

**Report on Second Consultative Science Platform – 29 July 2020**

# **Bouncing Forward Sustainably: Pathways to a post-COVID World Resilient Food Systems**

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This background paper has received only limited review. Views or opinions expressed herein do not necessarily represent those of IIASA, ISC or other organizations supporting the work.

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## Acknowledgments

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## 1. Context

The IIASA ISC Consultative Science Platform explores the implications of the COVID-19 pandemic and the global lockdown for sustainable development, focusing on the following themes: resilient food systems, sustainable energy, strengthening of science systems and governance for sustainability. This note summarizes the second of three consultations on resilient food systems, which took place on July 29, 2020. The discussions occurred against a backdrop of rising global numbers of COVID-19 infections, reaching well over 16 million confirmed cases at the time of the consultation. This reinforced the general sentiment that there is considerable uncertainty about the timing of recovery from the pandemic and that we can expect COVID-19 to persist, at least locally, for years to come. Depending on the collective strategic decisions that are taken during this crisis and the socioeconomic recovery process, the pandemic has the potential to fundamentally reshape the realities for development. This particularly applies to food systems, which play a critical role in meeting basic human needs, improving welfare and human health, and addressing climate change, biodiversity loss and other environmental challenges.

## 2. Process

The consultation brought together an international group of experts from academia, public and private sectors and civil society (see participant's list) and was chaired by Ismail Serageldin, Emeritus Librarian of Alexandria and Founding Director of the Bibliotheca Alexandrina. Flavia Schlegel, International Science Council (ISC), welcomed the participants and introduced the IIASA-ISC Consultative Science Platform. Following an overview presentation by Frank Sperling (IIASA) on behalf of the resilient food systems team, lightning talks were given by Pauline Scheelbeek, London School of Hygiene and Tropical Medicine (LSHTM), Kevin Urama, African Development Bank (AfDB), David Beckmann (Bread for the World), and Eva Ohlsson, Swedish International Development Cooperation Agency (SIDA), which were followed by in-depth discussions in two breakout groups. The outcomes of these group discussions were reported back by Barbara Stinson, World Food Prize Foundation, and Hugo Valin (IIASA) to the plenary, followed by closing remarks from the Chair, Leena Srivastava and Luis Gomez Echeverri of IIASA and Mathieu Denis of ISC.

## 3. Summary of Plenary Discussions

In his opening remarks of the consultation, Ismail Serageldin highlighted the almost inconceivable scope of the stimulus packages that were rapidly put in place. Yet the ability to absorb the economic fallout of the pandemic and global lockdown differs widely between developed and developing countries. Many developing countries, particularly in Sub-Saharan Africa but also in Latin America and Asia, do not have the governance structure and fiscal space to put adequate social and economic safety nets in place. This is further compounded by the dependency of many livelihoods on informal economic activities, depreciating currencies, loss of investments and remittances. In light future challenges like climate change and economic, social and environmental risk, he noted that the global challenge presented by COVID-19 is a reminder that we now need to lay the groundwork for more resilient systems.

In his overview presentation, Frank Sperling noted that the consultations are informed by two premises. First, COVID-19 is reshaping the solution space for sustainable development. Second, the transformation of the food system has been and remains essential for realizing the Sustainable Development Goals. He outlined the growing demands being placed on our food system, linking food production and consumption to environmental

sustainability and human health. He reviewed the unfolding impacts and potential longer-term implications of the pandemic on i) food and nutritional security, ii) land productivity and environment, iii) resilience and adaptive capacity. Building on deepening our understanding of the scope of impacts, he stressed the importance of drawing the right conclusions for the recovery process, so that a variety of risks are managed more comprehensively. It is hence worthwhile to explore how COVID-19 is challenging our underlying assumptions and narratives for sustainable development pathways, strengthening our insights of which drivers of change we can proactively influence to minimize adverse outcomes and improving also our understanding of the cost of inaction.

Ismail Serageldin underlined the decisions rapidly taken by governments have potential long-term ramifications. In this context he reflected on the recent sustained upward trends observed in stock markets despite the continued dire economic situation. There is a risk of a liquidity trap, where important investments despite the stimulus packages are not being made to address bottlenecks in infrastructure and other economic sectors, leading to a further concentration of wealth and the burden of the crisis being particularly being felt by the poor.

Opening the round of initial lightning talks, Pauline Scheelbeek (LSHTM) reflected on currently emerging research on the impacts of the pandemic in UK and Europe, contrasting these with impacts observed in West-Africa. In the UK, food supply remained robust, but shifts in demand were being observed, leading to a new equilibrium. She also noted that food prices remained quite stable across a number of European countries with some increases being observed for perishable food items such as fruits and vegetables. The main issues with food and nutrition insecurity are not associated with food supply and food prices, but rather with the rapid loss of income observed across a large number of households. While lockdowns and social distancing measures required home cooking the effects on healthiness varied substantially, based on early insights that could be gained. In contrast to rising levels of food insecurity and shifts in diets observed during the pandemic in European countries, she noted the much more existential threat of malnutrition in Western Africa. School lockdowns have a particularly detrimental effect on children of poor households, as school meals are no longer available. With the pandemic not being likely to go away soon, there is a need to build greater margins into our food systems. Within the context, the role of more regional food supply should also be examined. We also need to better recognize the link between food, environment and human health, breaking down silos between sectors. Our current agricultural production and intense livestock systems constitute a hotbed for the outbreak of pandemics such as COVID-19.

Kevin Urama (AfDB) highlighted the importance of looking at the adaptive, absorptive and transformative capacities of our current food systems. He noted that our food system has not been equitable. With reference to Africa, he highlighted that the current trade system is not adequate and there is a need to look at systemic issues. While the continent has 60% of the arable land, many African countries are dependent on food imports. With livelihoods relying on income from informal sectors, food insecurity due to lockdown measures might lead to more deaths than COVID-19 itself. Many African countries currently do not have the governance capacities or fiscal space to effectively implement or sustain social protection measures. He highlighted the importance of better integrating systemic aspects of food, human health, economy and environment, referring to this as a 'One Health' concept. There is need to strengthen regional trade in agricultural products on the continent, harnessing African continental free trade area agreement. Greater emphasis needs to be placed on the self-sufficiency of the continent, prompting African countries to pay greater attention to improving land-use, technology, and irrigation measures. This should include a fresh look at agriculture, considering whether a diversification of crop genetic varieties, which are better suited to local environmental conditions, can reduce the reliance on a global trade system built around a homogenized food system. Greater focus should also be given to value in addition the agricultural production chain within Africa. Given the urbanization trends, opportunities for urban agriculture to improve food and nutritional security of households should also be considered. Strengthening the livelihood

security through expansion of social safety nets, including cash transfers, and specialized funds, which are tailored to the situation of smallholder farmers and SMEs should also be explored instead of a singular focus on monoculture agricultural systems. Long-term contracts for farmers would improve their resilience to COVID-19 like shocks.

David Beckmann (Bread for the World) highlighted that food insecurity issues can also be a major concern in developed countries, pointing to the rising levels of inequity in society. Citing the US as example, he noted that one in six children lived in food insecure households before COVID-19 struck. Hunger and food insecurity have surged during the pandemic. There is an urgent need to strengthen food programs and job opportunities for low-income people to counter a growing societal divide. He emphasized the importance of political leadership and social accountability in managing this crisis. Further, he noted that the US agricultural system is geared towards grains and meat. This is environmentally unsustainable and detrimental to human health, with two-thirds of all Americans being overweight and obese.

Eva Ohlsson (SIDA) underlined in her remarks that the overexploitation of nature is a key factor being the spread of COVID-19. With the progressive human encroachment in natural systems, it becomes easier for pathogens to move from the wild to domestic animals and humans. This is further aided by a decreasing genetic diversity among livestock. The intensification of agriculture has to be viewed as a mixed blessing, as it created also conditions that are more conducive for diseases and pandemics. Consequently, a priority focus needs to be placed development cooperation during the recovery process on strengthening environment and social equity issues.

#### **4. Highlights from breakout discussion for recovery process**

Building on the lightening talks, the participants divided into two breakout groups for further in-depth discussion. The outcomes of these discussions were then shared in the concluding plenary. These discussions included the following areas for recommendations guiding the recovery process:

*Reaffirm emphasis on realizing zero hunger and other Sustainable Development Goals.* Participants noted that the pandemic has made the collective achievement of the SDGs in terms of ambition and timeframe more challenging. The commitment to attaining the SDGs is essential during the recovery process and this should guide the reorganization of the food systems with regards to universal food security, healthy nutrition, livelihood security and economic opportunities, trade, addressing food loss and waste and ensuring environmental sustainability. Collection of data on human welfare, socioeconomic development and the environment and integration of information are essential for identifying impacts of pandemic, along with identifying shortfalls towards the SDGs and adjusting strategies.

*Food and economic systems need to strengthen emphasis on resilience relative to the prevalent focus on efficiency.* Repeated reference was made to the weakness of current economic systems to adequately deal with shocks and multiple social, economic and environmental challenges. A shift away from the dominating focus on growth and efficiency towards a greater emphasis on well-being and resilience is required, greater margins need to be built into the food system. The pandemic underscores the importance of access to social safety nets and social protection schemes. Trade is essential for food security, but current trade patterns and supply chains should be evaluated from a resilience and environmental sustainability perspective, considering where greater levels of self-sufficiency or regional integration are warranted.

*Access to digital technologies and sustainable practices needs to be strengthened.* The potential of technology and a digital economy to buffer against some impacts on the food system was apparent. Innovation in technologies and practices are central for addressing immediate and long-term food security concerns. Considering the contracted fiscal space particular in developing countries, an emphasis on knowledge transfer, improvement of extension services and adoption of existing good practices will be essential, while also maintaining a focus on expanding the digital infrastructure in developing country regions to avoid a widening technological gap. The adoption of genetic varieties better adapted to local environmental conditions should be considered.

*Human and environmental health need to be an integral focus of food systems.* Human and planetary health perspectives should be co-jointly embedded in food systems. Access to affordable, healthy, nutritious diets needs to be combined with a focus on addressing environmental externalities. Food system policies need to better value ecosystem services and promote accounting of natural capital. Attention should also be paid to practices that maintain and restore soils, while supply chains and trade patterns should be evaluated with regards to the embedded CO<sub>2</sub>, water and natural resource footprints. The pandemic underlines the need to address biodiversity loss and protect ecosystems and assess our current management practices of livestock and crops as well as food consumption behaviors in order to effectively guard against outbreak of epidemics. In conjunction with the focus on sustaining essential life support functions of the earth system, this reinforces the need to design, implement and monitor the enforcement of ambitious climate and environmental targets across scales.

*Multilateral institutions need to be strengthened and complemented by new modes of international collaboration and multi-stakeholder engagement, which are underpinned by improved data access and knowledge sharing mechanisms.* Global crisis like COVID-19 require global cooperation but have revealed the weakness of the current multilateral system. Strengthening of international institutions is necessary, but also complementary models of cooperation, which break down silo-thinking and foster stakeholder engagement, which need to be reinforced. Data access and transparency are critical for empowering citizen engagement. Building on lessons learned from climate change action and strengthening engagement channels with the private sector on shifting investments towards more sustainable and resilient food systems need to be integral part of the recovery process.

## **5. Consideration for next steps**

The Covid-19 pandemic and the global lockdown revealed the vulnerabilities embedded in our food systems. In addition, the timing and pace of the recovery process is fraught with considerable uncertainties. The dominating emphasis on growth and maximizing efficiency has left us ill-prepared for global shocks. The consultations underline the importance of strengthening the emphasis on resilience, accounting for uncertainty by building in margins into our food systems, which enable greater flexibility and adaptive capacity. Growth as a driver of development progress should be assessed from a systems perspective, placing greater emphasis on quality of growth. Further focus should also be placed on inclusiveness and the monitoring of different capital stocks over time, acknowledging also the limited substitutability of natural capital stocks by other forms of capital. The consultations also noted the inter-dependence of countries. The lockdown measures implemented by developed countries to contain the spread of the virus had profound knock-on effects on developing countries with many now facing rising levels of infections while having less fiscal space and capacities to buffer against social and economic impacts. The need of international collaboration and international assistance is apparent if rising inequalities across and within countries are to be avoided. With regards to resilience of food systems, the role of trade should be further examined. While effects of the pandemic on trade in agricultural raw materials and food products has been limited so far, the inequities in the trade system and the dependence of rising number of

countries on food imports have been flagged as a concern. In this context the role of greater regional integration and self-sufficiency should be considered, while the role of trade in buffering against other environmental and economic shocks should be kept in mind. A comprehensive integration of human and environmental health impacts should guide the future transformation of food systems. Strengthening the enabling conditions for these transformations will be focus of the third consultation.

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## Participants of the online consultations

**Chair:** Ismail Serageldin (Emeritus Librarian of Alexandria and Founding Director of the Bibliotheca Alexandrina)

**David Beckmann**, President Emeritus, Bread for the World, US

**Oliver Greenfield**, GEC Convenor, Green Economy Coalition, International Institute of Environment & Development, UK

**Daniel Kurdys**, World Business Council for Sustainable Development (wbcSD), Switzerland

**Mauricio Lopes**, Research Scientist, Embrapa Agroenergy, Brazil

**Michal Nachmany**, Policy Fellow, Manager of Transition Pathway Initiative, London School of Economics and Political Science, UK

**Eva Ohlsson**, Senior Research Advisor, Swedish International Development Cooperation Agency, Sweden

**Guy Peér**, sDiv Catalyst Post-doc UFZ - Helmholtz Centre for Environmental Research

**Pauline Scheelbeek**, Assistant Professor in Nutritional and Environmental Epidemiology, School of Hygiene & Tropical Medicine, UK

**Ben Simmons**, Head, Green Growth Knowledge Partnership (GGKP), CH

**Elena Smirnova**, Scientific Secretary of Federal Research Centre on Nutrition and Biotechnology, Department for International Cooperation, Russian Academy of Sciences

**Barbara Stinson**, President of the World Food Prize, USA

**Stefan Uhlenbrook**, Strategic Program Director, Water, Food & Ecosystems, International Water Management Institute (IWMI), Sri Lanka

**Kevin Urama**, Senior Director, African Development Institute, African Development Bank Group, Côte d'Ivoire

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