



COMMITTEE ON AGRICULTURE

Twenty-eighth Session

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One Health and related policy and technical guidance

Executive Summary

This paper outlines the current and emerging challenges of our agrifood systems that necessitate a One Health approach. Further, it describes FAO's current actions to support its Members to implement and enhance the One Health approach for the benefit of the health of people, animals, plants, and the environment. The broadening of FAO's efforts from animal disease, zoonotic disease, food safety and antimicrobial resistance (AMR) to wider One Health activities in agrifood systems, including biodiversity and ecosystem considerations, holds the potential to generate benefits at multiple levels. Key areas of One Health activities of FAO are presented, spanning multiple sectors and disciplines as well as important efforts to mainstream One Health globally, regionally and nationally. Critical areas of ongoing and future actions include: broadening of the One Health approach across agrifood systems; enhancing One Health activities in FAO to generate additional capacities, knowledge, resources, and programming; and international collaboration and coordination to implement the One Health Joint Plan of Action. The paper seeks the guidance of FAO Members on the Organization's recommendations to boost efforts to broaden and mainstream One Health.

Suggested action by the Committee

The Committee is invited to:

- *encourage* FAO to support Members, upon request, in their efforts in mainstreaming One Health across the agrifood systems and integrating the One Health approach in agricultural production, land and water resources and biodiversity management and ecosystem restoration;
- *recommend* FAO to provide regular updates on its work related to One Health across the agriculture and food sectors;
- *note* with appreciation the initiative of developing a One Health Joint Plan of Action (OH JPA) by the Quadripartite (FAO/OIE/WHO/UNEP)¹, and *encourage* FAO and its partners to continue supporting the One Health approach and strategize for a broader One Health sustainable funding and financing; and
- *encourage* Members to promote One Health policies and interventions for the health of people, animals, plants, and the environment towards achieving the Sustainable Development Goals (SDGs).

¹ FAO, the World Organisation for Animal Health, the World Health Organization, and the United Nations Environment Programme.

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I. Introduction

1. Many threats caused by infectious disease agents as well as those stemming from pollution and environmental degradation, are exacerbated by anthropogenic activities and climate change. Moreover, agricultural production expansion, pollution, large scale deforestation, and loss of biodiversity and habitat threaten ecosystem integrity and our natural resources (e.g., water, air, soil, land) with negative effects on the health of people, plants, animals, and the environment.
2. Agrifood systems, including agriculture, have been identified as a contributor to many complex health challenges, and their transformation can be a powerful, positive enabler. To achieve transformation, the complexity and interconnectedness of these health and sustainability challenges in agrifood systems need to be recognized and approached in an integrated way.
3. One Health has recently been defined by the One Health High Level Expert Panel (OHHLEP) as “an integrated, unifying approach that aims to sustainably balance and optimize the health of people, animals and ecosystems. It recognizes the health of humans, domestic and wild animals, plants, and the wider environment (including ecosystems) are closely linked and interdependent. The approach mobilizes multiple sectors, disciplines and communities at varying levels of society to work together to foster well-being and tackle threats to health and ecosystems, while addressing the collective need for clean water, energy and air, safe and nutritious food, taking action on climate change, and contributing to sustainable development.”ⁱ
4. FAO is working already across multiple dimensions in agrifood systems to reduce global health security risks, build resilience, tackle vulnerabilities, and promote transformation. Without losing focus on key health risks stemming from infectious agents and other hazards, broadening of the scope and foundations of One Health can support agrifood system transformation for the *four betters* in the FAO Strategic Framework 2022-31.
5. One Health is fundamentally important to the *four betters*. It necessitates integrated working across sectors and groups in society spanning government, civil society, private sector, Non-Governmental Organizations (NGOs), multilateral organizations and academia.
6. Integrated policymaking, and multisectoral planning and working are hindered by many factors. They often run against established norms, institutional specializations and compartmentalization and encounter segregated political, bureaucratic, and funding domains often with limited cross-sectoral participation. Consequently, wide-reaching operationalization of One Health necessitates further action and support.
7. Unlocking the potential of multisectoral collaboration and integration in agrifood systems is expected to enhance information, knowledge and adaptive capacity and, thereby, increase the responsiveness and resilience of the constituent systems. This can help to make better decisions, promote innovation and mitigate threats. Thus, agrifood systems are an integral part of the One Health vision for a better future.
8. Operationalization efforts to date have often covered formal, institutional collaborations focused on specific health-dominated agendas, e.g., AMR, zoonotic diseases, plant pests and agrochemical risk reduction. One Health collaboration and collaborative capacity that also allow linking in areas such as biodiversity, microbiome, clean water, soils and air, can help with the promotion of efficient, inclusive, resilient and sustainable agrifood systems and healthy ecosystems.
9. One Health raises specific governance and regulatory challenges. From a governance perspective, the implementation of the One Health approach requires coordination mechanisms, backed by appropriate regulatory frameworks that facilitate an integrated approach to cross-cutting issues. From a legal standpoint, every area relevant for One Health should consider its connections and impacts to other areas, breaking the traditional regulatory silos.

II. FAO actions in One Health policy, technical guidance and advocacy

FAO support to Members to promote One Health across the agrifood system

10. FAO has longstanding experience in One Health with its work related to human, animal and plant health, wastewater and agrochemical risk reduction, and AMR conducted in established partnership with the Quadripartite. Recognising the fundamental importance of these collaborative and integrative activities, FAO is now scaling up its efforts, in collaboration with partners, towards the application of One Health along the entire agrifood systems domain, for better production, better nutrition, better environment and a better life contributing thereby also to national health security.

11. Under the FAO Strategic Framework 2022-31, the Organization has a “One Health” Programme Priority Area (PPA) that will apply an integrated and coordinated One Health approach to reduce losses to agrifood systems and adverse ecosystems impacts, caused by the spread of animal, plant and aquatic pests and diseases, including zoonotic and waterborne infections of pandemic potential and AMR. Its main goals are to enhance productivity and reduce risks from biological and chemical threats, applying integrated pest and biosecurity management approaches at national, regional and global levels for more sustainable, resilient and inclusive agrifood systems, in a changing climate and environment.

12. The “One Health” PPA will improve national pest and disease management through integrated early warning systems on animal and plant pests and diseases, the application of collaborative and progressive management of biosecurity and AMR risks in agrifood value chains, reducing agrochemical risks to human health and the environment through their lifecycle and improved multi-hazard food chain crises emergency management. The integrated One Health and biosecurity approach also considers that biodiversity, soil and microbiome health and water safety are fundamental to agrifood system productivity and the relevant FAO actions in these areas are therefore part of the “One Health” PPA.

13. The “One Health” PPA implementation will leverage the long experience of multiple technical divisions of FAO in food chain emergency prevention, water scarcity and crisis management, combined with its operational footprint at country level through its decentralised offices.

14. FAO has successfully worked with Members, international partners and regional commissions, through the Emergency Prevention System for Animal Health (EMPRES-AH) programme, to develop and implement strategies and policies focussing on the pillars of early warning, prevention, and response for the long-term management of high-impact transboundary and emerging pests and diseases, including zoonoses, under the One Health approach.

15. The control of transboundary animal and zoonotic diseases is coordinated through the Global Framework for the Progressive Control of Transboundary Animal Diseases (GF-TADs)², a joint OIE and FAO initiative and the joint FAO-OIE-WHO Global Early Warning System for Health Threats and Emerging Risks at the human-animal-ecosystems interface (GLEWS+).

16. FAO has cooperated with International Atomic Energy Agency (IAEA) through innovative work of the Joint FAO/IAEA Centre³, to tackle transboundary animal and zoonotic diseases, plant pests and diseases, food safety and control to detect food hazards (including antimicrobials), and soil pollution (particularly microplastics and antimicrobials), by using nuclear and related techniques. The work has focused on Research and Development activities through its research laboratories as well as capacity development and technology transfer via its well-established partnership network of national agricultural research institutions at global level, such as the national veterinary laboratory (VETLAB) network.

17. FAO focuses on protecting the world's plant resources from the spread and introduction of pests and promoting safe trade through the International Plant Protection Convention (IPPC).⁴ Threats

² <http://www.gf-tads.org/about/en/>

³ <http://www.fao.org/agriculture/fao-iaea-nuclear-techniques>

⁴ <https://www.ippc.int/en/core-activities/governance/convention-text/>

to plant health – similar to threats to animal health – pose challenges to food security and nutrition, the health of ecosystems, and livelihoods. The IPPC Secretariat implements activities in alignment with the One Health discussions for the IPPC development agenda “Strengthening Pest Outbreak Alert and Response Systems”. FAO operates advanced global monitoring, early warning and forecasting systems of plant transboundary pests, such as locusts and fall armyworm, which enable the preparedness and early response of countries to the threat of these migratory pests.

18. By coordinating multisectoral platforms and regional commissions, FAO supports Member Nations in mitigating the risks of transboundary as well as invasive pests and diseases such as locusts,⁵ fall armyworm,⁶ Red Palm Weevil, wheat rust diseases and Fusarium wilt of banana (TR4). FAO’s digital informatics through the Global Agroecological Zoning (GAEZ) maps and Water Productivity portal (WaPOR) provide near real-time information connecting weather, water, land and pest surveillance in building resilience to climate and health risks.

19. Through capacity-building interventions, FAO supports Members on reducing agrochemical risks to human health and the environment by strengthening the implementation of the International Code of Conduct on Pesticide Management and the Rotterdam Convention, with a focus on addressing highly hazardous pesticides, promoting alternatives as well as mainstreaming biodiversity as an essential property in agroecosystems.

20. The “One Health” PPA has the EMPRES pillars of early warning, prevention and response embedded within, thus building the foundation through which FAO can offer Members integrated and comprehensive One Health pathways for agrifood system transformation. Building on the lessons in the management of transboundary animal and plant pests and diseases (APPDs)⁷ and progressive aquaculture biosecurity programmes, an integrated approach can provide added value and efficiencies from joint programming, multidisciplinary capacity development, common tools, and digital services. In addition, it can offer more efficient coordination of pest and disease management ensuring greater delivery, increased national resilience and progress monitoring at every level.

21. The FAO Action Plan on AMR⁸ is one of the Organization’s One Health flagship programmes to address the growing threat of AMR through a coordinated, multisectoral approach. It provides technical assistance to strengthen national capacities and capabilities to gain a better understanding of antimicrobial use in food and agriculture sectors, including crops, and to manage AMR risks in agrifood systems. FAO works actively with Tripartite and UNEP (now the Quadripartite)⁹ and advances support to Members to implement their National Action Plans and to decrease the threat of AMR. The progress on this subject is presented at the Sub-Committee on Livestock and COAG 28.

22. The FAO Legal Office (LEGN) has solid experience working on regulatory frameworks relevant for One Health and is well placed to support the analysis of One Health-relevant legal sectors and the identification of regulatory solutions to improve One Health governance and legislation at all levels.

23. At the request of the 27th Session of COAG, FAO developed the *FAO Strategic Priorities for Food Safety within the FAO Strategic Framework 2022-31*. These Strategic Priorities seek to promote agrifood system policies and programmes that promote safe food and are linking the PPA on “One Health” (BP3) with other. The current Strategic Priorities reflect the intersectoral nature of food safety.

24. FAO provides an integrated water resources management approach that recognizes the intrinsic role of water in protecting human, animal, and ecosystem health (One Water One Health programme).

⁵ <https://www.fao.org/locusts/en/>

⁶ <https://www.fao.org/fall-armyworm/en/>

⁷ E.g. locust and fall armyworm control, and International Plant Protection Convention (IPPC) standards, Emergency Prevention System for Animal and Plant Pests and Diseases.

⁸ <https://www.fao.org/3/cb5545en/cb5545en.pdf>

⁹ On 17 March 2022, the Directors General of FAO, OIE, and WHO, and the Executive Director of the United Nations Environment Programme (UNEP), signed a Memorandum of Understanding for collaborative One Health work, renaming the group the “Quadripartite,” reflecting equal participation of all four partners. Prior to the establishment of the Quadripartite, Tripartite and UNEP is mentioned in the text.

This programme addresses the prevention and control of agricultural pollution to improve food production, food safety, AMR in the environment, and ecosystems conservation; it uses agri-water-environmental controls to prevent the spread of water-associated, vector-borne diseases and apply innovative techniques such as genomic tracking from source water to food for ensuring health and safety.

Working together to mainstream One Health in FAO programmes and partnerships

25. FAO supports the mainstreaming of One Health globally, regionally, and nationally through multiple initiatives that encourage collaboration, networking, communication and awareness raising. External efforts build on and benefit from collaborations with the Quadripartite partners. Internal efforts promote intra-organization exchange, learning and the consolidation of One Health activities.

26. To support these One Health intersectoral collaborations more widely and through science-based input, in May 2021 the Quadripartite selected 26 experts to form the OHHLEP, which has an advisory role to the four organizations on One Health matters regarding evidence-based scientific and policy advice.

27. With 35 countries working on their United Nations Sustainable Development Cooperation Frameworks (UNSDCF) this year and 40 next year, FAO is leading the development of guidance notes on how to embed One Health in the UNSDCF.

28. The regional Quadripartite partners play a key role in developing regional One Health frameworks. The One Health Coordination Mechanism for the Region for Europe and Central Asia was established in April 2021. The creation of a well-defined institutionalized Regional One Health Platform in coordination with other stakeholders is foreseen in the Near East and North Africa region to improve food security while working on enhanced management of agricultural risk.

29. The Quadripartite, at the request of the G7, is undertaking a One Health Intelligence Scoping Study (OHISS) to map strengths and weaknesses of existing information systems within the Quadripartite, and strengthen national and global early warning through identifying good surveillance practices. It is also proposing an integrated One Health early warning framework, to be implemented through effective sharing of One Health information at national level. The OHISS is receiving guidance from an External Advisory Group and OHHLEP.

30. Due to strong advocacy for One Health, the Italian Presidency of the G20 requested a paper at the time from the Tripartite and UNEP, together with the World Bank, on “Investing in One Health”. Presented in October 2021, the paper underlined the need for One Health financing, with the One Health Joint Plan of Action (OH JPA) cited as an investment framework for action. The paper informed the Joint G20 Finance and Health Ministers Meeting Communiqué,¹⁰ in which One Health was referenced as a key pillar for addressing global health threats and pandemic prevention, preparedness, and response. FAO has launched a One Health Programme Fund, building on and synergising with funding already mobilized through, e.g., the AMR Multi-Partner Trust Fund and EMPRES initiatives. FAO is also actively exploring a joint approach to resource mobilization for the OH JPA with the Quadripartite.

The One Health Joint Plan of Action (OH JPA)

31. The 166th Session of the Council welcomed FAO’s One Health work, including the positive collaboration within the at the time Tripartite and UNEP and their work to develop reporting mechanisms and a joint strategy and work plan on One Health. The call for developing a joint vision was reinforced by the World Health Assembly resolution (WHA74.7)¹¹ in May 2021.

¹⁰ G20-Joint-Finance-and-Health-Ministers-Communique-29-October-2021.

https://www.mef.gov.it/inevidenza/2021/article_00067/G20-Joint-Finance-and-Health-Ministers-Communique-29-October-2021.pdf

¹¹ https://apps.who.int/gb/ebwha/pdf_files/WHA74/A74_R7-en.pdf

32. Under FAO's Tripartite Chair, the Tripartite and UNEP (now Quadripartite), with advice from OHHLEP, jointly elaborated the OH JPA.

33. The OH JPA aims to further strengthen a comprehensive One Health approach and to foster the joint work by the four entities required for successful mainstreaming of One Health at all levels, thereby promoting the health of people, animals, plants and the environment. It contains six action tracks, namely:

- a. enhancing One Health capacities to strengthen health systems;
- b. reducing risks from emerging and re-emerging zoonotic epidemics and pandemics;
- c. controlling and eliminating endemic and neglected zoonotic and vector-borne diseases;
- d. strengthening the assessment, management and communication of food safety risks;
- e. curbing the silent pandemic of AMR; and
- f. integrating the environment into One Health.

III. Next steps: priority actions and plans

34. With its wide-reaching expertise, FAO is in a unique position to support the broadening and mainstreaming of One Health across the agrifood system and the linking of topics such as microbiome, invasive species, ecosystem restoration, biodiversity, water and soil to other One Health topics, including programmes targeting animal and plant pests and diseases.

35. To achieve this, FAO should:

- a. strengthen its One Health learning and dissemination to support national and international One Health capacities and competences based on science- and evidence-led guidance, through participatory and collaborative One Health knowledge and evidence development processes that interface with and support other relevant initiatives;
- b. elaborate mechanisms for joint capacity development to improve One Health systems in countries that are supported by resource mobilisation efforts and joint programming across different FAO divisions and with international partners;
- c. enhance its role in multistakeholder engagement in support of One Health global implementation across sectors and disciplines;
- d. play a stronger role in multisectoral coordination and capacity development contributing to increasing resilience at national and producer level through: i) strengthened and integrated early warning and information systems; ii) strengthened national biosecurity through progressive biosecurity management; iii) strengthened capacities for food-chain crisis management; iv) improved capacities in AMR risk management; v) mainstreaming of sound pest, pesticide and biodiversity management; and vi) enhanced One Health systems, which will include increased capacities in managing water and soil, animal and plant pests and diseases;
- e. enhance the resilience of agrifood systems while considering regional specificities, national contexts and priorities, and progress in the implementation of One Health.

36. Going forward, the scaling up of One Health will be an essential component of the "One Health" PPA of the FAO Medium Term Plan 2022-25 with the associated accountability mechanisms, including theory of change, targets, indicators, and FAO's efforts as part of a wider coalition of partners in support of One Health.

37. As recommended by the First Session of the Sub-Committee on Livestock, FAO will support Members in implementing Progressive Management Pathways for Biosecurity (PMP-B)¹² in different production systems to manage the risks of animal diseases and emerging zoonoses through stakeholder-led, collaborative, stepwise approaches to mainstream One Health and biosecurity for producer resilience and One Health outcomes at country level.

¹²<https://www.fao.org/3/ni007en/ni007en.pdf>

38. FAO will build on existing global, regional and national One Health coordination initiatives aiming at helping countries face complex multidimensional health risks with more resilient health systems.

39. Within the Quadripartite framework, FAO is committed to implementing the OH JPA from 2022 to 2026 and to supporting Members to enhance One Health capacities and scale up One Health to promote the health of humans, animals, plants and the environment. This would help Members in achieving the SDGs.

40. Significant, sustainable and streamlined financing will be necessary to support FAO in providing global goods and technical assistance and to put the OH JPA into action. It will be important to:

- a. strengthen the role of the Quadripartite and other partners, such as the World Bank, to foster greater efficiencies, coalition building, and enable countries to operationalize One Health at scale;
- b. continue the effort on advocacy and mobilization work to launch and promote the OHJPA, calling for financial support for its implementation and for the Quadripartite to supply technical assistance;
- c. work with a wide range of actors committed to see the goals of the OH JPA put into action; and
- d. leverage longer-term and more sustainable financial investments to ensure that One Health outcomes are realized for this and future generations.

ⁱ Joint Tripartite (FAO, OIE, WHO) and UNEP Statement supporting the OHHLEP's definition of "One Health": <https://www.fao.org/3/cb7869en/cb7869en.pdf>