private sector. Simply put, the private sector is a part of the economy that is not state controlled and is operated by individuals or companies usually for profit and participates in market exchanges. Given this definition, almost all farmers in the world (including smallholders) are private sector, a fact that is often forgotten.

In fact, family farmers including 500 million small producers are the backbone of the private sector in agriculture and that is where the bulk of the investment in the sector is coming from. Surprisingly, this is not the way that many define the private sector. The vast majority of farming households sell goods and services in the marketplace and they buy seeds and inputs from the relevant markets.

A part of the confusion about the definition of private sector relates to the perception, of some, that private sector implies multinational companies; however, in addition to small scale farm producers small and medium sized enterprises are proliferating in the agri-food systems of the developing countries including a myriad in the rural areas, small cities and rural towns usually under the radar of formal systems of statistics (the missing middle). In Chad, Cote d’Ivoire, Burkina Faso and Niger, most of the actors in the agri-food sector are small and medium enterprises, often managed by women and small farmers, who are essential actors in the agricultural economy and whose businesses are a source of employment, income, subsistence, sale and exchange. It is important that attention be given to harnessing the potential effectiveness of these bodies. An effort is needed to understand the different types of private actors in agriculture, their incentives and disincentives and their potential contribution to make agriculture work for nutrition, environment and reducing poverty.

All the FIRST country diagnostic reports identified the positive and negative aspects of the dominant role of the private sector in food security and nutrition. Integration of the private sector into the design of multi sector plans has been problematic. In general, country reports stressed a negative perception of different aspects of working with the private sector. Lack of trust between public and private organizations was a key reason stated repeatedly in the country reports for a lack of progress in effective public-private sector collaborations. Some FIRST countries present more difficulties than others. For example, Pakistan is ranked 136 and Myanmar ranked 171 among 190 economies in the World Bank Ease of Doing Business Index (World Bank, 2019).

Models of successful public-private sector collaborations historically are limited. This, however, is changing, with efforts by Scaling up Nutrition (SUN), Global Alliance for Improved Nutrition (GAIN) and the Fresh Network contributing to innovative ways to connect activities of the private sector to improving food security and nutrition. Recently, in FIRST countries there has been progress in terms of increasing recognition of the role of the private sector: For instance, in Tanzania, a balanced model of collaboration with private investors is sought where there is not an “either-or” dilemma in agricultural commercialization. Palestine and Pakistan intend to strengthen the role of the private sector in FSN and agricultural development. In Myanmar’s Agricultural Development Strategy (ADS), the policy design supported by FIRST has a strong focus on the role of the private sector in agricultural sector development.

The private sector engagement (including smallholder farmers, small and medium enterprises, and large companies) is central to agriculture and food systems transformation, however it remains an unexploited territory for many FIRST countries. Lack of clarity in the public sector on how to involve private sector (as funder, service provider, partner) and effective strategies to support a constructive engagement is common

among all countries. State interventions such as direct distribution of inputs and land use restrictions limit the development of the private sector in agriculture and the food system in general (this is the case for example in Cambodia, Timor-Leste, Fiji, and Myanmar). The Chad diagnostics country report notes that the lack of capacity of producer organizations, severely limits their performance in advising and advocating in favor of their members. Producer organizations in FIRST countries are also dependent on external aid due to limited internal resources.

Governments, through setting the rules, can create an “enabling environment” for business: through those rules, governments need to ensure security and predictability in incentives for private actors to invest. Governments might need support in developing appropriate relationships with the private sector, including the informal sector which has proliferated due to over regulation and taxation. Ongoing dialogue and transparency are vital to these relationships, especially to avert unintended consequences or potential conflicts of interest. The FIRST country reports, however, have identified a low government capacity to identify the best pathways to engage with the private sector in agriculture and nutrition as a chief bottleneck. More aggressive efforts on the part of governments are needed to effectively harness the potential of private sector involvement in reaching SDG2.

5.3. Does the gender equality talk bring us anywhere?

One question that emerged from the May 2019 FAO workshop was “Does the gender equality talk bring us anywhere?”. The essence of this sentiment is that most country plans have specific areas devoted to gender equity, yet, not enough has been done to make these plans a reality.

There is no ambiguity that promoting gender equality improves food security and nutrition. Voluminous evidence documents that eliminating gender disparities in income, decision-making, access to financial and other resources improves household food security, diet diversity and/or nutritional status of household members (FAOa, 2017). Yet according to a recent IFAD report, “Young women face greater constraints than their male counterparts do in seeking to become productive, well-connected individuals in charge of their own futures” (IFAD, 2019). In the least transformed countries, young rural women still lag in educational attainment, economic participation and productivity investments that are needed to improve human capital endowments so that females can transition to productive livelihoods.

Most countries-including FIRST countries - have gender policies and strategies. In country plans, there is the consistent message, “Make all national policies gender-sensitive.” The key constraint is not the lack of an articulated policy but rather the lack of implementation and evaluations of policies and programs. Gender is a cross cutting issue that is stated as a national priority globally. In FIRST countries, however, while there is endorsement of agreement and frameworks regarding gender in FSN, most policies are gender sensitive only to a certain extent but a momentum for change is emerging, albeit slowly.

Agricultural development and food security and nutrition strategies in many countries are not connected to the national strategies for achieving gender equality. For example, Fiji, Myanmar, Cambodia and Timor-Leste explicitly recognize in policy documents the importance of gender differences and gender improvements; however, a gender approach to agricultural development remains outstanding and lacks operationalization. In Guatemala, gender was not particularly mentioned as an issue for the Family Farming Programme for Strengthening Peasant Economy (PAFFEC). To address this, a gender equality approach has been adopted by the Ministry of Agriculture with the support of FIRST, for the implementation of the PAFFEC.

There is abundant evidence on the strategies that work. Equal access to inputs and services (land, water, credit, capacity) levels the playing field for women. These are necessary but not always enough to eliminate gender inequities. In addition, structural and rural transformation shape

young rural women’s livelihoods by influencing everything from their education, marriage, and childbearing choices to their selection of an occupation (IFAD, 2019). Breaking the gender gap requires profound changes in social norms and behaviors, which is the brick wall that policies and other efforts have not succeeded in dismantling.

In some FIRST countries there is lack of awareness about the importance of considering gender integration within sector planning and policy development, and limited experience on practical ways to promote empowerment and/or address the causes of gender inequality. This makes policy implementation patchy, limited in some of the sub-sectors or activities while significant gaps exist in gender-related access to resources and capital, labor remuneration and decision-making capacity. In Burkina Faso, as a recognition of the role and contribution of rural women, a national day is dedicated to rural women each year under the auspices of the President aimed at reviewing and improving women’s livelihoods. This expression of political will needs to be followed by further steps to strengthen women’s position in the governance of agriculture and FSN.

In the longer term, the education of girls and women will have a positive, significant impact on food security and nutrition. A final, essential ingredient for permanent success in successfully mainstreaming gender is the empowerment of women. There are many ways, both short and longer term to achieve this goal. Clearly the education of females produces both short- and long-term benefits, including higher earnings, more influence in household decision making and improved women’s and child’s health (FAOa, 2017). Participation of women in senior posts in government institutions is another strategy for reversing gender discrimination. However, despite apparent political will in many countries, women continue to be underrepresented in key roles in the public and private sector especially where key decisions are made. A change in the mind-set is essential.

5.4. Go local

There was very little guidance provided from the literature review on the localization of activities as part of an emphasis on SDG2. Most LMIC, including FIRST countries, have yet to fully decentralize activities. Increasingly governments, however, are exploring ways to make decentralization of authority and responsibilities a key part of delivering effective multi sector plans. The logic is that hunger and malnutrition are mostly local and context-specific; actions need to occur at the local levels. It is at the local level where policies and program implementation are critical.

Most FIRST countries are at the early stages of decentralization. Decentralization is viewed as a *modus operandi* for more effective delivery of services. Experiences in the FIRST countries have revealed several challenges. First, there is a mismatch between the assumption of how a modern decentralized state works and the reality of local power. The experience of Kenya and Uganda show that there was ambiguity of what local agencies were expected to do; the country reports suggest that local actors were given the responsibility for carrying out a range of activities but were not given the authority to follow through on implementation (IFPRI, 2020). In addition, dedicated budgets for sector activities at the local level were limited.

Governments have weak capacities to operate at local level because historically there has been limited vertical integration of systems from national to sub national levels. One suggestion from the literature review was that governments need to make national policies more specific and better targeted to the local realities by real decentralization instead of deconcentration.

Indeed, several FIRST countries describe “growing pains” in decentralization implementation. Here again, the lack of history using decentralized governance and implementation, lack of established national policies on which to build and almost non-existent capacities to assess the impact of policies and programs are key factors that have limited progress of decentralization in addressing SDG2. Line ministries

are less coordinated at the local level and again, there is ambiguity as to the expectation for specific sectors in the implementation of the overall multi sector plan.

However, decentralization is not a panacea, and may have potential disadvantages. Decentralization may not always be efficient, especially for standardized, routine, network-based services. It can result in the loss of economies of scale and control over scarce financial resources by the central government. Weak administrative or technical capacity at local levels may result in services being delivered less efficiently and effectively in some areas of the country. Administrative responsibilities may be transferred to local levels without adequate financial resources and make equitable distribution or provision of services more difficult. Decentralization can sometimes make coordination of national policies more complex and may allow functions to be captured by local elites. Also, distrust between public and private sectors may undermine cooperation at the local level.³

5.5. Think multi-sector, but act by sector

This quote, “To go fast, go it alone; to go far, go it together” encapsulates the essence of the advantages of a multi sector approach. FSN issues are inherently cross sectoral and multi-disciplinary and, as such, their design and implementation need the cooperation/contribution of multiple actors (public, private, civil society) and institutions of government (ministries, planning commissions etc.). Usually, single ministries oversee different parts of the FSN agenda (as for instance the Ministry of Agriculture is responsible for Food Security and the Ministry of Health for Nutrition. While multi sector policies and actions are the ideal way to dealing with cross cutting issues such as FSN, such practices are complicated, costly and not always efficient.

A large body of literature is replete with discussions of the advantages of a multi sector approach to improve food security and nutrition (World Bank, 2013). Alas much of the literature is conceptual and theoretical and does not contain evidence-based data on impacts of a multi sector approach and coordination in implementation plans. In addition, they may dilute responsibility and accountability if not properly managed. Political forces tend to keep in place defunct and outdated institutions that resist cross-institutional action; this is complicated by the fact that the importance of FSN may not be appreciated by all institutions based on lack of data on impacts of a multi sector approach in implementation plans. Even less apparent is what road map individual sectors have used to employ a “nutrition sensitive” approach in individual sectors.

Almost all the country diagnostic reports indicate that multi sector plans to improve food security and nutrition are part of the national policy landscape. The major bottleneck identified by some sources (country reports, literature review) is the lack of a “road map” for what each sector is expected to achieve; while multi sector is the model, each sector acts independently to contribute to the advancement of SDG2. Budgets are allocated by sector, reinforcing a sector approach for a multi sector plan to succeed. While multi sector plans do provide a framework for laying out the linkages across sectors, by and large, these plans have lacked the specificity for concrete actions.

An important step would be to provide existing bodies with the legal status and resources to play a coordinating role possibly with a more limited but clear mandate. Positioning such bodies under a center of power such the Office of the President, or the Prime Minister or the Ministry of Finance could contribute to increasing their influence and authority if they have a clear mandate. In Cambodia, the Council for Agricultural and Rural Development (CARD) is mandated to facilitate cross-sectoral coordination. However, its mandate greatly exceeds its resources and capacities and intermittent funding which complicates planning. The proposal is for CARD to focus on a limited set of actions

which require multi-sectoral coordination, clearly separated from those to be carried out by individual ministries.

Current experiences suggest rethinking issues related to multi sector and sector policies. Problems must be addressed in an interdisciplinary way that influences the development of multi sector approaches; each stakeholder’s role needs to be clearly articulated as part of this process including government – national and local – private sector and civil society.

5.6. Data

The lack of availability of high-quality statistics to inform evidence-based analysis poses a problem across practically all FIRST countries. Repeatedly the country reports identified the lack of relevant and reliable data as a key constraint for policy formulation and monitoring and evaluation. An additional common constraint is a lack of a centralized, easily accessible hub for all agricultural and food security data from across government agencies, research institutions, private sector and civil society.

Despite established monitoring and evaluation frameworks, limited resources and properly trained staff diminish the impact of these systems in any given country. While many countries have a monitoring and evaluation framework in place linked to their food security strategies, constrained resources and a scarcity of qualified staff obstruct the ability of the government to review the effectiveness and impact of policy changes using the available data. Investments are also needed in the kinds of data and data collection systems that will enable long-term, large-scale monitoring and analysis. Long-term panel data sets and geospatial data are increasingly being collected and made publicly available. The capacity to use and articulate data needs is a key problem.

The lack of data and the capacity to use them for policy support, is particularly acute in many developing including the FIRST countries. The case of Pakistan illustrates this point. The country report is clear that it has been difficult to gauge whether policies and programs in the FSN sphere are failing or succeeding, as there is almost no practice of conducting independent or internal government reviews and assessments as part of the policy development cycle (FAO and IFPRI, 2020). Even where there are some statistics, there is no “value chain” in data generation; this means that countries often have no operating systems for identifying which data are needed, who is to collect it, how data are to be analyzed, where to store it, how to share it and with whom to share, in which form and through which channels. All of this means that a serious investment in institutional and human capacity in data management is critically needed for effective planning and monitoring and evaluation systems.

5.7. The political process and priority setting

Policymaking is inherently a political process which also influences priority setting and the set of policy instruments. Failure to recognize this fact has doomed the effectiveness of many food security and nutrition strategies. The literature is clear that technically sound approaches to address food insecurity and malnutrition, by themselves, are often not enough to effectively implement solutions. A range of political economy issues are critical for success in launching food security and nutrition policies and programs. The evidence from the country diagnostics unambiguously tagged weak governance as a major constraint to effective policy. (IFPRI, 2020).

Often, the development community does not bring politics and political economy into its considerations and emphasizes only the technocratic perspective. Several the country diagnostic reports are very direct in describing the policy setting as the “politics of patronage.” (IFPRI, 2020). This is further elaborated in the country reports by indicating that the “power elite” has affected policy making, as in certain circumstances political leaders lack the incentives to formulate policies in response to citizens’ demands or to work towards effective policy implementation. This reality must be acknowledged and dealt with

³ <http://www1.worldbank.org/publicsector/decentralization/what.htm>.

going forward.

Understanding the political economy issues will be essential to making progress in moving the 2030 agenda. This is no magic formula that can be used in all countries. The failure to appropriately acknowledge and address the range of concerns embedded in political economy will thwart or in some cases doom the success in achieving SDG2.

There is a constant tension between shorter-term crisis needs to address political expediency and short political cycles, compared to important policies and programs which produce results in the medium or long term. Efforts need to be made to convince decision makers, donors and other relevant stakeholders that investing in sustainable development (including in sustainable agriculture) is the most efficient choice, even when the results will not be visible in the short term nor within the current electoral cycle.

6. Discussion

There was agreement among the participants in the May 2019 workshop, reinforced by the quantitative analyses, the country reports and the literature review, on critical issues that must be addressed in order to more successfully achieve the targets in SDG2.

6.1. Agriculture

There is little disagreement that further improvements in FSN will require better leveraging of the agricultural sector. Agriculture will be required to do more, and to do so more efficiently. As already discussed, major advances in agricultural productivity were achieved by a significant investment in improved technologies. The emphasis in the 1970s and 1980s was on increasing the quantities of basic cereals produced, particularly rice, maize and wheat. These efforts, by and large, were successful. The focus now has expanded. This new vision for agriculture is stressing both the quantity and quality of production as eloquently reflected in the guiding principles for the UN Decade of Action on Nutrition (FAO/WHO, 2016).

In addition, this renewed expectation for agricultural productivity – quantity and quality – is also linked to aggressive sustainability goals. The term, a “greener, green revolution” has become popular in the everyday jargon. The agricultural sector will be expected to, on average, produce more food (but hopefully less than the FAO’s baseline scenario mentioned above), more sustainably, with limited land expansion and input use than in the past. Both expansion and intensification of agriculture have produced serious environmental damage. There is currently a renewed debate about the world’s ability or capacity to sustainably supply nutritious foods to a growing population given the so-called triple burden of disease; indeed, nothing short of an agri-food system revolution will be effective in reaching the most vulnerable households.

The sustainability goals have implications for the agricultural approach that is employed. There is not universal agreement on the most appropriate strategy to be used. Discussions range from the pros and cons of sustainable intensification, climate smart agriculture, conservation agriculture, and integrated production system, i.e. agroforestry, crop-livestock, rice-fish and agroecological approaches, to name a few (HLPE, 2019). All of them exemplify the importance of adopting a holistic view when examining the production systems to identify their contribution to the key elements of sustainable food and agriculture.

There are advantages to each, and the challenge is to define, which type, or which combination will be the most efficient and cost effective in each country and a given locale. A related challenge is to identify how the private sector can be most appropriately integrated into decisions regarding investments, research and development and capacity building. There is limited evidence to guide the most judicious roles for private sector entities.

The choices made regarding national agricultural policies will also have enormous implications for the ability to be a positive driver of

increased employment in both rural and urban areas. The burgeoning numbers of youth necessitate a generation of off-farm employment in rural areas as well as increased job opportunities in urban settings. The need to create employment opportunities for youth in the rural areas is most acute in sub-Saharan Africa.

Finally, there are also likely to be tradeoffs between environmental and nutrition objectives. For example, the adoption of a sustainable agricultural strategy with emphasis on decreasing animal sourced foods may be to the detriment of a healthful diet in places where animal protein is below recommended standards (HLPE, 2015). These are neither easy, nor simple choices.

6.2. Food systems

There has been a renewed interest, reflected in the country diagnostic reports, in pursuing a food systems approach for achieving zero hunger targets of SDG2. In addition, a food systems paradigm has been suggested as viable way of approaching SDG12 – responsible production, responsible consumption (Global Panel, 2016). Much of elevated interest in food systems has been sparked by the obesity epidemic.

Food systems are dynamic and quickly evolving in some of the poorest countries of the world (HLPE, 2017). It is also apparent that in any given country there are multiple types of food systems. Many of the FIRST country diagnostic reports explicitly mention a redesign of food systems as one of the means to make more progress towards zero hunger targets of SDG2. Here again, there are many opinions on what is needed – changes in the food environments, less food waste and loss, more sustainable production, the increasing length and complication of food supply chains from farm to fork, cross-border supply chains, to name a few. There is much less empirical evidence on how to do this. A food systems’ strategy does afford the opportunity to link agricultural production and consumption and consider all players and institutions. In addition, a food systems perspective can also facilitate the identification of leverage points along the continuum from production to the food environment to enhance food security, diet and nutrition.

There are a variety of food systems ranging from the traditional system to industrial systems (IFPRI, 2015), and both may co-exist in a particular country. There are positive and negative effects of each type of food system. Traditional, rural systems face higher rates of food insecurity, undernourishment, micronutrient deficiencies and until recently lower rates of overweight and obesity and NCDs (IFPRI, 2015). At the other end of the continuum, urban, industrialized food systems are associated with low rates of undernourishment but higher overweight, obesity and NCDs (IFPRI, 2015). The dilemma for most countries is that there are many theories about effective food systems, but not a lot of evidence on the changes needed to improve the food security, diet and nutrition impacts. This is particularly apparent for addressing overweight and obesity through a food systems paradigm. Put quite simply, countries are grappling with what changes in food systems can be made to have significant, positive impacts on SDG2 with little empirical evidence available to guide modifications in policies and programs.

The literature review strongly suggests that a food systems approach as part of the agricultural transformation holds an enormous potential to link rural and urban areas; rural revitalization will require the expansion of job opportunities for the rural, unemployed – many of these are youth. A transformed food system could be an effective mechanism for increased agricultural production, the development of activities which link agriculture to input or output markets, employment creation decreased poverty, and improved food security, diet and nutrition.

6.3. Governance

The political will/leadership to drive actions in food security and nutrition are affected by actors, institutions, societal contexts, knowledge, evidence and framing, capacities and resources. There is a growing

consensus that a lack of political commitment is a primary reason for the low priority that food security and nutrition policies receive from national governments relative to the high disease burden caused by malnutrition. Policymaking and policy dialogue are inherently a political process. Policy dialogue will continue to be important in advancing the 2030 agenda.

7. Conclusion

The results from the literature review, country diagnostic reports, quantitative analyses and workshop reveal a consistent pattern of some positive changes in food security and better nutrition. Progress has been made over the past twenty-five years in improving food security, nutrition, and income. Poverty rates have been declining over the past few decades. Stunting and underweight in preschoolers has decreased and undernourishment has declined, but with an uptick, however, in prevalence of food insecurity in the past few years. Unfortunately, while undernourishment has been declining, the rates of overweight and obesity have been increasing; this trend is predicted to continue. The existence of both undernourishment and overweight and obesity, now present a challenge since historically at a country level there has been an emphasis (and rightly so) on the undernutrition part of the continuum and thus policies for the increasing problem of prevention of overweight and obesity through appropriate diets are almost nonexistent.

Some of the driving forces behind these positive changes in FSN are also clear. Economic improvements at the national and household levels have led to poverty reduction, and in turn, improvements in food security and nutritional outcomes. It is also apparent that the agriculture sector has been a key driver of this economic growth and poverty alleviation in most countries. In addition, for the most vulnerable groups, the combination of overall economic growth, agricultural growth strategies combined with social protection programs have been effective, in many cases, of reaching the poorest of the poor (FAO, 2015).

While progress has been made in reaching some of the targets embedded in SDG2, there is concern that the rates of change have stagnated; at the current rate of change it is unlikely that the goals for SDG2 will be achieved by 2030. A guiding principle that has emerged from the collective efforts of this review is that countries should focus on what is possible to control or influence, at least in the short to medium term. The message is: “focus, focus, focus!”.

The stocktaking exercise provided clear evidence that a “business as usual” approach will not come close to reaching SDG2. Leadership at the international, country and sub-nation level is essential to succeed. A transformational change in food and agriculture will be needed to address the challenges presented by the changing food security and nutrition landscape.

FIRST countries are experiencing different challenges in food security and nutrition; these countries are not homogenous in the nature and magnitude of problems currently encountered. As shown in the quantitative analysis, categories range from countries with a high level of hunger and undernourishment to those with high obesity and low levels of hunger. A regional classification of countries does not capture the nature of the nutrition landscape in individual countries.

Designing policy is becoming more and more complex. Many of the policies and programs that are planned or newly implemented build on prior experiences in agriculture, food security and nutrition yet with the changing nutrition landscape new challenges have emerged which bring countries into untested waters. There is nothing that illustrates this more clearly than the COVID-19 pandemic. The Corona pandemic and the concomitant economic crisis are exacerbating problems of food insecurity and malnutrition (IPES, 2020); as noted, “restrictions on the movement of people and goods (lockdowns) in a growing number of countries are putting a major strain on local, regional and global supply chains and testing the resilience of agri-food systems.” Undoubtedly the biggest burden of COVID-19 will fall upon the most vulnerable – the

poor and marginalized populations. The current pandemic reinforces, again, the precarious nature of agri-food systems which are vulnerable to climate change and disease related shocks.

The stocktaking exercise summarized in this paper point to some innovative, new directions for improving FSN. A major transformation of agriculture and food systems offers some potentially exciting new directions to fast forward progress towards SDG2. To make progress on SDG2 countries need to maintain their enthusiasm and momentum.

Declaration of competing interest

EK, AJ, KS and KC have no conflict of interest to declare.

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