Ending Hunger Sustainably: The role of social protection

INTRODUCTION

Ceres2030 brings together the International Institute for Sustainable Development (IISD), Cornell University, and the International Food Policy Research Institute (IFPRI) to answer two linked questions: What will it cost governments to end hunger as defined by Sustainable Development Goal (SDG) 2? And what are the most effective public investments to end hunger sustainably based on the available evidence? Ceres2030 is a three-year project that will conclude early in 2021. SDG 2 is the second of 17 Sustainable Development Goals that together comprise the United Nations' (UN) 2030 Agenda for Sustainable Development (UN General Assembly, 2015). SDG 2 is a commitment to end hunger sustainably, with sub-goals that focus on ending hunger, improving nutrition, increasing small-scale producers' income, and reducing the environmental footprint of agriculture.

The project combines a state-of-the-art economic model to cost the interventions needed to end hunger with a machine learning-enhanced approach to systematic evidence reviews to assess the effectiveness of agricultural policy interventions. The evidence syntheses are designed to support decision-makers in making better use of the available evidence when they choose the interventions to invest in to advance sustainable food systems and end hunger. The project is focused on SDG 2.1, the commitment to end hunger, SDG 2.3 on doubling the productivity and income of small-scale food producers, and SDG 2.4 on ensuring agricultural sustainability and resilience.

The primary focus of the Ceres2030 project team has been on investments in the next decade to realize SDG 2 by 2030. Yet the global COVID-19 pandemic and the economic consequences of measures to contain the disease have raised new and urgent hunger challenges. To address these negative consequences, many countries have implemented social protection measures to help the affected populations. In this brief, the Ceres2030 project team discusses the crucial role social protection plays in addressing poverty and vulnerability, as well as in mitigating the impact of COVID-19 and its

associated economic consequences. In addition, we explore the integration of social protection into the Ceres2030 tools and approaches and describe how social protection features in the economic model we use. As with all the project's work, the goal is to support governments to make informed choices as they allocate funds for the achievement of SDG 2.

THE WHAT AND WHY OF SOCIAL PROTECTION

Essential progress in reducing global hunger has been made over the past few decades. Yet, even before the COVID-19 pandemic was declared, food insecurity blighted an estimated 690 million lives around the world (Food and Agriculture Organization of the United Nations [FAO] et al., 2020). The economic shutdown forced by the pandemic has worsened hunger significantly, adding an estimated 98 million to 132 million to the food-insecure population (FAO et al, 2020). Prior to COVID-19, the number of people facing hunger was already rising, largely due to conflicts and climate-related disasters (FAO et al., 2019). It is challenging to measure the economic costs of malnutrition, but one recent estimate of the impacts of undernutrition on gross domestic product (GDP) estimated losses from 2%–3% up to 11% each year in Africa and Asia (World Bank, 2019).

The pandemic has made it harder to meet the ambition of SDG 2 by 2030. The impacts of COVID-19 and the policy measures governments have introduced to prevent the spread of the disease have made it difficult to earn an income outside the home, with a consequent increase in poverty and hunger. Our more recent estimate suggests that about 100 million people could fall into extreme poverty as a result of COVID-19, an increase of 13% from pre-COVID-19 levels (Laborde et al., 2020). Because the magnitude and the duration of the health crisis are still unknown, these numbers should be considered with caution.

WHAT IS SOCIAL PROTECTION?

The UN Research Institute for Social Development offers the following definition of social protection, drawing on the work of the International Labour Organization:

> Social protection is associated with a range of public institutions, norms and programmes aimed at protecting workers and their households from contingencies threatening basic living standards. Broadly, these can be grouped under three main headings: **social insurance, social assistance and labour market regulation. Social insurance** consists of programmes providing protection against life-course contingencies such as maternity and old age, or work-related contingencies such as unemployment or sickness. **Social assistance** or safety nets provide support for those in poverty. Normally, social insurance is financed from contributions by workers and their employers, whereas social assistance is tax-financed. Finally, **labour and employment standards** ensure basic standards at work, and extend rights to organization and voice. These institutions have been fully established in developed countries, but in developing countries their development has been uneven. (Barrientos, 2010, pp. 1–2; emphasis added)

In this brief, we focus on the effects of COVID-19 on hunger in sub-Saharan Africa, the region where undernourishment is most prevalent in the world and where the rates of increase are also greatest (FAO et al., 2020). Hunger tends to be concentrated in rural populations, whose livelihoods, incomes, and food security depend heavily on agriculture. In 2014, in the Malabo Declaration, African governments committed to ending hunger on the continent by 2025 through agriculture-led growth, integrating social protection programs and increasing agricultural productivity. The integration of social protection is critical to realizing this ambition, as economic growth alone will not eliminate deep-rooted inequalities and extreme poverty. The evidence shows that the greater the inequality in asset distribution (such as land, water, capital, finance, education, and health), the less likely it is for poor households to benefit from economic growth (FAO et al., 2019). People living in poverty face many constraints that prevent their taking advantage of the opportunities created by economic growth; social protection policies or programs designed to reduce poverty and vulnerability can help. Despite its importance, however, social protection coverage remains limited in sub-Saharan Africa, where, on average, fewer than 20% of households have access to some form of social protection, compared to 70% of households in Europe and Central Asia (World Bank, 2016).

Estimates show that, south of the Sahara, economic growth in Africa stabilized at 3.1% in 2019, allowing only a minor increase of GDP per capita at 0.33% (International Monetary Fund [IMF], 2020). Economists predicted that growth for this region would pick up in 2020, to reach 3.4% (IMF, 2020). However, the COVID-19 outbreak is expected to spark an economic slowdown in sub-Saharan Africa. Economists are now forecasting negative growth for the continent of between -1.6% (IMF 2020) and -3.1% in 2020 (Laborde & Smaller, 2020, based on MIRAGRODEP simulations). That slowdown will lead to a deeper fall in income per capita (of -4.1% to -6.6%). Results from a household survey carried out in Ethiopia and Senegal reveal that there has been a steep reduction in self-reported labour income since the outbreak of COVID-19. In addition, almost half of households reported a reduction in domestic remittances and an increase in the cost of critical household items. While most households were able to buy enough food, for those who could not, the biggest challenge was affordability, due to higher prices or less regular income (or both) (World Bank, 2020). In Senegal, to cope with income loss and price increases, many people left Dakar to return to their village of origin, typically in rural areas (Mbaye, 2020). In Ethiopia, poorer households appear disproportionally affected by increases in the prices of food and necessities, but their income is less affected compared to wealthier households. This is probably because they are more likely to rely on agricultural production for their livelihoods than on formal sector employment, and agricultural production was one of the sectors least affected by COVID-19-related job losses (World Bank, 2020).

Households facing a reduction in income and/or increases in prices as a result of economic events need coping mechanisms to maintain food security and consumption (FAO et al., 2019). Such coping mechanisms typically include household members working longer hours, requesting financial support from relatives and the community, and requesting increased remittances from friend and family circles employed abroad. Yet, because COVID-19 is affecting economies everywhere simultaneously, many traditional coping strategies are unlikely to be effective, as initial reporting from affected countries suggests (The Economist 2020; Haas & Strohm, 2020). In April, the Global Knowledge Partnership on Migration and Development (KNOMAD) predicted that remittances to sub-Saharan Africa would fall by 23.1% in 2020 (Ratha, 2020). These effects have dramatically increased the need for social protection. At the latest count, 195 countries have planned or introduced social protection measures, the majority in the form of cash transfers—although their use is lowest in the African region, where in-kind support is more common (Gentilini et al., 2020).

Although Africa's social protection coverage going into the pandemic was the lowest in the world, the region has joined the overwhelming public response to the crisis with the introduction of a wide range of social protection measures. For example, in April, the president of Togo announced the launch of an unconditional cash transfer scheme called Novissi, a word that means solidarity (Essozimna Gnassingbé, 2020). The transfer is done via mobile money and provides support to Togolese informal workers who lost their income because of the response to COVID-19. As of early June, 1.3 million Togolese had registered to receive the payment (Gentilini et al., 2020, p. 442). In Senegal, the government introduced measures that included cash transfers for children who are living in difficult circumstances, transfers to pay the water bills for almost one million households and the electricity bills for almost 700,000 households, and the distribution of food kits composed of rice, oil, pasta, and soap (IFPRI, 2020). These measures are providing crucial protection for poor households and reduce the incidence of hunger and prevent the depletion of household assets. One of the essential contributions of social protection is to reduce the necessity for households to sell productive assets or limit social capital investments, such as children's education or maternal health, which makes recovering from economic shocks more difficult by curtailing household resilience.

An example of a well-established social protection program in Africa is Ethiopia's Productive Safety Net Program. The program combines unconditional cash or in-kind transfers to those who cannot supply labour with transfers that are conditional on supplying labour to public works for those recipients who can. In addition, the program provides livelihood development packages that are designed to build and promote the household assets that are essential for sustained income generation. The objective is to enable graduation from the program, in order to eventually reduce the financial burden of the program on the public budget. Evaluations of the Productive Safety Net Program have shown that the public works intervention combined with the livelihood development packages significantly improves food security through a reduction of the hungry period by 1.29 months a year on average, which is equivalent to reducing the length of the hungry season by one third (Berhane et al., 2014).

Social protection is vital but expensive, demanding public resources at a time when they are under grave stress due to the direct and indirect effects of the COVID-19 pandemic. The urgency of the situation and the depth of need governments must respond to makes it a pressing research and policy-setting priority to provide analysis that supports smart decisions on the allocation of public resources. Economic growth for a young and still-growing population such as Africa's is essential for there to be sufficient gainful employment for a workforce that continues to increase each year. The goal in African countries is to protect economic growth during the pandemic, including through the provision of social protection for as many poor and vulnerable people as possible. Social protection is often driven by a public commitment to equity. But the programs have also been associated with economic growth; they can be designed to encourage savings, create community assets, and/or to address market imperfections. For example, the insurance function of social protection may give farmers the opportunity to adopt a more risky, high-return technology, thereby increasing their productivity. For a project such as Ceres2030, the objective is to help determine the policy mixes of effective interventions that will make it possible to realize the SDG goal of ending hunger sustainably.

SOCIAL PROTECTION AND CERES2030

The Ceres2030 project is dedicated to answering how much money is needed and where governments should allocate public funds to most effectively support the realization of SDG 2. Social protection measures have proved indispensable in reducing the impact of the economic earthquake that has been COVID-19. Protecting the existing gains made toward the realization of SDG 2 and its sub-goals by 2030 is crucial; even before the crisis, it was clear that more needed to be done to get countries on track to meet the SDG agenda (FAO et al., 2020). Importantly, reducing hunger and malnutrition can also translate into productivity gains due to the important outcomes associated with a healthy diet, including improved physical and cognitive ability (High Level Panel of Experts on Food Security and Nutrition, 2017). The existence of a strong and positive relationship between caloric intake and labour productivity at the family farm level has been known for more than 30 years (Strauss, 1986).

Social protection programs are not without problems, including the risk of creating program dependency among the beneficiaries, which results in reduced benefits when the program ends. The challenge for governments is to design and build social protection programs that understand the programs' potential to support economic productivity, rather than solely considering them as a safety net. The program may take the form of a government payment targeted at people living in poverty. But with an understanding of the causal relationships that link poverty and malnutrition to productivity, it is possible to design the social protection program to support stronger outcomes for economic productivity, too. Research shows that, in practice, it is very difficult to isolate malnutrition from other dimensions of poverty that together affect productivity directly, including educational performance and access to assets and networks (Hoddinot, 2008).

The economic model used in Ceres2030, called MIRAGRODEP, combines a multi-country and multisectoral model with household surveys (Laborde et al., 2013). Because of the use of household surveys, the model allows for targeted interventions based on the precise characteristics of hungry households in terms of their assets, their capacity to engage in agricultural production, and any additional calorie intake required to address food insecurity. This approach is different compared to other models and costing estimates, which base their assessments on national averages that hide these specificities. In a review of models that assessed the costs of ending hunger, Fan et al. (2018) suggested that it was the MIRAGRODEP model's ability to target interventions, along with the model's exclusive focus on ending caloric hunger (rather than including broader development goals such as poverty reduction) that resulted in it producing a cost estimate that was among the lowest of the models reviewed. An earlier version of the model, from 2016, showed that governments could end hunger by 2030 with an additional USD 11 billion in Official Development Assistance (ODA) per year, on average, from 2015 to 2030. The 2016 study showed that business-as-usual rates of economic growth and ODA support to developing countries (that is, not spending the additional USD 11 billion per year in ODA) would leave 73 countries with significant levels of hunger (Laborde et al. 2016).[1] For countries with significant hunger challenges, the model seeks to maximize the efficiency of public spending by proposing that the additional public funds be spent in three categories, one of which is interventions that provide social safety nets that directly target people affected by hunger, for instance, through cash transfers and food stamps. These measures are expensive in the short-term but important for their immediate benefits and their potential to provide a bridge from poverty to more remunerative activities.

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[1] Five per cent undernourished—or less—is the threshold at which hunger is deemed to have been eliminated in many model estimates, including the 2016 MIRAGRODEP study

By introducing the relationship between caloric intake and labour productivity in agriculture, we show that eliminating global hunger would boost global GDP by USD 276 billion in 2030 (2011 constant dollars), equivalent to 0.5% of expected total developing country GDP for 2030, and can reach 6% of GDP for countries with a high prevalence of undernourishment and a labour-intensive production system, such as exists in Ethiopia (Fan et al., 2018). This result is due to a direct and immediate boost to labour productivity from removing the calorie constraint. Of course, these were estimates developed under normal times; currently, many countries are entering an economic slowdown caused by COVID-19 and the physical distancing it has necessitated. This means that government revenues have decreased while the number of vulnerable households has increased dramatically, adding further challenges to allocating sufficient public funds to support the realization of SDG 2.

The MIRAGRODEP model can consider the increases in the occurrence of undernutrition due to the pandemic and generate cost estimates to achieve SDG 2.1 under these new circumstances. The estimated effects on food consumption are used to estimate the cost of social protection programs that would provide sufficient food or money to maintain people's pre-COVID-19 food consumption. By including the cost of social protection to address extreme poverty and limit the loss of productive assets, the model acknowledges the efficiency gain of protecting long-term investments in ending hunger with short-term measures. These estimates can be used as a tool for policy-makers to prioritize actions to stay on track for achieving SDG 2 in a time of economic downturn.

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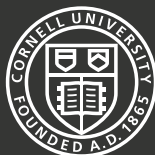
Ceres2030
Sustainable Solutions to End Hunger

ABOUT CERES2030

Ceres2030 brings together three institutions who share a common vision: a world without hunger, where small-scale producers enjoy greater agricultural incomes and productivity, in a way that supports sustainable food systems. Our mission is to provide the donor community with a menu of policy options for directing their investments, backed by the best available evidence and economic models.

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