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Food and Agriculture  
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Продовольственная и  
сельскохозяйственная организация  
Объединенных Наций

Organización de las  
Naciones Unidas para la  
Alimentación y la Agricultura

منظمة  
الأغذية والزراعة  
للأمم المتحدة

# COMMITTEE ON AGRICULTURE

## Twenty-eighth Session

18 - 22 July 2022

### FAO's Programme of Work in the Agrifood Sectors under the FAO Strategic Framework 2022-31

#### Executive Summary

This document provides an overview of FAO's achievements in the agrifood sectors during the 2020-21 biennium, analyses major trends and emerging issues that will influence FAO's work and activities, and lays out the priority areas of FAO's work in these domains in the 2022-23 biennium and beyond.

#### Suggested action by the Committee

The Committee is invited to:

- *take note of* and *provide* comments on the achievements, developments and trends identified with respect to the agrifood sectors (Sections II and III);
- *provide* guidance on the main priorities for FAO's work in the agrifood sectors in 2022-23 within the PWB 2022-23 (Section IV), as well as for the implementation of the Strategic Framework 2022-31, and specifically the Medium Term Plan 2022-25; and
- *review* and *advise* on global developments and their implications for the agrifood sectors.

*Queries on the substantive content of the document may be addressed to:*

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## I. Introduction

1. The 42nd Session of the FAO Conference endorsed the Strategic Framework 2022-31<sup>1</sup>, which guides all of FAO's work as called for in the Basic Texts – and approved the budgetary appropriations for the 2022-23 biennium.<sup>2</sup> The strategic narrative guiding the FAO Strategic Framework 2022-31 supports the 2030 Agenda through the transformation to MORE efficient, inclusive, resilient and sustainable agrifood systems for *better production, better nutrition, a better environment* and a *better life*, leaving no one behind.
2. FAO implements the Strategic Framework through 20 Programme Priority Areas (PPAs), which articulate FAO's thematic, technical and comparative advantage and competency to deliver. The *four betters* and 20 PPAs are anchored in the Sustainable Development Goals (SDGs). The Organization uses a systems approach, equally considering social, economic and environmental development dimensions, and addresses relevant trade-offs. Action at country level is at the core of the transformative nature of the 2030 Agenda, and the PPAs act as a pathway towards achieving the SDGs in alignment with national priorities.
3. The four cross-cutting accelerators – technology, innovation, data and complements (governance, human capital and institutions) – focus efforts in all of FAO's programmatic interventions to fast-track progress and maximize prospects for contributing to the SDGs while minimizing trade-offs. The cross-cutting themes of *gender, youth and inclusion* are embedded across all of FAO's work to operationalize the principle of leaving no one behind.
4. Since Director-General QU Dongyu took office in August 2019, FAO has undergone deep and transformative changes to ensure that it is prepared to face the challenges that lie ahead. FAO has introduced a modular and flexible structure that allows for optimal cross-sectoral collaboration and aims for a stronger and coordinated focus on the SDGs. Among the changes introduced are: the new Office of Innovation to consolidate and strengthen FAO's innovative spirit; the new Office of SIDS, LDCs and LLDCs,<sup>3</sup> to ensure that the special needs of these vulnerable populations and countries are met; the new Office of SDGs, which coordinates the corporate engagement in the 2030 Agenda follow-up and review; and FAO's new position of Chief Scientist that ensures the robustness, breadth and independence of scientific approaches in FAO's work.
5. During 2020-21, FAO fully aligned its country-level planning with the UN Sustainable Development Cooperation Framework (UNSDCF) process, thus building on the UN development system (UNDS) repositioning efforts to collectively support country ownership and address national SDG priorities and gaps. FAO's country-level process also contributes to shaping the formulation of the UNSDCF, thus ensuring that agrifood systems transformation concerns and related SDGs are well integrated and prioritized in the UN common planning processes.
6. In the 2022-23 biennium, FAO will continue to maximize impact at country level through a number of strategies, key corporate initiatives and actions. Two new corporate strategies on science and innovation and on climate change have been endorsed by the FAO Council in June 2022 to support the implementation of the FAO Strategic Framework 2022-31. FAO will continue to maximize impact at country-level through the Hand-in-Hand Initiative, FAO's evidence-based, country-led and country-owned initiative, and will continue to facilitate the World Food Forum (WFF), an independent, youth-led global network of partners.
7. FAO will continue to mitigate the immediate impacts of COVID-19 while strengthening the longer-term resilience of livelihoods, moving towards a green recovery, and transforming agrifood systems through the COVID-19 Response and Recovery Programme supported by the Food Coalition. The UN Food Systems Summit (UNFSS), held during the UN General Assembly in 2021, set the stage for global agrifood systems transformation. The UN Secretary-General tasked the Rome-based

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<sup>1</sup> <https://www.fao.org/3/ne577en/ne577en.pdf>

<sup>2</sup> <https://www.fao.org/3/ng170en/ng170en.pdf>

<sup>3</sup> Small Island Developing States (SIDS); least developed countries (LDCs); land-locked developing countries (LLDCs).

Agencies to coordinate the UN Food Systems Summit follow-up activities, designating FAO as the host for the Coordination Hub, on behalf of the UN system.

8. This document first provides an overview of achievements in the agrifood sectors in the 2020-21 biennium. It then outlines key global- and sector-specific developments and trends, through the *four betters* and highlighting related SDG targets, which will influence FAO's future work in the agrifood sectors. The last section lays out the priority areas of FAO's work in the agrifood sectors during 2022-23 and beyond, in the context of the 20 PPAs, related SDG targets and areas of emphasis.

## II. Achievements in FAO's work in the agrifood sectors in 2020-21

### A. The *four betters*, the Programme Priority Areas (PPAs), and the SDGs

9. The 2030 Agenda for Sustainable Development and the SDGs call for transformative shifts, integrated approaches and solutions to structural barriers to sustainable development, and it recognizes the fundamental role played by sustainable agriculture in the connection between people, planet and prosperity.

10. Achieving the 2030 Agenda is underpinned by the concept of food security and nutrition, which is inseparable from the urgency to eradicate extreme poverty, reduce inequalities, tackle climate change challenges, build community resilience, responsibly manage natural resources, and conserve and sustainably manage biodiversity, and it calls for fundamental transformation of our agrifood systems<sup>4</sup> for a *better life* for all.

11. The *four betters* represent an organising principle for FAO's vision to contribute directly to the three guiding SDGs, SDG 1 (No poverty), SDG 2 (Zero Hunger), and SDG 10 (Reduced inequalities). The Medium Term Plan 2022-25 and the Programme of Work and Budget (PWB) 2022-23 demonstrate how the *four betters* and 20 PPAs are anchored in the SDGs, with specific targets and indicators associated with each PPA. The updated results framework<sup>5</sup> lays out SDG targets and indicators by each PPA. These linkages between the *four betters*, the PPAs and the SDGs are summarized in Annex 1.

12. The balance among the three interconnected pillars of sustainable development (economic, social and environmental) is embedded throughout the Strategic Framework and the PWB and is illustrated by the span of SDGs associated across the *four betters* and their constituent PPAs, together with their specific targets. FAO is ensuring this balance in the further development of the PPAs and by putting in place coordination and oversight arrangements that combine expertise in social, economic environmental and natural resources management disciplines and biodiversity related to food and agriculture.

13. In order to accelerate progress and maximize FAO's efforts in meeting the SDGs and to realize our aspirations - the *four betters* - FAO applies four cross-cutting/cross-sectional "accelerators": technology, innovation, data and complements (governance, human capital, and institutions) in all programmatic interventions. In addition, FAO is taking into account cross-cutting themes: *gender, youth, and inclusion* (for reduced inequalities leaving no one behind, to promote a more systematic mainstreaming and operationalization of these issues across FAO's programmatic work).

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<sup>4</sup> The agrifood systems covers the journey of food from farm to table – including when it is grown, fished, harvested, processed, packaged, transported, distributed, traded, bought, prepared, eaten and disposed of. It also encompasses non-food products that constitute livelihoods and all the people and activities, investments and choices that play a part in getting us these food and agricultural products. ([www.fao.org/3/ne576en/ne576en.pdf](http://www.fao.org/3/ne576en/ne576en.pdf))

<sup>5</sup> [www.fao.org/3/nh231en/nh231en.pdf](http://www.fao.org/3/nh231en/nh231en.pdf)

## B. Country level planning

14. Transformative actions at country level are at the core of the change agenda. The collective commitments of the UNDS in support of national SDG goals and targets are articulated in the UNSDCF. The FAO Country Programming Framework (CPF) is derived from the UNSDCF and ensures that FAO builds on the UNDS efforts to collectively support countries and address national SDG priorities and gaps. At the same time, FAO's country-level process, as reflected in the respective CPF, also contributes to shaping the formulation of the UNSDCF, thus ensuring that agrifood systems transformation concerns and related SDGs are well integrated and prioritized in the UN common planning documents. At country level, CPFs are central FAO programming tools, linking country results directly with SDGs and the related PPAs, and reflect the diversity of countries' situations and priorities as well as coordinate efforts at country level.

## C. Strategies, initiatives and actions supporting the Strategic Framework

15. To operationalize the Strategic Framework and ensure MORE efficient, inclusive, resilient and sustainable agrifood systems, actions across all layers of the Organization and with Members and partners will need to come together in a synergistic and impactful manner. The implementation of the Strategic Framework is guided and informed by a number of strategies, initiatives and actions, outlined below.

16. **The FAO Strategy on mainstreaming biodiversity across agricultural sectors<sup>6</sup>** was adopted at the 163rd FAO Council in 2019, in view of preparations for the Post-2020 Global Biodiversity Framework. The 2021-23 Action Plan<sup>7</sup> is based on and serves the purpose of operationalizing the Strategy, and is intended to strengthen the work of FAO and its Members and partners, to mainstream biodiversity across agricultural sectors.

17. **FAO Strategy on Climate Change 2022-2031.<sup>8</sup>** Climate change is among the key drivers of global hunger and malnourishment, as altering the optimal conditions that sustain food production, with cascading consequences for food security and nutrition, livelihoods and global economies, often halting and reversing gains in food security and poverty reduction, and hampering efforts to reach SDGs 1, 2 and 10. Following the request of the 166th Session of the Council, FAO has developed the Strategy on Climate Change 2022-31 to enhance its support to Members in their efforts with respect to climate change adaptation and mitigation, working towards climate-resilient and low-emission agrifood systems while striving to achieve the SDGs, in particular eradicating hunger and malnutrition. The Strategy, prioritized by science, innovative solutions and inclusive processes, and aligned with the 2030 Agenda and the Strategic Framework, was endorsed at the 170th Session of the Council, and will strengthen FAO's delivery on climate action for sustainable food and agriculture.

18. **FAO Science and Innovation Strategy.<sup>9</sup>** The Strategic Framework recognizes innovation and technology as two of the four accelerators to be applied in all programmatic interventions. A wide range of approaches and technologies exist to tackle agrifood systems challenges. Science and innovation – including indigenous and local knowledge – underpin them all. Through the development of a Science and Innovation Strategy, FAO aims to provide guidance, coherence and alignment to Member-led initiatives for impact at country level through better use of science and innovation. The Strategy, endorsed at the 170th Session of the Council, will be a key tool for the implementation of the Strategic Framework and will strengthen the use of science and innovation in FAO's technical interventions and normative guidance.

19. **Vision and approach for FAO's work in nutrition.<sup>10</sup>** In 2021, FAO Members welcomed and adopted document PC130/5/Rev.1, which outlines FAO's vision and approach for enabling healthy diets for all. FAO's vision for nutrition is a world where all people are eating healthy diets from

<sup>6</sup> [www.fao.org/3/ca7722en/ca7722en.pdf](http://www.fao.org/3/ca7722en/ca7722en.pdf)

<sup>7</sup> [www.fao.org/3/nf693en/nf693en.pdf](http://www.fao.org/3/nf693en/nf693en.pdf)

<sup>8</sup> [www.fao.org/3/nj485en/nj485en.pdf](http://www.fao.org/3/nj485en/nj485en.pdf) and [www.fao.org/3/ni994en/ni994en.pdf](http://www.fao.org/3/ni994en/ni994en.pdf)

<sup>9</sup> [www.fao.org/3/nj485en/nj485en.pdf](http://www.fao.org/3/nj485en/nj485en.pdf) and [www.fao.org/3/ni995en/ni995en.pdf](http://www.fao.org/3/ni995en/ni995en.pdf)

<sup>10</sup> [www.fao.org/3/ne853en/ne853en.pdf](http://www.fao.org/3/ne853en/ne853en.pdf) and [www.fao.org/3/nf693en/nf693en.pdf](http://www.fao.org/3/nf693en/nf693en.pdf)

efficient, inclusive, resilient, and sustainable agrifood systems. FAO's mission is to tackle malnutrition in all its forms by accelerating impactful policies and actions across agrifood systems to enable healthy diets for all. The agricultural sector is essential in terms of enabling healthy diets. FAO's vision for nutrition recognizes the critical role of milk and dairy products, eggs, meat and diverse crops in policies and actions for MORE efficient, inclusive, resilient and sustainable agrifood systems, food security and good nutrition.<sup>11</sup>

20. In the 2022-23 biennium, FAO will continue to maximize impact at country-level and other levels through **key corporate initiatives**, including:

21. **The Hand-in-Hand Initiative**, which is FAO's evidence-based, country-led and country-owned initiative to accelerate agricultural transformation and sustainable rural development in support of the SDGs. The initiative prioritizes countries where national capacities and international support are the most limited or where operational challenges, including natural- or human-induced crises, are the greatest, and identifies areas within these countries that have good agricultural potential, but also high levels of poverty and hunger. A geospatial platform supports all stakeholders with rich, shareable data in areas including agroecological conditions, water, land, soil health, and greenhouse gas emissions.<sup>12</sup>

22. **The COVID-19 Response and Recovery Programme**,<sup>13</sup> launched in 2020, appeals for immediate, medium- and longer-term actions to prevent the health crisis from becoming a food crisis. The programme aims to mitigate the immediate impacts while strengthening the longer-term resilience of livelihoods, moving towards recovery and building to transform the agrifood systems and to build on FAO's convening power, real-time data, early warning systems and technical expertise to direct support where and when it is most needed. It is supported by the Food Coalition by leveraging high-level political support, financial resources and technical expertise, with a focus on country-level needs and demands.

23. **The UN Food Systems Summit (UNFSS) follow-up**<sup>14</sup> set the stage for global agrifood systems transformation. FAO leads the implementation of the UNFSS follow-up working together with the UN sister agencies and partners to take forward the momentum of the Summit process for efficient and coherent action. Focus will be on supporting Members to advance their national dialogues and transformative pathways for agrifood systems transformation. The coordination hub is hosted by FAO and staffed by secondments from the Rome-based Agencies, UNDP, UN Environment Programme (UNEP) and the World Health Organization (WHO).

24. **The World Food Forum (WFF)**, created for and led by youth, is one example of global follow-up action towards transforming agrifood systems and achieving the SDGs. The WFF brings together young people from around the world to brainstorm and to spur action, recognizing that the future of our planet belongs to the youth and that their engagement is central.

25. **Science and Innovation Days**, under the framework of the WFF, will be organized in early October 2022 focusing on the centrality of science, technology and innovation for agrifood systems transformation. The event will assist the Members in making informed decisions regarding the co-creation, adaptation and adoption of appropriate and context specific technologies and innovations.

#### D. Key achievements in 2020-21

26. FAO continued to keep hunger, food insecurity, addressing all forms of malnutrition and sustainable natural resource use at the forefront of the development agenda. Even before the COVID-19 pandemic, hunger continued to increase with almost 690 million people still undernourished worldwide, showing an increase in hunger since 2014; two billion people did not have regular access to safe, nutritious and sufficient food; and 3 billion people could not afford healthy diets. This is exacerbated by the impact of the COVID-19 pandemic. The *State of Food Security and*

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<sup>11</sup> [www.fao.org/documents/card/en/c/cb6862en](http://www.fao.org/documents/card/en/c/cb6862en)

<sup>12</sup> [www.fao.org/hih-geospatial-platform/en](http://www.fao.org/hih-geospatial-platform/en)

<sup>13</sup> [www.fao.org/3/ni998en/ni998en.pdf](http://www.fao.org/3/ni998en/ni998en.pdf)

<sup>14</sup> [www.fao.org/3/ni997en/ni997en.pdf](http://www.fao.org/3/ni997en/ni997en.pdf)

*Nutrition in the World (SOFI) 2022*<sup>15</sup> estimated that between 702 and 828 million people in the world faced hunger in 2021 – as many as 46 million more than in 2020. Projections that consider the potential impact of the COVID-19 pandemic reveal lasting effects on global food security.

27. The 2022 *Global Report on Food Crises*<sup>16</sup> highlights the alarming deterioration of acute food insecurity in 2021 in numerous food-crisis countries and territories. Nearly 193 million people were classified as being in crisis or worse (Integrated Food Security Phase Classification Phase 3 or above), or equivalent in 53 countries and territories where comparable data were available in 2021 – as a result of intensified conflict, significant economic shocks and some of the most severe weather extremes in recent years, or a combination of these drivers. This represents an increase of nearly 40 million people compared to the previous high reached in 2020. The outlook for global acute food insecurity in 2022 is expected to deteriorate further compared to 2021. In particular, the unfolding war in Ukraine is likely to exacerbate the already severe 2022 acute food insecurity forecasts included in this report, given that the repercussions of the war on global food, energy and fertilizer prices and supplies have not yet been factored into most country-level projection analyses.

28. While it is difficult to disentangle the precise effects of COVID-19 from other stressors, the report's analysis on food insecurity shows that the pandemic has had a compounding effect on pre-existing and ongoing drivers of food crisis, mainly through declining economic activity related to COVID-19 restrictive measures, leading to income losses and reduced household purchasing power. Women and children are more likely affected by moderate or severe food insecurity on every continent and the gender gap in food security is larger among the poorest people and least-educated people, widowed and those living in suburbs of large cities.<sup>17</sup>

29. At global level, FAO continued strengthening strategic partnerships through platforms and initiatives promoting international cooperation, such as: the Decade of Family Farming (2019-2028); UN Decade on Ecosystem Restoration (2021-2030); UN Decade of Action; Sustainable Food Systems Programme of the 10 Year Framework of Programmes on Sustainable Consumption and Production (10YFP); UN Decade of Action on Nutrition (2016-2025), the Sendai Framework for Disaster Risk Reduction (SFDRR) 2015-2030; International Decade (2018–2028) for Action – Water for Sustainable Development, the Decade on Indigenous Languages (2022-2032); the UN Environment Assembly (UNEA-5) Resolution to End Plastic Pollution; and the Koronivia Joint Work on Agriculture, the Green Cities Initiative, and One Health.

30. FAO reported to the United Nations High-level Political Forum on Sustainable Development (HLPF) in July of 2021 and 2022<sup>18</sup> to conduct in-depth reviews of progress on the 17 SDGs and supported countries to undertake their Voluntary National Reviews (VNR) providing comprehensive reports on national progress towards SDGs. FAO gained major recognition as a key player on: (i) the international climate arena, especially through its high-level participation and contributions to UNFCCC pre-COP, COP26, and sessions of the Subsidiary Bodies, Koronivia Joint Work on Agriculture; (ii) Biodiversity; and (iii) Combating desertification and drought through the active participation to the COP15 of the UN Convention on Combating Desertification in Abidjan in May 2022, as well as the 2021 UN Secretary-General's Food Systems Summit.

31. FAO continued to provide support to countries to develop capacity through integrated policy advice and monitoring progress, toward the achievement of the SDGs, as the UN custodian agency of 21 SDG indicators, and as the contributing agency for further five indicators. FAO has published its first digital report on tracking progress on food and agriculture-related SDG indicators,<sup>19</sup> showing that the world is not on track to meeting the majority of SDG targets related to sustainable agriculture, food security and nutrition. In order to address the current huge data and capacity gaps, FAO has developed a comprehensive programme for scaling up capacity development support on SDG monitoring, which aims to help countries align national and global indicators.

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<sup>15</sup> [www.fao.org/3/cc0639en/cc0639en.pdf](http://www.fao.org/3/cc0639en/cc0639en.pdf)

<sup>16</sup> [www.fao.org/3/cb9997en/cb9997en.pdf](http://www.fao.org/3/cb9997en/cb9997en.pdf)

<sup>17</sup> FAO, IFAD, UNICEF, WFP and WHO, 2019.

<sup>18</sup> <https://sustainabledevelopment.un.org/hlpf#hlpf2022>

<sup>19</sup> [www.fao.org/3/cb6872en/cb6872en.pdf](http://www.fao.org/3/cb6872en/cb6872en.pdf)

32. FAO developed a set of Strategic Priorities for its work on food safety with the vision to provide “Safe food for all people at all times” and the mission to support Members in continuing to improve food safety at all levels by providing scientific advice and strengthening their food safety capacities for efficient, inclusive, resilient and sustainable agrifood systems. The document on the FAO Strategic Priorities for food safety is submitted for endorsement by the 28th Session of COAG.<sup>20</sup> FAO further supported Members in decisions and actions to improve food safety.

33. During the biennium, the Organization provided scientific advice to support food standards setting and enhanced the capacities of developing countries to participate effectively in Codex standard-setting processes. FAO continued to assist Members in strengthening national food control systems by enhancing intergovernmental and intersectoral coordination of food safety governance and the capacity for policy negotiations, and thus ensured that food safety remained a priority for Members when making operational, governance and financial decisions aimed at transforming agrifood systems.

34. In 2021, with FAO’s leadership, over 300 events and activities were organized in more than 90 countries, in observance of the World Food Safety Day on 7 June, and a greater outreach was achieved in 2022. The FAO/ WHO paper on food safety implications of New Food Sources and Production Systems<sup>21</sup> was discussed at the 44th Session of the Codex Alimentarius Commission and FAO’s *Thinking about the future of food safety – A foresight report*<sup>22</sup> pointed to the need to avoid unintended consequences from new production systems, alternative protein sources and new technologies.

35. For over a decade, FAO has been working with countries to scale up climate investment for the agricultural sectors, leveraging partnerships with the Global Environment Facility (GEF) and more recently with the Green Climate Fund (GCF)<sup>23</sup> to build climate-resilient sustainable development pathways. FAO has supported more than 36 countries in accessing nearly USD 115 million from the GEF in priority areas such as agrobiodiversity conservation and mainstreaming biological diversity conservation and sustainable use practices into agriculture sectors, including fisheries and forestry, through Impact Programmes such as for Food Systems, Land Use and Restoration and for the Drylands Sustainable Landscapes.

36. As a GCF Accredited Entity and Delivery partner, FAO provides countries with the necessary support to formulate readiness and funding proposals as well as to implement these transformative climate change adaptation, mitigation and cross-cutting projects. In 2020-2021, FAO has leveraged USD 150 million (including co-financing) from the GCF, bringing the total value of FAO-GCF portfolio to USD 942.8 million. FAO helps countries catalyse investments that are in line with country priorities, GCF results areas and the FAO Strategic Framework 2022-31, to support the transformation to MORE efficient, inclusive, resilient and sustainable agrifood systems for *better production, better nutrition, a better environment, and a better life*, leaving no one behind. FAO-GCF high-impact projects bring innovation in terms of practices, techniques and technologies and financing mechanisms to generate a paradigm shift and make the agriculture, forestry and fisheries sectors more efficient, inclusive, sustainable and resilient to climate change.

37. FAO continues to play a lead role in supporting countries in transitioning towards sustainable agrifood systems. The 42nd Session of the Conference (June 2021) endorsed the Voluntary Code of Conduct for Food Loss and Waste reduction<sup>24</sup> which provides a framework and voluntary set of principles and actions to serve the different stakeholders. FAO continued to promote global advocacy and awareness to change attitudes and mobilize actors and stakeholders to reduce food loss and waste and achieve SDG target 12.3 and related targets.

38. FAO launched the report on *The State of the World’s Biodiversity for Food and Agriculture*,<sup>25</sup> the first global assessment of biodiversity for food and agriculture prepared under the guidance of the Commission on Genetic Resources for Food and Agriculture. The report finds that while most of the

<sup>20</sup> [www.fao.org/3/nj005en/nj005en.pdf](http://www.fao.org/3/nj005en/nj005en.pdf)

<sup>21</sup> CX/CAC 21/44/15 Add.1, July 2021

<sup>22</sup> [www.fao.org/3/cb8667en/cb8667en.pdf](http://www.fao.org/3/cb8667en/cb8667en.pdf)

<sup>23</sup> [www.greenclimate.fund/ae/fao](http://www.greenclimate.fund/ae/fao)

<sup>24</sup> [www.fao.org/3/nf393en/nf393en.pdf](http://www.fao.org/3/nf393en/nf393en.pdf)

<sup>25</sup> [www.fao.org/3/CA3129EN/CA3129EN.pdf](http://www.fao.org/3/CA3129EN/CA3129EN.pdf)

biodiversity, at genetic, species and ecosystem levels, is in decline, management practices and approaches considered biodiversity-friendly are increasingly being adopted. The Framework for Action on Biodiversity for Food and Agriculture that was developed by the Commission as a policy response to the State of the World report<sup>26</sup> has been endorsed by the Council at its 168th Session,<sup>27</sup> together with Council Resolution 1/168, “The conservation and sustainable use of biodiversity for food and agriculture and the post-2020 global Biodiversity framework”.<sup>28</sup>

39. FAO, with the IPPC Secretariat, led the implementation of the International Year of Plant Health (IYPH) in 2020 to raise awareness of the role that plant health in achieving the SDGs and the role of the IPPC and national and regional plant protection organizations in protecting plant health. As a legacy of IYPH, the International Day of Plant Health (IDPH) was established following a decision taken by the UN General Assembly and will be observed on the 12 May. The first observance was celebrated with a global event at FAO on 12 May 2022.

40. The FAO Conference<sup>29</sup> at its 42nd Session requested that FAO support countries and regions in enhancing their commitment and engaging more effectively in transitioning towards sustainable agriculture and food systems, by encouraging innovation in agriculture. FAO is developing strategies, guidelines and knowledge portals, and promoting a holistic approach to developing and accessing appropriate innovation for small-scale producers and family farmers, to enable regional organizations and governments to strengthen their integrated policies and increase investments, and the assessment and diagnosis of agricultural innovation systems (AIS). The Science and Innovation Strategy has been developed and was endorsed by the 170th Session of the Council to ensure a coordinated response to the needs of FAO Members.

41. FAO continued its leading and innovative work on Indigenous Peoples Food Systems, following the establishment of the Global Hub on Indigenous Peoples’ Food systems endorsed by COAG at its 27th Session.<sup>30</sup>

42. FAO continued to mainstream pastoralism and rangelands in FAO’s work and continued operation of the Pastoralist Knowledge Hub<sup>31</sup> to empower several hundred millions of pastoralists. The Pastoralist Knowledge Hub has triggered the attention to the needs and livelihoods of pastoralists, by building strong international partnership for sustainable pastoralism, facilitating the participation of pastoral representatives in the policy decision making process, and sharing information.

43. FAO continued to promote innovative and inclusive approaches to sustainable agricultural production, including, among others, Conservation Agriculture<sup>32</sup> (e.g. supporting the 8th World Congress on Conservation Agriculture), sustainable mechanization, protected cultivation, Globally Important Agricultural Heritage Systems (GIAHS), agroecology and other highlighted below.

44. FAO has compiled strategies, good practices, policies and indicators with regard to bioeconomy during the last five years. The FAO-led International Sustainable Bioeconomy Working Group has developed a set of ten aspirational principles and 24 criteria for a sustainable bioeconomy as a framework for monitoring the transition to a sustainable bioeconomy. This knowledge base has been piloted in Namibia and Uruguay. Bioeconomy cuts across many sectors in FAO, and coordination and coherence in the implementation of the programme towards the SDG goals are key.

45. The Scaling up Agroecology Initiative was launched together with major UN partners and other partners from academia, civil society, private sector and investors during the UN Partners Advisory Mechanism meeting in 2019. FAO provided technical advice in the elaboration of the Committee on World Food Security (CFS) Policy Recommendations on Agroecological and Other

<sup>26</sup> CGRFA-18/21/Report, Appendix C; see also [www.fao.org/cgrfa/resources/news/detail-events/en/c/1513048](http://www.fao.org/cgrfa/resources/news/detail-events/en/c/1513048)

<sup>27</sup> CL 168/REP, paragraph 38

<sup>28</sup> [www.fao.org/3/cb8110en/cb8110en.pdf](http://www.fao.org/3/cb8110en/cb8110en.pdf)

<sup>29</sup> [www.fao.org/3/ng170en/ng170en.pdf](http://www.fao.org/3/ng170en/ng170en.pdf)

<sup>30</sup> [www.fao.org/3/mi990en/mi990en.pdf](http://www.fao.org/3/mi990en/mi990en.pdf)

<sup>31</sup> [www.fao.org/pastoralist-knowledge-hub/en](http://www.fao.org/pastoralist-knowledge-hub/en)

<sup>32</sup> [www.fao.org/conservation-agriculture/en](http://www.fao.org/conservation-agriculture/en)

Innovative Approaches<sup>33</sup> which was endorsed by the 48th (Special) Session of CFS in June 2021. Within the UNFFS process, FAO contributed to the creation of the Coalition for Food Systems Transformation through Agroecology.

46. The Tool for Agroecology Performance Evaluation (TAPE)<sup>34</sup> based on the Ten Elements of Agroecology was developed by a multi-disciplinary team and is being utilized by FAO and partners. TAPE measures the performance of agroecology across the different dimensions of sustainability. It is applicable to all types of agricultural systems and has been utilized in over 30 countries throughout all regions of the world.

47. The Globally Important Agricultural Heritage Systems (GIAHS) programme continued the promotion of designation of GIAHS sites. The GIAHS Secretariat provided technical guidance to individual country requests and prepared for the scaling up of activities and its next phase, seeking collaboration in the areas of biodiversity, sustainable agriculture, poverty reduction, promotion of family farming and marketing, and digitalization of GIAHS among others.

48. At its 27th Session, COAG established the Sub-Committee on Livestock, endorsed by the Conference at its 42nd Session, as an intergovernmental forum with a mandate to discuss and build consensus on livestock issues and priorities, and advise COAG, and through it, the FAO Council and Conference, on technical and policy programmes and activities needed to optimize the contribution of livestock to poverty alleviation, food security and nutrition, sustainable livelihoods, and the realization of the 2030 Agenda. The COAG Sub-Committee on Livestock held its First Session from 16 to 18 March 2022. The Report<sup>35</sup> of the First Session has been submitted to COAG for consideration and endorsement.

49. FAO continued supporting Members in transforming livestock systems to: (i) contribute to food security, nutrition and healthy diets; (ii) provide opportunities for inclusive economic growth and improved livelihoods; (iii) improve animal health and welfare; and (iv) protect natural resources and respond to climate change.<sup>36,37,38</sup>

- FAO continues to produce guidelines, manuals and tools to improve health and husbandry practices, develop livestock value chains, design evidence-based livestock strategies and investment plans, and build the capacity of Members to adopt these practices and use these tools.
- FAO has strengthened the control of high impact transboundary animal diseases globally, and in countries and regions through the Global Framework for the Progressive Control of Transboundary Animal Diseases (GF-TADs).<sup>39</sup> The 41st Session of the FAO Conference adopted Resolution 6/2019 reaffirming the global commitment to addressing PPR. The Global Secretariat of GF-TADs has focused on the coordination of activities for the control of Foot and Mouth Disease (FMD), peste des petits ruminants (PPR), Rinderpest and African Swine Fever (ASF).
- FAO continues to support Members in capacity development to prevent, detect and respond to high impact animal and zoonotic diseases by using several tools. FAO has strengthened the early warning forecasting capacity for Rift Valley Fever (RVF) in eastern Africa region using a web-based RVF Decision Support Tool (DST). FAO has supported several regional bodies to reduce the risk of high impact transboundary and zoonotic disease threats, such as the Association of South-East Asian Nations (ASEAN) Sectoral Working Group on Livestock

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<sup>33</sup> [www.fao.org/3/nf777en/nf777en.pdf](http://www.fao.org/3/nf777en/nf777en.pdf)

<sup>34</sup> [www.fao.org/agroecology/tools-tape/en](http://www.fao.org/agroecology/tools-tape/en)

<sup>35</sup> [www.fao.org/3/ni966en/ni966en.pdf](http://www.fao.org/3/ni966en/ni966en.pdf)

<sup>36</sup> COAG/2020/5.

<sup>37</sup> FAO. 2018. *World Livestock: Transforming the livestock sector through the Sustainable Development Goals*. Rome. 220 pp. (<https://doi.org/10.4060/ca1201en>).

<sup>38</sup> [www.fao.org/3/ni075en/ni075en.pdf](http://www.fao.org/3/ni075en/ni075en.pdf)

<sup>39</sup> [www.fao.org/3/ni007en/ni007en.pdf](http://www.fao.org/3/ni007en/ni007en.pdf)

(ASWGL) and the Central Asian Animal Health Network (One-Health) for regional epidemiology and laboratory networks and services.

- Antimicrobial resistance (AMR) was addressed through FAO's Action Plan,<sup>40</sup> working with the World Health Organization (WHO) and the World Organisation for Animal Health (WOAH) in the context of the One Health Approach and the Inter-Agency Coordinating Group established by the UN Secretary-General in 2016. FAO increased its overall support to countries in developing and implementing National Action Plans and their capacity building in the areas of awareness, surveillance, governance and good practices to combat AMR. FAO has also submitted to COAG 28 a progress report on the FAO Action Plan on AMR 2021-2025.<sup>41</sup>
- FAO continued to support the One Health approach to address food chain threats at global and country levels, including through the Global Health Security Agenda and Emerging Pandemic Threats programmes implemented in more than 30 countries in Africa and Asia by the FAO Emergency Centre for Transboundary Animal Diseases (ECTAD).
- FAO continued supporting Members in implementing the Global Plan of Action for Animal Genetic Resources<sup>42,43</sup> by providing technical and policy support, and monitoring the status of animal genetic resources, including through the Domestic Animal Diversity Information System (DAD-IS),<sup>44</sup> which contains data for the calculation of SDG indicators 2.5.1b and 2.5.2.
- FAO started assessing the contribution of livestock to food security, sustainable food systems, nutrition and healthy diets comprehensively, science and evidence-based following an agrifood systems approach and equally considering the dimensions of sustainability.<sup>45</sup> The process has been designed to build the foundation for evidence-informed policies and thus provides a science-policy platform.

50. FAO continues to be at the forefront of tackling increasing regional and transboundary food chain threats from plant diseases and pests focusing on threats such as the Fall Armyworm (FAW) in Africa, Near East and Asia and Desert Locust outbreaks in East Africa, South West Asia and Yemen, Red Palm Weevil (RPW) in North Africa and Near East, and Fusarium wilt of Banana (TR4) in Latin America. FAO is implementing the Global Action for Fall Armyworm Control<sup>46</sup> to ensure a strong coordinated approach at country, regional and global levels, which aims to mobilize USD 500 million over 2020-22 to take coordinated measures to strengthen prevention and sustainable pest control capacities.

51. FAO supported Members in implementing Desert Locust preventive control strategies through the Desert Locust Control Regional Commissions. To prevent one of the worst Desert Locust infestations in decades in Africa and Southwest Asia, FAO activated fast-track mechanisms to support governments in the response and through implementing resilience programmes focused on anticipatory action to avert a food crisis.

52. Major successes have been achieved to suppress the Desert Locust upsurge – the worst in decades – and to mitigate its impacts on vulnerable farmers and herders. The support of resource partners, for a total contribution of USD 243 million enabled FAO to: (i) provide technical and operational assistance for surveillance and control operations; (ii) provide livelihood support for affected farmers and herders; and (iii) build and sustain the capacity of national and regional actors to cope with similar outbreaks in the future. FAO, governments of affected countries and resource partners have successfully controlled the spread and safeguarded livelihoods, including through ground and aerial operations to treat 2.3 million ha of Desert Locust in the Horn of Africa and Yemen from January 2020 to December 2021. These collective efforts averted 4.5 million MT of crop losses,

<sup>40</sup> [www.fao.org/3/a-i5996e.pdf](http://www.fao.org/3/a-i5996e.pdf)

<sup>41</sup> [www.fao.org/3/nj007en/nj007en.pdf](http://www.fao.org/3/nj007en/nj007en.pdf)

<sup>42</sup> [www.fao.org/3/a1404e/a1404e.pdf](http://www.fao.org/3/a1404e/a1404e.pdf)

<sup>43</sup> [www.fao.org/3/ni079en/ni079en.pdf](http://www.fao.org/3/ni079en/ni079en.pdf)

<sup>44</sup> [www.fao.org/dad-is/en](http://www.fao.org/dad-is/en)

<sup>45</sup> [www.fao.org/3/ni005en/ni005en.pdf](http://www.fao.org/3/ni005en/ni005en.pdf)

<sup>46</sup> [www.fao.org/fall-armyworm/global-action/en](http://www.fao.org/fall-armyworm/global-action/en)

saved 900 million litres of milk production, and secured food for nearly 42 million people. The commercial value of the cereal and milk loss averted is estimated at USD 1.8 billion. In addition, 305 000 households affected by the Desert Locust upsurge received livelihood packages to meet their immediate needs while restoring their productive capacity.

53. FAO also continued to support national and regional locust management in Caucasus and Central Asia, where more than 4 million hectares are treated annually. FAO's Desert Locust Information Service (DLIS) provided timely and accurate early warning and forecasts throughout the upsurge, in collaboration with academic, research and private sector partners, which led to the development of several innovations including digital tools and smartphone apps for real time data collection, remote sensing products that detect green vegetation and moist soil, models to estimate swarm migration, geospatial systems that manage aerial operations, and drones for desert locust surveillance.

54. The IPPC community developed governance principles and a draft standard on commodity-based phytosanitary measures to facilitate safe trade. Annually, seven IPPC Regional Workshops (RWs) were coordinated. The IPPC Strategic Framework 2020-2030 and the five-year investment plan of the IPPC Secretariat for 2021–2025 were endorsed. The IPPC ePhyto Solution was completed, with over 80 countries registered for application.

55. FAO provides tools and technical assistance to its Members in the transition away from highly hazardous pesticides. Highly hazardous pesticides are being addressed through the Strategic Approach to International Chemicals Management (SAICM), FAO/WHO International Code of Conduct on Pesticide Management, FAO/WHO Guidelines on highly hazardous pesticides and the Rotterdam Convention, enabling parties to exchange information on and decide on future imports of certain hazardous chemicals. The Secretariat of the Rotterdam Convention, the Prior Informed Consent Procedure for Certain Hazardous Chemicals and Pesticides in International Trade, hosted by FAO, provide technical assistance with a focus on supporting, monitoring and data collection related to pesticide poisoning, both regarding human health and the environment, alternatives to hazardous pesticides and taking policy measures to ensure sustainable use of indispensable pesticides and information exchange among all Parties on these pesticides. In 2021, the first part of the Conference of Parties for the approval of the Programme of Work and Budget was held, and the second part is scheduled in June and July 2022.

56. FAO continues to develop guidelines, good practices, and training materials in areas relevant to pollinators, such as, the use of chemicals in agriculture, protection programmes for native pollinators in natural ecosystems, and towards the promotion of biodiverse production systems and sustainable beekeeping. FAO expanded the scope of the Domestic Animal Diversity Information System (DAD-IS) allowing countries to enter data to monitor the diversity of managed bees for food and agriculture.

57. FAO's framework for the Urban Food Agenda has streamlined its support and collaboration with national and subnational institutions increasingly incorporating food in urban and territorial policy development (SDG 11), contributing to more resilient and sustainable food systems both in urban areas and in the rural territories that supply them.

58. The Committee supported at its 27th Session the inclusion of the expanded Urban Food Agenda in FAO's corporate initiatives such as the Green Cities Initiative (GCI) aimed at improving the urban environment, strengthening urban-rural linkages and the resilience of urban systems, services and populations to external shocks. Sixty-one cities have been supported by GCI since September 2020. FAO also launched a GCI Regional Programme for Africa involving 30 cities from ten countries, and where urban and peri-urban agriculture is one of the key pillar. It will contribute to climate change mitigation and adaptation and sustainable resource management by increasing people's well-being through better access to improved products and services provided by urban and peri-urban forestry, agrifood systems on a sustainable basis.

59. To enhance the resilience of agricultural livelihoods in the face of disasters, food chain crises and conflicts, the Organization has contributed to preventing, reducing the impact, preparing and responding and recovering to emergencies, moving from reactive disaster and crisis management approaches, toward more preventative, proactive multi-hazard risk management, where households,

communities and governments are able to anticipate, absorb, recover and adapt for more resilient and sustainable agrifood systems. FAO continues its efforts to enhance understanding of how the agriculture sector is affected by disasters and crisis, including from animal and plant diseases and pests to support Members to respond to the impact of many disasters, crisis and conflicts on their agrifood based livelihoods.

60. To support countries in the follow-up of the Second International Conference on Nutrition (ICN2), FAO developed resource materials on nutrition-sensitive approaches to agrifood systems, a capacity needs assessment methodology to integrate nutrition in the work of agriculture extension services, and farmer field schools and e-learning modules for strengthening capacity for agriculture to have a positive nutrition impact. The methodology and e-learning are being disseminated and implemented through collaborations with global, regional and country partners. FAO has advanced integration of nutrition-sensitive programming in FAO Country Programming Frameworks (CPFs) in the development of the new UNSDCFs. FAO, jointly with WHO, as Secretariat of the UN Decade of Action on Nutrition, continued advocacy for keeping nutrition on the agenda of policy-makers at international and national levels. In 2021, to increase global advocacy and awareness for food systems transformation, FAO supported the implementation of the International Year of Fruits and Vegetables.

#### *Gaps and lessons learned*

61. The Programme Implementation Report (PIR) 2020-21<sup>47</sup> identified key lessons learned, related to the areas of: i) Science, technology, innovation and digitalization; ii) Data, information and evidence; iii) Policy coherence and multi-level food governance mechanisms; iv) Coordination and alignment with the rest of the UN system; v) Response to the COVID-19 pandemic; and vi) Need for greater support to SIDS, LDCs and LLDCs, among others.

62. The impact pathways for the UN Food Systems Summit have highlighted awareness raising as a priority to garner support and motivate action to address food insecurity, malnutrition in all its forms, access to healthy diets and food loss and waste. Greater attention should therefore be accorded to linking data, information and evidence generation initiatives to advocacy, communication, and planning at national, regional and global levels.

63. Over the past two years, FAO has been working with country-level partners to maximize nutrition gains through the development of impact pathways across the agrifood systems. The impact pathways show the contribution of plant and livestock production, and forestry to healthy diets through the identification of impactful policies and/or actions in key entry points from the ecosystem services to the production systems to the food environments all the way to consumer behaviours. From 2022, the work on impact pathways incorporates a costing tool to present the cost-benefits in terms of dietary diversity and quality. This aims to fill the evidence gap on the relative benefits of nutrition-sensitive policies and actions in agrifood systems as compared with other sectors.

64. In the areas of science, technology and innovation, gaps identified and lessons learnt at country level include national contextual issues, such as lack of political support for and public financing of agricultural research, weak extension services and lack of successful business models in innovation. Other gaps are lack of baseline data/evidence on the adoption of innovation at country level, limited engagement – especially with smallholders, Indigenous Peoples, women, youth, lack of experience in developing partnerships with the private sector, limited technical capacities and strategic thinking on scaling up successful innovations, insufficient harnessing of interdisciplinary and trans-disciplinary research approaches, the need to improve knowledge management, and the lack of technology transfer.

65. Among the lessons learned for the development and implementation of tools and metrics, TAPE has proven to be a robust yet flexible tool adapted to a multitude of contexts and purposes owing to its step-wise approach that connects territorial and farm level data collection. Additionally, it is showing its potential in bridging operational and normative work, thereby offering the potential for data-driven decision making for sustainable transitions. The further refinement of the tools is

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<sup>47</sup> [www.fao.org/3/ni547en/ni547en.pdf](http://www.fao.org/3/ni547en/ni547en.pdf)

experiencing resource constraints as to collect, analyse, interpret, and apply longitudinal data, to support sustainable transitions and transformation, and the operational and normative work of FAO.

66. Further details on FAO's achievements during the biennium in relation to the Strategic Framework and related SDG indicators, including gender equality, nutrition, climate change, governance and statistics, and the regional results, are reported in the Programme Implementation Report 2020-21 (PIR).<sup>48</sup> This report highlights areas of relevant technical work and key related achievements in support of the implementation of the 2030 Agenda and lessons learned. It further presents FAO's improved capacity to serve Members by facilitating the management of trade-offs with the use of innovative technologies, data and statistics; technology and innovative approaches; mainstreaming issues related to Small Island Developing States youth, gender and Indigenous Peoples; implementing a programmatic approach to FAO's work and increasing institutional inclusivity, efficiency and effectiveness so as to leave no one behind.

### III. Global trends and developments relevant to the agrifood sectors

67. To accelerate strategic thinking on global challenges and opportunities, FAO undertook a Corporate Strategic Foresight Exercise (CSFE) to increase preparedness and effectiveness in providing support to achieving the 2030 Agenda, and to share knowledge on challenges, threats and opportunities in moving agrifood systems towards sustainability. The CSFE contributed to guiding the FAO Strategic Framework 2022-31<sup>49</sup> as well as to the flagship report on the Future of Food and Agriculture (FOFA). The interconnected socioeconomic and environmental drivers affecting agrifood systems identified by the CSFE are shown in Table 1.

Table 1: Critical drivers of agrifood systems and related trends

<b><i>A. Systemic (overarching) drivers</i></b>
<ol style="list-style-type: none"> <li>1. <b>Population dynamics and urbanization</b>, which are expected to increase and change food demand</li> <li>2. <b>Economic growth, structural transformation and macro-economic outlook</b>, which are not always delivering the expected results in terms of inclusive economic transformation of societies</li> <li>3. <b>Cross-country interdependencies</b>, which tie together agrifood systems globally</li> <li>4. <b>Big data generation, control, use and ownership</b>, which enable real-time innovative technologies and decision-making, also in agriculture</li> <li>5. <b>Geopolitical instability and increasing conflicts</b>, which include resource- and energy-based conflicts</li> <li>6. <b>Uncertainties</b>, which materialize in sudden occurrences of events in many occasions impossible to predict</li> </ol>
<b><i>B. Drivers directly affecting food access and livelihoods</i></b>
<ol style="list-style-type: none"> <li>7. <b>Rural and urban poverty</b>, with a high proportion of rural people living in poverty or extreme poverty</li> <li>8. <b>Inequalities</b>, characterized by high income inequality and inequalities in job opportunities, in gender, access to assets, basic services and inequitable fiscal burden</li> <li>9. <b>Food prices</b>, which are in real terms lower than in the 70's but higher than in the 80's and 90's despite the fact that they fail to capture the full social and environmental costs of food</li> </ol>

<sup>48</sup> [www.fao.org/3/mi547en/mi547en.pdf](http://www.fao.org/3/mi547en/mi547en.pdf)

<sup>49</sup> See the Strategic Framework 2022-31, Paragraph 8 of its Executive Summary and section B (<https://www.fao.org/3/cb7099en/cb7099en.pdf>).

### ***C. Drivers directly affecting food and agricultural production and distribution processes***

10. **Innovation and science** including more innovative technologies (including biotechnologies and digitalization) and systemic approaches (inter alia agroecology, and conservation and organic agriculture)
11. Public investment in agrifood systems, which is often insufficient
12. **Capital/information intensity of production**, which is increasing due to mechanization and digitalization of production, including in food and agriculture
13. **Market concentration of food and agricultural input and output**, which represents a challenge for the resilience and equitability of agrifood systems
14. **Consumption and nutrition patterns**, resulting from behavioural change of consumers which are increasingly being asked to make complex choices about the nutritional content and safety of what they eat and where shifting consumer demand in the direction of healthier eating patterns is key

### ***D. Drivers regarding environmental systems***

15. **Scarcity and degradation of natural resources**, including land, water, biodiversity, soil
16. **Epidemics and degradation of ecosystems**, which may increase in the future due to rising trends in transboundary plant pests and diseases, agriculture encroaching in wild areas and forests, antimicrobial resistance, the increasing production and consumption of animal products
17. **Climate change**, including weather extremes and variability of temperatures and rainfall patterns, which is already affecting agrifood systems and natural resources and is expected to accelerate hunger and poverty in rural areas
18. **The ‘Blue Economy’**,<sup>50</sup> where the development of economic activities related to the fisheries and aquaculture sector is increasing globally, and arising trade-offs require sound policy-making integrating technical, social and economic solutions, principles of ecosystem restoration of production systems, and cross-sectoral stakeholder involvement in the context of transformative agrifood systems

Source: FAO. 2021. *Strategic Framework 2022-31*. Rome

68. The forthcoming FAO report ‘*The future of food and agriculture – Drivers and triggers for transformation*’ (*FOFA-DTT*), consolidates the findings of the CFSE 2020-21. The *FOFA-DTT*’s main findings<sup>51</sup> are presented to the Committee for deliberation.

69. The *FOFA-DTT* report further provides an analysis of the “priority triggers” – or areas of development with transformative potential with the potential to influence all the drivers and the channels that link the various elements of agrifood systems with other systems. These triggers are proposed to prioritize actions and comprise: i) Institutions and governance; ii) Consumer awareness and behavioural approaches; iii) Income and wealth distribution; and iv) Innovative technologies. These triggers are expected to interact and generate systemic impacts on agrifood systems. The Strategic Framework articulates some of these triggers as “accelerators” (for example, innovation and technology) or complements (for example, governance and institutions).

70. Specific developments and trends identified for the agrifood sectors, through the lens of the *four betters*, which will influence FAO’s future work in these sectors, are highlighted below.

<sup>50</sup> In the context of the Corporate Strategic Foresight Exercise, the World Bank definition for blue economy applies: The sustainable use of ocean resources for economic growth, improved livelihoods, and jobs while preserving the health of ocean ecosystem ([What is the Blue Economy?](#), World Bank, 6 June 2017)

<sup>51</sup> [www.fao.org/3/nj008en/nj008en.pdf](http://www.fao.org/3/nj008en/nj008en.pdf)

### (1) Trends and developments for *better production*

71. Current agricultural production systems still lack integration, optimization, diversification and innovation, while relying on the intensive use of chemical and other external inputs and natural resources. The reliance of 75 percent of the world's food on only 12 plant and 5 animal species underlines that the need of identifying and using the potentials of neglected or underutilized crops and breeds is essential for food security and nutrition and improve livelihoods at scale. In this context, FAO aims to facilitate the development of sustainable and inclusive value chains for small-scale producers and family farms through global initiatives providing new opportunities for special agricultural products for all Members. Such initiatives should contribute in particular to SDG 2.3, 2.4 and 10.1 targets.

72. In many parts of the world, technical and organizational innovations of livestock production – such as improved feeding, genetics, animal health, husbandry practices and information technology – are driving up productivity of livestock, feed crops and pastures. Sustainable intensification of livestock systems ensures a better integration with other agricultural sectors, as part of bioeconomy, and the enhancement of synergies and management of potential trade-offs across different dimensions of sustainability. When improving productivity, synergies must be harnessed with other *bettters* and potential trade-offs identified and managed, taking a systems approach. Natural resources must be used efficiently to minimize environmental externalities; negative social impacts must be avoided, and the best possible health and welfare of the animals raised under our care must be ensured. Multi-stakeholder platforms can help facilitate discussion around synergies and trade-offs among sustainability objectives.

73. Within-livestock system comparisons reveal large variations in productivity, suggesting considerable scope to improve efficiency through broader adoption of good practices in different contexts. Productivity growth has mostly responded to increasing consumer demand and economic drivers, rather than to the need to achieve other dimensions of sustainability. Where such forces are weak – such as in systems with poor market access or where livestock serve social and other functions beyond productivity – public policy should be directed to create an enabling environment to improve and strengthen market mechanisms.<sup>52</sup>

74. Animal health and welfare deserve special attention due to their links with improved productivity, human health and environmental health. This is the principle underpinning “One Health”, whereby livestock systems are at the nexus of human, animal and environmental health. Better animal health and welfare can raise productivity and enhance livestock's contribution to *better nutrition* and livelihoods, and a *better environment*. The devastating impacts of diseases can be reduced or prevented. The global burden of food-borne diseases, many of which are carried by livestock products, was of 33 million disability-adjusted live years in 2010. Of that burden, 40 percent was borne by children under five years of age. Tackling zoonotic diseases with pandemic potential – emerging from growing opportunities for pathogen transmission among people, animals and the environment – at the source is of paramount importance.

75. Good animal welfare requires not only disease prevention and veterinary treatment, but also appropriate housing, shelter, management, nutrition, and humane transport and slaughter of livestock.

76. Growth in livestock production globally has been accompanied by an increase in use of antimicrobials, not only to treat infections but also to prevent disease and promote growth. There is an urgent need to address the use of antimicrobials to reduce antimicrobial resistance (AMR).<sup>53</sup>

77. FAO strives to improve Transboundary Plant Pest and Disease (TPPD) monitoring and early warning in order to ensure early reaction, preventive control strategy and eventually *better production*. This includes biopesticide adoption and operational use for TPPD control in the affected countries.

78. Drawing lessons from the successful on-going implementation of the Global Action on Fall Army Worm Control, plant health issues should be further integrated to One Health approach and

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<sup>52</sup> See COAG:LI/2022/3.

<sup>53</sup> COAG:LI/2022/7.

avoid duplication and identify synergies, while developing better network with other plant health related global programmes [e.g. CGIAR Plant Health Initiative, Plant Wise Plus of Centre for Agriculture and Bioscience International (CABI)].

## **(2) Trends and developments for *better nutrition***

79. While the global agrifood system has succeeded in feeding a growing population in terms of providing enough dietary energy, ensuring availability, physical and economic accessibility of a variety of nutritious foods and food products that contribute to healthy diets and good nutrition outcomes remains a challenge. Healthy diets are unaffordable for 3 billion people worldwide. The COVID-19 pandemic has threatened the food security, nutrition, health and livelihoods of many people around the world, a trend likely to continue with current food price trends. Agrifood systems transformation is needed to enable people to choose healthy diets for *better nutrition* and sustainable development. An agrifood systems approach to preventing malnutrition in all its forms enables consideration of many factors related to food in terms of what we eat, the factors that influence our choices, and how the food is produced and distributed.

80. It is envisaged that agrifood systems transformation will happen through creating an enabling environment where stakeholders recognise and internalize the need to contribute to *better nutrition*, reduce food loss and waste and have the tools to change the way in which food is produced, handled, preserved, processed and stored for greater resilience, efficiency and to better support the achievement of the SDGs, while adopting circular approaches that maximize the use of food and lower the carbon footprint.

81. The maximum impact for food security and *better nutrition* will come from a focus on: (i) improving the availability and accessibility of nutritious foods on a year round basis; (ii) creating demand for healthy diets through complementary approaches and policy levers; and (iii) reducing losses by small-scale producers and nutrition-sensitive preservation and value addition by small and medium-sized enterprises, to extend shelf-life and assure availability on a year-round basis, while maintaining the nutritious value of foods.

82. Animal source food is nutrient-dense and provides energy and many essential nutrients such as proteins, fatty-acids and micronutrients, contributing greatly to *better nutrition*. FAO aims to promote an optimal contribution of animal source food to healthy diets for all.

83. Livestock-derived food products comprise 33 percent of protein and 17 percent of calorie intake worldwide, but this is not equitably distributed across regions, groups or income levels. Many groups do not consume sufficient terrestrial animal source food to meet their nutritional needs, while others consume more than their dietary needs.

84. Livestock contribute to food security on all scales. At household level, livestock-keeping increases incomes and availability of foods, contributing to healthy and nutritious diets. At community level, the sector creates employment opportunities. At national and global levels, it helps provide the world's population with sufficient and reliable supplies of nutritious, affordable and safe food.

85. FAO and its Members will need to prepare themselves for the risks of tomorrow. As the agrifood systems are transforming to meet the 2030 Agenda for Sustainable Development, there is a need to develop and maintain a deep understanding of the future opportunities, threats and challenges ahead of us. FAO published in March 2022 a foresight report<sup>54</sup> *Thinking about the future of food safety* that is designed to support a shift from reactionary to anticipatory approach, enhancing strategic preparedness through long-term thinking. Among others, the report discusses the impact on food safety caused by climate change, changing consumer behaviour and food consumption patterns, new food sources and food production systems, technological advances, microbiome science, circular economy, and food fraud.

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<sup>54</sup> [www.fao.org/documents/card/en/c/cb8667en](http://www.fao.org/documents/card/en/c/cb8667en)

### (3) Trends and developments for a *better environment*

86. FAO's work towards a *better environment* contributes to the realisation of all SDGs. A *better environment* is considered as the foundation for *better production*, *better nutrition* and a *better life*, through the sustainable management of natural resources and the conservation, sustainable use and restoration of biodiversity, and of productive ecosystems. In particular, there are four areas of work articulated under the PPAs: Climate change, Biodiversity; Sustainable Bioeconomy; and Urban food systems. These areas are interlinked and contribute to other PPAs and *bettters*.

87. FAO has recently developed mutually reinforcing strategies and guidelines on themes including nutrition, private sector engagement, gender equality, mainstreaming biodiversity across agricultural sectors, corporate environmental responsibility, climate change, and science and innovation. The four areas of work under a *better environment* seek connections, synergies and complementarities with all of these.

88. The FAO Strategy on Climate Change 2022-2031 aims to ensure that agrifood systems are sustainable, inclusive, resilient and adaptive to climate change and its impacts and contribute to low-emission economies while providing sufficient, safe and nutritious foods for healthy diets, as well as other agricultural products and services, for present and future generations, leaving no one behind. The Strategy and its Action Plan will be core instruments for FAO to deliver under the *four betters* and its PPAs and to contribute to the realization of the SDGs, in particular SDGs 2 and 13, and its relevant targets.

89. The action plan for the implementation of the FAO Strategy on Mainstreaming Biodiversity across Agricultural Sectors, as approved at the 166th Session of the FAO Council in 2021, in view of preparations for the Post-2020 Global Biodiversity Framework. The progress report on the Strategy's implementation is submitted to the Committee.<sup>55</sup>

90. A sustainable bioeconomy harnesses the power of biosciences, bio-innovations and biotechnologies to address many different challenges for which conserving biodiversity and regenerating biological resources is paramount, including providing food, feed, wood-based products, paper, bio-based textiles, bio-based plastics, biochemicals, and biopharmaceuticals. Innovative technologies in the bioeconomy can help moving directly to more efficient and less polluting stages of development. To meet the growing demand for food, fiber, fuel and feed in an equitable and sustainable way without further depleting finite planetary resources will require dramatically reducing losses and waste and creating local economic opportunities that leave no one behind, especially Indigenous Peoples and local communities that benefit, use and conserve biodiversity and ecosystem services.

91. Bioeconomy and bioscience innovations are major global agrifood drivers.<sup>56</sup> Biological resources in food and agriculture offer promising opportunities for game-changing improvements.<sup>57</sup>

92. The UN Decade on Ecosystem Restoration 2021-2030 co-led by FAO and UNEP provides an opportunity to address and reverse land and natural resources degradation for improving food security and nutrition, the environment and sustaining livelihoods. This to be done through enhancing and scaling-up sustainable management and restoration of productive systems. Practices could include crops diversification and agroecology practices, agroforestry and forest and landscape restoration, as well as the conservation and sustainable management of land, soils and water resources.<sup>58</sup>

93. In March 2022 in Nairobi, UNEA-5.2 adopted a draft resolution to convene an intergovernmental negotiating committee to develop a multilateral instrument on plastic pollution, including in the marine environment. In this framework, it is important that FAO leads on the issue of agricultural plastics with the aim of supporting countries in promoting the transition towards a low

<sup>55</sup> [www.fao.org/3/nj010en/nj010en.pdf](http://www.fao.org/3/nj010en/nj010en.pdf)

<sup>56</sup> [https://sc-fss2021.org/wp-content/uploads/2021/09/ScGroup\\_Reader\\_UNFSS2021.pdf](https://sc-fss2021.org/wp-content/uploads/2021/09/ScGroup_Reader_UNFSS2021.pdf)

<sup>57</sup> [www.fao.org/publications/card/en/c/CB5798EN](http://www.fao.org/publications/card/en/c/CB5798EN) and [www.fao.org/documents/card/en/c/cb6564en](http://www.fao.org/documents/card/en/c/cb6564en)

<sup>58</sup> [www.fao.org/3/nj009en/nj009en.pdf](http://www.fao.org/3/nj009en/nj009en.pdf); [www.fao.org/3/nj013en/nj013en.pdf](http://www.fao.org/3/nj013en/nj013en.pdf) and [www.fao.org/3/ni991en/ni991en.pdf](http://www.fao.org/3/ni991en/ni991en.pdf)

plastics future. In addition, tackling agricultural plastic pollution will be a vital measure in helping to deliver the objectives of the United Nations Decade on Ecosystem Restoration, launched by FAO and UNEP in 2021, for instance, through the reduction and sustainable disposal of agricultural plastics and their environmental residues. A document on the use of plastics in agriculture is submitted to the Committee.<sup>59</sup>

94. Livestock are highly versatile, helping hundreds of millions of people to survive in marginal areas, withstand climate shocks and adapt to changing climatic conditions. However, livestock systems draw heavily on natural resources, emit greenhouse gases and, if not managed in a sustainable way, can contribute to detrimental land-use change, land degradation and environmental pollution. FAO strives to help Members optimize the contribution livestock systems made to a *better environment*.

95. Permanent pastures and grasslands cover about one-quarter of the Earth's land area and account for some 70 percent of agricultural land.<sup>60</sup> Approximately one-third of the cereals produced globally are used to feed livestock.<sup>61</sup> Some of this cropland and pastureland has been converted from forest and part of that converted land is degraded though estimates of how much vary widely.<sup>62</sup> Deforestation and land degradation both release carbon stocks into the atmosphere.

96. The following issues and challenges have been identified for livestock systems:

- need to contribute to the conservation of biodiversity and to important ecosystem services, including nutrient cycling, soil organic carbon sequestration and maintenance of agricultural landscapes; there are many opportunities to improve efficiency, reduce waste and better integrate livestock systems into a bioeconomy;
- draw significantly on water resources and contribute in some areas to land-use change, particularly through forest encroachment for feed production and pasture, resulting in deforestation, habitat fragmentation and biodiversity losses; and
- contribute to greenhouse gas (GHG) emissions on farms, mostly through enteric fermentation and manure; they also contribute upstream through the production of feed and other inputs, and downstream in transportation, cooling, storage and processing of livestock products.

97. The three main GHGs emitted from livestock systems are methane (CH<sub>4</sub>), nitrous oxide (N<sub>2</sub>O) and carbon dioxide (CO<sub>2</sub>). Methane is an especially important target as it is an extremely potent but short-lived GHG. As such, in the race to manage global warming, reducing methane emissions can provide fast returns. Livestock systems offer great potential to reduce emissions, capture CO<sub>2</sub> and produce renewable energy.<sup>63</sup>

98. With the climate crisis gaining recognition, there is growing urgency for Members to increase their commitments to ambitious action towards meeting the Paris Agreement commitments. With livestock systems contributing substantially to anthropogenic GHG emissions, it is essential that climate action in livestock systems be integrated into Paris Agreement commitments and others such as the Global Methane Pledge.<sup>64</sup> The same applies to biodiversity and the Convention on Biodiversity Post-2020 Global Biodiversity Framework which is currently under development.

#### **(4) Trends and developments for a *better life***

99. The rapid transformations of agrifood systems, along with natural and human induced shocks and stresses, are leaving many behind and exacerbating inequalities and discrimination as the

<sup>59</sup> [www.fao.org/3/nj012en/nj012en.pdf](http://www.fao.org/3/nj012en/nj012en.pdf)

<sup>60</sup> FAOSTAT, 2020

<sup>61</sup> Mottet, A., De Haan, C., Dalcucci, A., Tempio, G., Opio, C. & Gerber, P. *Livestock: On our plates or eating at our table? A new analysis of the feed/food debate*. Global Food Security, 14 (2017) 1-8.

<https://doi.org/10.1016/j.gfs.2017.01.001>

<sup>62</sup> Gibbs, H. K. & Salmon, J. M. (2015). *Mapping the world's degraded lands*. *Applied Geography*, 57 (2015) 12-21, <https://doi.org/10.1016/j.apgeog.2014.11.024>

<sup>63</sup> FAO. 2019. *Five practical actions towards low-carbon livestock*. Rome

[www.fao.org/3/ca7089en/ca7089en.pdf](http://www.fao.org/3/ca7089en/ca7089en.pdf)

<sup>64</sup> [www.globalmethane.org](http://www.globalmethane.org)

livelihoods of the majority of the poor and disadvantaged populations are directly and indirectly linked to agrifood sectors. The priority areas of work under a *better life* include identifying the most at risk and the vulnerable, and taking actions to reach the poorest of the poor, combating discrimination, strengthening resilience, responding to emergencies of the agrifood systems and reducing inequalities.

100. Livestock production is increasing, but smaller producers in lower middle-income countries (LMICs) are failing to participate fully in sector growth. Of the 770 million people surviving on less than USD 1.90 per day, about half depend directly on livestock for their livelihoods.<sup>65</sup> Through its multiple roles, livestock is catalytic in helping rural households achieve their livelihood objectives: enhancing human, social, natural, physical and financial capital, and providing resilience against external shocks.

101. However, alongside the benefits of livestock keeping, lie issues of equality. Large numbers of low-income livestock producers are women, yet they often have less access to productive resources and markets than men, preventing them from deriving significant benefits from their livestock. Child labour is common in some livestock systems, with young boys and girls tending herds and flocks instead of going to school. As livestock systems expand to meet demand, millions of small-scale livestock producers – efficient but not competitive – may be forced to abandon the business altogether.

#### **IV. Priority areas of work in the agrifood sectors in 2022-23 and beyond**

102. The priority areas for FAO's work in food and agriculture, are derived from the trends and developments described in Section III and contribute to the achievement of the FAO Strategic Framework as central to delivering the overarching SDGs. FAO addresses these priorities through its core functions – norms and standard setting, data and information, policy dialogue, capacity development, knowledge and technologies, partnerships, and advocacy and communication.

103. The transformative nature of the 2030 Agenda, its complexity, and the need for more integrated and comprehensive, cross-sectoral and systemic approaches require new tools and new governance mechanisms that will have profound implications on the way countries plan, implement and monitor their food and agriculture, food security and nutrition programmes. It has increased awareness of the key role that agrifood systems transformation can play as an entry point for accelerating progress towards the achievement of the SDGs.

104. Cross-cutting themes identified in the MTP-PWB such as gender, youth and inclusion are well reflected throughout FAO's work and the Organization continues to strengthen mainstreaming these areas across its programmes.

105. Data, information and statistics are integrated in FAO's programmes, particularly to improve countries' capacities to formulate evidence-based policies and monitoring their impact. Monitoring and reporting on food insecurity and malnutrition, climate change, as well as on agriculture and rural development requires reliable and timely data that is systematically disaggregated by gender, age and other key socio-economic variables. Digitalization will play an increasingly important role in contributing towards the SDGs. FAO is advancing its innovative effort to increase the dissemination and improve utilization of food availability, food consumption, and diet quality statistics and indicators through a common "Food and Diet" domain on FAOSTAT to be launched in 2022.

106. The COAG 28 discussion documents address various emerging issues and priorities, present the major trends and challenges and provide substantive input towards the priority areas of work for the Committee's considerations, including the recommendations from the First Session of the COAG Sub-Committee on Livestock.

107. FAO priority areas of action in the agrifood sectors can be summarized under four closely interrelated and overarching themes, of which several will be reviewed by COAG 28. These four areas listed below are built on the main thematic areas considered by previous COAG sessions and the priorities under the Strategic Framework.

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<sup>65</sup> FAO. 2018. *Shaping the future of livestock sustainably, responsibly, efficiently* [online]. [Cited 13 January 2022]. [www.fao.org/3/I8384EN/i8384en.pdf](http://www.fao.org/3/I8384EN/i8384en.pdf)

**Priority Area 1. Achieving resilient sustainable agrifood systems for food security and nutrition for all.**

108. The transformation to MORE efficient, inclusive, resilient and sustainable agrifood systems for *better production, better nutrition, a better environment, and a better life*, leaving no one behind is at the center of the FAO Strategic Framework 2022-31.

109. In the area of agricultural plant production systems, sustainable plant production and protection innovation will be promoted through use of inputs, practices, technologies and services for integrated systems that optimize production, genetic resources and biodiversity conservation, soil fertility, pest and disease management, increasing profits, decent jobs, social and gender equality, minimizing the application of chemical fertilizers and pesticides, losses and wastes, targeting region specific crop technologies for small scale and family farms in rural, peri-urban and urban areas.

110. The strengthening of the local, national and regional capabilities for successful adoption, promotion and upscaling of innovation and business models on plant production and protection will be indispensable components of sustainable intensification systems. Creating an enabling environment for increasing crop production will contribute to the establishment and strengthening of policy and institutional frameworks, governance mechanisms, formulation and implementation of strategies, and appropriate normative standards for transformation to more efficient, inclusive, resilient and sustainable plant production and protection.

111. Consumers are important actors in the food systems; however, their ability to influence the nutritional outcomes at the individual level through individual food choices is often constrained by the options made available to them through the food supply and their food environments.

112. Food Loss and Waster (FLW) reduction will help address the challenge of promoting economic prosperity and sustainably feeding a world population projected to reach almost 10 billion in 2050, while staying within planetary boundaries in terms of alleviating pressure on the environment and the natural resources underpinning the food systems.

113. Reducing FLW will contribute to the transformation of agrifood systems for more inclusiveness, efficiency, sustainability and resilience. It will contribute to engaging all players in agrifood systems in enabling equitable physical and economic access to culturally appropriate, safe, sufficient, diverse, and nutritious food and promoting healthy diets towards the realization of the right to adequate food.

114. FAO's work on emergency and resilience is aligned with the humanitarian, development and peace nexus (HDPN) and contributes to strengthening country capacities to support the agricultural livelihoods and food systems of the acutely food insecure faced with disasters and crises. The Organization provides assistance to strengthen the capabilities of agrifood systems to prevent, anticipate, absorb, respond and recover, adapt and transform in the face of disasters and crises, supporting countries in sustainably ensuring sufficient, safe and nutritious food is available and accessible to all.

115. The management of multiple risks and crises builds resilience across and within systems, thus helping to deal with uncertainty for the whole of society. Resilience building addresses systemic threats by building a common understanding of the multidimensional risks, crisis and contexts, amongst multiple stakeholders, recognizing interconnected systems and integrated for achieving the SDGs. FAO supports its Members to strengthen the contribution of livestock systems towards achieving the SDGs. FAO's work on sustainable livestock systems is at the interface of the *four betters* of FAO Strategic Framework 2022-31. Sustainable livestock systems play important roles in achieving each of these aspirations.

116. As global events disrupt societies, food systems and supply chains, food safety is often among the vulnerable attributes and easily threatened by the massive changes throughout the food systems in response to those disruptions. This programme will focus on strengthening national food control capacities and capabilities to be able to ensure that food remains safe and available. Food security for all is only possible when the food available is safe for humans.

117. FAO will support Members to shift towards the modern food safety concepts to develop “preventive”, rather than merely “reactive”, food control systems by implementing risk-based approaches to food control activities, complementing the joint FAO/WHO food control system assessment tool, which enables Members to analyse the performance of their national food control system and to identify priority areas of improvement based on a harmonized, objective and consensual approach involving all relevant stakeholders.

118. FAO will continue, with its partners, to support inclusive and innovative business models for agricultural machinery hire services, promoting agricultural equipment to sustainably scale the mechanization. FAO is supporting inclusive, decent jobs and labour saving technologies for women farmers. FAO will further promote capacity development for mechanization hire services through e-learning courses on small-scale agricultural mechanization hire services as a business enterprise.

**Table 2- Priority Area 1: Achieving resilient sustainable agrifood systems – Link with the Strategic Framework and PPAs**

Programme Priority Areas (PPAs)	SDG Targets	Technical Areas of Emphasis
BP1: Innovation for sustainable agriculture production	2.3, 2.4, 6.4, 15.2	<ul style="list-style-type: none"> <li>- Implementation of recommendations of the first Session of the COAG Sub-Committee on Livestock (COAG 28 item 2.1.).</li> <li>- Facilitating multi-stakeholder dialogue to facilitate a sustainable transformation of the livestock sector (example: Global Agenda for Sustainable Livestock).</li> <li>- Developing Livestock Policy Lab – a platform that serves as a science-policy interface to support the identification of policy issues, generation of analytical evidence, and formulation of policy instruments to enhance the contribution of livestock to achieving the SDGs and developing decisions support toolbox for quantitative policy analysis.</li> <li>- Supporting Members in implementing the Global Plan of Action for Animal Genetic Resources by providing technical and policy support, and monitoring the status of animal genetic resources, including through the Domestic Animal Diversity Information System (DAD-IS), which contains data for the calculation of SDG indicators 2.5.1b and 2.5.2.</li> <li>- Further development and implementation at country level of the Tool for Agroecology Performance Evaluation (TAPE) to assess the level of transition in food systems and their performance on dimensions of sustainability.</li> <li>- Reporting on water use efficiency in the livestock sector.</li> <li>- Capacity development to measure and monitor organic soil stock change and carbon sequestration in grasslands and managed pastures.</li> <li>- Development of technical guidelines on the assessment of ecosystem services.</li> <li>- Sustainable plant production and protection related innovation including practices recommended under the International Code of Conduct on sustainable use and management of fertilizers and the International Code of Conduct on pesticide management.</li> </ul>
BP4: Small-scale producers' equitable access to resources	1.4, 2.3 2.4, 9.3	<ul style="list-style-type: none"> <li>- Consulting on need, scope, nature and process for development of a voluntary guidance tool to enhance the productivity of small-scale livestock keepers.</li> </ul>

Programme Priority Areas (PPAs)	SDG Targets	Technical Areas of Emphasis
		<ul style="list-style-type: none"> <li>- Supporting pastoral networks and policy support through the Pastoralist Knowledge Hub platform.</li> </ul>
BP5: Digital agriculture	1.4, 5.b, 9.c, 17.8	<ul style="list-style-type: none"> <li>- Integrating One Health intelligence in early warning systems for risk assessment and forecasting.</li> <li>- Supporting digital tools for better targeting of livestock interventions and improving interoperability of DAD-IS with other systems.</li> </ul>
BN1: Healthy diets for all	1.3, 2.1, 2.2, 3.1, 3.2, 3.4, 12.8, 14.b	<ul style="list-style-type: none"> <li>- Promoting healthy diets and food diversification.</li> <li>- Implementation of the vision and approach for FAO's work in nutrition.</li> <li>- Assessing the contribution of livestock to food security, sustainable food systems, nutrition and healthy diets</li> <li>- Integrating nutrition in the work of agriculture extension.</li> </ul>
BN3: Safe food for everyone	2.1, 2.2, 3.2	<ul style="list-style-type: none"> <li>- Enhancing food safety and quality.</li> <li>- Improving methods to capture food consumption data on wild, forest and neglected, underutilized species in dietary assessments.</li> <li>- Implementing animal welfare practices contributing to food safety and quality.</li> <li>- Developing capacities on feed safety through Multi-stakeholder Partnership on Feed Safety.</li> <li>- Supporting Members in continuing to improve food safety at all levels by providing scientific advice and strengthening their food safety capacities for efficient, inclusive, resilient and sustainable agrifood systems.</li> <li>- Improving methods to capture food consumption data on wild, forest and neglected, underutilized species in dietary assessments.</li> <li>- Providing sound science and evidence as the foundation for food safety and quality decision making for international food standards.</li> <li>- FAO Strategic Priorities for Food Safety within the FAO Strategic Framework 2022-31.</li> </ul>
BN4: Reducing food loss and waste	2.1, 2.2, 12.3	<ul style="list-style-type: none"> <li>- Supporting education and awareness raising in order to stimulate behaviour change and actions to reduce FLW and improve nutrition.</li> <li>- Reducing food losses and waste along the value chain</li> <li>- Strengthening the capacity of actors in the food supply chain and agrifood system, through education and training.</li> <li>- Improving access to innovative technologies to support FLW reduction.</li> <li>- Facilitating partnerships and collaboration and support inclusive coalitions.</li> <li>- Developing guidelines and capacities on the safe and sustainable recycling of food losses and wastes as animal feed.</li> </ul>
BE1: Climate change mitigating	2.4, 13.1, 13.2,	<ul style="list-style-type: none"> <li>- Implementation of FAO Strategy on Climate Change 2022-31 and the development and implementation of its Action Plan 2022-2025.</li> </ul>

Programme Priority Areas (PPAs)	SDG Targets	Technical Areas of Emphasis
and adapted agrifood systems	13.b, 14.3	<ul style="list-style-type: none"> <li>- Developing policy briefs on policy analysis and technical opportunities to integrate livestock-related commitments and targets in Nationally Determined Contributions including issues related to the Koronivia Joint Work on Agriculture.</li> <li>- Supporting stakeholders including private sector to raise ambitions of climate action in the dairy sector through the development of pathways to low-emission dairy systems.</li> <li>- Supporting development of feasibility studies, policies, strategies, and action plans to reduce methane emissions from the livestock sector and other agrifood systems while improving food security and livelihoods in support of the Global Methane Pledge.</li> <li>- Developing technical guidance on methane assessment</li> <li>- Agroecology and the utilization of TAPE for sustainable agrifood systems.</li> </ul>
BL3: Agriculture and food emergencies	1.5, 2.1, 2.2, 2.3, 16.1	<ul style="list-style-type: none"> <li>- Countries facing or at high risk of acute food insecurity provided with urgent livelihood and nutrition assistance and, adopting a HDPN approach, equipping affected and vulnerable agriculture and food-based livelihoods and related agrifood systems with appropriate capacities and means to better prepare, anticipate, respond and recover from disasters and crises, for building resilient agrifood systems. The key thematic areas include (i) monitoring, forecasting, and early warning systems; (ii) preparedness; (iii) anticipatory actions; (iv) emergency response and recovery; (v) contribution to peace sustaining and conflict prevention; and (vi) social protection.</li> </ul>
BL4: Resilient agrifood systems	1.3, 1.5, 2.4	<ul style="list-style-type: none"> <li>- Resilience of agrifood systems and livelihoods to socio-cultural, economic and environmental shocks and stresses is strengthened through improved multi-risk understanding and effective governance mechanisms for implementation of risk and vulnerability reduction measures.</li> </ul>

### **Priority Area 2. Addressing threats to plant, animal and human health through the One Health approach.**

119. Increasing losses to agricultural production and adverse human health effects are largely caused by the spread of pest and disease agents, including zoonotic infections of pandemic potential and antimicrobial resistance (AMR) in the crop, animal, forestry and aquatic (aquaculture and capture fisheries) sectors. The responsiveness of animal and plant health systems and resilience of agrifood systems in the face of pests, diseases and other threats (e.g. climate change) needs to be strengthened at global, regional, national and local levels to effectively prepare for and defend against high-impact biological threats.

### **Table 3 - Priority Area 2. Addressing threats to plant, animal and human health through the One Health approach – Link with the Strategic Framework and PPAs**

Programme Priority Areas (PPAs)	SDG Targets	Technical Areas of Emphasis
BP3: One Health	1.5, 3.d, 15.8	<ul style="list-style-type: none"> <li>- One Health and related policy and technical guidance.</li> </ul>

Programme Priority Areas (PPAs)	SDG Targets	Technical Areas of Emphasis
		<ul style="list-style-type: none"> <li>- Supporting policy reforms contributing to the wide adoption of biosecurity and veterinary public health practices along livestock value chains.</li> <li>- Developing capacity to decrease use of antimicrobials through animal feeding practices.</li> <li>- Supporting better AMR risk management through disease control.</li> <li>- Supporting revision of national One Health governance, legislation, and regulations to improve coordinated One Health implementation</li> <li>- Integrating One Health intelligence in early warning systems for risk assessment and forecasting.</li> <li>- Supporting countries towards PPR eradication.</li> <li>- Providing guidance, technical assistance, knowledge products and support countries and regions to enhance prevention against and progressive control of high impact animal diseases.</li> <li>- Increasing identification of high-risk interfaces to enable surveillance and risk assessment for evidence based decision risk management at the human-plant-animal-environment interface to prevent spillover and spread.</li> </ul>
BL3: Agriculture and food emergencies	1.5, 2.1, 2.2, 2.3, 16.1	<ul style="list-style-type: none"> <li>- FAO Action Plan on Antimicrobial Resistance (AMR) 2021-2025.</li> <li>- Transboundary Plant Pests and Diseases: support to global or regional cooperation and national capacities, including through innovations for monitoring, early warning and forecasting.</li> <li>- Key thematic areas to support agrifood systems to manage emergencies that affect plant, animal and human health include; (i) Monitoring, forecasting, and early warning systems; (ii) preparedness; (iii) anticipatory actions; (iv) emergency response and recovery; (v) contribution to peace sustaining and conflict prevention; and (vi) social protection.</li> </ul>
BL4: Resilient agrifood systems	1.3, 1.5, 2.4	<ul style="list-style-type: none"> <li>- The key thematic areas to reduce threats to plant's, animal's and human's health include; (i) measuring and understanding multiple risks; (ii) governance of multiple risks; and (iii) reducing multiple risks and vulnerabilities.</li> </ul>

### Priority Area 3. Climate and Natural Resources (biodiversity, land and water)

120. Natural resources are the foundation for climate resilient and sustainable agrifood systems. Ecosystem-based approaches and nature-based solutions are key when working to enhance the resilience of agrifood systems, as they provide various solutions to development challenges dealing with climate and disaster risks. Thus, enhancing the resilience of agrifood systems in the face of multitude of shocks and stresses, implies ensuring the sustainable management and restoration of natural resources, so that the groups in most vulnerable situations (and hence at risk) that depend on natural resources can continue to make their living and to have access to food.

121. The primary SDGs of the BE2 “Bioeconomy for sustainable food and agriculture” are 12.2, 12.4 and 12.5. Therefore, the programme aims respectively at: sustainably manage and use natural resources (e.g. value addition of biomass by bio-based processes); improve environmental outcomes

(e.g. responsibly manage chemicals and waste); and increase resource use efficiency (e.g. substantially reduce loss and waste generation).

**Table 4 - Priority Area 3. Climate and Natural Resources (biodiversity, land and water) – Link with the Strategic Framework and PPAs**

Programme Priority Areas (PPAs)	SDG Targets	Technical Areas of Emphasis
BP1: Innovation for sustainable agriculture production	2.4, 6.4, 15.2	<ul style="list-style-type: none"> <li>- Increasing water use efficiency, watershed management and water productivity for nutrition.</li> </ul>
BE1: Climate change mitigation and adapted agrifood systems	2.4, 13.1, 13.2	<ul style="list-style-type: none"> <li>- Adaptation to extreme weather, droughts and flooding</li> <li>- State of the World's Land and Water Resources for Food and Agriculture (SOLAW21).</li> <li>- Governance of tenure of water resources for food and agriculture.</li> <li>- Collaboration with Global Environmental Facility to enhance the nutrition-sensitivity of their GEF-8 programming and investment cycle.</li> <li>- Climate Change adaptation and mitigation actions.</li> <li>- Implementation of FAO Strategy on Climate Change 2022-31.</li> </ul>
BE2: Bioeconomy for sustainable food and agriculture	12.2, 12.4, 12.5	<ul style="list-style-type: none"> <li>- Enhancing Members' capacities to generate agrifood related responses to climate change mitigation and adaptation.</li> <li>- Assessing opportunities to enhance circular bioeconomy and nitrogen use efficiency in agrifood systems (crop and livestock).</li> <li>- Developing technical guidelines on the environmental assessment of recovery options of animal residues and waste in view of boosting circular bioeconomy through livestock systems.</li> <li>- Supporting preparation of national assessments of feed resources, including crop residues and agro-industrial by-products.</li> <li>- Improved global governance on sustainable bioeconomy, building common narratives.</li> <li>- Supporting bioeconomy interventions through the enabling environment for the production, use and regeneration of biological resources and innovation for value addition and territorial development.</li> <li>- Guidance on the use of agricultural plastics.</li> </ul>
BE3: Biodiversity and ecosystem services for food and agriculture	2.5, 15.1	<ul style="list-style-type: none"> <li>- FAO Strategy on Mainstreaming Biodiversity across Agricultural Sectors and its 2021-23 Action Plan.</li> <li>- Implementation of the UN Decade on Ecosystem Restoration 2021-2030.</li> <li>- Global Soil Partnership (GSP) including collaboration in the Global Symposium on Soils for Nutrition, which will take place in July, 2022.</li> <li>- Protection and sustainable utilization of pollinators (CBD IPI 2.0).</li> <li>- Enhancing Members' capacities to generate agrifood related responses to climate change mitigation and adaptation.</li> </ul>

Programme Priority Areas (PPAs)	SDG Targets	Technical Areas of Emphasis
		<ul style="list-style-type: none"> <li>- Integrate agrifood responses in the international climate debate, including implementation of the Paris Agreement and the Koronivia Joint Work on Agriculture.</li> <li>- Strengthening the coordination and delivery of FAO's work on climate-change mitigation and adaptation, including higher access to climate finance.</li> <li>- Enhance opportunities for youth and women to engage in climate-action activities, such as climate-related knowledge events.</li> <li>- Reducing land and soil degradation.</li> <li>- Developing technical guidelines on the assessment of ecosystem services.</li> <li>- Assessing soil carbon stocks in grasslands.</li> <li>- Strengthening contributions to biodiversity, and its ecosystem services, environmental health, soil/land, water, food safety and the sustainability of agrifoods systems, at national, regional and global levels, through sustainable One Health systems.</li> <li>- The Domestic Animal Diversity Information System (DAD-IS) as data accelerator is further developed and maintained as the clearing house mechanism for the management of animal genetic resources.</li> </ul>
BE4: Achieving sustainable urban food systems	1.1, 2.1, 11.a, 12.1	<ul style="list-style-type: none"> <li>- Promote the Urban Food agenda, urban agriculture and green cities.</li> </ul>
BL3: Agriculture and food emergencies	1.5, 2.1, 2.2, 2.3, 16.1	<ul style="list-style-type: none"> <li>- Key thematic areas to support agrifood systems to manage emergencies that affect plant, animal and human health include; (i) Monitoring, forecasting, and early warning systems; (ii) preparedness; (iii) anticipatory actions; (iv) emergency response and recovery; (v) contribution to peace sustaining and conflict prevention; and (vi) social protection.</li> <li>- Providing technical assistance and enhance preparedness and emergency response to mitigate disease impact to vulnerable farmers and food security at country/regional level.</li> </ul>
BL4: Resilient agrifood systems	1.3, 1.5, 2.4	<ul style="list-style-type: none"> <li>- The key thematic areas to reduce threats to plant's, animal's and human's health include; (i) measuring and understanding multiple risks; (ii) governance of multiple risks; and (iii) reducing multiple risks and vulnerabilities.</li> <li>- Providing technical assistance and enhance preparedness and emergency response to mitigate disease impact to vulnerable farmers and food security at country/regional level.</li> </ul>

#### **Priority Area 4. Revitalizing agriculture and inclusive rural transformation**

122. Agrifood systems require an urgent transformation so they can be part of the main solutions for inclusive, resilient and sustainable development for all. Such transformation requires urgent and at scale action to tackle cascading risks and crisis at all levels for building inclusive, resilient and sustainable agrifood systems in order to deal with growing uncertainties and inequalities.

123. As part of the work of FAO in supporting countries in revitalizing agriculture and in the promotion of inclusive rural transformation, the organization addresses underlying root causes of risks, vulnerabilities and inequalities, while fostering deliberate contributions to localized peace and reduction of future conflicts and risks, informed by a context analysis.

**Table 5 - Priority Area 4. Revitalizing agriculture and inclusive rural transformation - Link with the Strategic Framework and PPAs**

Programme Priority Areas (PPAs)	SDG Targets	Technical Areas of Emphasis
BN2: Nutrition for the most vulnerable	2.1,2.2,	<ul style="list-style-type: none"> <li>- Incorporating the provision of nutrient-enriched crops in social protection (including school meals), emergency and resilience responses with a focus on the most vulnerable individuals.</li> <li>- Incorporating the provision of animal source foods in social protection (including school meals), emergency and resilience responses with a focus on the most vulnerable individuals.</li> </ul>
BL1: Gender equality and rural women's empowerment	2.3, 5.4.	<ul style="list-style-type: none"> <li>- Mainstreaming Gender Equality and Social Inclusion in all projects aimed at improving food security and nutrition through rural transformation by addressing systemic determinants and risks.</li> <li>- Promoting rural women empowerment and building the evidence on the link with improved food security and dietary outcomes.</li> </ul>
BL2: Inclusive rural transformation	8.3	<ul style="list-style-type: none"> <li>- Promoting Rural Youth employment.</li> <li>- The catalyser role of the UN Decade of Family Farming 2019-2028 (UNDF) and progress towards its implementation.</li> <li>- Mainstreaming Gender Equality and Social Inclusion in all projects aimed at improving food security and nutrition through rural transformation by addressing systemic determinants and risks.</li> <li>- Promoting rural women empowerment and build the evidence on the link with improved food security and dietary outcomes.</li> <li>- Promoting inclusion of transboundary pastoral mobility in local development.</li> <li>- Mainstreaming pastoralism and rangelands within FAO's technical and policy programme.</li> </ul>
BL3: Agriculture and food emergencies	1.5, 2.1, 2.2, 2.3, 16.1	<ul style="list-style-type: none"> <li>- Supporting progressive control of high impact animal diseases to reduce disease burden, promote progressive biosecurity management for sustainable livestock production and contribute to national, regional and global food security.</li> <li>- Reducing risks and vulnerability to food insecurity and malnutrition by embedding nutrition in social protection, emergency and resilience responses in Ukraine, Yemen, South Sudan, Haiti and other fragile and conflict affected countries.</li> </ul>
BL4: Resilient agrifood systems	1.3. 1.5, 2.41	<ul style="list-style-type: none"> <li>- Promoting more coherent and integrated Agricultural Innovation Systems (AIS) by strengthening national agricultural research and extension systems. The key thematic area of (i) Monitoring, forecasting, and early warning systems; (ii) preparedness; (iii) anticipatory actions; (iv) emergency response and recovery; which contributes to address root causes of risks and vulnerabilities (v)</li> </ul>

Programme Priority Areas (PPAs)	SDG Targets	Technical Areas of Emphasis
		contribution to peace sustaining and conflict prevention; and (vi) social protection. In particular the key thematic area of on multi-risk understanding, to inform multi risk governance and the implementation of risk and vulnerability reduction measures.

124. In addition to the priority areas, FAO's work is strengthened by Accelerators: Technology, Innovation, Data and Complements (governance, human capital, institutions), while minimizing trade-offs. The cross-cutting areas of *gender, youth and inclusion* are mainstreamed across all sectors.

125. Within the framework of the FAO Science and Innovation Strategy and in order to leverage technology and innovation in the implementation of the PPAs, the following is planned:

- a. A stocktaking exercise and an inventory of currently available technologies and innovations will be undertaken across the Organization to better understand and leverage existing organizational knowledge and resources.
- b. FAO further aims to gather data on the development, adaptation, adoption and impact of technologies and innovations in agrifood systems at country level, with a focus on LMICs.
- c. Dialogue on science will be strengthened, including by developing paper(s) on issues that are contentious and have presented communication challenges in the past.
- d. The process assessing the contribution of livestock to food security, sustainable food systems, nutrition and healthy diets has been set-up as interface between science and policy.

126. As an example of how technology and innovation will be utilized within the context of PPAs, the PPA on reducing food loss and waste (BN4) will support context-specific and context appropriate innovations in technologies policies, institutions, social and market relationships, finance products and business models that contribute to reducing food loss and waste in a sustainable way (economically, socially and environmentally), while ensuring that trade-offs in satisfying these three sustainability dimensions are minimised and synergies maximized.

127. Technology is an enabler and a challenge for food safety alike. To ensure that enough safe food is produced in a sustainable manner, numerous technologies are piloted and novel, new and/or unusual food sources (e.g., insects as food and feed, cultured meat, and cultured seafood) as well as production methods are being explored FAO's focus in this regard is to act both as a guardian to ensure that all Members are sufficiently prepared to ensure that novel food sources and production methods produce safe food and that no one is excluded by the emergence of new technological requirements. Innovations are emerging at an ever-accelerating pace, FAO's foresight programme and other activities are closely monitoring this development to ensure that Members can make informed trade-off decisions, to best leverage the benefits of technology and innovation in the national context. FAO has already built a strong platform for collecting, compiling and disseminating data accelerators relevant to safe food, through databases on food consumption, food composition databases, human nutrient requirements, and various databases with regard to contaminants, additives and residues of pesticides and veterinary drugs in food, data generated through the Food Control Systems Assessment, standards set by the FAO/WHO Codex Alimentarius Commission, harmful algal blooms (HABs) and trade rejections in fishery, among others.

128. FAO established the Data in Emergencies (DIEM) hub<sup>66</sup>, a geospatial platform that integrates data and analysis about agricultural livelihoods and food security in the context of shocks. Its aim is to inform decision-making on timely action to save lives and livelihoods by providing regularly updated data and information. DIEM consists of three pillars: Monitoring, Impact and Risk. DIEM Monitoring

<sup>66</sup> <https://data-in-emergencies.fao.org>

is a monitoring system implemented in more than 25 food crisis countries, with two to four rounds of household-level data collection per year using Computer-Assisted Telephone Interviews and in-person modalities. DIEM Impact is related to the assessment of the impacts of large-scale natural and manmade hazards on agricultural livelihoods, using a combination of methods (remote sensing, damage and losses assessment, field surveys). DIEM Risk, which is under development, will focus on risk profiling and analysis, in relation to anticipatory action and resilience programming. The outputs of these three pillars are publicly available on the hub, in the form of dashboards, interactive maps, StoryMaps, exportable datasets and reports. The standardization and automation of data management steps allows for the timely processing and dissemination of large-scale data.

## V. Towards a reinvigorated business model

129. FAO aims to create an inclusive and agile Organization that is transparent, open, innovative, responsible, effective and impactful, and that serves its Members to achieve the *four betters*. In this respect, FAO needs to focus both on “doing things right” and on “doing the right things”, including on transformative partnerships, FAO’s normative work, innovative funding and financing, delivering as a unified FAO, efficiency and innovative approaches, and operating in the context of increasing risk and uncertainty. This is further articulated in the areas of work below, including the FAO Strategy on Climate Change 2022-31 and FAO Science and Innovation Strategy.

130. The implementation of the FAO Strategy on Climate Change 2022-31 will seek multi-stakeholder partnerships, including with Rome-based Agencies and other United Nations agencies, financial institutions and the private sector, as well as by means of instruments such as South-South and Triangular Cooperation. It will also be rooted in science and evidence-based innovations focusing on climate action – technological, financial, policy, legislative, social and institutional – across the agrifood systems.

131. The FAO Science and Innovation Strategy proposes to strengthen FAO’s efficiency and effectiveness by reinforcing its capacities on science and innovation, particularly at country level. This will be achieved through capacity development and better targeted skills profiling to fill gaps. Specific gaps include systemic approaches and enhanced cross-sectoral collaboration. Documentation and sharing of information on science and innovation will be enhanced across the Organization, from country to global level through improved knowledge management, which will facilitate capturing project evaluations and feeding this into the design of new innovation-focused projects. FAO will develop effective and transformative partnerships for harnessing science and innovation, based on an understanding of the differentiated roles, responsibilities and knowledge of partners. Partnerships with research organizations at national, regional and international levels will be prioritized, including CGIAR, AIRCA, regional research consortia, relevant associations, networks, programs and partnerships, universities, academies of science, national ministries and extension and advisory organizations. Private sector partnerships will be enhanced – with special attention to micro-, small- and medium-sized enterprises (MSMEs) and entrepreneurs, start-ups and incubators (particularly women and youth). Collaboration with UN entities on science and innovation will be enhanced while avoiding duplication of roles.

132. Among the efforts to strengthen partnerships, the PPA on reducing FLW (BN4) will establish and promote partnerships and coalitions with country-led institutions in support of Members’ efforts to reduce FLW. Partnerships will be facilitated between governments, development partners, civil society and the private sector. Partnerships at sub-regional and regional levels, including regional bodies and economic commissions, will also be supported. The PPA will support the “Food is Never Waste” Coalition emerging from the UN Food Systems Summit process.

133. Food safety is everyone’s business, and FAO’s priorities for food safety will be amplified by adopting a One Health approach, whereby multiple sectors work together to tackle health threats, to support food safety developments and to include food safety considerations when making decisions related to food security and sustainability. This will include: providing food safety support at all levels, from global to national and local levels, and advocating for better intersectoral coordination and integrated multi-sectoral approaches to securing food safety; contributing to the establishment of

innovative and broader partnerships between FAO and public and private entities to better leverage and mobilize the available expertise and resources needed to achieve the strategic outcomes; and pursuing new approaches to better assist specific food business operators and stakeholders in LMICs, such as smallholder farmers, family farmers, MSMEs, that lack adequate resources and capacities to meet food safety requirements for public health and market access.

Annex 1: The *four betters* and 20 Programme Priority Areas (PPAs)

PPA	Outcome statements	SDGs Targets
<b>BETTER PRODUCTION</b>	<i>Ensure sustainable consumption and production patterns, through efficient and inclusive food and agriculture supply chains at local, regional and global level, ensuring resilient and sustainable agrifood systems in a changing climate and environment</i>	2.3, 2.4, 6.4, 14.6, 14.7, 14.b, 15.2
<b>BP1: Innovation for sustainable agriculture production</b>	Sustainable crop, livestock and forestry production systems that are productive, resilient, innovative and competitive, and create integrated entrepreneurial and business opportunities, inclusive of small-scale and vulnerable producers, supported through enabling technologies and policies	2.3, 2.4, 6.4, 15.2
<b>BP2: Blue transformation</b>	More efficient, inclusive, resilient and sustainable blue food systems promoted through improved policies and programmes for integrated science-based management, technological innovation and private sector engagement	2.1, 2.2, 14.2, 14.4, 14.6, 14.7, 14.b, 14.c
<b>BP3: One Health</b>	Strengthened and better performing national and international integrated One Health systems for human, animal, plant and environmental health achieved through improved pest and disease prevention, early warning and management of national and global health risks, including AMR	1.5, 3.d, 15.8
<b>BP4: Small-scale producers' equitable access to resources</b>	Enhanced equitable access of small-scale producers and family farmers to economic and natural resources, markets, services, information, education and technologies ensured through improved policies, strategies and programmes	1.4, 2.3, 2.4, 9.3
<b>BP5: Digital agriculture</b>	Accessible digital ICT technologies to enhance market opportunities, productivity and resilience integrated into agrifood systems policies and programmes, with particular focus on ensuring affordable and equitable access of poor and vulnerable rural communities	1.4, 5.b, 9.c, 17.8
<b>BETTER NUTRITION</b>	<i>End hunger, achieve food security and improved nutrition in all its forms, including promoting nutritious food and increasing access to healthy diets</i>	2.1, 2.2, 2.c, 3.1, 3.2, 3.3, 3.4, 12.3
<b>BN1: Healthy diets for all</b>	The right to adequate food established and transition towards healthy diets for national populations prioritized in integrated institutional, policy and legal environments that ensure and incentivize engagement of consumers and the private sector	1.3, 2.1, 2.2, 3.1, 3.2, 3.4, 12.8, 14.b
<b>BN2: Nutrition for the most vulnerable</b>	Identifying and ending food insecurity and malnutrition for the most vulnerable individuals in all contexts made the specific focus of targeted policies, strategies and programmes developed and implemented by countries	1.3, 2.1, 2.2, 3.1, 3.2
<b>BN3: Safe food for everyone</b>	Integrated, multi-sectoral food safety policies and legislation across national agrifood systems adopted and implemented by governments, and capacities and awareness of value chain operators and consumers enhanced	2.1, 2.2, 3.2
<b>BN4: Reducing food loss and waste</b>	Clear, specific and contextualized roadmaps to prompt and enable all actors in the food supply chain, the food environment and at consumer level to reduce food loss and waste put in place and implemented by governments and intergovernmental organizations	2.1, 2.2, 12.3

<b>BN5: Transparent markets and trade</b>	Improved market transparency and equitable participation in markets, global value chains and international trade achieved through policy coordination and human and institutional capacities for evidence based decision-making	2.b, 2.c, 10.a, 17.11
<b>BETTER ENVIRONMENT</b>	<i>Protect, restore and promote sustainable use of terrestrial and marine ecosystems and combat climate change (reduce, reuse, recycle, residual management) through more efficient, inclusive, resilient and sustainable agrifood systems</i>	2.5, 12.2, 12.4, 12.5, 13.2, 14.3, 14.4, 15.1, 15.3, 15.4
<b>BE1: Climate change mitigating and adapted agrifood systems</b>	Transformation and resilience of agrifood systems to achieve sustainability and Paris Agreement goals enabled through the establishment and implementation of climate-smart agricultural practices, policies and programmes	2.4, 13.1, 13.2, 13.b, 14.3
<b>BE2: Bioeconomy for sustainable food and agriculture</b>	A bioeconomy that balances economic value and social welfare with environmental sustainability promoted through formulation and implementation of integrated evidence-based policies and practices in micro and macro environments, using technological, organizational and social innovations	12.2, 12.4, 12.5
<b>BE3: Biodiversity and ecosystem services for food and agriculture</b>	Biodiversity for food and agriculture maintained and sustainable use, conservation and restoration of marine, terrestrial and freshwater ecosystems, and their services promoted through adoption of targeted policies and practices	2.5, 14.4, 15.1, 15.3, 15.4, 15.6
<b>BE4: Achieving sustainable urban food systems</b>	More efficient, inclusive, resilient and sustainable urban and periurban agrifood systems transformation that addresses urban poverty, food insecurity and malnutrition, enables healthy diets and catalyses inclusive and sustainable rural transformation while safeguarding the underlying natural resources base, promoted through the adoption of supportive policies and programmes, and the initiation and scaling-up of actions and investments by national and local stakeholders	1.1, 2.1, 11.a, 12.1
<b>BETTER LIFE</b>	<i>Promote inclusive economic growth by reducing inequalities (urban/rural areas, rich/poor countries, men/women)</i>	2.5, 12.2, 12.4, 12.5, 13.2, 14.3, 14.4, 15.1, 15.3, 15.4
<b>BL1: Gender equality and rural women's empowerment</b>	Women's equal rights, access to, and control over resources, services, technologies, institutions, economic opportunities and decision making ensured, and discriminatory laws and practices eliminated, through gender-responsive policies, strategies, programmes and legal frameworks	2.3, 5.4, 5.a, 5.c
<b>BL2: Inclusive rural transformation</b>	Inclusive rural transformation and revitalization of rural areas ensuring equal participation of, and benefits to poor, vulnerable and marginalized groups accelerated through implementation of targeted policies, strategies and programmes	1.1, 8.3, 8.5, 10.1, 10.2, 10.7, 14.b
<b>BL3: Agriculture and food emergencies</b>	Countries facing, or at risk of acute food insecurity provided with urgent livelihood and nutrition assistance and, adopting a humanitarian-development nexus and its contribution to peace approach,	1.5, 2.1, 2.2, 2.3, 16.1

	their populations equipped with appropriate capacities to better withstand and manage future shocks and risks	
<b>BL4: Resilient agrifood systems</b>	Resilience of agrifood systems and livelihoods to socio-economic and environmental shocks and stresses strengthened through improved multi-risk understanding and effective governance mechanisms for implementation of vulnerability reduction measures	1.3, 1.5, 2.4
<b>BL5: Hand-in-Hand (HIH) Initiative</b>	Agricultural transformation and sustainable rural development accelerated through targeting the poorest and the hungry, differentiating territories and strategies, and bringing together all relevant dimensions of agrifood systems through analysis and partnerships	1.1, 1.2, 2.1 2.2, 2.a, 10.1, 10.2
<b>BL6: Scaling up investment</b>	Transformation towards sustainable agrifood systems with largescale impacts on reducing inequalities and eradicating poverty and hunger accelerated through increased public and private investment, and improved capacities to leverage future investments	1.b, 2.a, 10.1, 10.2, 10.b, 17.5