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COMMITTEE ON AGRICULTURE

SUB-COMMITTEE ON LIVESTOCK

Second Session

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Review of progress on mainstreaming One Health and biosecurity

Executive Summary

FAO developed the Progressive Management Pathway for Terrestrial Animal Biosecurity and is currently implementing it in several countries. The Organization provided support to Members for undertaking technical actions to mainstream One Health and biosecurity in priority animal value chains. Stakeholders were convened by FAO to establish communities of practice to share knowledge and lessons. Global and national early warning systems have been enhanced to integrate intelligence across sectors, and improved tools for monitoring and forecasting biosecurity risks have been provided to Members. FAO coordinated actions with partners for the prevention and control of high impact animal diseases to reduce risks to food and health security. FAO has mainstreamed One Health by integrating animal health into assessments of national health systems and has supported Members to access investments for strengthening capacities of the animal health sector.

Embedding One Health approaches and biosecurity protocols to make livestock systems safe and resilient to shocks will require efficient national early warning frameworks, and equitable access to knowledge and primary services. This is particularly important for small-scale livestock producers. This document reports on significant progress achieved by FAO in advancing One Health and biosecurity, and advocates for good biosecurity practices from backyard production to international borders. It calls for further resources to be leveraged to strengthen the capacities of national animal health systems, thereby ensuring resilient livestock systems.

Suggested action by the Sub-Committee

The Sub-Committee is invited to recommend COAG to:

- recommend FAO to continue to support Members to accelerate the implementation of the Progressive Management Pathway for Terrestrial Animal Biosecurity (PMP-TAB), to reduce animal and zoonotic diseases and antimicrobial use, and gather and share knowledge and evidence on the benefits of implementing the One Health approach and biosecurity protocols;
- call on Members to develop national early warning frameworks for animal health threats, applying a multihazard approach, integrating information on risks from different sectors and request FAO, as appropriate, to provide training and decision support tools to manage ongoing and emerging risks; and
- recommend FAO to continue its support to Members for the upskilling of primary animal health service providers to ensure equitable access to primary services for all livestock keepers and encourage Members to leverage investments from domestic and international financial mechanisms, including from the private sector, to strengthen animal health systems.

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

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I. Introduction

1. Growing demand for terrestrial animal source foods, combined with the necessity for sustainable transformation of livestock systems will require, *inter alia*, actions that limit environmental impacts, reduce disease burdens and lower antimicrobial use.

2. Disaster events cause estimated losses of USD 123 billion per year in crop and livestock production. About 6 percent of agricultural losses from disasters are caused by animal diseases,¹ which highlights the crucial role of biosecurity in safeguarding value chain productivity and ensuring resilience of livestock production systems.

3. One Health is an integrated, unifying approach that aims to sustainably balance and optimize the health of people, animals and ecosystems. The Committee on Agriculture (COAG) at its 28th Session in July 2022 highlighted the role of One Health in achieving the 2030 Agenda for Sustainable Development and implementing the FAO Strategic Framework 2022-31.²

¹ FAO. 2023. *The impact of disasters on agriculture and food security 2023 – Avoiding and reducing losses through investment in resilience*. Rome. <https://openknowledge.fao.org/handle/20.500.14283/cc7900en>

² C 2023/22, para 13 <https://openknowledge.fao.org/handle/20.500.14283/nj925en>

4. Recognizing the holistic nature of One Health and biosecurity in addressing complex livestock health issues, the COAG Sub-Committee on Livestock at its First Session in March 2022 recommended COAG to request FAO to support its Members “to enhance biosecurity along livestock value chains by developing a Progressive Management Pathway for Biosecurity (PMP-B)”³ and “in building and developing capacities to implement the PMP-B in a variety of production systems and sectors and regularly report on progress made.”⁴

5. At its First Session, the COAG Sub-Committee on Livestock also recommended COAG to request FAO to support Members “to review and strengthen national multisectoral legal frameworks relevant to their sustainable wildlife management programmes”⁵ and “in enhancing national One Health early warning frameworks”.⁶ It also recommended COAG to encourage FAO to “strengthen collaboration within the Tripartite and the United Nations Environment Programme (UNEP) in the establishment of the PMP-B, taking opportunity of the development by these parties of the One Health Joint Plan of Action (OH-JPA), and to consider the pathway for biosecurity as a component in the work plan of this Action”.⁷ The COAG at its 28th Session in July 2022 subsequently endorsed the report of the First Session of the COAG Sub-Committee on Livestock and the recommendations therein.⁸

6. This document gives an overview of FAO efforts to address these technical challenges in collaboration with Members and partners.

II. Development of the Progressive Management Pathway for Terrestrial Animal Biosecurity and improving capacities for risk management

7. A scoping review of global biosecurity initiatives⁹ was undertaken to inform the development of the Progressive Management Pathway for Terrestrial Animal Biosecurity (PMP-TAB),¹⁰ aligned with FAO's definition of biosecurity.¹¹ The review highlighted that 71 percent of the identified biosecurity initiatives were in high-income countries. Critical elements were the enabling policy environment, initiatives tailored to the local context, the adoption of an “all hazards” approach, multidisciplinary engagement and access to primary livestock health services.

8. The PMP-TAB¹² is a stepwise framework for strengthening biosecurity that can be adapted to different sectors and different country priorities. A PMP-TAB taskforce, consisting of FAO technical units and offices, was established to share experiences from different countries on context-specific biosecurity initiatives, which informed the development of the PMP-TAB. Based on lessons learned, the PMP-TAB was designed as a “bottom-up” approach. Key components include progressively assessing and improving biosecurity practices, incentivizing stakeholders, creating an enabling environment

³ COAG/2022/5 para 28, <https://openknowledge.fao.org/handle/20.500.14283/ni966en>

⁴ COAG/2022/5 para 31, <https://openknowledge.fao.org/handle/20.500.14283/ni966en>

⁵ COAG/2022/5 para 32, <https://openknowledge.fao.org/handle/20.500.14283/ni966en>

⁶ COAG/2022/5 para 33, <https://openknowledge.fao.org/handle/20.500.14283/ni966en>

⁷ COAG/2022/5 para 34, <https://openknowledge.fao.org/handle/20.500.14283/ni966en>

⁸ C 2023/22, para 10 <https://openknowledge.fao.org/handle/20.500.14283/nj925en>

⁹ Militzer, N., McLaws, M., Rozstalnyy, A., Li, Y., Dhingra, M., Auplish, A., Mintiens, K., Sabirovic, M., von Dobschuetz, S. & Heilmann, M. 2023. Characterising biosecurity initiatives globally to support the development of a Progressive Management Pathway for Terrestrial Animals: A scoping review. *Animals*, 13(16):2672. <https://doi.org/10.3390/ani13162672>

¹⁰ FAO. 2022. *Progressive Management Pathway for Terrestrial Animal Biosecurity (FAO-PMP-TAB)*. Rome. <https://openknowledge.fao.org/handle/20.500.14283/cc5771en>

¹¹ COAG/2003/9, <https://www.fao.org/3/Y8453e/Y8453e.htm>

¹² FAO. 2022. *Progressive Management Pathway for Terrestrial Animal Biosecurity (FAO-PMP-TAB)*. Rome. <https://openknowledge.fao.org/handle/20.500.14283/cc5771en>

through policy and legislative changes and developing institutional and workforce capacities to manage risks.

9. The Emergency Prevention System (EMPRES) for Animal Health Strategic Plan for 2023-2026¹³ has the objectives of enhancing national biosecurity systems and One Health intelligence for improved early warning and risk management of emerging threats to food and health security. Extrabudgetary resources, totalling USD 20.8 million, have been mobilized from various partners¹⁴ to enhance country capacities.

10. The Emergency Centre for Transboundary Animal Diseases (ECTAD),¹⁵ FAO's operational platform to strengthen countries' capacities in animal health/One Health, has been expanded from 30 to 49 countries in 2023 through extrabudgetary support from the Global Health Security Program of the United States Agency for International Development (USAID) and other resource partners.

11. Capacities to support biosecurity management has improved through the assessment of animal disease surveillance systems^{16,17,18} of seven countries¹⁹ biosafety and quality assurance standards in more than 100 laboratories and emergency preparedness of 20 countries.²⁰

12. FAO has supported the mainstreaming of One Health and strengthening of animal health systems by supporting the Joint External Evaluations²¹ for public health of 16 countries²² in Africa to ensure that the results lead to equitable resourcing and capacity development of the animal health system for national health security.

III. Actions to scale up the uptake and implementation of the PMP-TAB

13. An open-access biosecurity toolkit has been developed for supporting implementation of the PMP-TAB. A PMP-TAB community of practice (CoP)²³ has been established that currently has 429 members from 73 different countries. The CoP is hosted on the FAO Virtual Learning Centers (VLC)

¹³ FAO. 2023. *The Emergency Prevention System for Animal Health. Enhancing the prevention and control of high-impact animal and zoonotic diseases through biosecurity and One Health. Strategic Plan (2023–2026)*. Rome.

<https://openknowledge.fao.org/handle/20.500.14283/cc4293en>

¹⁴ US State Department American Rescue Plan Act (USD 10 million), United States Department of Agriculture (USDA) Animal and Plant Health Inspection Service (APHIS) (USD 5 million), Defense Threat Reduction Agency (USD 5.8 million)

¹⁵ FAO. 2023. *Emergency Centre for Transboundary Animal Diseases (ECTAD): Briefing note – October 2023*. Rome.

<https://openknowledge.fao.org/handle/20.500.14283/cc8135en>

¹⁶ The assessments were performed by the FAO Surveillance Evaluation Tool (SET).

¹⁷ Lamielle, G., ElMasry, I., Gioia, G. & VonDobschuetz, S. 2022. How the FAO Surveillance Evaluation Tool and its Biothreat Detection Module accelerate countries' capacities. *EMPRES-Animal health* 360, 48:24-26. Rome, FAO.

<https://openknowledge.fao.org/handle/20.500.14283/cc2775en>

¹⁸ Vasconcelos Gioia, G., Lamielle, G., Aguanno, R., ElMasry, I., Mouillé, B., De Battisti, C., Angot, A., *et al.* 2021. Informing resilience building: FAO's Surveillance Evaluation Tool (SET) Biothreat Detection Module will help assess national capacities to detect agro-terrorism and agro-crime. *One Health Outlook*. 3(1):14. <https://doi.org/10.1186/s42522-021-00045-8>

¹⁹ Cambodia, Guatemala, Jordan, Niger, Pakistan, Viet Nam and Zambia

²⁰ FAO. 2024. *Emergency Management Centre. Achievements overview, November 2022–October 2023*. Rome.

<https://openknowledge.fao.org/handle/20.500.14283/cc9683en>

²¹ WHO (World Health Organization). 2022. *Joint external evaluation tool: International Health Regulations (2005), third edition*. Geneva. <https://www.who.int/emergencies/operations/international-health-regulations-monitoring-evaluation-framework/joint-external-evaluations>

²² Angola, Benin, Burundi, Central African Republic, Chad, Côte d'Ivoire, Democratic Republic of the Congo, Ethiopia, Guinea, Liberia, Mali, Senegal, Sierra Leone, Uganda, United Republic of Tanzania and Zambia.

²³ Community of Practice for the Progressive Management Pathway for Terrestrial Animal Biosecurity. <https://virtual-learning-center.fao.org/mod/page/view.php?id=8724>

platform.²⁴ Features include a news and discussion forum, case study database, knowledge hub and webinar recordings. Ten webinars²⁵ and two dialogue sessions have been held to showcase case studies.

14. PMP-TAB piloting has been initiated in the pig sector in the Dominican Republic and the United Republic of Tanzania, in the poultry sector for Ghana and Guinea and will soon commence in several other countries. Community-level biosecurity initiatives for the pig sector are being piloted in the Philippines and will soon be expanded to other countries. In Viet Nam, biosecurity model pig farms have been selected and training initiated in two provinces. Thereafter, model farms will be scaled up by the agricultural extension system.

15. A key component of biosecurity piloting is the engagement of local public and private stakeholders in a “co-creation” process to design and implement scalable pilot initiatives. A review of policies and legislation and their suitability at local level is part of piloting, as often national-level policies may not be fit for purpose.

16. Support for risk management of priority transboundary animal diseases has been provided in collaboration with the World Organisation for Animal Health (WOAH) under the Global Framework for the Progressive Control of Transboundary Animal Diseases (GF-TADs). Of note were the organization of the global consultation on highly pathogenic avian influenza (HPAI)²⁶ in May 2023 and the expert consultation on African swine fever (ASF)²⁷ in December 2023 to bring the latest science to inform policy development. Improving biosecurity in value chains through the PMP-TAB emerged as the main recommendation within these consultations.

17. The Economic Community of West African States (ECOWAS), with the support of FAO, developed the regional HPAI control strategy in May 2023. The strategy recommends the ECOWAS member states to “develop national biosecurity action plans to improve risk management along the poultry value chain, using the PMP-TAB framework”.²⁸

18. Following the introduction of HPAI in Latin America, using emergency funding, FAO supported 11 countries²⁹ to plan biosecurity management and share knowledge on mitigating risks in poultry value chains and poultry-wildlife interfaces.

19. Notably, One Health and biosecurity management in poultry value chains are a key component of the revised FAO-WOAH Global Control Strategy for HPAI (soon to be launched) to protect poultry systems, biodiversity and public health, and to progress towards sustainable transformation of poultry systems.

20. Due to the unprecedented impacts of HPAI on wildlife, the Convention on the Conservation of Migratory Species of Wild Animals (CMS) and FAO Co-Convened Scientific Task Force on Avian

²⁴ <https://virtual-learning-center.fao.org/>

²⁵ <https://virtual-learning-center.fao.org/mod/page/view.php?id=16327&forceview=1>

²⁶ FAO. 2023. Global consultation on highly pathogenic avian influenza (HPAI) – Rome, Italy, 2–4 May 2023. In: *FAO Animal Production and Health Reports*, No. 20. Rome, FAO. <https://openknowledge.fao.org/handle/20.500.14283/cc7302en>

²⁷ <https://www.fao.org/animal-health/news-events/events/detail/global-consultation-on-african-swine-fever-control/en>

²⁸ FAO, ECOWAS & USAID. 2023. *Report on the regional consultative meeting on the prevention and control of highly pathogenic avian influenza in West Africa – Accra, Ghana, 30 May–2 June 2023*.

<https://openknowledge.fao.org/handle/20.500.14283/cc7212en>

²⁹ Argentina, Bolivia (Plurinational State of), Chile, Colombia, Costa Rica, Cuba, Ecuador, Honduras, Panama, Peru and Venezuela (Bolivarian Republic of).

Influenza and Wild Birds released biosecurity and One Health guidance³⁰ to respond to the threat of HPAI in wild birds.

21. FAO supported several low- and middle-income countries in attracting Pandemic Fund³¹ investments for the livestock sector and will co-lead and oversee the implementation of 12 projects aimed at enhancing collaborative surveillance, laboratory capacity and workforce development for health security. Increased funding for animal health for pandemic prevention will directly benefit farmers' livelihoods and sustainable livestock transformation and, at the same time, has the potential to attract co-investment and co-financing, both domestically and internationally.

IV. Scaling knowledge sharing, learning and information exchange for biosecurity management

22. Knowledge on One Health and biosecurity, transboundary diseases and antimicrobial resistance has been delivered through the seven regional VLC hubs.^{32,33} Since March 2022, 75 courses have been delivered across multiple regions in different languages. Approximately 19 000 people participated in these courses with more than 9 900 fully completing them (49 percent of whom were women).

23. The VLCs proved to be an effective platform for training and knowledge transfer in disease emergency situations. Recent examples include: a foot-and-mouth disease (FMD) course in a local language to support control efforts in Indonesia; an avian influenza preparedness course for Latin America in both Spanish and English; an FMD emergency preparedness webinar for the Middle East; and ASF courses provided in multiple languages for different regions.

24. The VLCs also host the One Health Knowledge Nexus³⁴ that provides a space for knowledge generation, exchange and learning in diverse CoPs, including one on the Return on Investment of One Health, which will support the quantification of biosecurity benefits, such as preventing economic losses, preserving ecosystems, reducing risks and enhancing resilience.

25. A large proportion of primary animal health services required for implementing biosecurity are provided by veterinary paraprofessionals (VPPs). FAO improved VPPs' technical skills and knowledge on One Health and biosecurity through three online courses provided by regional VLCs in West Africa, East Africa and the Pacific.³⁵ The online training courses attracted over 700 VPPs from West Africa, 600 from Eastern Africa and more than 250 from the Pacific region. Training on "growing your business through preventive animal healthcare services" was piloted with VPPs in Nigeria, South Africa and Uganda on improved biosecurity and preventive healthcare practices in service packages of private sector VPPs. A VPP Competency Framework Toolkit³⁶ was developed to support PMP-TAB implementation.

³⁰ CMS FAO Co-convened Scientific Task Force on Avian Influenza and Wild Birds (2023). Scientific Task Force on Avian Influenza and Wild Birds statement on H5N1 high pathogenicity avian influenza in wild birds - Unprecedented conservation impacts and urgent needs. Bonn, CMS Secretariat. <https://openknowledge.fao.org/handle/20.500.14283/cc6936en>

³¹ <https://www.fao.org/newsroom/detail/fao-champions-implementation-of-12-projects-as-pandemic-fund-rolls-out-first-round-of-financing/en>

³² VLC Asia and the Pacific, VLC Eastern Africa, VLC Europe and Central Asia, VLC Latin America and the Caribbean, VLC Near East and North Africa, VLC Southern Africa, VLC West Africa

³³ <https://virtual-learning-center.fao.org/course/index.php?categoryid=2>

³⁴ <https://virtual-learning-center.fao.org/local/vlcs/view.php?id=12>

³⁵ <https://www.fao.org/animal-health/news-events/news/detail/collaborative-workshops-pave-the-way-for-enhanced-biosecurity-and-one-health-in-africa-and-the-pacific/en>

³⁶ FAO. 2024. *Veterinary Paraprofessional Competency Framework Toolkit*. Rome. <https://openknowledge.fao.org/handle/20.500.14283/cc6980en>

26. Recognizing the key role played by women in livestock production, a course on “Female leadership in One Health”³⁷ has been delivered through the West Africa VLC with more than 500 participants from the human and animal health sectors. In Nigeria, it has been delivered with a complementary workshop for female VPPs and community health workers. The course also included a specific module on overcoming gender bias and gender-based violence.³⁸ These courses are accredited as continuous professional development by the relevant statutory bodies to further incentivize up-skilling for VPPs.

V. Strengthening legal frameworks for sustainable wildlife management

27. The FAO Development Law Service is providing support to Members to strengthen national and regional legislation in support of their biosecurity systems. This includes the legal component of the PMP-TAB and the Sustainable Wildlife Management (SWM) Programme.³⁹ The latter has created five legal diagnostic tools covering various areas, such as animal production, animal health and wildlife hunting and trade, used to assess the legal frameworks in 13 target countries,⁴⁰ identifying areas for improvement. These analyses are accessible online at the SWM Legal Hub.⁴¹

28. The SWM programme promotes a One Health approach to biosecurity to prevent the spillover of zoonotic infections at human-animal-ecosystem interfaces. It enhances knowledge, capacities and coordination with the wildlife sector in risk assessment, participatory surveillance and early warning systems at national (Congo, Gabon, Guyana) or subregional levels (Central Africa, West Africa).

29. To promote One Health, the PMP-TAB will soon be implemented in Gabon in wild meat value chains to ensure sustainable and safe wild meat value chains that support food security and natural resource management.

VI. Enhancing national One Health early warning frameworks

30. FAO supported progress towards effective national and global early warning systems. A regional meeting in Mombasa, Kenya, in September 2023 brought together nine countries and global and regional partners⁴² to explore mechanisms for strengthening animal health information systems in Eastern and Southern Africa.

31. The Event Mobile Application (EMA-i+) developed by FAO was enhanced to assist frontline animal health workers in timely reporting of disease events by smartphone. This is supported by improvements in data management and analysis through the EMPRES-i+ platform. EMA-i+ is available in Arabic, English, French, Portuguese and Spanish and has been rolled out in six countries.⁴³

32. EMA-i+ integration with other event-based monitoring systems has been initiated to expedite integrated information flow from field workers and facilitate cross-sectoral information sharing. Other

³⁷ <https://www.fao.org/one-health/highlights/highlights-detail/female-leadership-course/en>

³⁸ <https://www.fao.org/one-health/highlights/gender-based-violence/en>

³⁹ <https://www.swm-programme.info/homepage>

⁴⁰ Chad, Congo, Democratic Republic of the Congo, Egypt, Gabon, Guyana, Madagascar, Mali, Senegal, Sudan, Suriname, Zambia and Zimbabwe

⁴¹ <https://www.swm-programme.info/legal-hub>

⁴² African Union Interafrican Bureau for Animal Resources (AU-IBAR), FAO, Intergovernmental Authority on Development (IGAD), WHO and WOAH.

⁴³ Gambia, Ghana, Guinea, Iraq, Mozambique and Togo.

systems include the District Health Information System used by public health service providers in 80 countries, and syndromic surveillance⁴⁴ systems like Afyadata.⁴⁵

33. Gaps in legal, institutional and coordination frameworks hinder the operationalization of early warning systems, prompting FAO to convene experts to a global technical meeting in November 2023 to develop a strategic framework for early warning of animal health threats.⁴⁶ The framework will enable countries to identify objectives of early warning, outline the elements for an enabling environment and provide indicators to benchmark progress for progressive strengthening of early warning systems. An expert review of the draft framework is ongoing, and once finalized, regional trainings in Africa and Southeast Asia and national piloting will follow in Mozambique, Senegal and Viet Nam.

VII. Collaboration with the Quadripartite on the One Health Joint Plan of Action

34. The pathway for biosecurity in animal value chains is a key component of action track 1 of the Quadripartite One Health Joint Plan of Action (OH JPA), which seeks to “Provide adequate guidance and tools for the effective implementation of multisectoral approaches to promote the health of humans, animals, plants and ecosystems and to prevent and manage risks at the human–animal–plant–environment interface”.⁴⁷ This action track is cross-cutting and contributes to all other action tracks, where the PMP-TAB implementation in livestock value chains reduces the risks of emerging epidemics and pandemics, the burden of endemic diseases and antimicrobial use and promotes food safety and ecosystem health.

35. A repository of One Health tools has been developed by the One Health High-Level Expert Panel (OHHLEP) to support the implementation of the OH JPA, to be published soon. Several FAO tools that support assessment of health system capacities for biosecurity management, such as the FAO Surveillance Evaluation Tool and the Laboratory Mapping Tool, are included. Discussions on including the PMP-TAB are ongoing.

36. FAO led the Quadripartite One Health Intelligence Scoping Study⁴⁸ to enhance early warning of emerging health threats and proposed an operational framework for a Quadripartite One Health Intelligence System (OHIS) to gather multisectoral data for epidemic intelligence, as often the drivers of risks are interconnected and multifactorial. As per the recommendations, the first use case of enhancing the Joint FAO-WOAH-WHO Global Early Warning System (GLEWS+)⁴⁹ has commenced to support Pathway 3 on data, evidence and knowledge of the OH JPA. The OHHLEP provided guidance on both the development of the OHIS and the strategic framework for early warning of animal health threats.

VIII. Achieving universal animal health coverage and scaling biosecurity and One Health – the way ahead

37. Following the COVID-19 pandemic, there are increasing calls for promoting holistic biosecurity management in animal value chains supported by One Health early warning systems. Strengthening

⁴⁴ Traditionally, surveillance was based on a definitive diagnosis of a disease as the indicator that a disease is present, whereas syndromic surveillance uses signs and symptoms of diseases (clinical data) or presumed signs and symptoms (non-clinical data).

⁴⁵ <https://sacids.org/news/news-advisory-launch-afyadata-app/>

⁴⁶ <https://www.fao.org/animal-health/news-events/news/detail/mapping-the-path-to-strengthen-animal-health-early-warning-systems/en>

⁴⁷ FAO, UNEP, WHO & WOAH. 2022. *One Health Joint Plan of Action (2022–2026). Working together for the health of humans, animals, plants and the environment*. Rome. <https://openknowledge.fao.org/handle/20.500.14283/cc2289en>

⁴⁸ FAO, UNEP, WHO & WOAH. 2023. *Quadripartite One Health Intelligence Scoping Study - Final report*. Rome. <https://openknowledge.fao.org/handle/20.500.14283/cc4480en>

⁴⁹ <http://www.glews.net/>

biosecurity for producer resilience needs to be firmly embedded into national plans and budgets linked to livestock development, and should be key components of national health security and pandemic prevention, preparedness and response. Good biosecurity will also contribute to the Reduce the need for antimicrobial use in farms for sustainable agrifood system transformation (RENOFARM) initiative, a ten-year global initiative that supports countries to reduce the need for antimicrobials in their agrifood systems.⁵⁰

38. To account for the interconnected nature of risks, FAO will focus on supporting Members in effective multihazard early warning systems, integrating information from multiple sectors and scaling up necessary capacities to prepare for, prevent and mitigate emerging threats. Wider capacity building and knowledge generation and transfer to address evidence gaps will be supported by the One Health Knowledge Nexus.

39. Increasing the access of livestock keepers to quality primary services and affordable and good quality vaccines in low- and middle-income countries to reduce disease burdens, improve productivity and tackle antimicrobial resistance is a priority. These “last-mile” service providers and the communities they serve are also critical for early detection of emerging threats. FAO will encourage and support countries to improve information exchange on risks from these key players and provide necessary knowledge support to ensure preparedness and reduce losses.

40. Advocacy and leverage for the goal of universal equitable animal health will be pursued to enhance the world’s livestock producers’ access to quality services, which include advocacy at the G7, G20 and G77, close engagements with multilateral development banks in advising on national investment planning with governments and leveraging ongoing and forthcoming projects such as the Pandemic Fund.

⁵⁰ <https://www.fao.org/antimicrobial-resistance/background/fao-role/renofarm/en>