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FAO REGIONAL CONFERENCE FOR ASIA AND THE PACIFIC

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Biodiversity mainstreaming across agricultural sectors in Asia and the Pacific region

Executive Summary

The FAO Council, at its 163rd Session in 2019, adopted the FAO Strategy on Mainstreaming Biodiversity across Agricultural Sectors (Strategy). At its 166th Session in 2021, the Council further adopted the Action Plan (2021–2023) for the Implementation of the Strategy (Action Plan), including a timetable, to operationalize the Strategy. In Asia and the Pacific, a Regional Consultative Meeting on Mainstreaming Biodiversity across Agricultural Sectors took place in July 2019, organized by FAO and the Convention on Biological Diversity Secretariat, and co-hosted by the Kingdom of Thailand. This document recalls the role of biodiversity mainstreaming across agricultural sectors for sustainable agrifood system transformation, summarizes the status of biodiversity mainstreaming in the region, and reports on progress to date, including emerging future priorities.

Suggested action by the Regional Conference

The Regional Conference is invited to:

- a. recognize that mainstreaming biodiversity across agricultural sectors is part of the solution towards more productive, efficient, nutritious, sustainable and resilient agrifood systems;
- b. welcome FAO's efforts to support countries in mainstreaming biodiversity across agricultural sectors, including through its support to the Post-2020 Global Biodiversity Framework; and
- c. advise FAO on priority actions for the Biodiversity Mainstreaming Programme, including actions to be taken by FAO towards enabling regional (or subregional) policy dialogues and facilitating cross-sectoral mechanisms to increase coordination among national efforts to address biodiversity mainstreaming.

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Introduction

1. In recent years, the role of biodiversity and the need to embed biodiversity considerations into policies, strategies and practices of key public and private actors (thus, to “mainstream biodiversity”) across all economic sectors have been gaining growing global attention. The 2030 Agenda for Sustainable Development puts biodiversity as one of the key elements for many economic activities, particularly those related to sustainable agricultural sectors. In 2016, the UN Biodiversity Conference called for the mainstreaming of biodiversity across all agricultural sectors.
2. In 2017, the 40th Session of the FAO Conference endorsed the call for FAO and countries to mainstream biodiversity in agriculture, including livestock, to promote their contribution to ecosystem services and to climate change adaptation and mitigation.
3. The Council, at its 160th Session, endorsed the “development by FAO of a strategy on biodiversity mainstreaming across agricultural sectors, for consideration by the Programme Committee and Council, to be presented at the FAO Conference in 2019, in view of the preparation of the post-2020 Global Biodiversity Framework of the Convention on Biological Diversity (CBD)”.
4. In 2019, the FAO Council, at its 163rd Session, adopted the FAO Strategy on Mainstreaming Biodiversity across Agricultural Sectors (Strategy).¹ At its 166th Session in 2021, the Council further adopted the Action Plan (2021–2023) for the Implementation of the Strategy (Action Plan),² including a timetable, to operationalize the Strategy.
5. In Asia and the Pacific, a Regional Consultative Meeting on Mainstreaming Biodiversity across Agricultural Sectors took place in July 2019, organized by FAO and the CBD Secretariat, and co-hosted by the Kingdom of Thailand. The recommendations from the regional consultation, also presented to the 35th Session of the Regional Conference for Asia and the Pacific in 2020,³ included the need for joint actions across agricultural and environment sectors at different levels (including regional, national and local communities) promoted through awareness-raising, facilitation of cross-sectoral dialogue and a regional technical network on biodiversity.
6. This document recalls the role of biodiversity mainstreaming across agricultural sectors for sustainable agrifood system transformation, summarizes the status of biodiversity mainstreaming in the region, and reports on progress to date as regards relevant FAO actions in the region.

Background

7. Biodiversity and ecosystem services are key ingredients for productive, sustainable and resilient agrifood systems. Defined as the variety of life at genetic, species and ecosystem levels, biodiversity is indispensable to food security, sustainable development and the supply of many vital ecosystem services.
8. Achieving food security and nutrition for all depends on biodiversity, which generates multiple livelihood benefits. As highlighted by two recent landmark global assessments,⁴ biodiversity and ecosystem services are essential for sustainable agriculture, forestry, aquaculture and fisheries. They enable sustainable production in the agricultural sectors. Biodiversity provides regulating and supporting ecosystem services, including nutrient cycling, soil formation and rehabilitation, carbon sequestration, water storage and filtration, habitat provision for wild species, biological pest control, and pollination. Biodiversity makes production systems and livelihoods more resilient to economic, social and environmental shocks and stresses, including the effects of climate change. The impacts of climate change to biodiversity are a concern with respect to food security and nutrition.

¹ CL 163/11 Rev.1.

² CL 166/9 Add. 1.

³ APRC/20/INF/18.

⁴ FAO. 2019. The State of the World’s Biodiversity for Food and Agriculture, J. Bélanger & D. Pilling (eds.). FAO Commission on Genetic Resources for Food and Agriculture Assessments. Rome. 572 pp. and IPBES. 2019. Global Assessment Report on Biodiversity and Ecosystem Services.

9. Despite global efforts spanning several decades, however, biodiversity generally continues to be eroding, leading to the call for biodiversity mainstreaming across all sectors. The two assessment reports also provide evidence that many of the drivers that have negative impacts on biodiversity, which include climate change, are at least partly caused by inappropriate agricultural practices. As the demand for agricultural products grows, the role of the agricultural sectors in the sustainable use and conservation of biodiversity will become even more significant.

Biodiversity mainstreaming in Asia and the Pacific

10. Asia and the Pacific region is still regarded as biodiversity-rich. It counts numerous endemic species and holds more biodiversity hotspots than any other region of the world. Of the 17 countries identified as the most biodiversity-rich in the world, seven are located in the region (Australia, China, India, Indonesia, Malaysia, Papua New Guinea, and the Philippines).⁵

11. Nevertheless, the Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services (IPBES) points to alarming messages about Asia and the Pacific region, including the following:⁶

- a. Asia and the Pacific region has enjoyed great economic growth, rapid urbanization and one of the world's highest agricultural expansions, which has also resulted in biodiversity loss;
- b. among different ecosystem types, the most threatened are forests, alpine ecosystems, inland freshwater and wetlands, and coastal systems. South-East Asia has shown a 12.9 percent reduction in forest cover due to an increase in timber extraction, large-scale biofuel plantations, and the expansion of intensive agriculture and shrimp farming;
- c. invasive alien species have increased in both number and abundance, negatively affecting islands and coastlines as well as agricultural heartlands and large affluent cities;
- d. the decline of traditional agrobiodiversity and corresponding loss of indigenous and local knowledge – caused by a shift towards the intensification of agriculture with a small number of improved crop species and varieties – has unfortunately resulted in a considerable reduction in the cultivation of native varieties of plants and a reduction in genetic resources;
- e. coral reefs and capture fisheries have great environmental, economic and cultural importance, but are now undergoing serious threats;
- f. the freshwater ecosystems in the region support more than 28 percent of aquatic and semi-aquatic species, but nearly 37 percent of these are now being threatened by overfishing, pollution, infrastructure development and invasive alien species;
- g. climate change, coupled with an increase in agricultural production, is negatively affecting species and ecosystems, and these impacts can negatively affect human well-being;
- h. food waste and plastic waste are rising proportionally to urban growth in the region, leading to the pollution of rivers and seas water bodies. Plastic waste is of concern: 8 of the 10 rivers around the globe carrying the highest amounts of plastic waste are in Asia, which accounts for up to 95 percent of the global load of plastics in the oceans.

12. At the same time, Asia and the Pacific region has a wide range of strategic partnerships and alliances – regional and subregional intergovernmental mechanisms, platforms and networks –, which offer opportunities to further strengthen efforts to mainstreaming biodiversity across agricultural sectors. For example:

⁵ IPBES. 2018. *Summary for policymakers of the IPBES regional assessment report on biodiversity and ecosystem services for Asia and the Pacific*.

⁶ IPBES. 2018. *Chapters of the regional assessment report on biodiversity and ecosystem services for Asia and the Pacific of the Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services*.

- a. The Association of Southeast Asian Nations (ASEAN) countries (Brunei, Cambodia, Indonesia, Lao PDR, Malaysia, Myanmar, the Philippines, Singapore, Thailand and Viet Nam) adopted, during the 37th ASEAN Summit in November 2020, the ASEAN Comprehensive Recovery Framework. The framework provides a blueprint to guide collaborative action among partners, including on nature-based solutions to increase resilience towards future pandemics, and continuous promotion to mainstream biodiversity across relevant sectors.
- b. The Greater Mekong Subregion (GMS) has worked towards enhancing physical connectivity in the GMS economic corridors and the realization of the target of a single market and production base, equitable growth, and sustainable resource management. In fact, the GMS has a long history of several subregional cooperation initiatives, which offers opportunities for biodiversity mainstreaming efforts, including the Belt and Road Initiative, Lancang-Mekong Cooperation, Ayeyawady-Chao Phraya-Mekong Economic Cooperation Strategy, the Strategy for Promoting Safe and Environment-Friendly Agro-Based Value Chains in the Greater Mekong Subregion and Siem Reap Action Plan 2018–2022, Mekong River Commission, among others.
- c. Other strategic partnerships in the Pacific include:⁷ the European Union-funded FAO FIRST Programme implemented in Fiji and the Solomon Islands, with lessons learned as regards strengthening local and indigenous foods in biodiverse food and agriculture systems; the FAO-European Union partnership programme ACPMEAs3, one of whose objectives is to strengthen national and regional capacity to mainstream biodiversity across agricultural sectors; and the Pacific Soil Partnership Collaborative action on protecting soil biodiversity and building resilience to climate change.

Relevant FAO actions in support of mainstreaming biodiversity in Asia and the Pacific

13. Based on FAO's Strategy and Action Plan, and following up on the related regional consultation in 2019, FAO initiated important resource mobilization components to upscale practical action on the ground, aligned with the FAO Strategic Framework 2022-31. FAO is also promoting action for enhanced protection and conservation of primary forests in the region and is collaborating with partners to promote sustainable forest and land management in the Pacific Island countries.
14. On 21 May 2021, a virtual event was organized to commemorate the International Day of Biodiversity under the theme "We are part of the solution". It was attended by 126 participants from 26 countries, including representatives from both the agricultural and environment sectors.
15. On 5 June 2021, FAO and UN Environment Programme launched the UN Decade on Ecosystem Restoration (2021–2030) to prevent, halt and reverse the degradation of ecosystems. One relevant focus to the densely populated region of Asia and the Pacific refers to the restoration of productive landscapes and seascapes to enhance food security and nutrition, address climate change and restore ecosystems.
16. Since 2019, FAO and IFAD have been co-leading the implementation of the UN Decade on Family Farming (2019–2028) and its Global Action Plan. For biodiversity mainstreaming, Pillar 7 is of particular relevance, as it relates to strengthening the multidimensionality of family farming to promote social innovations contributing to territorial development and food systems that safeguard biodiversity, the environment and culture.
17. Following calls for better integration of biodiversity into One Health, FAO has initiated activities to strengthen and facilitate the involvement of natural resources and environment sectors in

⁷ FAO. 2022. Conserving, restoring and sustainably using biodiversity for food security and nutrition in the Pacific Islands. Thirty-sixth Session of the Regional Conference for Asia and the Pacific. Plenary Session item, APRC/22/5. Bangkok. Available at <https://www.fao.org/events/detail/aprc36/>

One Health efforts. In collaboration with Mahidol University, FAO has initiated a scoping study on health, wildlife and livelihoods in the context of One Health and biodiversity mainstreaming.

18. FAO has been piloting the Tool for Agroecology Performance Evaluation, a comprehensive tool using dedicated indicators on agrobiodiversity for measuring the performance of any kind of agricultural system across the different dimensions of sustainability (social, economic, environmental, health and governance). To date, it has been implemented in Cambodia, China, Lao People's Democratic Republic and Viet Nam, as well as minor pilots conducted in French Pacific Territories and India.

19. To harness rich biodiversity for food security, livelihoods and healthy diets, FAO has identified promising neglected and underutilized species that are nutrition-dense, climate-resilient, economically viable and locally available or adaptable as Future Smart Food. In March 2021, FAO's Regional Office for Asia and the Pacific, in collaboration with the FAO Regional Offices for Near East and North Africa and Regional Office for Africa, organized the first FAO interregional ministerial event on "Harnessing traditional foods for ending hunger and eliminating all forms of malnutrition".

20. Tapping into the rich agrobiodiversity of mountains in Asia and the Pacific, FAO's Mountain Agriculture initiative identifies context-specific challenges and demonstrates how to realize the potential of special mountain products – through prioritization, production, processing and market development – to achieve Zero Hunger and strengthen sustainable food systems. A joint publication on sustainable mountain agriculture development strategy is being prepared with partners of the Mountain Partnership Secretariat and International Centre for Integrated Mountain Development.

21. Following the development of FAO's new Global Action on Green Development of Special Agro-Products, FAO's Regional Office for Asia and the Pacific is taking actions to develop a regional prototype of "One Country One Priority Product". In June 2021, a webinar on Stocktaking and Lessons Learned from the Implementation of One Village One Product (OVOP) in Asia and the Pacific was organized with Cambodia, India, Nepal, Republic of Korea, Thailand and Viet Nam. In July, another knowledge-sharing event was organized with the Japan International Cooperation Agency on its OVOP experience.

22. The 15th meeting of the Conference of the Parties (COP15) to the CBD is expected to launch a new post-2020 global biodiversity framework, including a new set of goals and targets to curb biodiversity loss. COP15 is held in two parts. Part I of the meeting, held from 11 to 15 October 2021, adopted the Kunming Declaration.⁸ The final in-person negotiations on the post-2020 global biodiversity framework will take place during Part II of the Conference, in Kunming, China, from 25 April to 8 May 2022. FAO is participating in the negotiations on the post-2020 global biodiversity framework as an international observer and will convey the message that the future of food and agriculture is inextricably linked to biodiversity, and there is a need to connect the post-2020 framework with the transformation of agrifood systems.

23. Preparations are also underway for a biodiversity session at the upcoming XV World Forestry Congress in Korea in May 2022, which aims to promote the role of forests and trees as nature-based solutions for climate change mitigation and adaptation, including biodiversity conservation.

24. Internally, the FAO Strategic Framework 2022-31 dedicates one Programme Priority Area to the topic of *Biodiversity and Ecosystem Services for Food and Agriculture*, which includes biodiversity mainstreaming. In February 2021, FAO's Regional Office for Asia and the Pacific established an internal Biodiversity Task Force, composed of technical officers and led by FAO's Regional Biodiversity Focal Point. In 2022, FAO will be supporting biodiversity mainstreaming into One Health capacity development in selected countries of the region.

Conclusions

25. In the face of increasing awareness of the urgency to counter biodiversity loss, supported *inter alia* by the negotiations of the Post-2020 Global Biodiversity Framework and the UN Decade on

⁸ <https://www.cbd.int/doc/c/c2db/972a/fb32e0a277bf1ccff742be5/cop-15-05-add1-en.pdf>

Ecosystem Restoration, there is new momentum to advance efforts to mainstream biodiversity in the region, including as part of the solution for more productive, efficient, sustainable, nutritious and resilient agrifood systems towards a green recovery.