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### Agriculture development, food security and nutrition

## Agriculture development, food security and nutrition

### Report of the Secretary-General

#### *Summary*

The present report contains an overview of how transformation towards sustainable agrifood systems mitigates the impact of persistent crises by enabling collective action that leverages interlinkages between the Sustainable Development Goals to maximize synergies and minimize trade-offs. The report includes: (a) lessons learned from the lingering impact of and efforts to recover from the coronavirus disease (COVID-19) pandemic, (b) evidence on how to build resilience to the impacts of conflict on local and global food security and nutrition and (c) how to address persistent inequalities in agrifood systems in order to improve agriculture, food security and nutrition.

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## I. Introduction

1. In its resolution [76/222](#) on agriculture development, food security and nutrition, the General Assembly requested the Secretary-General to report to the Assembly at its seventy-seventh session on the implementation of the resolution and reaffirmed the commitment to leave no one behind and to taking more tangible steps to support people in vulnerable situations and the most vulnerable countries and to reach those who are the furthest behind first.

2. The present report provides an update on efforts to achieve internationally agreed goals on agriculture development, food security and nutrition in line with the 2030 Agenda for Sustainable Development. It has been drafted with contributions from across the United Nations system,<sup>1</sup> the high-level political forum on sustainable development, the Department of Economic and Social Affairs and other sources.

## II. Overview

3. The thematic focus of the present report concerns how to strengthen the resilience of agrifood systems to crises and shocks with a view to mobilizing collective action for transformational change and maximizing synergies across the Sustainable Development Goals while minimizing trade-offs. In the report, it is emphasized that the world is not on track to achieve Goal 2 given the continued impacts of the COVID-19 pandemic, economic slowdowns and downturns, climate variability and extremes and conflict and war. The lessons learned from recovery efforts are examined and initiatives and approaches for accelerated and transformative recovery are presented.

4. Section III presents the latest evidence and trends related to agrifood systems, food security and nutrition (and especially how those trends relate to Goal 2 and other aspects of the 2030 Agenda). That section illustrates how addressing the interlinkages, trade-offs and critical gaps in the realization of Goal 2 affects the achievement of other Goals and supports the case for strengthening and fostering the resilience of agrifood systems through integrated approaches. Section IV examines (a) lessons learned from the lingering impact of and recovery efforts from the coronavirus disease (COVID-19) pandemic, (b) how to build resilience to conflict, including the conflict in Ukraine, to reduce impacts on local and global food security and nutrition and (c) how to address persistent inequalities in the agriculture sector for the aim of improved food security and nutrition. The final section offers recommendations, including key actions and emerging initiatives, for improving the resilience of agrifood systems and mitigating the impacts of future crises.

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<sup>1</sup> Contributions have been included from the following entities: Food and Agriculture Organization of the United Nations (FAO), United Nations Framework Convention on Climate Change, Economic Commission for Europe (ECE), Economic and Social Commission for Western Asia (ESCWA), Economic Commission for Latin America and the Caribbean (ECLAC), United Nations Office for South-South Cooperation, United Nations Office on Drugs and Crime (UNODC), International Atomic Energy Agency (IAEA), United Nations Industrial Development Organization (UNIDO), World Tourism Organization (UNWTO), United Nations Human Settlements Programme (UN-Habitat), World Health Organization (WHO), World Trade Organization (WTO), Convention on Biological Diversity, United Nations Conference on Trade and Development (UNCTAD), Office of the United Nations High Commissioner for Human Rights (OHCHR) and World Food Programme (WFP).

### III. Progress towards Sustainable Development Goal 2 and related Goals

5. World hunger, following a sharp upturn in 2020 in the midst of the COVID-19 pandemic rose further in 2021. The persistence of the pandemic and its consequences, which exacerbated existing inequalities, contributed to further setbacks in 2021 towards the achievement of the goal of zero hunger by 2030. It is estimated that in 2021, between 702 and 828 million people globally faced hunger,<sup>2</sup> and the number of people facing hunger grew by approximately 150 million between the outbreak in 2019 of the COVID-19 pandemic and 2022.<sup>3</sup> In 2021, approximately 2.34 billion people, or nearly 30 per cent of the global population, were moderately or severely food insecure, an increase of more than 350 million since 2019.<sup>4</sup>

6. The global burden of malnutrition in all its forms remains a challenge. Estimates from 2020 indicated<sup>5</sup> that 149 million children under 5 years of age (or 22.0 per cent of all children) were stunted, 45.4 million (6.7 per cent) suffered from wasting and 38.9 million (5.7 per cent) were overweight.<sup>6</sup> Some progress has been made, but malnutrition persists in many forms across all regions and may be worse than those findings suggest, as the impact of the COVID-19 pandemic on nutritional outcomes is still unfolding. Exclusive breastfeeding among infants under 6 months of age (37.1 to 43.8 per cent) and stunting among children under 5 years of age (26.2 to 22.0 per cent) were the only categories to have notably improved since 2012, but even those indicators will require accelerated progress to meet the 2030 targets.

7. Since mid-2020, agricultural commodity markets have been characterized by issues strongly linked to the COVID-19 pandemic and the war in Ukraine, such as high energy prices, supply chain disruptions and restrictive trade measures. In March 2022, the FAO Food Price Index reached an all-time high, up by nearly 34 per cent from the previous year. Even though it dropped slightly in April and May 2022, the Index remained very high relative to historical levels.<sup>7</sup> The increase in prices is broad-based, affecting almost all food categories, with the vegetable oil price index registering the steepest increase, followed by cereals, sugar, dairy products and, to a lesser extent, meat. At the same time, input prices, including of fertilizers, have risen. Domestic and international markets are increasingly affected by rising costs of freight and agricultural inputs and by logistical bottlenecks and market uncertainty. More recently, the conflict in Ukraine has caused food prices to skyrocket and further disruption of supply chains.

8. Government expenditure on agriculture relative to the agriculture sector's contribution to GDP increased globally between 2015 and 2019 but receded in 2020,<sup>8</sup> as expenditures were higher for non-agriculture activities, in particular those related to the COVID-19 response.

<sup>2</sup> FAO, International Fund for Agricultural Development (IFAD), UNICEF (United Nations Children's Fund), WFP and WHO, *The State of Food Security and Nutrition in the World 2022* (Rome, 2022).

<sup>3</sup> Ibid.

<sup>4</sup> Ibid.

<sup>5</sup> These estimates have not been updated for the FAO report, *The State of Food Security and Nutrition in the World 2022* owing to COVID-19 data collection interruptions. Estimates of childhood stunting, wasting and overweight, as well as anaemia in women of reproductive age, have not been updated since the previous edition of the report.

<sup>6</sup> *The State of Food Security and Nutrition in the World 2022*.

<sup>7</sup> FAO Food Price Index (<https://www.fao.org/worldfoodsituation/foodpricesindex/en/>).

<sup>8</sup> FAO, "Government expenditures in agriculture 2001–2020: Global and regional trends", FAOSTAT Analytical Brief No. 35 (Rome, 2022).

9. The average labour productivity and incomes of small-scale food producers remain lower than for large-scale producers. In three quarters of the countries with data, small-scale food producers earn less than half the average annual income of large-scale producers.<sup>9</sup> The income of women-headed production units is systematically lower than that of production units headed by men.

10. The proportion of food lost globally after harvest on farm, transport, storage, wholesale and processing levels is estimated at 13.3 per cent, with no visible improvements since 2016,<sup>10</sup> suggesting that structural patterns of food losses have not changed.

11. Gender disparities continue to persist in agricultural land ownership and control: in over three quarters of surveyed countries, a smaller proportion of women in the agricultural population have secure tenure rights as compared with men. Meanwhile, legal frameworks remain inadequate for safeguarding women's access to land, with only 29 per cent of reporting countries providing sufficient legal protection.<sup>11</sup>

12. Although water use efficiency improved worldwide by 12 per cent from 2015 to 2019, approximately 70 per cent of fresh water globally is still used in agriculture.<sup>12</sup> Across the world, water stress levels remained at 18.6 per cent in 2019, with large regional variations. Priority should be given to incentivizing practices that increase water productivity, including the rehabilitation and modernization of existing irrigation infrastructure and the adoption of innovative technologies.<sup>13</sup>

13. The world's forest area, currently estimated at 31 per cent of total land area,<sup>14</sup> continues to diminish, but at a slightly slower rate compared with previous decades. Despite the overall losses, the world continues to make progress towards sustainable forest management. Between 2010 and 2020, the share of forests under certification schemes, within protected areas and under long-term management plans increased globally.

14. In recent years, the disruption of value chains and decreased access to inputs and veterinary services owing to the pandemic lowered the contribution of the livestock sector to food security, livelihoods, nutrition and health. The situation was worsened by the spread of several transboundary animal diseases in the past year, including the global spread of highly pathogenic avian influenza and African swine fever and, in Asia, of lumpy skin disease, as well as the persistence of brucellosis and bovine tuberculosis in low-income countries. Population growth, expanding urbanization and increased demand for animal-source foods continue to drive agricultural expansion, changes in production practices and habitat fragmentation, altering host-pathogen interactions between human- and animal-ecosystem interfaces, which increases the risk of the emergence and spillover of zoonotic diseases.

15. The world is also off track when it comes to preserving the genetic diversity of farmed and domesticated animals, with 72 per cent of the number of surveyed local livestock breeds deemed at risk of extinction. Only 277 out of 7,704 local livestock

<sup>9</sup> *The Sustainable Development Goals Report 2022* (United Nations publication, 2022).

<sup>10</sup> See <https://www.fao.org/sustainable-development-goals/indicators/1231/en/>.

<sup>11</sup> OHCHR and UN-Women, *Realizing Women's Rights to Land and Other Productive Resources*, 2nd ed. (United Nations publication, 2020).

<sup>12</sup> Tariq Khokhar, "Chart: Globally, 70% of Freshwater is Used for Agriculture", World Bank blogs, 22 March 2017.

<sup>13</sup> FAO, *The State of Food and Agriculture 2020* (Rome, 2020).

<sup>14</sup> FAO, *Global Forest Resources Assessment 2020: Main Report* (Rome, 2020).

breeds have sufficient material in gene banks to reconstitute the breed in case of extinction.<sup>15</sup>

16. Aquatic foods sourced from sustainable fisheries and aquaculture provide key nutrients to a substantial portion of the population, with a proven positive impact on the nutritional and developmental status of vulnerable populations, especially children. Small-scale fisheries account for at least 40 per cent of the catch of fisheries globally and nearly 500 million people depend at least partially on small-scale fisheries for food and livelihoods.<sup>16</sup>

17. Although the COVID-19 pandemic caused disruptions to production, distribution, demand and labour in aquatic food supply chains globally,<sup>17</sup> some reports show that small-scale actors have shown greater resilience in the face of shocks.<sup>18</sup>

18. In 2022, the International Year of Artisanal Fisheries and Aquaculture, the extent of the adoption of regulatory frameworks supporting small-scale fisheries has improved worldwide. The average degree of implementation of international instruments to combat illegal, unreported and unregulated fishing has also improved across the world, with close to 75 per cent of countries scoring highly in 2022,<sup>19</sup> which is 5 per cent higher than in 2018. However, illegal activities in fisheries extend beyond illegal, unreported and unregulated fishing and include corruption, fraud, forgery and tax crimes. Such activities can occur at any stage of the value chain, impacting vulnerable communities, especially in developing countries.

19. Subsidies still allow many fleets to fish in ways that are harmful to fish stocks and other marine life. WTO estimates indicate that such support ranges from \$14 billion to \$54 billion per year globally.<sup>20</sup> In June 2022, after more than two decades of negotiations, members of WTO reached a new multilateral deal on fishery subsidies. The new agreement includes a set of rules prohibiting subsidies for illegal, unreported and unregulated fishing, for the fishing of overfished stocks and for fishing on the high seas outside the control of regional fisheries management organizations.<sup>21</sup>

20. Biodiversity and genetic resources are key to food security and nutrition. Biodiversity also provides vital ecosystem services, such as pollination, nutrient cycling and pest control and can reduce the need for costly or environmentally harmful external inputs. Efforts to conserve biodiversity for food and agriculture purposes are currently insufficient and the agricultural sector, in particular its intensive production systems, remains among the key drivers of biodiversity loss. The post-2020 global biodiversity framework will be a milestone to encourage action and facilitate implementation of ecosystem preservation and restoration at the national level.<sup>22</sup>

<sup>15</sup> See [https://sustainabledevelopment.un.org/content/documents/29858SG\\_SDG\\_Progress\\_Report\\_2022.pdf](https://sustainabledevelopment.un.org/content/documents/29858SG_SDG_Progress_Report_2022.pdf).

<sup>16</sup> FAO, *The State of World Fisheries and Aquaculture 2022* (Rome, 2022).

<sup>17</sup> FAO, "How is COVID-19 affecting the fisheries and aquaculture food systems", FAO brief, 10 April 2020.

<sup>18</sup> David Love and others, "Emerging COVID-19 impacts, responses, and lessons for building resilience in the seafood system" in *Global Food Security*, vol. 28, March 2021.

<sup>19</sup> See <https://www.fao.org/sustainable-development-goals/indicators/1461/en/>, accessed 28 July 2022.

<sup>20</sup> WTO, "Factsheet: Negotiations on fisheries subsidies", available at [https://www.wto.org/english/tratop\\_e/rulesneg\\_e/fish\\_e/fish\\_intro\\_e.htm](https://www.wto.org/english/tratop_e/rulesneg_e/fish_e/fish_intro_e.htm).

<sup>21</sup> WTO, "Agreement on fisheries subsidies: ministerial decision of 17 June 2022", WT/MIN(22)/33, 22 June 2022.

<sup>22</sup> The first draft of the framework (CBD/WG2020/3/3) is available at <https://www.cbd.int/doc/c/914a/eca3/24ad42235033f031badf61b1/wg2020-03-03-en.pdf>.

21. Over the previous century, the use of fertilizers and the production and use of manure in agriculture have caused significant nitrogen emissions to air and releases to water and land. The dire consequences of that include greenhouse gas emissions that contribute to climate change, as well as air, soil and water pollution that damages human health, threatens the biodiversity of forests and rivers and leads to coastal and marine pollution, exacerbating climate change effects. In some European countries, over 40 per cent of air pollution-related mortality can be attributed to agriculture-related nitrogen compound emissions. Globally, two thirds of nitrogen pollution is from agriculture.

#### **IV. Thematic discussion: strengthening resilience in the integrated global agrifood system in the context of recurring crises**

##### **1. Lessons from the continued impact of and recovery efforts from COVID-19 on agriculture development, food security and nutrition and actions to strengthen recovery**

22. The widespread disruptions resulting from the pandemic have highlighted the fragility of contemporary agrifood systems.<sup>23</sup> The measures taken to contain the spread of the virus continued to reverberate across agrifood systems into the first quarter of 2022. As a result of lockdown measures, farmers, young “agripreneurs” and employees of agrifood systems, especially in developing countries, have seen their livelihood opportunities become increasingly fragile.<sup>24</sup> The fallout from the pandemic has had a disproportionate effect on the poor, who already struggle to access decent jobs and afford nutritious diets. In 2020, almost 3.1 billion people could not afford a healthy diet, an increase of 112 million from 2019, which reflects the effects of inflation on consumer food prices stemming from the economic impacts of the COVID-19 pandemic and the measures to contain it.<sup>25</sup>

23. The survival of micro-, small and medium-sized agrifood enterprises was compromised during the pandemic. A lack of innovation capacity and/or access to investments for automated and digitalized business remodelling led to the closure of farms and enterprises and increased the already high levels of unemployment. Those working in fields related to the high-value agrifood value chains or perishable commodities that are essential to good nutrition (such as fruits and vegetables, meat and dairy and fish and aquaculture products) were also disproportionately affected.<sup>26</sup>

24. Vast inequalities still exist in agrifood systems, as evidenced by the persistence of hunger, food insecurity and poverty among those depending on agrifood sectors. Billions of people in both rural and urban areas cannot afford a healthy diet and struggle for decent livelihoods within and outside the agriculture sector. From 2019 to 2020, the prevalence of undernourishment jumped from 8.0 to 9.3 per cent and in 2021 rose at a slower pace to 9.8 per cent. The additional increase in global hunger in 2021 reflects exacerbated inequalities across and within countries, which are the result of an unequal economic recovery among countries and income losses among those most affected by the COVID-19 pandemic.

<sup>23</sup> Johan Swinnen and Rob Vos, “COVID-19 and impacts on global food systems and household welfare: Introduction to a special issue”, in *Agricultural Economics*, vol. 52, issue 3, May 2021.

<sup>24</sup> FAO, *The State of Food and Agriculture 2021* (Rome, 2021).

<sup>25</sup> *The State of Food Security and Nutrition in the World 2022*.

<sup>26</sup> FAO and UNIDO, *Assessing the impact of COVID-19 on agrifood manufacturing small and medium enterprises in sub-Saharan Africa: Recommendations for building back better* (Rome and Vienna, 2022).

25. While the prevalence of moderate or severe food insecurity remained at nearly 30 per cent from 2020 to 2021, severe food insecurity increased to 11.7 per cent in 2021, the equivalent of 74 million additional people in a single year. That provides further evidence of a deteriorating situation, mainly for those already facing serious hardships. Women, for example, have been disproportionately impacted by the economic crisis that was triggered by the COVID-19 pandemic, as revealed in the growing gender gap in food insecurity. In 2021, 31.9 per cent of women globally were moderately or severely food insecure, compared with 27.6 per cent of men.<sup>27</sup>

26. The COVID-19 pandemic induced a macroeconomic shock, with cumulative losses to the global economy of over \$12 trillion over two years (2020–2021).<sup>28</sup> The most recent global growth projections were reduced for both 2022 and 2023. Supply chain disruptions are fuelling higher inflation, adding to pressures caused by strong demand and elevated food and energy prices, which have been compounded by the conflict in Ukraine. Higher food prices hit the poorest countries the hardest, as spending on staples makes up the bulk of household disposable income. With interest rates rising, low-income countries already at risk of debt distress will see their liability dramatically increased.

27. Both supply and demand in agrifood systems have been affected in the previous two years. Disruptions have had an impact on almost all segments of the supply chain. Despite the severity of those shocks, global agrifood trade and value chains have proved to be quite resilient. While shifts in consumption patterns for beverages and fishery products, for example, and non-food commodities, such as cotton, live plants and cut flowers, led to a sharp reduction in trade during the beginning of the COVID-19 outbreak, disruptions to the global trade in basic foods, such as cereals and oilseeds, were minimal. The overall impacts on the global trade in food and agriculture have thus far remained limited to short-term disruptions.

28. In order to maintain business operations during and after lockdowns, enterprises responded by introducing business innovations, resorting to alternative input-sourcing channels, reducing output, increasing procurement from local markets and focusing on inventory management.

29. Despite shocks, diversity and stability in trade also emerged. Minimizing of trade restrictions, further digitalization of trade procedures and supply chain operations, improvements in transparency in markets and policies and strengthening of international governance and coordination mechanisms are needed. The Agricultural Market Information System, a Group of 20 initiative launched in 2011, is a key tool for reducing asymmetry of information with respect to food availability, stocks and trade flows and for promoting the coordination of policy responses in times of uncertainty.<sup>29</sup>

30. The risks of global disruption in domestic food value chains during the pandemic highlighted the need for the diversification of value chains through enabling a mix of traditional, transitional and modern food supply chains to operate as buffers against shocks and stresses. Modern supply chains, which are longer than in the past and serve wide geographical areas, can respond more easily to local shocks. Traditional and local chains, however, improve resilience, especially when small and medium agrifood enterprises have access to adequate credit sources and infrastructure. Enhanced use of traditional knowledge can also increase the resilience

<sup>27</sup> *The State of Food Security and Nutrition in the World 2022*.

<sup>28</sup> Gita Gopinath, “Reopening from the Great Lockdown: Uneven and Uncertain Recovery”, International Monetary Fund, IMFBlog, 24 June 2020.

<sup>29</sup> <http://www.amis-outlook.org/home/en/>.

of agriculture to climate change, provide alternatives for rural livelihoods and improve the availability of more diverse and nutritious foods.

31. In collaboration with the United Nations Environment Programme (UNEP) and the World Organization for Animal Health, WHO has developed guidance to minimize the spread of zoonotic diseases, which includes a call for the suspension of live-caught wild animals and for the strengthening of the regulatory basis for improved hygiene and sanitation standards in traditional food markets.

32. The pandemic has resulted in improved leveraging of information and communications technology (ICT) and digital tools for logistics, the detection of risk signals, early warning strategies, and the linking of consumers to producers. Improved agriculture information sharing can boost the effectiveness of agricultural extension and advisory services and learning and contributes to informed decisions on natural resources, cropping systems, pests and diseases. The digital divide remains a barrier to equal access to those tools.

33. ICT can improve risk management and early warning and predictability capacities with respect to the likelihood and impact of climate-related shocks, including through agroclimatic monitoring, disaster and crisis risk management, vulnerability assessments and agricultural damage and loss data. Early warning systems, coupled with alerts for immediate action and emergency response mechanisms, need to be connected to institutions and local stakeholders through clear anticipatory action and contingency plans and need funding and training for effective implementation.

34. Enhanced ICT use with a human rights-based approach to data can also support monitoring processes and the systematic analysis of disaggregated data on food insecurity, vulnerability and nutritional status among different groups. Information and data gathering, planning, dissemination and analysis should be transparent and participatory.

35. Policy coherence, when combined with fiscal responsibility and objectivity in reallocating public resources, contributes to resilience in agrifood systems and improved food security and nutrition without compromising macroeconomic stability. Between 2013 and 2018, worldwide support for the agricultural sector averaged almost \$630 billion a year.<sup>30</sup> However, much of that support is market-distorting, does not reach many farmers, harms the environment and does not promote the production of nutritious foods. Evidence shows that if governments repurpose the resources they are using to incentivize the production, supply and consumption of nutritious foods, they will contribute to making healthy diets more affordable and equitable for all, thereby contributing to improved food security and nutrition.<sup>31</sup>

## **2. Building resilience to the global impacts of conflict, including the Ukraine conflict, on local and global food security and nutrition**

36. The conflict in Ukraine raises concerns for global markets, on top of high international food prices and the increasing prevalence of food insecurity. Exports of food commodities are concentrated in a handful of countries, making markets vulnerable to shocks and volatility. Of particular concern are countries that are highly dependent on both food and fertilizer imports from the Russian Federation and Ukraine. The conflict has created major uncertainties regarding the production and

<sup>30</sup> *The State of Food Security and Nutrition in the World 2022.*

<sup>31</sup> *Ibid.*



export capacities of agricultural products, whereas, before the escalation, global wheat production had been expected to increase for the fourth consecutive year.<sup>32</sup>

37. In 2021, the Russian Federation and Ukraine ranked among the top three global exporters of wheat, maize, rapeseed, sunflower seeds and sunflower oil, while the Russian Federation also stood as the world's top exporter of nitrogen fertilizers, the second leading supplier of potassium fertilizers and the third-largest exporter of phosphorous fertilizers. Many countries that are highly dependent on the import of those commodities were already facing the negative effects of high international food and fertilizer prices and of the COVID-19 pandemic.

38. While Ukraine, in the aggregate, currently has sufficient stocks of staple foods, distribution remains a problem. Conflict-induced supply chain disruptions and decreasing purchasing power will constrain access to healthy diets across the country. The conflict is also constraining agricultural production, limiting economic activity and raising prices and reducing the purchasing power of the local population.

39. Disruptions to essential public services are expected to negatively affect agricultural activities. Current reports from the European Commission indicate that 20 to 30 per cent of areas sown with winter crops will remain unharvested during the 2022/23 season, with yields also likely to be adversely affected. Considerable uncertainties remain regarding the capacity of Ukrainian farmers to plant crops during the spring crop cycle. In March 2022, the FAO Food Price Index sharply increased to a record high, largely driven by conflict-related disruptions to exports from Ukraine.<sup>33</sup>

40. In 2021, 36 out of the 53 food-crisis countries/territories presented in the *Global Report on Food Crises 2022*<sup>34</sup> depended on Ukrainian and Russian exports for more than 10 per cent of their total wheat imports. Some of them obtained almost the entirety of their wheat imports in 2021 from the Russian Federation and Ukraine. They included Somalia (over 90 per cent), the Democratic Republic of the Congo (over 80 per cent) and Madagascar (over 70 per cent). Many food-crisis countries, in particular in the Middle East, North and sub-Saharan Africa and South Asia, depend heavily on wheat imports from the Russian Federation and Ukraine. In East Africa alone, where wheat and wheat products account for one third of average cereal consumption, 90 per cent of wheat is imported from the two countries.<sup>35</sup> Those disruptions are compounded by reduced grain production owing to the impacts of climate change, which include, for example, droughts and low rainfall and locust outbreaks.

41. Humanitarian efforts to address the impacts of the conflict in food crisis contexts must include a scaled-up focus on local food production, as over two thirds of those experiencing acute food insecurity rely on agriculture for their survival. Despite the importance of agriculture to food availability and access, only 8 per cent of funding for the humanitarian food security sector is being allocated to those efforts.<sup>36</sup>

42. High fuel and fertilizer prices increase farmers' production costs, which may result in higher food prices and lower farm yields. That can squeeze household finances, raise poverty, erode living standards and fuel social instability. Higher prices can increase pressure to raise interest rates, increasing the cost of borrowing while

<sup>32</sup> FAO, "Crop Prospects and Food Situation", Quarterly Global Report No. 1 (Rome, March 2022).

<sup>33</sup> FAO, "FAO Food Price Index posts significant leap in March", 8 April 2022. Available at <https://www.fao.org/newsroom/detail/fao-food-price-index-posts-significant-leap-in-march/en>.

<sup>34</sup> Global Network against Food Crises and Food Security Information Network, *Global Report on Food Crises 2022* (2022).

<sup>35</sup> WFP, "Implications of Ukraine Conflict on Food Access and Availability in the Eastern Africa Region", Update No. 2, March 2022.

<sup>36</sup> Global Network Against Food Crises, *Report on Financing Flows and Food Crises 2021* (Rome, 2021).

devaluing currencies, thereby making food and energy imports even more expensive and restarting the cycle. Those dynamics have dramatic implications for social cohesion, financial systems and global peace and security.<sup>37</sup>

43. Grain, oil and gas price hikes increase the cost of humanitarian operations, reducing the ability to serve those in need when it is most required. Funding for humanitarian food assistance has been falling since 2017, with the current shortfall being particularly stark owing to the COVID-19-induced economic slowdown and the prioritization of public health response expenditures. More than ever, action is needed from across the humanitarian-development-peace nexus and from stakeholders.

44. In order to minimize conflict-induced shocks and remain resilient, alternative export suppliers are needed. Reliance on existing food stocks and enhancement of the diversification of domestic production bases would help. Careful consideration of national measures is needed in order to avoid harm to international markets. In particular, export restrictions should be avoided, as they exacerbate price volatility, limit the buffer capacity of the global market and have negative impacts over the medium term.

45. Predictable and fair-trade rules are important for ensuring access to food for all. Agriculture is an important source of income in many developing countries, in particular in poorer rural areas. However, tariffs in agriculture are, on average, higher than on non-agricultural products and non-tariff measures constitute an even higher obstacle for agricultural trade than for industrial products. A lack of transparency, as well as uncoordinated and often ill-defined regulations, impose an unnecessary burden on agricultural trade. Transparency alone can decrease trade costs by 25 per cent. The United Nations, together with non-United Nations organizations, leads an international effort to enhance transparency in non-tariff measures.

46. Decreased purchasing power and rising food costs may increase demand for cheaper foods while decreasing demand for healthy and sustainably produced foods, which may cost more. Local food producers may see this as an opportunity, but it also involves the challenge of ensuring adequate levels of safety and sustainability of product. Local producers and micro-, small and medium-sized enterprises, in particular in developing countries, should be supported so that they can benefit from the reorientation of food markets.

47. Between 2018 and 2021, the number of people in crisis situations in countries where conflict was the main driver of acute food insecurity increased by a staggering 88 per cent, to 139.1 million. Conflict and insecurity were the main drivers of acute food insecurity in 24 countries or territories covered in the *Global Report on Food Crises 2022*.<sup>38</sup> Degraded and limited natural resources, climate change, population growth, increased urbanization, food price fluctuations, financial shocks and other stresses all shape a complicated future for the disaster-climate-conflict interface. They also lead to fertile ground for new conflicts and exacerbate existing ones. That complex situation requires multisectoral, multi-hazard preventive and anticipatory approaches that integrate disaster, climate and crisis risk management. Investing in resilient agriculture and agrifood systems can make substantial contributions to peace and stability at the local level.

48. Strengthening disaster and climate risk governance within and across sectors and at all levels is fundamental to mitigating the impacts on agrifood systems. Governments and agrifood actors should have legal, policy, and institutional systems in place to identify, monitor and manage risks and to coordinate disaster response and

<sup>37</sup> United Nations, Global Crisis Response Group, "Global impact of the war in Ukraine: Billions of people face the greatest cost-of-living crisis in a generation", Brief No. 2, 8 June 2022.

<sup>38</sup> *Global Report on Food Crises 2022*.

climate risk reduction interventions. Building resilience to multiple risks requires close partnerships with public and private agrifood stakeholders, especially community and local actors.

49. The integration of disaster risk reduction measures is also key, through enhanced context/conflict analysis and conflict-sensitive programming; a more systematic integration of disaster risk reduction in peacebuilding and State-building frameworks; and the integration of disaster risk reduction in post-recovery and reconstruction processes. Moreover, there is a need to enhance funding for disaster risk reduction in fragile and conflict-affected States.

### 3. Persistent inequalities impacting agriculture, food security and nutrition

50. The economic crisis induced by the pandemic increased the prevalence of undernourishment and food insecurity. Extreme poverty increased for the first time in 20 years, as did global inequality.<sup>39</sup> Those increases were linked to the disproportionate first-year impacts of the pandemic on the poorest and most disadvantaged groups, including women, young people and less educated and informal sector workers, and to uneven recovery in the second year.<sup>40</sup> In 2021, while the top 20 per cent of the global income distribution had recovered nearly half of its income losses, the bottom 40 per cent had not even started to recover.<sup>41</sup> Economic slowdowns and increased inequalities hinder progress towards the elimination of extreme poverty, food insecurity and malnutrition and are linked with increased malnutrition and diseases in all countries.<sup>42</sup>

51. Sustainable agrifood systems are central to eliminating extreme poverty and malnutrition. Globally, more than 80 per cent of the extreme poor live in rural areas<sup>43</sup> and their livelihoods depend on agriculture.<sup>44</sup> Data from 10 West African countries reveal that agriculture and agrifood systems contribute approximately 66 per cent of total employment in the region.<sup>45</sup>

52. A rights-based approach can boost results on hunger reduction and access to nutritious and affordable food for all, including by removing impediments to the right to food that result from biological or socioeconomic factors or discrimination and stigma, or a combination of those.

53. In general, nutritional inequalities continue to exist in children and adults and with respect to who is vulnerable to undernutrition, overweight and obesity. Children in rural settings and poorer households are more vulnerable to stunting and wasting,

<sup>39</sup> Ambar Narayan and others, “COVID-19 and Economic Inequality: Short-term Impacts with Long-term Consequences”, World Bank Group, Poverty and Equity Global Practice and Development Data Group, Policy Research Working Paper 9902, January 2022.

<sup>40</sup> Ibid. See also World Bank Group, *Global Economic Prospects* (Washington, D.C., January 2022) and Nishant Yonzan, Christoph Lakner and Daniel Gerszon Mahler, “Is COVID-19 increasing global inequality?”, World Bank blogs, 7 October 2021.

<sup>41</sup> Carolina Sánchez-Páramo and others, “COVID-19 leaves a legacy of rising poverty and widening inequality”, World Bank blogs, 7 October, 2021.

<sup>42</sup> See FAO IFAD, UNICEF, WFP and WHO, *The State of Food Security and Nutrition in the World 2019* (Rome, 2020); Kate E. Pickett and others, “Wider income gaps, wider waistbands? An ecological study of obesity and income inequality”, in *Journal of Epidemiology and Community Health*, vol. 59, July 2005; and Joseph L. Ward and Russell M. Viner, “The impact of income inequality and national wealth on child and adolescent mortality in low and middle-income countries” in *BMC Public Health*, vol. 17, 11 May 2017.

<sup>43</sup> Andrés Castañeda and others, “Who Are the Poor in the Developing World?”, in World Bank Group, *Poverty and Shared Prosperity Report 2016: Taking on Inequality* (Washington, D.C., 2016).

<sup>44</sup> FAO provisional estimates, 2022. See also Thomas Allen and others, “Agriculture, food and jobs in West Africa”, West African Papers No. 14, OECD Publishing, April 2018.

<sup>45</sup> Allen and others, “Agriculture, food and jobs in West Africa”.

whereas children and adults in urban areas and wealthier households are at higher risk of overweight and obesity. In order to address malnutrition in all its forms, including overweight, obesity and diet-related non-communicable diseases, attention should be paid to inequalities, which are driving factors.<sup>46</sup>

54. Inequalities also prevent women, young people, smallholder producers and the extreme poor from deriving the same benefits from agrifood systems as other actors across value chains, despite their dependence on those systems. That leads to their lower levels of food security and nutrition, often owing to a lack of access to and ownership of productive assets, in particular agricultural land, as well as to gaps in the areas of farm incomes, labour conditions and work burdens.

55. Between 2017 and 2019, the cost of a healthy diet increased by 7.9 per cent globally and by 12.9 per cent in Africa, where a large majority of the poor and the most food-insecure reside.<sup>47</sup> As the poorest spend a larger share of their income on food, even a small increase in food prices can be devastating, especially in places where the poor make up a large share of the population.<sup>48</sup> In Africa, 80 per cent of the population cannot afford a healthy diet.<sup>49</sup> Additional pressures on food prices owing to conflict and global instability currently threaten to make food even less affordable.

56. Net-seller small-scale farmers are unlikely to capture the benefits of rising food prices resulting from significant price volatility because of their weak bargaining position in value chains.<sup>50,51</sup> Although certification schemes such as the voluntary sustainability standards can support sustainable agrifood global supply chains, the criteria may pose challenges for smallholder producers in developing countries, resulting in their marginalization from export markets.

57. Land is increasingly concentrated in large farms. Globally, the largest 1 per cent of farms (those larger than 50 hectares) operate more than 70 per cent of the world's farmland, while small-scale farms (of 2 hectares or less), which represent 84 per cent of the world's farms, operate only 12 per cent of farmland.<sup>52,53</sup> In most countries, the annual incomes of large-scale food producers are, on average, at least two or three times greater than the annual income of small-scale producers.<sup>54</sup>

58. Although agrifood systems are more important for the livelihoods of women in low and middle-income countries than of men, women continue to be disadvantaged through, inter alia, lower access to assets and legal frameworks, which often offer only partial guarantees of women's equal rights to land.<sup>55</sup> While small-scale female producers are, on average, no less productive than their male counterparts, their incomes are systematically lower, which indicates deep inequalities in agrifood

<sup>46</sup> *The State of Food Security and Nutrition in the World 2022*.

<sup>47</sup> *The State of Food Security and Nutrition in the World 2022*.

<sup>48</sup> Alberto Zezza and others, "The impact of rising food prices on the poor", FAO Agricultural Development Economics Working Papers, August 2008.

<sup>49</sup> *The State of Food Security and Nutrition in the World 2022*.

<sup>50</sup> Jeffrey Alwang and George W. Norton, "What types of safety nets would be most efficient and effective for protecting small farmers and the poor against volatile food prices?" in *Food Security*, vol. 3, 12 February 2011.

<sup>51</sup> Independent Group of Scientists appointed by the Secretary-General, *Global Sustainable Development Report 2019: The Future is Now – Science for Achieving Sustainable Development* (New York, United Nations, 2019).

<sup>52</sup> Sarah K. Lowder, Marco V. Sanchez and Raffaele Bertini, "Which farms feed the world and has farmland become more concentrated?", in *World Development*, vol. 142, June 2021.

<sup>53</sup> Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services, "The assessment report on land degradation and restoration: summary for policymakers", 2018.

<sup>54</sup> FAO, *Tracking progress on food and agriculture-related SDG indicators 2021: A report on the indicators under FAO custodianship* (Rome, 2021).

<sup>55</sup> Ibid.

systems along various intersections.<sup>56</sup> Moreover, the incidence of both severe and moderate food insecurity was persistently higher among women even before the pandemic, which exacerbated the gap.<sup>57</sup> Gender inequalities need to be examined in areas other than agricultural production and market spheres, taking into consideration household and social roles and norms.<sup>58,59</sup>

59. Women farmers and producers and women-led cooperatives have increasingly adopted sustainable practices such as agroecology, agroforestry, diversified production systems, conservation agriculture and ecosystem-based approaches, which support climate-resilient livelihoods and food sovereignty. Scaling up support and advice to women- and youth-led start-ups with financial resources and advisory services can reshape local value chains.

60. While agriculture and agrifood systems are also critical for the employment of young people, many rural areas offer fewer opportunities to them and tend not to invest in them as a source of transformation for rural economies. In West Africa, employment in agriculture and agrifood systems accounts for approximately 64 per cent of youth employment.<sup>60</sup> The majority of young people live in rural areas, and, as a consequence, have higher engagement in agriculture.

61. The youth population is expected to triple to over 350 million by 2050, putting huge pressures on rural economies, in particular in low- and middle-income countries located in South and East Asia and in Africa, where the global population of youth is concentrated.<sup>61</sup> At the same time, outside of Africa, the population, including farmers, is ageing,<sup>62</sup> which creates other unique challenges for agriculture and agrifood systems and for food security and nutrition.

62. Today, over half of the global population is urban and by 2050 an additional 2.5 billion people are expected to be living in urban areas. Ninety per cent of that increase will take place in Africa and Asia. Urban dwellers consume up to 70 per cent of the global food supply, even in countries with large rural populations. Food and green waste comprise more than 50 per cent of all municipal waste. Lifestyles in cities have significantly contributed to the consumption of processed food with low nutrient value, with obesity incidence growing in parallel with urbanization.

63. Farms between 1 and 20 hectares, which comprise only 28 per cent of total farms, produce approximately 45 per cent of the world's food.<sup>63</sup> Agricultural development policies should strengthen the productive capacity of those medium-sized producers, including through land consolidation and improved land tenure security mechanisms, which would stimulate innovation and investments and enable those producers to take advantage of the commercial opportunities posed by urbanization and agrifood system transformations.

<sup>56</sup> Ibid.

<sup>57</sup> *The State of Food Security and Nutrition in the World 2021*.

<sup>58</sup> Hitomi Komatsu, Hazel J. Malapit and Sophie Theis, "Does women's time in domestic work and agriculture affect women's and children's dietary diversity?", in *Food Policy*, vol. 79, August 2018.

<sup>59</sup> Ruth Meinzen-Dick and others, "Gender: A key dimension linking agricultural programs to improved nutrition and health", International Food Policy Research Institute, 2020 Conference Brief, February 2011.

<sup>60</sup> Allen and others, "Agriculture, food and jobs in West Africa".

<sup>61</sup> IFAD, *Creating Opportunities for Rural Youth: 2019 Rural Development Report* (Rome, 2019).

<sup>62</sup> Deon Filmer and Louise Fox, *Youth Employment in Sub-Saharan Africa* (Washington, D.C., World Bank Publications, 2014).

<sup>63</sup> Jim Woodhill, Saher Hasnain and Alison Griffith, *What Future for Small-Scale Agriculture?*, Environmental Change Institute, University of Oxford (Oxford, 2020).

64. Cities can also serve as critical game changers. There is a need to acknowledge the important role of local and regional governments in responses to food security and nutrition challenges at the territorial level and across urban, peri-urban and rural areas and the emerging transformative solutions that cities and territories offer for sustainable and resilient food systems.

65. Unsustainable tourism contributes to the overuse of scarce resources, excessive food waste and poor labour conditions in destination countries. Efforts are needed for the sustainable management of food in tourism through sustainable procurement, which would lead to healthy diets, sustainable consumption and food waste reduction, including through circular economy initiatives that can diversify income streams and enhance linkages with local communities.

## **V. Implementation of Sustainable Development Goal 2 and other vital Goal targets and partnership initiatives to accelerate transformative action in that regard**

66. The United Nations Food Systems Summit was convened on 23 September 2021. The Summit showcased commitments by countries in national pathways for food system transformations, which were consolidated through extensive dialogue among concerned national and local stakeholders. One follow-up to the Summit, drawing upon wider United Nations system capacities, was the establishment of the food systems coordination hub to support the translation of those commitments into concrete actions. The hub will help to strengthen United Nations system collaboration around interlinked challenges, leverage financial support and facilitate access to existing knowledge and guidelines. The high-level political forum will review progress made.

67. Results from a country-level survey highlighted the need for further development of national pathways, through, inter alia, mobilization of technical assistance at the country level and science- and evidence-based support for policymaking in order to concretely translate pathways into concrete policies, plans and programmes.

68. The “Food is Never Waste” action coalition was launched at the Food Systems pre-Summit event convened in July 2021 to accelerate collective action and support the transformation of food systems through the reduction of food loss and waste. The multi-stakeholder coalition will have global outreach with the aim of creating more sustainable and resilient food systems that minimize food loss and waste.<sup>64</sup>

69. Another initiative that emerged from the Food Systems Summit is the Climate Resilient Food Systems Alliance, convened by the United Nations Framework Convention on Climate Change. The Alliance is a major initiative that is aimed at accelerating progress towards more climate-resilient food systems, with a focus on least developed countries, landlocked developing countries and small island developing States.

70. Organizations in the United Nations system have established a new coordination and collaboration mechanism, UN-Nutrition, with a two-year rotating chair, currently held by WHO. UN-Nutrition is working inclusively to develop a strategic plan for global and country-level action for 2022–2030 (see [E/2022/48](#)).

71. The Voluntary Guidelines on Food Systems and Nutrition adopted by the Committee on World Food Security provide recommendations for policies,

<sup>64</sup> <https://foodsystems.community/coalitions/coalition-on-food-is-never-waste/>.

investments and institutional arrangements to tackle the causes of hunger and malnutrition in all their forms from an agrifood systems perspective and to improve the inclusiveness and equality of those policies, investments and arrangements.<sup>65</sup> The Committee on World Food Security, with the support of its high-level panel of experts, is developing voluntary guidelines on gender equality and women's and girls' empowerment in the context of food security and nutrition as well as policy recommendations on promoting youth engagement and employment in agriculture and food systems.

72. The Coalition for Action on Healthy Diets from Sustainable Food Systems for Children and All is a global multi-stakeholder partnership that aims to integrate nutrition, health and sustainability through food.<sup>66</sup> Its measurable goal is to halve the number of people who cannot afford a healthy diet, while working in partnership to ensure that food is produced by sustainable agrifood systems.

73. UN-Habitat, out of a recognition of the critical role of market systems in the resilience and accessibility of healthy diets for urban and rural communities, is collaborating with the World Union of Wholesale Markets and other market associations to create awareness and build capacities among national and subnational authorities.

74. In 2019, the Secretary-General commissioned the Global Action Plan on Child Wasting, which, by the end of 2021, resulted in the development of national road maps to prevent, detect and treat child wasting in 22 countries.

75. The Alliance for Anemia Actions,<sup>67</sup> a multisector partnership co-led by WHO, will aim at making progress in reducing anaemia, including through actions needed to increase regular consumption of iron.

76. FAO and WHO jointly developed an innovative global database called the FAO/WHO global individual food consumption data tool, which is an open-access digital platform aimed at providing access to harmonized individual quantitative food consumption data collected through dietary surveys and focused on low- and middle-income countries.<sup>68</sup>

77. A joint project by OHCHR, the African Union and the World Bank Group on mainstreaming a human rights-based approach to data and indicators in early warning mechanisms in Africa is working to help to strengthen early warning analysis and to support rights-based crisis responses.

78. UNODC supports Member States in addressing a broad range of crimes in the fisheries sector and crimes related to illicit drug cultivation. In collaboration with FAO, a legislative guide on combatting crimes in the fisheries sector, aimed at strengthening national legislative frameworks, is being developed. With its alternative development programmes, UNODC works to shift agricultural practices away from illicit drug crop cultivation and supports farmers' self-organization by creating associations to facilitate the marketing of their products and the procurement of materials.

79. IAEA assists member States with capacity-building with respect to nuclear and related technologies to enhance crop and livestock production; livestock nutrition; the control of animal diseases and plant pests; and agriculture, water and soil management. For example, in 2021, IAEA partnered with FAO to build national

<sup>65</sup> <https://www.fao.org/cfs/vgfsn/en/>.

<sup>66</sup> <https://www.who.int/initiatives/food-systems-for-health/the-coalition-of-action-on-healthy-diets-from-sustainable-food-systems-for-children-and-all>.

<sup>67</sup> An early description of the effort is available at <https://micronutrientforum.org/emerging-initiatives/>.

<sup>68</sup> Source: <https://www.fao.org/gift-individual-food-consumption/en/>.

capacities in the use of the sterile insect technique as part of area-wide insect pest management.

80. In 2021, the smallholder agricultural market support activities of WFP benefited 947,000 smallholder farmers and supported over 6,000 aggregation systems (such as farmers' organizations and cooperatives).<sup>69</sup> Smallholder farmers were supported with agricultural equipment, inputs, post-harvest management equipment and training sessions and were connected with input suppliers, financial service providers and buyers.

81. The Global Agenda for Sustainable Livestock is a partnership, facilitated by FAO, of diverse livestock sector stakeholders that is committed to the sustainable development of the sector. Its 120 institutional members contribute to the enhancement of livestock stakeholders' understanding of, commitment to, investment in and adoption of good practices and policies in support of the 2030 Agenda.

82. While Earth observation and crop monitoring hold immense potential for better food security planning, many developing countries do not have access to the required tools, either because of deficits in or the costs of technology. UNCTAD has partnered with the Chinese Academy of Sciences and the Alliance of International Science Organizations to launch the "CropWatch" innovative cooperation programme.

83. The multi-stakeholder partnership platform of the antimicrobial resistance quadripartite was established in 2021 to drive multidisciplinary actions and build global momentum to tackle antimicrobial resistance.

84. As part of the United Nations Decade of Family Farming (2019–2028) efforts are being made towards the creation an enabling environment for the promotion of policies, investments and knowledge for family farmers through a global partnership initiative involving more than 2,600 actors, including more than 1,800 farmers' organizations.

85. The regional commissions of the United Nations have conducted numerous initiatives, often with various stakeholder partners. ESCWA, for example, provides technical support for monitoring food security through its Arab Regional Food Security Monitoring Framework and engages young people through an annual youth challenge to address desertification and drought. Under the Convention on Long-range Transboundary Air Pollution, ECE has developed guidance (ECE/EB.AIR/149) on fostering a "nitrogen circular economy" in order to reduce nitrogen losses and promote recovery and reuse, while at the same time ensuring sustainable food security for all. In Latin America and the Caribbean, the Regional Agreement on Access to Information, Public Participation and Justice in Environmental Matters in Latin America and the Caribbean promotes an environmentally sustainable growth model in agriculture and in April 2022 held its first meeting of the Conference of the Parties.

86. In 2021, UNIDO, as the lead agency for the implementation of the Third Industrial Development Decade for Africa (2016–2025), initiated a continental mapping of regional value chains at the request of the African Union Commission. The major outcomes of the study include the development of a pan-African regional value chain strategy that takes advantage of the opportunities offered by the African Continental Free Trade Area.

87. Collaboration has been enhanced with external partners in the application of the One Health approach to improving food security and livelihoods through the inclusion of UNEP in the tripartite collaboration between FAO, the World Organization for Animal Health and WHO. In coordination with the World Organization for Animal

<sup>69</sup> FAO, "Annual Performance Report 2021: Executive Board – Informal Consultation, 23 May 2022.



Health, efforts are being made to strengthen global and regional policy development, coordination and networking for transboundary disease biosecurity risk management through the Global Framework for the Progressive Control of Transboundary Animal Diseases Strategy 2021–2025,<sup>70</sup> which has a renewed focus on One Health.

88. Many vulnerable producers face degradation of the quality of their land, which is increasingly linked to poverty and food insecurity, and face higher levels of susceptibility to the risks of climate change.<sup>71</sup> Investment in the restoration of productive landscapes and seascapes can increase land productivity and provide some of the highest returns in the form of climate and environmental benefits, jobs and economic growth.<sup>72</sup> The United Nations Decade of Ecosystem Restoration<sup>73</sup> aims to accelerate action on restoration, including the restoration of productive landscapes.

89. The annual multi-stakeholder forum on science, technology and innovation for the Sustainable Development Goals, supported by the Department of Economic and Social Affairs and the United Nations inter-agency task team on science, technology and innovation for the Sustainable Development Goals, has been a platform for discussion of the interconnected challenges facing agrifood systems and their related technological solutions. The forum has helped to advance global collaboration and commitments in the field of science, technology and innovation with respect to food and agriculture.

90. The Enhanced Integrated Framework,<sup>74</sup> a multi-agency initiative, supports the mainstreaming of trade and the building of productive capacity in least developed countries, including in the area of food and agriculture. Over 13,000 micro-, small and medium-sized enterprises have received support, contributing to the creation of over 31,000 jobs.

91. UNWTO, within the framework of the One Planet Sustainable Tourism Programme, is developing a global road map on food waste reduction in tourism. To support the development of the road map, a repository of resources was created on the One Planet Network website.<sup>75</sup>

92. South-South and triangular cooperation has been recognized as an important delivery mechanism for catalysing agricultural development, food security, rural development and enhanced nutrition. The United Nations Office for South-South Cooperation disseminates good practices regarding Goals 1 and 2 through its global digital knowledge-sharing and partnership-brokering platform, “South-South Galaxy”.<sup>76</sup>

## VI. Conclusions and recommendations

93. An integrated agrifood system perspective will help to address challenges across the 2030 Agenda. Urgent action is needed to (a) strengthen resilience against the economic, social and environmental impacts of the COVID-19 pandemic and other crises, (b) address the key constraints on rapid recovery without compromising long-

<sup>70</sup> FAO and World Organization for Animal Health, “GF-TADs Strategy for 2021–2025: Enhancing control of transboundary animal diseases for global health” (Rome, 2021).

<sup>71</sup> *The State of Food Security and Nutrition in the World 2021*.

<sup>72</sup> Radhika Dave and others, *Second Bonn Challenge progress report: Application of the Barometer in 2018*, International Union for Conservation of Nature and Natural Resources (Switzerland, 2019).

<sup>73</sup> <https://www.decadeonrestoration.org/>.

<sup>74</sup> <https://www.un.org/ldcportal/content/enhanced-integrated-framework-eif-0>.

<sup>75</sup> <https://www.oneplanetnetwork.org/programmes/sustainable-tourism/tourism-food-value-chain/tools-resources>.

<sup>76</sup> <https://my.southsouth-galaxy.org/en/solutions/>.

term sustainability and (c) increase investment in agrifood systems to accelerate transformation.

94. In order to accomplish those objectives, governments and their development partners may wish to consider the following:

(a) Strengthening the adaptive capacity and resilience of agrifood systems to address the interwoven impacts of climate change and shocks owing to conflicts, including through emergency agricultural assistance as a frontline humanitarian intervention; anticipatory action linked to early warnings with a view to safeguarding livelihoods and food security; and an increased focus on prevention and preparedness;

(b) Increasing services and access to natural and financial resources and enabling pro-poor investments in rural areas in order to address systemic inequalities and to allow small scale-producers, particularly women and young people, to improve livelihoods and the resilience of rural communities;

(c) Promoting the equal access of women to decent work in green and blue economic sectors by eliminating occupational segregation and discriminatory social norms and ensuring equal opportunities for women entrepreneurs in the agrifood system by strengthening their technical capacities and their access to finance and networks;

(d) Promoting longer-term transformational change and focusing on nutritional outcomes of value chains and healthier food environments, including by protecting children from harmful marketing of food and beverages, fortifying staple foods by adding extra vitamins and minerals, encouraging the adoption of plant-based diets, ensuring clear and accurate nutrition labels, encouraging food manufacturers to replace and reformulate their products and implementing taxation and pricing policies that encourage the consumption of nutritious food;

(e) Designing policies that ensure economic access by all to healthy diets and that improve household resilience by helping households to safeguard access to food in the face of shocks and avoid coping strategies detrimental to their livelihoods;

(f) Maintaining diversity in value chains for improved resilience by enabling a mix of traditional, transitional and modern food supply chains, improving connectivity through more robust food transport and information networks and improving risk management and early warning capacities;

(g) Keeping markets open and ensuring a smooth flow of trade by avoiding the use of trade restrictions, further digitalizing trade procedures and supply chain operations, improving transparency in markets and policies and strengthening international governance and coordination mechanisms;

(h) Fostering regional joint partnerships and investments to enhance food production potential and the implementation of region-wide comprehensive agricultural and trade policies;

(i) Supporting the adoption, adaptation and broadening of innovative good practices through South-South and triangular cooperation;

(j) Investing in local producers, smallholder farmers and micro-, small and medium-sized enterprises, including through business support along the value chain, support for diversification and substitution of supplies, and considering tax reductions on locally produced primary foods;

(k) Mobilizing the investments and political will needed to collectively address the causes and consequences of escalating food crises across humanitarian, development and peace perspectives;

(l) Recognizing the role of biodiversity, including pollinators, pest and disease control organisms, soil biodiversity and genetic diversity, and moving to protect and restore ecosystems and diversity in the landscape for productive and resilient agriculture that makes efficient use of land, water and other resources;

(m) Investing in technologies and adopting policies that encourage carbon-neutrality and water-use efficiency in agrifood systems;

(n) Exercising fiscal responsibility and objectivity in reallocating public resources to meet the most urgent needs arising from the pandemic and other crises in order to ensure recovery without compromising macroeconomic stability while mitigating political and social polarization by building back trust in institutions and increasing transparency and accountability in public management;

(o) Strengthening ICT to improve risk management and early warning capacities to help to predict the likelihood and impact of shocks related to climate change, including through technological improvements to agroclimatic monitoring, disaster and crisis risk management, vulnerability assessments (including those related to pests and diseases) and agricultural damage and loss data, all of which should be made available for risk- and crisis-informed decision-making.

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