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HLPF Thematic Review Expert Group Meeting Session on

SDG 2

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Responses to the guiding questions

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Key messages

- The world is not on track to achieve SDG2; not in any of its dimensions.
- The SDG agenda was meant to be transformative. This not how it is unfolding. Government and other stakeholders need to retake control of the agenda as it was meant to be.
- The COVID-19 crisis has exacerbated problems of food access and, likely, has pushed an additional 100-150 million people into poverty and hunger during 2020.
- Conflict remains a core driver of deepening crises of acute food insecurity (including of recent famines) in parts of the world. Concerted efforts to address the root causes of food crisis should be stepped up, aligning humanitarian assistance with support for long-term development and conflict prevention/peace building.
- COVID-19 has reiterated the importance of addressing pervasive inequalities and the importance of sound macroeconomic policies and adequate fiscal and financial space to support incentives for and finance investments in sustainable agriculture and food systems and to end hunger and all forms of malnutrition.
- Food market agents have shown great capacity to adjust to shocks and changing circumstances. This capacity has obviously been much weaker among poorer food producers who also face inadequate access to markets, infrastructure, and basic services. Yet, policy solutions should target improving enabling conditions (including access to digital technologies) to increase resilience and capacity to adjust for all food system actors.
- Agricultural and food-system interventions are more effective with a population that enjoys at least a minimum level of income, education, with access to networks and resources such as extension services and robust infrastructure. Additionally, they are much more effective to create integrated portfolios of interventions.
- Transformative change involves hard choices and trade-offs across multiple objectives. For better decision making, monitoring of progress and risks require better metrics (including through a harmonized new measure of food security, the prevalence of adequately nourished people, and real-time monitoring of food crises risks), as well as integrated model-based tools for ex-ante and ex-post assessments of impacts of interventions across multiple sustainable development objectives.

1. What is the current status of the goal or target, in terms of actual measured progress and trends?

The world is clearly not on track to meet the SDG2 targets of ending hunger and all forms of malnutrition. In fact, the number of people affected by hunger globally has been on the rise since 2014. With current trends, the number of people affected by hunger is projected to increase by 200 million people to exceed 840 million by 2030 (FAO et al. 2020). These FAO projections do not account for the toll of the COVID-19 pandemic that is likely to add 100-150 million people to the total number of undernourished in the world (see also below). At the same time, there are more than 3 billion people who cannot afford the cost of what is considered a nutrition-adequate diet and it is safe to assume those 3 billion people suffer from micronutrient deficiencies. One third of the adult world population is considered overweight or obese and the prevalence of this form of malnutrition is increasing in every country in the world. Rising overweight and obesity are a main cause of the increased prevalence of non-communicable diseases. Poor diets are behind the top two global health risks, according to the Global Burden of Disease study (GBD 2019).

Trends in hunger and malnutrition are highly uneven. More than half of the world's hungry live in fragile and conflict-affected contexts. Conflict is also a main driver behind the recent rise in global hunger; in most affected contexts this is compounded by repeated weather shocks and economic collapses. This has led to protracted food crisis situations in localized contexts, especially in the Sahel, parts of Central and Eastern Africa, the Middle East and Central America, and a source of massive displacement of people whose food security typically is far from guaranteed in their destination locations. The Food Security Information Network estimates in the 2021 Global Report on Food Crises, that 28 million people are presently on the verge of facing famine (IPC Phase 4 – Emergency) and 100,000 to 150,000 people in parts of South Sudan, Burkina Faso and Yemen are already facing famine (IPC Phase 5 – Catastrophe) (FSIN 2021).

Agriculture provides livelihoods for over 1 billion people worldwide, the majority of whom work on small-scale farms. The livelihoods for another 2 billion people depend on downstream agro-food system activities in transport, wholesale, retail, processing, food services and other support services. Perversely, the very people whose livelihoods depend on food and agriculture are among the most likely to experience hunger. Smallholders, landless agricultural workers and those working in SME agri-food businesses often get only a small share of growing earnings in the food sector and face greater hurdles in accessing markets, improved technologies, credits, IT services, etc., hampering productivity growth and keeping them in poverty.

The climate crisis poses a mounting threat to food systems, while at the same time, the current food system is a major driver of climate change. Food systems are also already putting excessive stress on water, biodiversity, and soil resources undermining their proper functioning.

This is not how the UN 2030 Agenda for Sustainable Development was meant to unfold. The ambition of the agenda was to be transformative. Governments acknowledged the central importance of ending hunger, but they set themselves a bolder target: they wanted everyone to enjoy an affordable, healthy, and nutritious diet, and committed to supporting the most vulnerable food producers to earn the means to live in dignity. They also made a commitment to sustainable change, vowing to preserve biological diversity and to better protect the resources and the ecosystems that our children will need to feed themselves into the future. Governments and all other stakeholders now urgently need to retake control of the transformative agenda.

2. What has changed since the last time this Goal was reviewed at the HLPF?

(a) Any deviations in progress from what was expected (including due to COVID-19)?

The COVID-19 pandemic has provoked major supply and demand shocks to the global economy and to food systems, causing further setbacks to poverty reduction, food security and nutrition. IFPRI analysis (Laborde, Martin & Vos 2021) projects a 7% decline in global GDP in 2020 (compared with a scenario without COVID-19), consistent with the IMF projections. Developing countries are being hurt disproportionately through declines in trade and remittance incomes and disruptions in businesses caused by social distancing measures. The recession has also reduced the fiscal and financial space of developing countries to enact social and economic mitigation measures through fiscal stimulus and/or expansion of social safety nets in developing countries. IFPRI's global assessment estimates that the number of people living in extreme poverty (measured against the PPP\$1.90 per person per day international poverty line) could have increased by 150 million (a 20% increase) because of COVID-19, which is in the range of estimates of FAO of the impact on people affected by chronic hunger. Urban and rural populations in South Asia are affected the most, where 72.5 million more people would be joining the ranks of the poor (equivalent to a 27% increase in that region), while the number of poor people in Sub-Saharan Africa is projected to increase by 15% or 50.5 million people.

The income and price changes associated with the recession and supply disruptions caused by pandemic are further impacting on dietary choices with likely adverse nutritional consequences. Laborde, Martin & Vos. (2021) estimate substantial reductions in the demand for nutrient-dense foods, such as fruits, vegetables, and dairy products, while the shares of calorie-rich basic staple foods, such as rice, maize, and other basic grains, in diets increased, raising concerns about increased micronutrient deficiency among many more people.

While prices for staple foods have remained relatively stable in world markets, composite food price indices have risen steeply in many developing countries, especially those dependent on food imports. Macroeconomic woes are a key driver of higher food prices in these contexts: the global recession has substantially reduced export earnings for these countries and with insufficient contingency financing available has led to currency depreciations, driving up the cost of imported food.

The main upshot is that the pandemic obviously has posed a major shock, but above all it has posed a demand shock that is affecting access to food to people that have lost their jobs and/or suffered income losses, with consequences in terms of food insecurity severest for those with already low incomes, especially in rural areas in developing countries. The demand shifts have also provoked shifts in relative prices between main food groups influencing consumer decisions towards cheaper but also less healthy diets. Countries with greater fiscal space have been able to cushion these adverse effects on food security to some or even in large extent, but in those without such space and lacking sufficient access to contingency financing – especially poorer countries (van der Hoeven & Vos, 2021) – the adverse impacts have been exacerbated because of consequent macroeconomic adjustment (such as currency depreciations fuelling food price inflation). In this regard, COVID-19 has made painfully clear how (international) inequalities and macroeconomics matter for food security and malnutrition.

(b) Additional obstacles or opportunities in implementation including through interlinkages with other Goals, and connections to related processes?

Key challenges to food systems prior to COVID-19 remain, of course. Some of these were already alluded to in the above, but relating in particular to (a) climate change and other environmental threats;

(b) spread of pests and foodborne diseases; (c) conflict; (d) pervasive inequality in economic opportunities along food supply chains; (e) major inefficiencies in food systems, visible inter alia in vast amounts of food loss and waste; and (f) demographic change (population growth, urbanization) pushing dietary change in ways that would further increase environmental pressures and induce more malnutrition. While varying by context, these challenges are interlinked to a great extent, demanding solutions for achieving SDG2 to be concerted with those for several other Goals. This poses an additional challenge in itself: achieving much greater policy coherence behind multiple goals. This notion has to be central to regaining control of the transformative agenda.

There are also opportunities to rebuild the consensus behind the common agenda drawing lessons from the COVID-19 crisis. The crisis also has shown that food systems do possess great capacity to adjust to major shocks. Disruptions in food supplies have happened, but - in most cases - those were short-lived and food value chains managed to adjust to keep food supplies flowing. It has shown the enormous potential of digital technologies in reorganizing supply chain processes and more effectively connecting players between farm and fork (see e.g., Reardon & Vos 2021; Reardon et al. 2021). Farmers directly connecting to consumers and agri-food SMEs obtaining greater market access have provided added benefits. However, these new opportunities for more inclusive food value chains have also reinforced inequalities in food systems, given the prevailing digital divide and inadequacies of other basic infrastructure and services (including education), putting poor areas and food system actors at a disadvantage.

Close links between the pandemic and the food system has also increased awareness about food safety and dietary quality, visible in significant growth in demand for plant-based proteins and calls for stricter standards of food quality. While far from mainstream trends, they are shifts in consumer sentiments that could help spark necessary support for the transformative agenda.

3. What are promising strategies to accelerate action (by UN and partners) and to mobilize other stakeholders to advance implementation?

There are no simple strategies as applies to any transformative agenda. Political obstacles are immense, as many resist change if many of the targeted benefits of the actions to be taken now are to mature over long periods of time. Moreover, food systems are by and large driven by market forces, that is decisions by farmers and other supply chain actors and by consumers. Changing market behavior is difficult, but the message for policy makers is to focus on incentives and basic conditions (like infrastructure) to steer food systems towards more sustainable outcomes. How best to do this will vary from context to context and there are no silver bullets. So, instead of providing a menu, I will emphasize a few basic notions for the design of strategies and for the policy dialogues.

The research undertaken by the Ceres2030 project (Ceres2030 2020; Laborde, Parent & Smaller 2020), provides meaningful guidance in this regard. It notes that agricultural and food-system interventions are more effective with a population that enjoys at least a minimum level of income, education, with access to networks and resources such as extension services and robust infrastructure. This matters whether the intervention is climate-resilient crops, membership in a farmer organization, or reducing crop losses, this minimum threshold matters when deciding on investments or incentive schemes to reduce hunger and make agriculture more productive.

This means that in areas where poverty is still widespread, interventions should focus first on lifting conditions towards the “minimum threshold” and, more generally and based on the same evidence, it implies further it is much more effective to create integrated portfolios of interventions rather than seek

improvements in isolation. Put differently, interventions are also more successful if they are designed to meet complex objectives, such as paying attention to the marketability of a crop and not just its climate resilience or resistance to pests. The evidence from studies of small and medium enterprises (SMEs) working with small-scale producers in the informal sector, for instance, shows significant success with linking producers to markets, particularly in Africa. Importantly, a large share of these SMEs provides other, linked services, such as capacity building, access to credit and – as mentioned above – to e-commerce and other digital platforms. The SMEs are correlated with higher levels of technology adoption and productivity among small-scale producers.

Likewise, we know that much greater investments in R&D are needed to forge sustainable technological solutions and that such investments come with high economic returns. However, such returns will not materialize and benefit actors across the food system is not accompanied with the right incentives and complementary investments in extension services, infrastructure, etc. to induce widespread adoption and ensure new crop varieties and sustainable practices are also commercially viable.

Lastly, for any set of policy choices it is crucial to identify the expected gains towards the goals in the short, medium- and long-run and how the cost of the interventions are distributed. We cannot assume that in a transformative agenda all solutions are win-win-win. Trade-offs should be explicitly recognized; ignoring them is unhelpful and will only hamper the process of getting to widely supportive solutions.

4. How would one monitor action for implementing these?

And

5. New/promising openings for tracking progress, including from additional data sources?

Three of improvements for monitoring progress, food system risks, and assessing (ex-ante and ex-post) effectiveness of actions can be suggested:

- a. *Prevalence of adequate nourishment.* We need better and more harmonized metrics to track progress towards the goal of ending hunger and all forms of malnutrition. Current key indicators, the prevalence of undernourishment, the food security insecurity scale, and the various measures for child malnutrition (stunting, wasting, overweight) are based in very distinct methodologies, data sources, and covering different population segments (respectively, all, adults, children under 5). Moreover, the food insecurity and hunger measures are only proxies for “chronic” hunger and malnutrition and differ from the measure for “acute food insecurity” used to identify food crisis situations. As a result, monitoring progress on the key SDG indicators is fragmented and incomplete. An alternative would be to start from defining an ***indicator for the prevalence of adequate nourishment***, defined as the share of the population (of all ages) not suffering from any form of malnutrition, that is, the population not affected by acute food insecurity, chronic undernourishment (calorie-deficiency), micronutrient deficiency, or overweight and obesity. While this will encounter data challenges (especially in identifying people affected by more than one condition) but will have the advantage of providing a unifying concept for monitoring progress against its components.
- b. *Real time-monitoring of food crises risks.* Much of the recent rise in global hunger has been driven by conflict, compounded by vulnerability to weather and economic shocks. Existing early warning systems are valuable and have improved much over the years, but they are also costly and cumbersome to implement, while coverage is limited to contexts with past or existing food crises. Various organizations (WFP, IFPRI, Cornell) are working on predictive models of food crises based on assessments of key risk factors that can be monitored in real time using information of satellite images, artificial intelligence and daily updated data. Bringing these efforts together in full

operational form (e.g. through the Food Security Information Network) will greatly help improve early warning and early preventative action to avoid future food emergencies and mitigate risk of conflict.

- c. *Building capacity for ex-ante and ex-post assessments of impacts of interventions across multiple sustainable development objectives.* Transformative change involves making hard choices which tend to involve trade-offs between short-term costs and long-term benefits, trade-offs across key objectives, and winners and losers. Impact assessments will be essential to test the effectiveness of interventions in different contexts, both as isolated interventions and those that bundled (as argued above). For stakeholders to make the right evidence-based choices, integrated economy-wide assessments of alternative policy and investment scenarios to identify expected gains and trade-offs will be essential for underpinning policy dialogues for the SDG agenda. Existing frameworks (such as CGIAR/IFPRI's [MIRAGRODEP](#), [RIAPA/AIDA](#), and [IMPACT](#) models) provide a good starting point to build up that capacity for assessing the feasible national and global solutions for achieving the SDG agenda.

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