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DRAFT VOLUNTARY GUIDELINES FOR THE IMPLEMENTATION OF THE FRAMEWORK FOR ACTION ON BIODIVERSITY FOR FOOD AND AGRICULTURE

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I. INTRODUCTION

Biodiversity at genetic, species and ecosystem levels is the basis of food and agriculture. It allows a wide variety of products to be harvested from the world's farms, pasturelands, forests, fisheries and fish farms. In addition to supplying food and non-food products, biodiversity provides services such as pollination, pest control, regulation of water supplies and protection from extreme weather events. It allows a range of diverse production environments to be used and provides a buffer against shocks and fluctuations. It allows production systems to adapt over time in response to changing conditions and changing human needs.

However, it is increasingly recognized that biodiversity is under severe threat and that many important components of biodiversity are in decline, driven in part by unsustainable practices in agrifood systems. This has led to the adoption of global policy responses for its conservation and sustainable use, notably the Kunming-Montreal Biodiversity Framework (KM GBF) (CBD, 2022a) and the Framework for Action on Biodiversity for Food and Agriculture (FA BFA) (FAO, 2022a), the latter specifically targeting the biodiversity that underpins the world's agrifood systems.

The FA BFA contains a globally agreed set of priorities and actions to address the loss of the biodiversity of relevance to food and agriculture and ensure its sustainable use (Figure 1). It was negotiated over a three-year period by the Members of the Commission on Genetic Resources for Food and Agriculture (Commission)¹ as a response to the findings of the country-driven report on *The State of the World's Biodiversity for Food and Agriculture*. The FA BFA was approved by the Commission in October 2021 and endorsed by the FAO Council in December of the same year. It intends to address the interlinkages between the Commission's sectoral Global Plans of Action (GPAs) (Box 1), and other relevant international agreements, to strengthen their harmonious implementation. It sets operative principles for its implementation.

The FA BFA contains more than 50 individual actions grouped within the following strategic priority areas.

Strategic Priority Area 1: Characterization, assessment and monitoring of biodiversity for food and agriculture

1.1 Improve availability of, and access to, information on biodiversity for food and agriculture

Strategic Priority Area 2: Management of biodiversity for food and agriculture

2.1 Promote sustainable use of biodiversity for food and agriculture and integrated approaches to its management

2.2 Improve conservation and restoration of biodiversity for food and agriculture

Strategic Priority Area 3: Institutional frameworks for biodiversity for food and agriculture

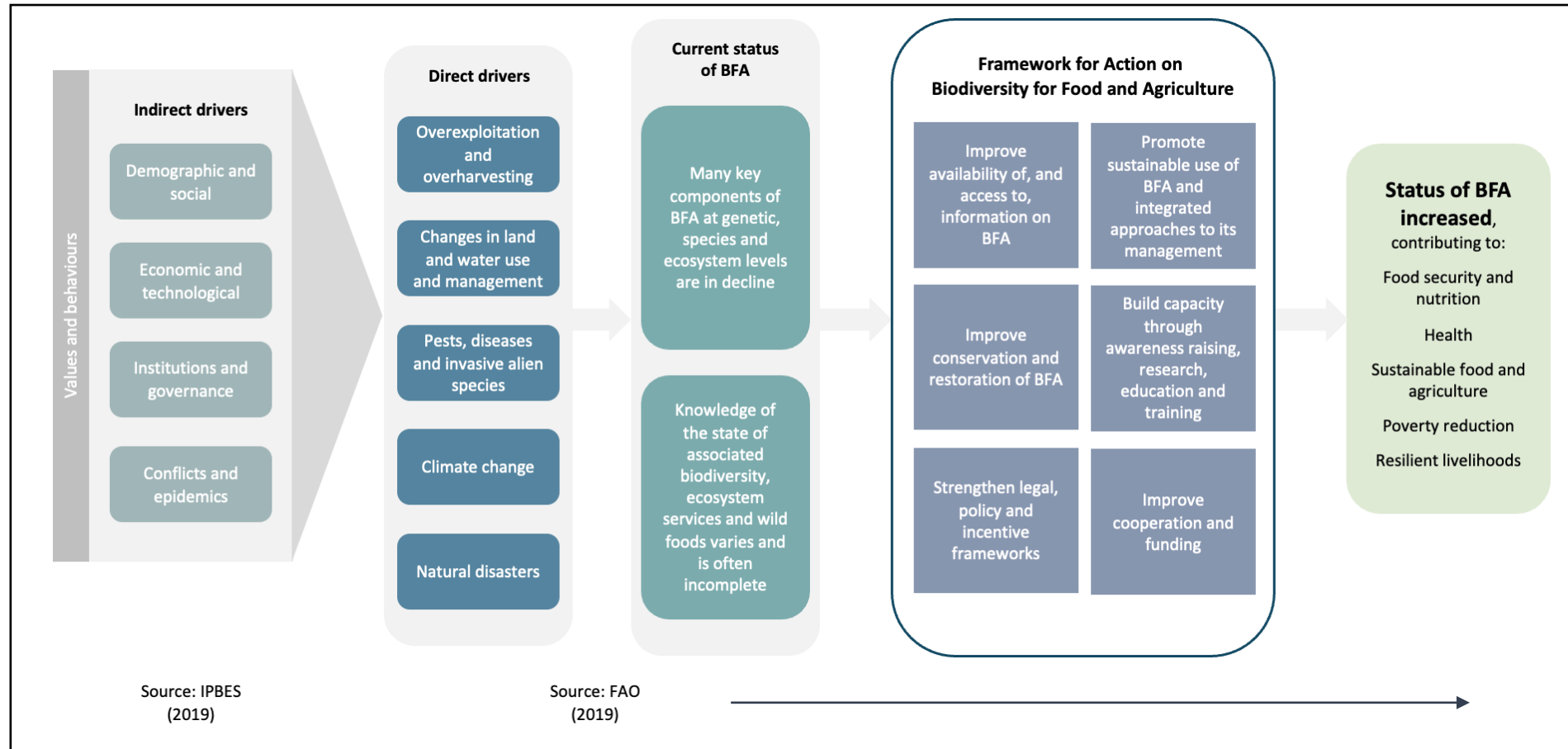
3.1 Build capacity through awareness raising, research, education and training

3.2 Strengthen legal, policy and incentive frameworks

3.3 Improve cooperation and funding

¹ <https://www.fao.org/cgrfa/overview/members/en>

Figure 1. Theory of transformative change of the Framework for Action on Biodiversity for Food and Agriculture.



For the purposes of the FA BFA, biodiversity for food and agriculture (BFA) is a subcategory of biodiversity that corresponds to “the variety and variability of animals, plants and micro-organisms at the genetic, species and ecosystem levels that sustain the ecosystem structures, functions and processes in and around production systems, and that provide food and non-food agricultural products.” Definitions of other concepts used in the FA BFA are provided in Annex I.

Countries’ options for facilitating the implementation of the FA BFA at national level include:

- developing and implementing a national strategy and action plan for BFA; and/or
- implementing the FA BFA as part of their National Biodiversity Strategies and Action Plans (NBSAPs).²³

These guidelines were developed by the Commission’s Expert Team on Biodiversity for Food and Agriculture and endorsed by the Commission at its [...] Session. Their objectives are to:

- facilitate the implementation of the FA BFA, the GPAs and the KM GBF in a mutually supportive, coherent, consistent and non-duplicative way;
- support national policy development for the sustainable use and conservation of BFA; and
- promote the inclusion of action and targets related to sustainable agrifood systems in NBSAPs.

II. IMPLEMENTATION OF THE FRAMEWORK FOR ACTION ON BIODIVERSITY FOR FOOD AND AGRICULTURE

Scope of the Framework for Action on Biodiversity for Food and Agriculture

The scope of the FA BFA is in various respects far wider than that of the “sectoral” GPAs developed by the Commission, which primarily focus on the genetic resources of species used directly for agricultural production with varying degrees of attention also given to their wild relatives (Box 1). The FA BFA, in contrast, covers all agrifood sectors (crop and livestock production, aquaculture, fisheries and forestry) and all the components of biodiversity that directly or indirectly support and contribute to the productivity and sustainability of these systems. The FA BFA, therefore, aims to address linkages and synergies between the sectors covered by the GPAs and covers, in addition, components of associated biodiversity that support agricultural production, such as soil organisms, pollinators, biological control agents, rumen microbes, grasslands, mangroves, coral reefs and seagrass beds, as well as wild species that are gathered or harvested to provide foods and non-food products. Furthermore, it emphasizes the importance of managing the various components of BFA in a more systematic and integrated manner.

² NBSAPs are the main tool for the implementation of the KM GBF at national level.

³ CBD/COP/DEC/15/6.

Box 1. The sectoral Global Plans of Action for genetic resources

The Commission oversees the preparation of global stocktaking assessments of plant, animal, forest and aquatic genetic resources at intervals of approximately ten years. The outputs are “*State of the World*” reports for the respective genetic resources. They are based on national assessments of the state of genetic resources, their use, the drivers that contribute to their erosion and the challenges and opportunities involved in conserving and using them in a sustainable manner to contribute to food security, nutrition and sustainable livelihoods. After the first report in each series was published, the Commission developed and agreed upon a policy response in the form of a rolling Global Plan of Action (GPA) (FAO, 2007, 2011a, 2014, 2022b). The Commission also supports and monitors the implementation of the GPAs by countries. Monitoring results and country reports feed into the next round of State of the World reports that may occasionally lead to the recalibration of the relevant GPA (FAO, 2011a).

The GPAs have various structures, but they all cover the tasks of accumulating and updating knowledge (characterization, monitoring and related activities) of genetic resources, conserving and sustainably using genetic resources, and establishing and maintaining a facilitating policy, legal and institutional framework for the management of genetic resources. They each include a list of specific actions grouped by theme. They target activities at national, regional and global levels, and their implementation requires action on the part of a wide range of stakeholders. However, national governments have a key role to play in facilitating and coordinating implementation at national level.

Broader policy landscape

In addition to the sectoral GPAs, the policy landscape for implementing the FA BFA also includes a range of other synergistic and complementary global, regional and national policies which need to be considered in its implementation. These include but are not limited to those identified in Table 1.

Typically, national governance related to these policies is fragmented, and policies are often implemented in isolation without considering their interactions. The FA BFA provides a framework relevant to both the environmental and agricultural sectors, which can support coherence and synergy. In particular, it advocates for integrated approaches and the management of BFA to be incorporated into agricultural, biodiversity and broader cross-sectoral planning frameworks, which can support the achievement of the KM GBF and the Sustainable Development Goals. It recognizes the importance of harmonizing and strengthening existing instruments and activities related to biodiversity and agrifood systems and emphasizes the importance of promoting coherence and synergy in the implementation of the sectoral GPAs.

Table 1. Global agreements of particular relevance to the Framework for Action on Biodiversity for Food and Agriculture, and their national implementation mechanisms.

Global agreement	Focus	National implementation mechanisms
Sustainable Development Goals	Sustainable development	National development plans, national agricultural plans, plans for food security and nutrition (FSN), etc.
The Kunming-Montreal Global Biodiversity Framework (agreed under the Convention on Biological Diversity) ⁴	Biodiversity	NBSAPs
The Paris Agreement (agreed under the UN Framework Convention on Climate Change)	Climate change	Nationally Determined Contributions (NDCs) and National Adaptation Plans (NAPs)
United Nations Convention to Combat Desertification	Land degradation	National action programmes and/or Land Degradation Neutrality targets
International Treaty on Plant Genetic Resources for Food and Agriculture	Plant genetic resources for food and agriculture	National agricultural plans, plans for food security and nutrition (FSN), etc.
International Plant Protection Convention	Plant protection from pests	National Plant Protection Organizations

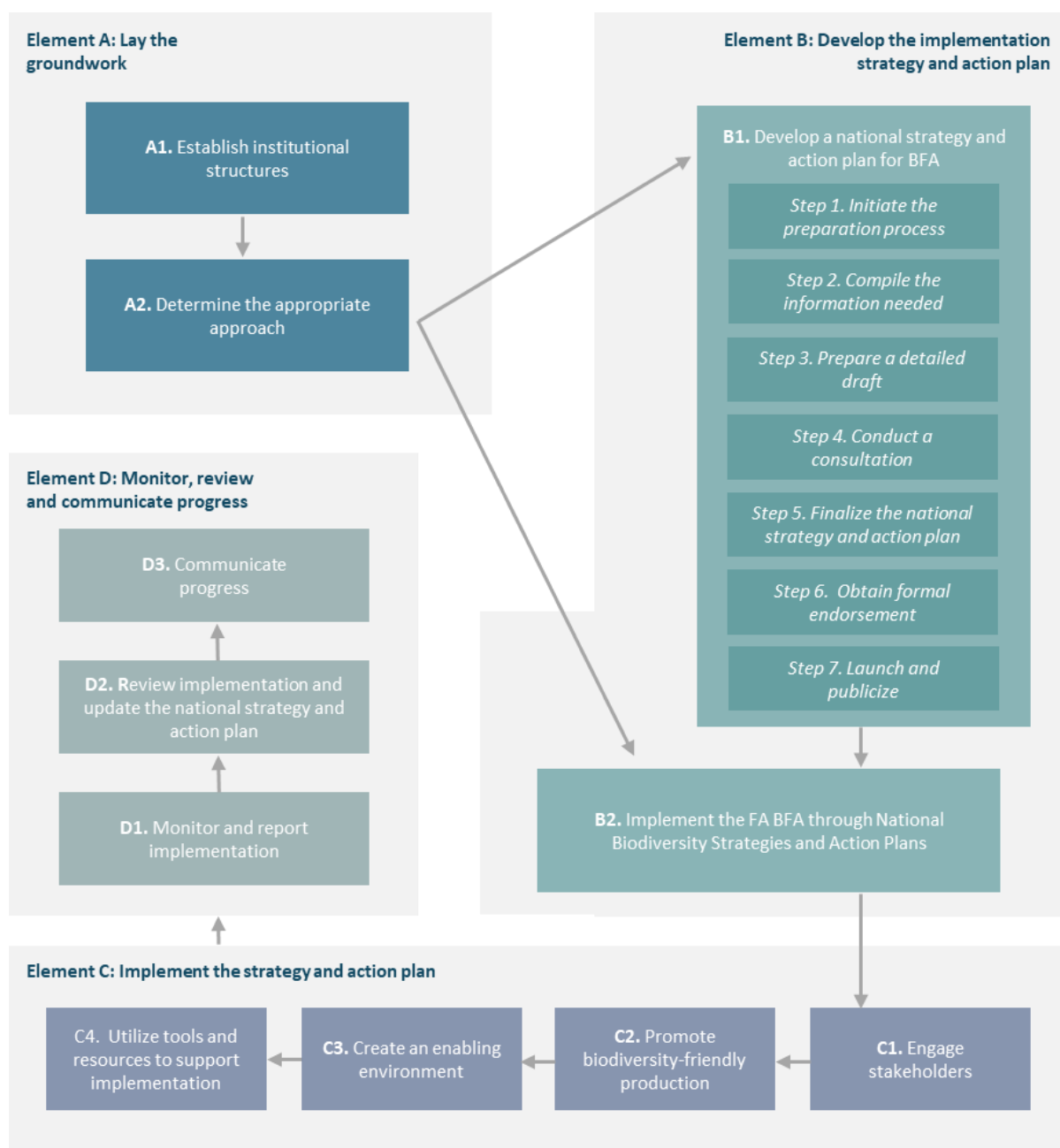
⁴ See Element B2 for more information on the KM GBF and NBSAPs.

Overview of steps

Implementing the FA BFA requires action at country level. As noted in the FA BFA, “action should be taken by countries in accordance with their national priorities and international commitments, as appropriate.”

To support countries in the implementation of the FA BFA at national level through developing and implementing a national strategy and action plan for BFA and/or implementing the FA BFA as part of their NBSAPs, these Guidelines are structured around four main elements: (a) lay the groundwork; (b) develop the implementation strategy and action plan; (c) implement the strategy and action plan; and (d) monitor, review and communicate progress. As illustrated in Figure 2, each of these elements include sub-elements and/or steps.

Figure 2. Elements and steps for implementing the Framework for Action on Biodiversity for Food and Agriculture through a national strategy and action plan for biodiversity for food and agriculture and/or as part of National Biodiversity Strategies and Action Plans



III. ELEMENT A: LAY THE GROUNDWORK

A1. Establish institutional structures

Strategic Priority Area 3 of the FA BFA addresses institutional frameworks for BFA. A fully developed and well-functioning national institutional framework for managing BFA is, of course, an objective rather than a starting point for the process of implementing the FA BFA. However, the process itself of developing a national strategy and action plan for BFA or implementing the FA BFA as part of NBSAPs will require some institutional structures, and these may form the core of a longer-term institutional framework. These structures could include:

- appointing and/or supporting a **National Focal Point (NFP) for BFA**;
- establishing and/or strengthening a **national committee on BFA**; and
- establishing and/or strengthening a **national stakeholder network on BFA**.

The institutional structures required may vary depending on the current status of the strategy and action plan, as well as the type of formal endorsement needed. It may be important to clarify both aspects at the outset, while recognizing that they may change based on the outcomes of the process.

National focal point for biodiversity for food and agriculture

A NFP for BFA would be an important player for improving coordination and coherence across national priorities related to agriculture and biodiversity.

During the reporting process for the preparation of *The State of the World's Biodiversity for Food and Agriculture*, many countries appointed NFPs to coordinate the preparation of their country report. NFPs subsequently played an important role in the development of the FA BFA.

In 2021, the Commission endorsed *Model terms of reference of the NFPs for plant, aquatic and forest genetic resources and for BFA and the National Coordinators for animal genetic resources for food and agriculture* (FAO, 2021a). The model terms of reference state that NFPs for BFA (and their sectoral counterparts) “play a coordinating role at national level”, and that their tasks may include “supporting and facilitating national implementation of Global Plans of Action and other relevant instruments, as appropriate, at technical and policy level, including, as appropriate, the development or review of national strategy and action plans and other relevant sectoral and cross-sectoral policies and programmes and the establishment or strengthening of national stakeholder networks.” The FA BFA is clearly one such “other relevant instrument” (it had not yet been endorsed by the FAO Council at the time the model terms of reference were endorsed).

Countries may wish to ensure that their NFPs are given sufficient time (i.e. time to devote specifically to their role as NFP as opposed to any other duties they may have) and sufficient support (in terms of funding, human resources, etc.) to undertake the work required. This can support the full and effective implementation of the FA BFA at national level and participation in related Commission processes.

National committee on biodiversity for food and agriculture

During the reporting process for the preparation of *The State of the World's Biodiversity for Food and Agriculture*, FAO encouraged countries to establish national committees to oversee the preparation of their country reports. The committees would include the NFP for BFA and a wide range of stakeholders from a variety of different backgrounds (government and civil society, the various sectors of food and agriculture, etc.) with a range of expertise. If countries have maintained these committees over the intervening period (e.g. to support the NFP for BFA in their work related to negotiation of the FA BFA and early implementation activities), they are likely to be able to play a key role in the development of national strategies and action plans. However, they may of course need to be strengthened to meet the specific requirements of the process. Where committees do not exist, a

new committee may need to be established. Representation from both agricultural and environmental ministries, as well as other relevant government departments, producer organizations, the various agrifood sectors and civil society, could support coordination and coherence across sectors. National committees may need to be linked to institutional frameworks setup for NBSAPs, national agricultural policies and other relevant national strategies and action plans. National committees of this kind have proved valuable in the management of sectoral genetic resources (see, for example, the FAO guidelines on *Developing the institutional framework for the management of animal genetic resources* – FAO, 2011b).

Countries may also wish to establish subsidiary bodies to the national committee, such as working groups, scientific committees or expert groups of various kinds, to address specific tasks or themes, either during the process of developing the national strategy and action plan or over the longer term. Options could include groups focused on particular tasks (e.g. facilitating interministerial communication and cooperation, managing communication strategies, organizing consultative processes, identifying research priorities or identifying options for promoting synergies in the implementation of the sectoral GPAs), particular components of biodiversity (e.g. functional groups of organisms or types of ecosystem), particular agrifood sectors, or particular geographical locations.

National stakeholder network on biodiversity for food and agriculture

Another structure that has proved valuable in the management of sectoral genetic resources is a national stakeholder network. This is a mechanism through which the NFP, together with the NFPs responsible for the different sectors of genetic resources for food and agriculture (i.e., those designated by Members of the Commission as NFPs for plant, aquatic and forest genetic resources and for BFA and the National Coordinators for animal genetic resources for food and agriculture) and a range of stakeholders can keep one another informed about developments that may be of interest. Establishing such a network can be supported by stakeholder mapping, followed by engagement with those identified. Once established, such a network is a potential means of mobilizing expertise and conducting informal discussions. A national stakeholder network for BFA could thus be a valuable resource in the context of the development of a national strategy and action plan as well as in the implementation phase, and provide much needed support to the NFP.

Stakeholder mapping may identify a broad and diverse range of stakeholders involved in the management, policy development or monitoring of BFA. This may include but is not limited to stakeholders in the following categories: agricultural and environmental ministries (including forestry and fisheries departments), other relevant government departments, research institutions and universities, extension services, national focal points (e.g. for the Commission, the Convention on Biological Diversity and other relevant frameworks), producers (e.g. farmers, fisherfolk, livestock keepers, forest dwellers), Indigenous Peoples, local communities, private sector (e.g. seed and biotechnology companies, food and beverage industries, supply chain actors, agribusiness), non-governmental organizations (e.g. conservation organizations, producer and consumer advocacy groups) and civil society.

A2. Determine the appropriate approach

Countries – potentially led by a national committee or network under the guidance of the NFP – may carefully consider their specific contexts, capacities and goals when deciding how to facilitate implementation of the FA BFA at national level. If countries are considering whether to develop a dedicated national strategy and action plan for BFA and/or to implement the FA BFA as part of their NBSAPs, the following considerations could help guide their decision:

Alignment with existing policies and plans. To understand how well relevant existing national strategies and action plans address the actions outlined in the FA BFA, countries can conduct an analysis of their alignment (see Box 2). If the country's existing national strategies and action plans already include elements that align with the FA BFA, further integrating the FA BFA into the development and implementation of the NBSAP may ensure coherence, reduce redundancy and streamline efforts. This approach is especially useful where goals for BFA overlap with broader

biodiversity goals. However, if a country finds that there are limited entry point in for implementing the FA BFA as part of their existing national strategies and action plans (i.e. limited alignment and/or lack of entry points in the country’s timelines for updating relevant national strategies and action plans), a standalone national strategy for BFA may be more effective by providing focus and facilitating comprehensive coverage of BFA-specific actions.

Box 2. Analyzing alignment between the Framework for Action on Biodiversity for Food and Agriculture and relevant national strategies and action plans

Countries can evaluate the coverage of actions specified in the Framework for Action on Biodiversity for Food and Agriculture (FA BFA) against their relevant national strategies and action plans in order to identify gaps and areas where action could be harmonized or strengthened. A table could be completed, similar to the following structure, adapted to national circumstances:



Action of the FA BFA	National Biodiversity Strategy and Action Plan (NBSAP)	Sectoral plans of action for genetic resources for food and agriculture	National agricultural and/or food security and nutrition (FSN) plans	Nationally Determined Contribution (NDC) and/or National Adaptation Plan (NAP)	Appropriate coverage, gap in action and/or synergies to be strengthened?
1.1.1					
1.1.2					

Available financial, human and technical resources. If the institutions responsible for BFA are already deeply involved in the implementation of NBSAPs, implementing the FA BFA as part of the NBSAP process can enhance collaboration, support holistic action and reduce duplication of effort. This is particularly true if agrifood stakeholders are well-represented in NBSAP governance, or if there is scope in the NBSAP process to ensure their active engagement. It can also save resources by utilizing existing frameworks, monitoring mechanisms and implementation processes. However, if dedicated resources are available or could be mobilized, developing a dedicated strategy may be more effective to ensure targeted action, particularly if agrifood stakeholders are not well-represented in NBSAP governance and there are limited opportunities to enhance their active engagement.

Urgency and prioritization. Countries with pressing challenges related to BFA, such as declining ecosystem services critical for agrifood production (e.g. pollination, control of pests, maintenance of soil fertility), may benefit from a dedicated strategy that allows for more immediate and focused action. If BFA priorities are less urgent but still important, integrating them into the broader NBSAP can balance with other biodiversity issues.

Overall, developing a standalone national strategy and action plan for BFA is likely to provide more specialization and focus, whilst implementing the FA BFA as part of NBSAPs could be more efficient and synergistic. Figure 3 summarizes the advantages and challenges associated with each of these options, but ultimately the approach able to maximize impact while aligning with national priorities will be determined by the country context and goals.

Figure 3. Potential advantages and disadvantages of facilitating the implementation of the Framework for Action on Biodiversity for Food and Agriculture (FA BFA) through a dedicated national strategy and action plan for BFA or as part National Biodiversity Strategies and Action Plans.

	Developing a national strategy and action plan for BFA	Implementing the FA BFA through National Biodiversity Strategies and Action Plans
PROS 	<ul style="list-style-type: none"> • Clear focus on BFA • Tailored approaches to address challenges specific to agrifood systems • Facilitates stakeholder engagement specific to BFA • May allow for more tailored monitoring and reporting frameworks to track BFA-specific outcomes 	<ul style="list-style-type: none"> • Leverages established institutional frameworks • Facilitates synergies with broader action on biodiversity • Reduces administrative burdens by utilizing existing monitoring and reporting frameworks
CONS 	<ul style="list-style-type: none"> • Requires additional resources and institutional capacity • May risk duplication of efforts or misalignment with NBSAPs 	<ul style="list-style-type: none"> • Broader scope may dilute focus on BFA • Coordination challenges across environmental and agrifood sectors may limit impact

IV. ELEMENT B: DEVELOP THE IMPLEMENTATION STRATEGY AND ACTION PLAN

B1. Develop a national strategy and action plan for biodiversity for food and agriculture – step by step guide

A national strategy and action plan for BFA provides a mechanism for translating the strategic priorities and individual actions set out in the FA BFA into coordinated and effective action at national level. Countries may also choose to address national BFA-related priorities that are not covered by the FA BFA. Many countries have developed equivalent instruments for the components of BFA for which the Commission has developed GPAs.

This section describes the steps involved in developing a national strategy and action plan for BFA: from the stage of initiating the preparation process to that of obtaining endorsement for final version, launching it and publicizing it. Countries may wish to follow all these steps in the order they are set out or may wish to adapt them to meet their national circumstances and objectives. Countries that do not choose to develop a national strategy and action plan may nonetheless wish to implement some elements of the process.

Step 1. Initiate the preparation process

Once the institutional framework is established (see Element A), the preparation of the national strategy and action plan can begin. This may be led by a national committee under the guidance of the NFP or involve some other arrangement suited to the country's needs.

There are a number of actions that can be taken at the outset to build support for the process, foster ownership and ensure that it operates as smoothly as possible. These include:

Preparation of a preliminary vision statement for biodiversity for food and agriculture. A vision statement of this kind may communicate the importance of BFA in terms of national interests, food security, agricultural and rural development and provision of ecosystem services, as well as the need to use it sustainably and conserve it. A preliminary version can support communication with stakeholders regarding the need for and purpose of the national strategy and action plan and may be revised based on stakeholder feedback as the process proceeds.

Preparation of draft national goals for the management of biodiversity for food and agriculture. Draft national goals should clearly state the main outcomes sought through the implementation of the

national strategy and action plan. The objectives of the FA BFA are likely to be useful in this context, as most of them could easily be adapted to specific national needs and priorities. As with the preliminary vision statement, the draft national goals may need to be revised as the process proceeds.

Preparation of a detailed prospectus. A prospectus can serve to clarify the scope, objectives and preparation process of the national strategy and action plan, thereby building understanding and confidence among stakeholders. It could show how the national strategy and action plan can best complement other national biodiversity- and agrifood-related instruments (e.g. NBSAPs, strategies implementing the sectoral GPAs for genetic resources, strategies for the development of agriculture or agricultural sectors, strategies on food security and nutrition, and strategies on climate change adaptation and mitigation), whether already in existence, in preparation or planned.

Preparation of a draft outline of the national strategy and action plan. Preparing a draft outline can help those responsible for the development of the national strategy and action plan reach general agreement on its content and scope. This may facilitate the design of the preparatory process and also support the identification any issues that are likely to require particular attention in the national context. It also provides an opportunity to consider how aspects of the national strategy and action plan such as implementation mechanisms, financing, monitoring and potential updates could be addressed.

Preparation of a communication plan. Communication activities can engage various stakeholders, keep senior officials and ministers informed, and possibly involve the media and general public. A communications plan could identify the main target groups, the points in the process at which each of them needs to be targeted and the best means of communication. Arrangements need to be made for the preparation and updating of briefing materials and communication products for dissemination to relevant target groups.

Step 2. Compile the information needed to prepare the detailed content of the national strategy and action plan

The basis for the national strategy and action plan is likely to be the FA BFA itself, the country's specific goals for the management of BFA and an analysis of the status of the country's BFA, its drivers of change and its management. Countries that contributed to the preparation of the report on *The State of the World's Biodiversity for Food and Agriculture* (FAO, 2029) may wish to use their country report as a starting point for the analysis (Box 3). The analysis could also be supported by *Annex III*, which suggests guiding questions for each strategic priority of the FA BFA. However, there is no one size fits all formula for compiling this information and using it to prepare a draft national strategy and action plan.

Those leading the preparation process can assess the availability of the necessary information and identify what, if any, new assessments are needed. The latter will depend on the particular circumstances of the country, including how recently country reports have been prepared on BFA and other topics of relevance. There is also the possibility that additional information needs may emerge as the process proceeds.

Box 3. Country reports related to biodiversity for food and agriculture

The global assessments overseen by the Commission on Genetic Resources for Food and Agriculture draw on reports submitted by countries on the state of the respective components of biodiversity (i.e. plant, animal, forest or aquatic genetic resources for food and agriculture or BFA as a whole) and their management at national level.⁵ For example, 91 country reports were submitted on BFA as part of the reporting process for *The State of the World's Biodiversity for Food and Agriculture*.

These country reports, as well as country reports prepared on the implementation of the International Treaty on Plant Genetic Resources for Food and Agriculture⁶ and for the Global Forest Resources Assessment,⁷ may be useful in the development of national strategies and action plans for BFA.

Step 3. Prepare a detailed draft of the national strategy and action plan

Drawing on the compiled information, those preparing the national strategy and action plan may wish to proceed systematically through the strategic priorities and the specific actions of the FA BFA, to identify how they relate to their national circumstances and what should be done to address them. Countries may also consider whether they wish to address priorities and implement actions that complement or go beyond the content of the FA BFA, or to include sections on the implementation, financing, monitoring, updating or communication of the national strategy and action plan.

Working groups or expert groups, as discussed under Step 1, may be particularly useful under Step 3, including to help identify specific actions. The work of such groups can be guided by clear terms of reference and overall responsibility for finalizing the draft document can remain with those leading the process.

If significant knowledge gaps emerge, expert reports or rapid assessments could be commissioned. However, the implications for the wider process – in terms of the cost and duration – may need to be considered.

Next, the different components of the draft national strategy and action plan (which may have been worked on by different groups) can be reviewed by those leading the process to ensure coherence, eliminate duplication and identify gaps. A competent writer or writing team may then produce a full draft – including any introductory sections such as background information on the context and process and the draft vision statement (see Step 1) if one has been prepared – that can be circulated for consultation. If the core group responsible for overseeing the preparation of the national strategy and action plan has the necessary writing skills, selecting a writer or writers from this group may be an efficient option due to their familiarity with the process. If it is necessary to engage writers that are less familiar with the process, clear terms of reference and close supervision can support their work. Once a full draft is available, internal review may be necessary.

Step 4. Conduct a consultation on the draft national strategy and action plan

In order to ensure that the final national strategy and action plan meets the country's requirements, the draft may be thoroughly reviewed by a wide range of stakeholders. The consultation process can be planned in advance, taking the country's circumstances and budget into account.

A range of consultation methods may need to be employed, including in-person workshops and meetings and electronic communications. The consultation process may be flexible and open but remain focused on the goal of improving the draft. Consultees could be engaged in advance to ensure that the purpose of the process is clear to them. Questionnaires may be useful to help consultees

⁵ Country reports may be found for BFA at: <https://www.fao.org/cgrfa/topics/biodiversity/SOWBFA/country-reports/en/>; for aquatic genetic resources for food and agriculture at: <https://www.fao.org/aquatic-genetic-resources/activities/sow/countryreports/en/>; for plant genetic resources for food and agriculture at: <https://www.fao.org/agriculture/crops/core-themes/theme/seeds-pgr/sow/sow2/country-reports/en/>; for forest genetic resources at: <https://www.fao.org/forest-genetic-resources/assessments/first-report/country-reports/en/>

⁶ <https://www.fao.org/plant-treaty/areas-of-work/compliance/compliance-reports/en/>

⁷ <https://www.fao.org/forest-resources-assessment/fra-2020/country-reports/en/>

structure their inputs. Given the complexity of the subject matter, it may be appropriate to stratify the consultation, i.e. ask certain groups to focus on particular aspects of the draft. It will be important to address any barriers to participation in the process, for example those that may face marginalized groups of stakeholders. Timelines for the consultation process should be set, communicated clearly to those involved, and adhered to. The outcomes of all consultation exercises can be carefully recorded and, if the process has been complex, a summary report on the consultation may be useful.

The consultation process is an opportunity to build and strengthen networks that may be useful in the implementation of the finalized national strategy and action plan. Efforts could therefore be made to maintain these networks throughout the rest of the planning process.

Step 5. Finalize the national strategy and action plan

The consultation outcomes should be carefully reviewed, and decisions taken as to what adjustments are needed to the draft. The reasons to accept or reject particular proposals emerging from the consultation process may be recorded and made available for transparency. It will likely be important to maintain dialogue with relevant stakeholders at this point in the process.

The details for implementation, monitoring and review of the national strategy and action plan may be finalized. Costs could be estimated, even if they remain only indicative at this point.

Step 6. Obtain formal endorsement of the national strategy and action plan

Obtaining formal endorsement for the national strategy and action plan from the national government is a key requirement and could be planned for in advance. Mechanisms for endorsement will vary by country, but it may be helpful to prepare a statement of commitment indicating the type of endorsement.

It may also be useful to provide the opportunity for other stakeholders – including those from the public, private and non-governmental sectors – to indicate their commitment to the national strategy and action plan, including by signing a statement of commitment.

Step 7. Launch and publicize the national strategy and action plan

Publicizing and raising awareness of the national strategy and action plan is vital for maintaining momentum and ensuring effective implementation. The full document may be published and widely disseminated. Preparation of communication materials, such as a summary version, factsheets, videos, and web and social media content will be important. A launch event could be considered to promote awareness.

B2. Implement the Framework for Action on Biodiversity for Food and Agriculture through National Biodiversity Strategy and Action Plans

Countries are encouraged to make use of the FA BFA for the development and implementation of their NBSAPs, in accordance with Article 6 of the Convention on Biological Diversity and in line with the goals and targets of the KM GBF.

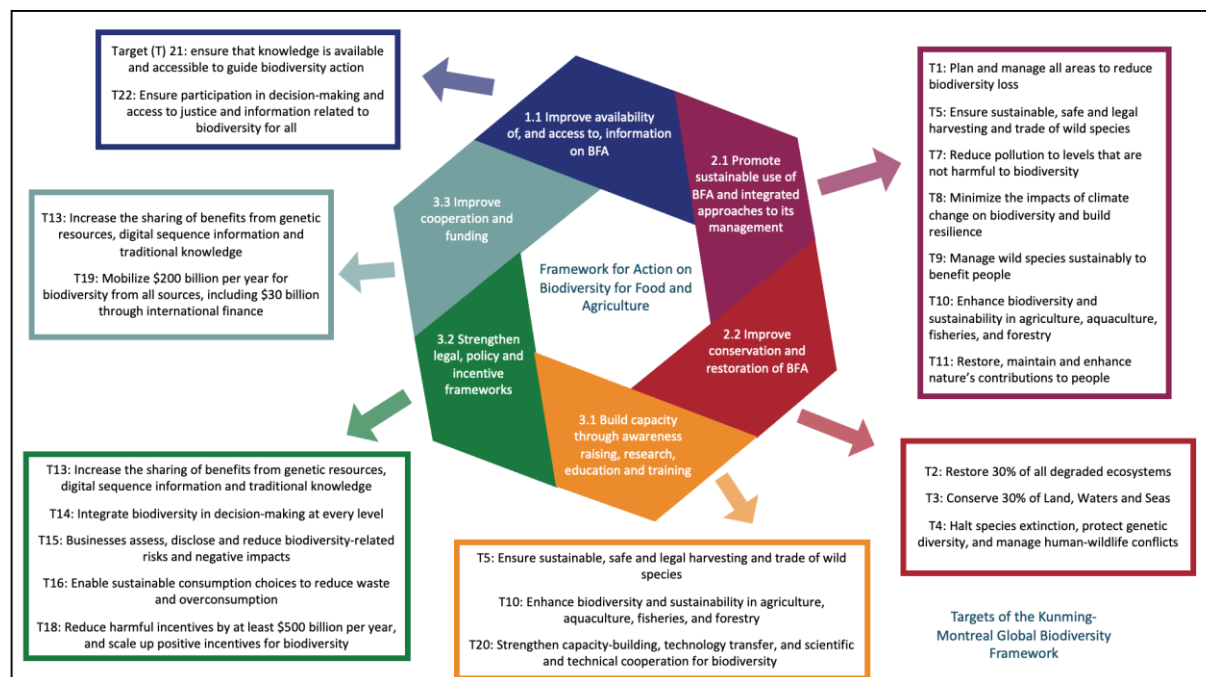
The KM GBF was adopted in 2022 during the fifteenth meeting of the Conference of the Parties to the Convention on Biological Diversity following a four-year consultation and negotiation process. It sets an ambitious roadmap for a world living in harmony with nature. It includes four goals for 2050 and 23 targets for 2030. The targets address:

- reducing threats to biodiversity;
- meeting people's needs through sustainable use and benefit-sharing; and
- tools and solutions for implementation and mainstreaming.

The 23 targets are all either directly or indirectly linked to agrifood systems and the sustainable use and conservation of BFA (FAO, 2024a). In other words, implementing the FA BFA contributes to the achievement of the KM GBF and vice versa. *Annex II* aligns the FA BFA actions and the strategic priorities/priority activities of the GPAs with the KM GBF targets, a summary of which is provided in Figure 4. The FA BFA actions and the GPA priorities/priority activities generally allow planning and

implementation of more in-depth and specialized action focused on agrifood sectors, therefore facilitating the overall implementation of KM GBF targets, which are usually broader in scope.

Figure 4. Strategic Priorities of the Framework for Action on Biodiversity for Food and Agriculture (FA BFA), with Targets of the Kunming-Montreal Global Biodiversity Framework (KM GBF) of particular relevance. The linkages are not intended to be exhaustive (i.e. implementation of any action of the FA BFA could contribute towards attainment of KM GBF Target 10).



At COP15, Parties to the Convention on Biological Diversity agreed to revise their NBSAPs aligned with the goals and targets of the KM GBF by COP16 (2024), and to report on their implementation in 2026 and 2029 (Figure 5) (CBD, 2022b). The review, implementation, monitoring and reporting of NBSAPs have typically been led by countries' ministries of environment and coordinated by their nominated CBF Focal Point,⁸ with – generally – limited participation of ministries of agriculture and actors in agrifood systems. However, the KM GBF recognizes that “its success requires political will and recognition at the highest level of government and relies on action and cooperation by all levels of government and by all actors of society” and should thus be implemented considering a “whole-of-government and whole-of-society approach” (CBD, 2022a). In such a “whole-of-government and whole-of-society approach,” ministries of agriculture and actors in agrifood systems can make use of the globally agreed priorities and actions in the FA BFA as a guide to support their participation. The format of such participation will depend on the stage at which the country is in the planning, implementation and monitoring of the NBSAP.

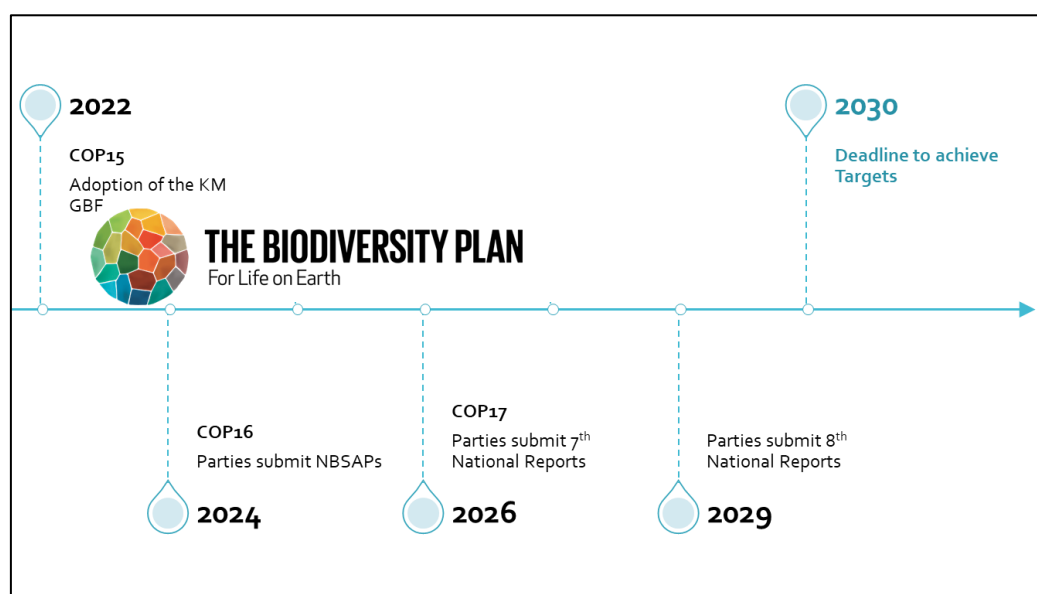
If the NBSAP is under revision, the NFP for BFA should ensure that the national committee and national stakeholder network for BFA (if established under Element A) are appropriately engaged in the institutional framework which has been, or is being, established for the review, implementation, monitoring and reporting of the NBSAP. Their engagement can be informed by developing specific national goals for the management of BFA (see Step 1 under Element B1). As assessment of the status of the country's BFA, its drivers of change and its management could be incorporated into any assessments conducted for the wider NBSAP review process or – if this is not possible (i.e. due to timing) – the NFP and national committee for BFA may wish to conduct their own assessment (see Step 2 under Element B1) to inform their engagement. When a detailed draft of the NBSAP is being developed – similar to Step 3 under Element B1 – those considering synergies with the FA BFA may

⁸ <https://www.cbd.int/information/nfp.shtml>

draw on the FA BFA itself, the country's specific goals for the management of BFA and the analysis of the status of the country's BFA, its drivers of change and its management. *Annex II* can support the identification of specific actions of relevance from the FA BFA for each target of the KM GBF. This may be particularly useful if working groups have been developed for individual targets. In addition, to ensure that the NBSAP incorporates appropriate coverage of the actions in the FA BFA, it may be important to ensure that any related implementation mechanisms, communication plans and financing appropriately target BFA-related stakeholders, and that monitoring and reporting frameworks appropriately track BFA-specific outcomes.

If the NBSAP has already been recently updated, it may still be important that the NFP for BFA ensures that the national committee and national stakeholder network for BFA (if established under Element A) are appropriately engaged, and that any communications plans appropriately target BFA-related stakeholders. More specific action by the NFP and national committee on BFA could be informed by the analysis of alignment between the FA BFA and relevant national strategies and action plans – as proposed under Element A (see Box 2). This can help identify gaps and entry points where implementation could be harmonized with the FA BFA and relevant action strengthened.

Figure 5. Timeline for the preparation, implementation and reporting of National Biodiversity Strategies and Action Plans (NBSAPs)



Overall, countries that have decided to implement the FA BFA as part of their NBSAPs may wish to ensure that:

- the Focal Point to the Convention on Biological Diversity is sufficiently aware of the FA BFA;
- BFA-related stakeholders are appropriately engaged in the institutional framework which has been established for the development, implementation and monitoring of the NBSAP;
- the implementation of the NBSAP (as well as its development, if under revision) incorporates appropriate coverage of the actions in the FA BFA;
- monitoring and reporting frameworks appropriately track BFA-specific outcomes; and
- implementation mechanisms, communication plans and financing appropriately target BFA-related stakeholders.

V. ELEMENT C: IMPLEMENT THE NATIONAL STRATEGY AND ACTION PLAN

C1. Engage stakeholders

The mechanism overseeing the implementation of the national strategy and action plan – potentially a national committee on BFA (see Element A1) or an alternative coordination mechanism – may aim to engage with key actors for each national action and/or target identified, including through the national stakeholder network for BFA – if established (see Element A1) – producer-group extension programmes and community-based organizations.

The national committee on BFA or an alternative coordination mechanism can foster partnerships within and between government agencies, partnerships between government agencies and the various segments of civil society, in particular Indigenous Peoples, small-scale agricultural producers and local communities, and public-private partnerships in the management of BFA. In alignment with the KM GBF, a national committee on BFA or an alternative coordination mechanism can also support whole-of-government and the whole-of-society approaches, and promote the full and effective participation in decision-making and access to justice and information related to biodiversity by Indigenous Peoples and local communities, as well as women and girls, children and youth, and persons with disabilities.

Coordination may take full account of regional and international dimensions, particularly considering that the distributions of many important species or populations of BFA are not limited to a single country. It can also account for international agreements on access and benefit-sharing, as well as existing regional mechanisms that support the conservation and sustainable use of BFA.

C2. Biodiversity-friendly production

Biodiversity-friendly practices are practices and approaches in crop and livestock production, forestry, fisheries and aquaculture that promote the conservation and sustainable use of biodiversity (FAO, 2019). Such practices, also referred to as integrated sustainable management approaches, underpin the goal of achieving sustainability in agrifood systems.

Practices and approaches that can, in some contexts, be considered “biodiversity-friendly” include those implemented at ecosystem, landscape and seascape scales, at farm level (or at the level of equivalent holdings or operations in other sectors), at genetic level, in terrestrial and aquatic ecosystems, and in food processing and agro-industrial processes (see examples in Box 4).

Strategic Priority Area 2 of the FA BFA targets the implementation of biodiversity-friendly practices by promoting the conservation, restoration and sustainable use of BFA and integrated approaches to its management. The actions under the other Strategic Priorities (i.e. Strategic Priority Area 1 which focusses on ensuring the availability of information on BFA, and Strategic Priority Area 3 which focusses on developing institutional frameworks for BFA) can develop the enabling environment needed to support the implementation of biodiversity-friendly practices, as well as ensure that information is available to inform management decisions. The important role of an enabling environment is further dealt with under Element C3.

Box 4. Examples of biodiversity-friendly practices (FAO, 2024a) and resources that could support their implementation.

Agroecology: an integrated approach that seeks to optimize the interactions between plants, animals, humans and the environment while taking into consideration the social aspects that need to be addressed for a sustainable and fair food system. *For evidence, policies and practices, see the [Agroecology Knowledge Hub](#).*

Agroforestry: land-use systems and technologies where woody perennials (trees, shrubs, palms, bamboos, etc.) are deliberately used on the same land-management units as agricultural crops and/ or animals. *For lessons learnt on building capacity to implement agroforestry, see this [report](#).*

Ecosystem approach to fisheries (or aquaculture) (EAF/EAA): an approach that strives to balance diverse societal objectives by taking account of the knowledge and uncertainties about biotic, abiotic and human components of ecosystems and their interactions and applying an integrated approach to fisheries within ecologically meaningful boundaries. *To implement an EAF through policy frameworks, see this [Guide](#). To develop an EAA management plan, see this [Handbook](#).*

Integrated pest management: includes measures that discourage the development of pest populations, and combines biological, chemical, physical and crop specific (cultural) management strategies and practices to grow healthy crops and minimize the use of pesticides.

Organic agriculture: promotes and enhances agroecosystem health, emphasizing the use of management practices in preference to the use of off-farm and synthetic inputs.

Restoration practices: a wide continuum of practices that contribute to conserving and repairing damaged ecosystems. The restoration of forest landscapes, farming, livestock and fish-producing ecosystems should primarily contribute to restoring these ecosystems to a healthy and stable state, so that they are able to support human needs for sustainable food production and livelihoods. *To guide restoration, see these [Standards](#).*

Sustainable forest management: considers seven thematic elements: extent of forest resources; forest biodiversity; forest health and vitality; productive functions of forest resources; protective functions of forest resources; socio-economic functions of forests; and legal, policy and institutional framework. *For tools, case studies and other resources, see the [Sustainable Forest Management Toolbox](#).*

Sustainable soil management: maintains or enhances soil functions that enable the ecosystem services the soil provides, including for water and nutrient quality and availability, and for carbon sequestration. *To incorporate principles and practices into policies and decision-making, see these [Voluntary Guidelines](#).*

C3. Create an enabling environment

The actions specified under Strategic Priority Area 3 of the FA BFA can support the development of the enabling framework needed to achieve the country's goals on BFA. As such, countries may have considered the appropriate approaches for their context in their development of the national biodiversity strategy and action plan on BFA (see Element B1) and/or NBSAP (see Element B2). This may include approaches to:

Capacity-building

- Support awareness-raising campaigns on BFA.

- Promote ongoing training and education for producers, including via Farmer Field Schools.⁹
- Improve research on BFA and the communication of its findings.

Legal, policy and incentive frameworks

- Mainstream BFA considerations, including from economic analyses, into existing legislative, administrative and policy frameworks of relevance.
- Develop incentive schemes to support biodiversity-friendly production systems.
- Reform incentives harmful to biodiversity.

Cooperation

- Establish or strengthen coordination mechanisms between institutions with mandates relevant to BFA.
- Strengthen international cooperation for capacity building, technical assistance and technology transfer related to BFA.
- Implement international instruments and/or domestic regulatory mechanisms to promote facilitated access to genetic resources for food and agriculture and the sharing of benefits arising from their use.

Information to support decision-making

- Strengthen and streamline national frameworks for the assessment and monitoring of BFA.
- Support information systems for BFA.
- Strengthen the role of stakeholders in the assessment and monitoring of BFA.

To ensure the availability of sufficient financial resources to implement relevant targets and/or actions from the NBSAP and/or the national strategy and action plan for BFA, countries could consider domestic, international, public and private resources. If countries have chosen to implement the FA BFA as part of their NBSAP, it will be important that appropriate consideration is given to agrifood systems and actors in any national biodiversity finance plans or similar instruments developed for domestic resource mobilization. Countries that develop a national strategy and action plan for BFA could consider if developing a national finance plan dedicated to BFA may be appropriate.

C4. Utilize tools and resources to support implementation

Annex IV maps a wide range of resources that are available to support national implementation of each action specified in the FA BFA. Many of these resources have been developed through intergovernmental processes and are global in nature. This collation of resources is not intended to be exhaustive, and it is likely that resources specific to the national, regional and ecological context may also be available. In using these resources, implementation may take into account all of the operative principles identified in section IV of the FA BFA.

For example, if a country has developed a national action and/or target which corresponds to Action 1.1.3 in the FA BFA (“Improve the assessment and, as appropriate, monitoring of drivers of change and their effects on BFA”), *Annex IV* could be used to identify resources to support implementation. For this action, *Annex IV* includes eLearning courses which can support capacity-development in collecting data for a number of Sustainable Development Goal indicators of relevance, as well as tools which can support the assessment and monitoring of different drivers of change of BFA (e.g. pollution, climate change and invasive alien species).

⁹ <https://www.fao.org/farmer-field-schools/home/en/>

VI. ELEMENT D: MONITOR, REVIEW AND COMMUNICATE PROGRESS

D1. Monitor and report implementation

Monitoring and evaluation mechanisms can be established to track progress towards the national strategy and action plan for BFA (see Element B1) and/or the NBSAP (see Element B2), so that strategies can be adapted as needed. A set of quantifiable metrics can be well defined with clear collection procedures, understood by stakeholders and linked with the country's other national monitoring processes. It may be important that selected indicators monitor both the process of implementing the national strategy and action plan, as well as progress towards the desired outcomes, i.e. trends in the status of BFA.

Multiple existing indicators and databases are relevant for monitoring implementation of the FA BFA. *Annex IV* identifies over 70 relevant indicators and databases, several of which are relevant to more than one action. Many of these have been developed under the aegis of the Commission or adopted for monitoring the implementation of the KM GBF. Several indicators identified are resource indicators targeting specific components of BFA, such as genetic resources for food and agriculture, aquatic species or forest resources, and are particularly relevant to Strategic Priority Area 1. There remain key gaps in the scope of identified indicators, in particular for monitoring associated biodiversity and wild foods, the implementation of biodiversity-friendly practices, and the degree of implementation of the FA BFA itself.

Countries may choose to select indicators identified in *Annex IV* for monitoring progress towards their national strategy and action plan for BFA, use other relevant national indicators and/or develop new indicators where gaps exist.

In addition, the actions specified under Strategic Priority Area 1 of the FA BFA address the characterization, assessment and monitoring of BFA. Their implementation can improve the availability of data and information on BFA and its management, and thus contribute to an effective monitoring and evaluation mechanism.

D2. Review implementation and update the national strategy and action plan

Monitoring implementation (Element D1) will allow for a review of the national strategy and action plan. In particular, this will allow for an assessment of effectiveness, i.e. where action may need to be strengthened, as well as an identification of gaps where new actions may be needed.

An identifiable process could be established to ensure that the review is undertaken in a coordinated way on a regular basis with full stakeholder involvement. The analysis of new information and the findings and proposals from the review may be made public. In addition, implementation of the FA BFA may generate new knowledge on how best to conserve and sustainably use BFA which can be integrated into the review process.

D3. Communicate progress

In the context of the wider communication plan, the findings from monitoring and the review of implementation, as well as any updates to the national strategy and action plan, may be communicated to all the relevant stakeholders, including through the national stakeholder network on BFA. Reporting on progress made is crucial for identifying best practices and supporting mainstreaming.

ANNEX I: KEY CONCEPTS

The actions listed in the Framework for Action on Biodiversity for Food and Agriculture (FA BFA) refer to the following concepts:

- **Agricultural inputs and practices based on the use of BFA:** inputs consisting of, or produced with, components of BFA, and practices that involve the deployment of components of BFA to provide services (e.g. pest control or nutrient to food and agricultural systems, for instance) by taking action to promote their presence in locations where such services are particularly required.
- **Agrifood systems:** “the entire range of actors, and their interlinked value-adding activities, engaged in the primary production of food and non-food agricultural products, as well as in storage, aggregation, post-harvest handling, transportation, processing, distribution, marketing, disposal and consumption of all food products including those of non-agricultural origin.” (FAO, 2021b).
- **Assessment:** refers to the systematic process of gathering, collecting, analysing and using information from diverse sources to – in the context of the FA BFA – assess the value, quality or importance of BFA, and the ecosystem services it provides.
- **Associated biodiversity:** “Associated biodiversity comprises those species of importance to ecosystem function, for example, through pollination, control of plant, animal and aquatic pests, soil formation and health, water provision and quality, etc., including inter alia:
 - a) Micro-organisms (including bacteria, viruses and protists) and fungi in and around production systems of importance to use and production such as mycorrhizal fungi, soil microbes, planktonic microbes, and rumen microbes;
 - b) Invertebrates, including insects, spiders, worms, and all other invertebrates that are of importance to crop, animal, fish and forest production in different ways, including as decomposers, pests, pollinators, and predators, in and around production systems;
 - c) Vertebrates, including amphibians, reptiles, and wild (non-domesticated) birds and mammals, including wild relatives, of importance to crop, animal, fish and forest production as pests, predators, pollinators or in other ways, in and around production systems;
 - d) Wild and cultivated terrestrial and aquatic plants other than crops and crop wild relatives, in and around production areas such as hedge plants, weeds, and species present in riparian corridors, rivers, lakes and coastal marine waters that contribute indirectly to production” (FAO, 2013).
- **Biodiversity:** Biological diversity (often referred to as biodiversity) is defined in Article 2 of the Convention on Biological Biodiversity (CBD) as “the variability among living organisms from all sources including, inter alia, terrestrial, marine and other aquatic ecosystems and the ecological complexes of which they are part: this includes diversity within species, between species and of ecosystems” (CBD, 1992).
- **Biodiversity for food and agriculture (BFA):** BFA is a subcategory of biodiversity taken to correspond to “the variety and variability of animals, plants and micro-organisms at the genetic, species and ecosystem levels that sustain the ecosystem structures, functions and processes in and around production systems, and that provide food and non-food agricultural products” (FAO, 2019).
- **Biodiversity-friendly practices:** “Production, practices and approaches that promote the conservation and sustainable use of biodiversity” (FAO, 2019). Chapter 5 of *The State of the World’s Biodiversity for Food and Agriculture* (FAO, 2019) describes the status of adoption of practices and approaches that can, in some contexts, be considered “biodiversity friendly” in crop and livestock production, forestry, fisheries and aquaculture. The practices and approaches covered include examples implemented at ecosystem, landscape and seascape

scales, at farm level (or at the level of equivalent holdings or operations in other sectors), at genetic level, in terrestrial and aquatic ecosystems, and in food processing and agro-industrial processes. The list of practices and approaches is not exhaustive and is the result of expert consultations and inputs from countries via the submission of country reports. Examples of such practices and approaches include the ecosystem approach to fisheries and aquaculture, landscape or seascape approaches, sustainable forest management, agroecology, restoration practices, diversification approaches, polyculture, aquaponics, home gardens, agroforestry, organic agriculture, sustainable soil management, integrated pest management, pollination management and domestication.

- **Best practices in rangeland management:** practices that are effective in promoting sustainability in the use of rangelands (see definition of “Sustainable food and agricultural production practices and approaches”). The term “rangeland” has been defined in various ways (see *The State of the World’s Biodiversity for Food and Agriculture* [FAO, 2019] for a discussion of this issue). In implementing the FA BFA, countries may wish to ensure that all lands used or potentially used by grazing livestock are managed sustainably.
- **Characterization:** in the context of BFA management, this refers to the description and evaluation of BFA based on non-molecular information (e.g. obtained from field observations, provenance trials or ecological/climatic zonation of species’ distribution ranges) or molecular information (e.g. obtained through molecular markers and/or genomic approaches).
- **Circular economy:** FAO has provided the following explanation of “circularity” in the context of a bioeconomy “Circularity is a principle that can be applied at different steps of the value chain in order to retain the value of all resources (not only biological resources) in the economic cycle for as long as possible before these resources reach the end-of-life stage. Circularity, which is focused on 'designing out' waste by adding value to biological waste and by-product flows, increases resource use efficiency in the biomass value chain by using less inputs and producing less waste. Applying circularity is a key aspect for making the bioeconomy sustainable” (FAO, 2024b).
- **Citizen scientists:** volunteers with varying levels of expertise who conduct scientific research through a diverse range of approaches.
- **Conservation of BFA:** includes all actions implemented with the aim of preventing the loss of diversity in the populations, species and ecosystems that constitute this subset of biodiversity (FAO, 2019).
- **Drivers of change:** in the context of the FA BFA, refers to the factors that directly or indirectly influence BFA and the ecosystem services it provides. These include but are not limited to: population growth and urbanization; markets, trade and the private sector; changing economic, socio-political and cultural factors; climate change; natural disasters; pests, diseases and invasive alien species; advancements and innovations in science and technology; changes in land and water use and management; pollution and external inputs; overexploitation and overharvesting; and policies.
- **Ecosystem services:** Ecosystem services are “the benefits humans derive from ecosystems” (Millennium Ecosystem Assessment, 2005). The Millennium Ecosystem Assessment identified four categories of ecosystem service: provisioning, regulating, supporting and cultural. “Provisioning services” are “the products obtained from ecosystems”, i.e. food and raw materials of various kinds, including the products of agrifood systems. “Regulating services” are “benefits obtained from the regulation of ecosystem processes”. Examples include regulation of the climate, air and water quality, diseases and natural disasters. “Cultural services” are the “nonmaterial benefits people obtain from ecosystems through spiritual enrichment, cognitive development, reflection, recreation, and aesthetic experiences”. “Supporting services” are services “that are necessary for the production of all other

ecosystem services”. Examples include photosynthesis and nutrient cycling. The distinguishing feature of supporting services is that they have a less direct effect on human welfare. All four categories of ecosystem services contribute, directly or indirectly, to agrifood systems and the production of food and non-food agricultural products.

- **Ex situ conservation:** “the conservation of components of biological diversity outside their natural habitats” (CBD, 1992).
- **Facilitated access:** according to the CBD, the Convention’s Contracting Parties “shall endeavour to create conditions to facilitate access to genetic resources for environmentally sound uses by other Contracting Parties and not to impose restrictions that run counter to the objectives of this Convention” (CBD, 1992). Article 12 of the International Treaty on Plant Genetic Resources for Food and Agriculture addresses facilitated access to plant genetic resources for food and agriculture within the Treaty’s Multilateral System.
- **Farmer field school:** an approach that brings together groups of producers to engage in a process of hands-on experiential learning and draws on field experimentation and management approaches to strengthen participants’ critical analysis skills (FAO, 2018; see also FAO, 2016 and FAO, 2017)
- **Food value chain:** “consists of all the stakeholders who participate in the coordinated production and value-adding activities that are needed to make food products” (FAO, 2024c).
- **Funding strategies of the Commission’s sectoral Global Plans of Action:** existing and potential future agreed funding strategies for the sectoral Global Plans of Action (e.g. the *Funding Strategy for the Implementation of the Global Plan of Action for Animal Genetic Resources* [FAO, 2010]).
- **Incentive schemes:** in the context of BFA management, this term refers to schemes aiming to reduce threats to BFA or promote its conservation and sustainable use by providing relevant stakeholders with a financial or other kind of incentive to change their behaviours.
- **In situ conservation:** “the conservation of ecosystems and natural habitats and the maintenance and recovery of viable populations of species in their natural surroundings and, in the case of domesticated or cultivated species, in the surroundings where they have developed their distinctive properties” (CBD, 1992). This includes on-farm conservation.
- **Landscape connectivity:** this term has been defined in various ways including “the degree to which the landscape impedes or facilitates movement among resource patches” (Taylor *et al.*, 1993). In the context of BFA management, improving connectivity refers to taking action that facilitates the movement of components of BFA across the landscape.
- **Landscape structure:** the presence and configuration of elements within a landscape, including elements that affect BFA and its capacity to deliver ecosystem services.
- **Indigenous and local knowledge:** refers to a cumulative body of knowledge, practice and belief, evolving by adaptive processes and handed down through generations by cultural transmission, about the relationship of living beings (including humans) with one another and with their environment (IPBES, 2014).
- **Information system:** refers to a database (or databases) and other electronic documentation systems (offline or online) that is used to gather, store and/or make available the data and information on BFA. A national BFA information system is up-to-date when the data and information are updated periodically (e.g. annually) or whenever new data and information have become available.

- **Integrated management approaches at production system, ecosystem, landscape and seascape levels:** approaches that address the management of all (or at least a broad range of) the components of BFA within a given production system, ecosystem, landscape or seascape in a joined-up and coherent way that accounts for synergies, trade-offs and other interactions.
- **International Initiative for the Conservation and Sustainable Use of Pollinators:** an initiative established by the Conference of the Parties to the CBD in 2000 to promote coordinated worldwide action on pollinators (CBD, 2000). In 2018, the Conference of the Parties adopted The Plan of Action 2018–2030 for the International Initiative for the Conservation and Sustainable Use of Pollinators (CBD, 2018a).
- **International Initiative for the Conservation and Sustainable Use of Soil Biodiversity:** an initiative established by the Conference of the Parties to the CBD in 2002 to promote coordinated worldwide action on soil biodiversity (CBD, 2002).
- **Inventory:** In the context of the FA BFA, refers to a mechanism to document BFA and its management (e.g. comprehensive lists of the components of BFA present in a country, or of relevant institutions and legal instruments). A national (or subnational) inventory is operational when the collection of data and information is repeated frequently, and when the data and information are processed, stored and made available to support policymaking, management of BFA or R&D efforts.
- **Interdisciplinary, transdisciplinary, cross-cultural and participatory research:** research that synthesizes or transcends approaches and perspectives associated with a range of different disciplines, accounts for different cultural perspectives and actively engages and involves the intended beneficiaries and other relevant stakeholders.
- **Mainstreaming (of biodiversity):** the process of embedding biodiversity considerations into policies, strategies and practices of key public and private actors that impact or rely on biodiversity, so that it is conserved and sustainably used both locally and globally.
- **Management of BFA:** the various activities involved in the sustainable use of BFA, its conservation *in situ* and *ex situ* and its restoration.
- **Monetary and non-monetary benefits:** according to the Nagoya Protocol on Access to Genetic Resources and the Fair and Equitable Sharing of Benefits Arising from their Utilization to the Convention on Biological Diversity, monetary benefits in the context of access and benefit sharing for genetic resources may include but not be limited to: (a) Access fees/fee per sample collected or otherwise acquired; (b) Up-front payments; (c) Milestone payments; (d) Payment of royalties; (e) Licence fees in case of commercialization; (f) Special fees to be paid to trust funds supporting conservation and sustainable use of biodiversity; (g) Salaries and preferential terms where mutually agreed; (h) Research funding; (i) Joint ventures; (j) Joint ownership of relevant intellectual property rights. Non-monetary benefits may include but not be limited to: (a) Sharing of research and development results; (b) Collaboration, cooperation and contribution in scientific research and development programmes, particularly biotechnological research activities, where possible in the Party providing genetic resources; (c) Participation in product development; (d) Collaboration, cooperation and contribution in education and training; (e) Admittance to *ex situ* facilities of genetic resources and to databases; (f) Transfer to the provider of the genetic resources of knowledge and technology under fair and most favourable terms, including on concessional and preferential terms where agreed, in particular, knowledge and technology that make use of genetic resources, including biotechnology, or that are relevant to the conservation and sustainable utilization of biological diversity; (g) Strengthening capacities for technology transfer; (h) Institutional capacity-building; (i) Human and material resources to strengthen the capacities for the administration and enforcement of access regulations; (j) Training related to genetic resources with the full participation of countries providing genetic

resources, and where possible, in such countries; (k) Access to scientific information relevant to conservation and sustainable use of biological diversity, including biological inventories and taxonomic studies; (l) Contributions to the local economy; (m) Research directed towards priority needs, such as health and food security, taking into account domestic uses of genetic resources in the Party providing genetic resources; (n) Institutional and professional relationships that can arise from an access and benefit-sharing agreement and subsequent collaborative activities; (o) Food and livelihood security benefits; (p) Social recognition; (q) Joint ownership of relevant intellectual property rights.

- **Monitoring:** the repeated observation of a system in order to detect signs of change.
- **Multi-, inter- and transdisciplinary research teams:** teams of researchers that collectively embody the skills and perspectives associated with different disciplines. The use of the three terms implies that the different skills and perspectives may be drawn on, synthesized or transcended, as appropriate.
- **Multi-year Programme of Work (of the Commission):** a rolling ten-year work plan covering the totality of biodiversity for food and agriculture, including plant, animal, forest, aquatic, microorganism and invertebrate genetic resources as well as cross-sectoral matters relevant to several or all components of biodiversity for food and agriculture, such as climate change food security and nutrition, access and benefit-sharing, targets and indicators, and digital sequence information.
- **National monitoring systems:** comprises the people, institutions and resources that implement monitoring at the country level in collaboration with other stakeholders. Generally, it is led by a governing body responsible for its conceptualization, planning and execution within a clear and well-defined mandate.
- **On-farm conservation:** the conservation of domesticated biodiversity on farms. The term is most commonly used in the context of the conservation of plant genetic resources for food and agriculture. It is sometimes considered to be a type of *in situ* conservation and sometimes considered a separate category.
- **Other effective area-based conservation measure:** “a geographically defined area other than a Protected Area, which is governed and managed in ways that achieve positive and sustained long-term outcomes for the *in situ* conservation of biodiversity, with associated ecosystem functions and services and where applicable, cultural, spiritual, socio-economic, and other locally relevant values” (CBD, 2018b).
- **Overgrazing:** various approaches have been taken to defining and using the concept of overgrazing. The call to reduce the risk and impact of overgrazing implies that, where necessary, action should be taken to ensure that the use of land by grazing livestock is managed sustainably (see definition of “Sustainable food and agricultural production practices and approaches”).
- **Participatory approaches to building capacity:** capacity-building approaches that require the active engagement and involvement of the intended beneficiaries.
- **Production systems:** taken in the context of the FA BFA to include those in the crop, livestock, forest, fishery and aquaculture sectors. As per FAO’s definition, agriculture is inclusive of forestry, fisheries and aquaculture.
- **Protected area:** “a geographically defined area which is designated or regulated and managed to achieve specific conservation objectives” (CBD, 1992).
- **Restoration:** the Annex of the FA BFA quotes the following definition of restoration taken from IPBES (2018): “any intentional activity that initiates or accelerates the recovery of an

ecosystem from a degraded state. Active restoration includes a range of human interventions aimed at influencing and accelerating natural successional processes to recover biodiversity ecosystem service provision.”

- **Soil health:** “the ability of the soil to sustain the productivity, diversity, and environmental services of terrestrial ecosystems” (FAO, 2020).
- **Sourcing policies:** in the context of BFA management, this term refers to processes for selecting suppliers of products and services from agrifood systems.
- **South–South cooperation:** cooperation between countries from the Global South.
- **Sustainable consumption and production:** “the use of goods and services that respond to basic needs and bring a better quality of life, while minimising the use of natural resources, toxic materials and emissions of waste and pollutants over the life cycle, so as not to jeopardise the needs of future generations” (Ofstad *et al.*, 1994)
- **Sustainable food and agricultural production practices and approaches:** The approaches to framing and defining sustainable agriculture vary in terms of their coverage of the three primary dimensions of sustainability, i.e. economic, environmental and social, and in terms of the scale that is used to assess sustainability, i.e. from field and farm scales, to national and global scales. The multi-dimensional approach developed by FAO (1988) considers sustainable agriculture to be “the management and conservation of the natural resource base, and the orientation of technological and institutional change in such a manner as to ensure the attainment and continued satisfaction of human needs for present and future generation. Such development (in agriculture, forestry and fishing etc.) conserves land, water, plant and animal genetic resources, environmentally non-degrading, technically appropriate, economically viable and socially acceptable.”
- **Sustainable use of biodiversity:** “the use of components of biological diversity in a way and at a rate that does not lead to the long-term decline of biological diversity, thereby maintaining its potential to meet the needs and aspirations of present and future generations” (CBD, 1992).
- **Triangular cooperation:** Southern-driven partnerships between two or more developing countries supported by a developed country(ies)/or multilateral organization(s) to implement development cooperation programmes and projects (UNOSSC, 2024).
- **Use and non-use values of BFA:** the range of different types of value that may be associated with BFA, including those arising directly from the use of components of BFA to provide humans with products and services, those arising from the ways in which components of BFA, even if it not themselves directly used, underpin the supply of products and services (e.g. the contributions to food and agriculture provided by wild, unmanaged pollinators, nutrient-cycling organisms or biological control agents), those arising from the options that BFA provide for the future, and those arising from the mere knowledge that that components of BFA exist or can be bequeathed to future generations.
- **Valuation studies:** the context of BFA management, this term refers to studies that attempt to calculate the economic value of components of BFA or BFA as a whole.
- **Wild foods:** “Food products obtained from non-domesticated species. They may be harvested (gathered or hunted) from within food and agricultural production systems or from other ecosystems. The group of species that supplies wild foods overlaps to various degrees with those in the ... ‘sectoral’ categories of genetic resources and with associated biodiversity. For example, capture fisheries are probably the largest single example of the human use of wild

foods, and many aquaculture facilities use wild-caught stocks for broodstock or larval grow-out” (FAO, 2019).

ANNEX II: THE KUNMING-MONTREAL GLOBAL BIODIVERSITY FRAMEWORK AND THE COMMISSION'S FRAMEWORK FOR ACTION ON BIODIVERSITY FOR FOOD AND AGRICULTURE AND GLOBAL PLANS OF ACTION

Table 1. Targets of the Kunming-Montreal Global Biodiversity Framework (KM GBF), with action specified in the Framework for Action on Biodiversity for Food and Agriculture (FA BFA) and strategic priorities/priority activities of the Global Plans of Action (GPAs) of particular relevance. Each action of the FA BFA is linked to at least one target of the KM GBF. However, the linkages are not intended to be exhaustive (i.e., implementation of any action of the FA BFA could contribute towards attainment of KM GBF Target 10).

Targets of the KM GBF	Actions of the FA BFA	GPAs*
1. Reducing threats to biodiversity		
Target 1. Plan and manage all areas to reduce biodiversity loss	2.1.9 Improve, where appropriate, landscape structure, and connectivity in particular, to provide habitats for associated biodiversity and wild food species.	SP 5 PA 4
Target 2. Restore 30% of all degraded areas	2.2.1 Identify priority species, ecosystems and ecosystem services for conservation and restoration and establish targets or goals relative to these priorities at national level.	SP 13
Target 3. Conserve 30% of land, waters and seas	2.2.4 Maintain, develop or expand designated areas, such as protected areas (including International Union for Conservation of Nature Categories 5 and 6), relevant UNESCO sites and other effective area-based conservation measures, for BFA and related ecosystem services, as well as Globally Important Agricultural Heritage Systems. 3.2.13 In planning and implementing designated areas, such as protected areas and other effective area-based conservation measures, raise awareness of, and take into account, as relevant, the roles of components of BFA.	SP 5 SP 2.1 SP 5, 11 PA 4
Target 4. Halt species extinction, protect genetic diversity, and manage human-wildlife conflicts	2.2.1 (see above) 2.2.2 Strengthen conservation programmes, in particular <i>in situ</i> and on-farm conservation, focusing on associated biodiversity and wild foods, and seek to optimize complementarity between <i>in situ</i> and <i>ex situ</i> conservation approaches, where appropriate. 2.2.3 Establish or strengthen effective infrastructure, including at the local level, for the <i>ex situ</i> conservation of BFA, including micro-organisms, invertebrates and other components of associated biodiversity, and wild foods, and improve documentation and overviews of collections within countries	SP 1, 7, 8, 9, 10, 11 SP 2.3, 2.4, 2.5 SP 5, 6, 7, 11, 18 PA 1, 2, 4, 5, 6, 7, 16
Target 5. Ensure sustainable, safe and legal harvesting and trade of wild species	2.1.2 Promote sustainable food and agricultural production practices and approaches, including integrated management approaches at production system, ecosystem, landscape and seascape levels, that make sustainable use of, conserve and restore BFA while improving livelihoods and supporting economic performance, healthy ecosystems and the supply of ecosystem services. 3.1.5 Promote opportunities for ongoing training and education for farmers, fisherfolk, livestock keepers and forest dwellers, including via farmer field schools, producer group extension programmes or community-based organizations, to strengthen the sustainable use and conservation of BFA and the ecosystem services it supports	SP 2.1, 2.6, 4.3 SP 12, 16 PA 4, 10
Target 6. Reduce the introduction of invasive alien species by 50% and minimize their impact		SP 17 SP 2.6, 4.3
Target 7. Reduce pollution to levels that are not harmful to biodiversity	2.1.3 Promote measures to reduce the risks to and impacts on BFA from the inappropriate use of chemical pesticides and veterinary medicines and from the excess use of fertilizers. 2.1.6 Promote, where relevant, agricultural inputs and practices based on the use of BFA, in particular associated biodiversity, for pest control and nutrient management.	PA 10
Target 8. Minimize the impacts of climate change on biodiversity and build resilience	2.1.1 When developing or implementing approaches to the management of BFA, identify and take into account drivers of change affecting BFA and associated ecosystem services.	SP 3 SP 2.2 SP 14 PA 2, 3, 4, 9, 10, 14
2. Meeting people's needs through sustainable use and benefit-sharing		
Target 9. Manage wild species sustainably to benefit people	2.1.2 (see above)	SP 3.3 SP 2, 16 PA 2, 4

Targets of the KM GBF	Actions of the FA BFA	GPAs*
<p>Target 10. Enhance biodiversity and sustainability in agriculture, aquaculture, fisheries and forestry</p>	<p>2.1.2 (see above) 2.1.4 Promote measures to reduce the risk and impact of overgrazing and to enhance and promote best practices in rangeland management. 2.1.5 Identify, and develop methodologies based on, best management practices (including those based on indigenous and local knowledge) that contribute to the sustainable use and conservation of BFA, and develop tools and guidance to facilitate their implementation, as appropriate. 2.1.6 (see above) 2.1.8 Promote, as appropriate, production systems that serve several purposes, including the sustainable use, conservation and restoration of BFA, the supply of food and other products, and the supply of a range of other ecosystem services. 3.1.5 (see above) 3.1.9 Promote awareness raising and sharing of information on BFA-friendly management practices and approaches, including through the use of participatory techniques (for instance community-made videos, photo, stories and infographics). 3.1.10 Promote research, including interdisciplinary, transdisciplinary, cross-cultural and participatory research, on BFA and its roles in agrifood systems and on management practices and approaches that contribute or potentially contribute to the sustainable use, conservation and restoration of BFA.</p>	<p>SP 5, 6, and FAO Conference Resolution 3/2017 SP 2.3 SP 8, 9 PA 2, 4, 10</p>
<p>Target 11. Restore, maintain and enhance nature's contribution to people</p>	<p>1.1.4 Take action to reduce knowledge gaps on the roles of BFA in the supply of ecosystem services, including on how these are influenced by management practices in the food and agriculture sector. 1.1.5 For all relevant components of BFA, take action to reduce gaps in knowledge on their nutritional contents and their potential significance in efforts to improve food security, nutrition and health, including gaps in knowledge related to cultural and social aspects of their use. 2.1.7 Develop and implement strategies, plans and actions to manage soil biodiversity to ensure soil health and soil fertility. 2.1.8 Promote, as appropriate, production systems that serve several purposes, including the sustainable use, conservation and restoration of BFA, the supply of food and other products, and the supply of a range of other ecosystem services. 3.2.3 Encourage the governing bodies of relevant international organizations to consider – as appropriate and consistent with their respective mandates – the importance of BFA and the ecosystem services it supplies when revising global agreements on biodiversity and on crop and livestock production, forestry, fisheries and aquaculture. 3.3.10 Contribute to the implementation of the international initiatives for the conservation and sustainable use of soil biodiversity and of pollinators.</p>	<p>PA 10</p>
<p>Target 12. Enhance green spaces and urban planning for human well-being and biodiversity</p>		
<p>Target 13. Increase the sharing of benefits from genetic resources, digital sequence information and traditional knowledge</p>	<p>3.2.11 Promote, as appropriate, the implementation of access and benefit-sharing measures for genetic resources for food and agriculture (GRFA) as a means of improving the sustainable use of these resources, raising awareness of their roles and values and building capacity to strengthen research, education and training for their sustainable use and conservation, while recognizing the special nature and distinctive features of GRFA. 3.3.6 Promote facilitated access to GRFA and the sharing of benefits arising from their use through implementation of relevant international instruments and/or other domestic regulatory mechanisms, considering the importance of such monetary and non-monetary benefits to the conservation and sustainable use of GRFA, especially in developing countries, and the special nature of GRFA and its distinctive features.</p>	<p>SP 3, 4, 9, 10, 20, 21 SP 4.7 SP 23 PA 13</p>
<p>3. Tools and solutions for implementation and mainstreaming</p>		
<p>Target 14. Integrating biodiversity into decision-making at every level</p>	<p>3.2.1 Inventory and review existing legislative, administrative and policy frameworks relevant to the sustainable use, conservation and restoration of BFA, with a view to identifying gaps, weaknesses or inefficiencies. In reviewing and, as relevant, updating them, consider options for adequately mainstreaming all components of BFA and addressing drivers of change, as well as cross-sectoral considerations, as appropriate. 3.2.2 In reviewing and, as relevant, updating legislative, administrative and policy frameworks for the management of BFA, ensure that they are aligned, to the extent feasible, with the SDG Framework and promote the contributions of BFA and its management to efforts to meet the SDGs.</p>	<p>SP 7, 20, 21 SP 4.1, 4.4 SP 19 PA 2, 13</p>

Targets of the KM GBF	Actions of the FA BFA	GPAs*
	<p>3.2.4 Promote the implementation of studies, including participatory assessments, that identify the use and non-use values of BFA and the ecosystem services it provides – and of other relevant economic analyses – including by developing and standardizing economic methodologies and tools. Such studies should, as far as possible, build on existing information and assessments.</p> <p>3.2.5 Promote the integration of the outcomes of economic analyses, including valuation studies, into conservation strategies and other aspects of BFA management.</p> <p>3.2.9 Adapt policies and investment decisions in the various sectors of food and agriculture in a way that reduces ecosystem degradation and promotes the sustainable management of biodiversity and sustainable production systems.</p> <p>3.3.1 Inventory and describe national and regional institutions with mandates related to the management of BFA to enable the establishment or strengthening of relevant coordination mechanisms.</p> <p>3.3.4 Further develop and strengthen international cooperation to mainstream BFA within and beyond agriculture sectors. Disseminate examples of successful cooperation.</p>	
Target 15. Businesses assess, disclose and reduce biodiversity-related risks and negative impacts	3.2.14 Support the mainstreaming of conservation, restoration and sustainable use of BFA into food value chains.	SP 6 SP 3.3 PA 11, 12
Target 16. Enable sustainable consumption choices to reduce waste and overconsumption	3.2.10 Promote sustainable consumption and production patterns, including through applying circular economy and other relevant approaches to resource-use efficiency, in order to support the sustainable use, conservation and restoration of BFA.	
Target 17. Strengthen biosafety and distribute the benefits of biotechnology		SP 4.3
Target 18. Reduce harmful incentives by at least \$500 billion per year, and scale up positive incentives for biodiversity	<p>3.2.6 Document and map existing incentive schemes and other economic instruments related to the management of BFA across the environmental and food and agriculture sectors and the public, non-governmental and private sectors. Where gaps, weaknesses or inefficiencies are identified, address them by developing new instruments or strengthening or harmonizing existing instruments, as appropriate and in a manner fully consistent with relevant international agreements and obligations.</p> <p>3.2.7 Promote and incentivize – in a manner fully consistent with relevant international agreements and obligations – production systems that sustainably use and conserve BFA, including markets, sustainable sourcing policies and value chains for products from production systems that favour the conservation and sustainable use of BFA.</p> <p>3.2.8 Eliminate, phase out or reform incentives harmful to biodiversity, in a manner fully consistent with other relevant international agreements and obligations, taking into account national socio-economic conditions.</p>	SP 7
Target 19. Mobilize \$200 billion per year for biodiversity from all sources, including \$30 billion through international finance	<p>3.3.7 Explore opportunities to increase support, including financial, for activities related to BFA, including research, innovation, monitoring and assessment, sustainable use and conservation, outreach, training and capacity-building.</p> <p>3.3.8 Identify opportunities for efficient use of resources, for example by promoting synergies and cooperation between projects at national and regional levels.</p> <p>3.3.9 Support the funding strategies of the FAO Commission on Genetic Resources for Food and Agriculture’s sectoral Global Plans of Action and the implementation of its Multi-year Programme of Work.</p>	SP 23; Part III SP 4.8 SP 27 Paragraphs 313–322
Target 20. Strengthen capacity-building, technology transfer, and scientific and technical cooperation for biodiversity	<p>3.1.2 Improve capacity for research on BFA, in particular soil biodiversity and other associated biodiversity, wild foods and ecosystem services, including through the formation of multi-, inter- and transdisciplinary research teams and by strengthening mechanisms for cooperation and exchange of information between scientists and producers and other stakeholders involved in the management of BFA. Promote innovative ways of building capacity, for example through the use of information and communication technologies and through participatory approaches involving, inter alia, indigenous and local communities of traditional-knowledge holders.</p> <p>3.1.4 Assess gaps and strengthen the teaching of all relevant areas of knowledge related to BFA in universities, schools and in professional and informal education and training, targeting various stakeholders, including citizen scientists, and promoting interdisciplinary skills.</p> <p>3.1.8 Strengthen capacity to use assessment and monitoring systems, including by improving the dissemination of information to users.</p>	SP 13, 14, 16 SP 3.4, 4.6 SP 15, 21, 24, 25 PA 17

Targets of the KM GBF	Actions of the FA BFA	GPAs*
	<p>3.3.5 Further develop and strengthen international cooperation, including triangular and South–South cooperation, to foster capacity- building, technical assistance and technology transfer related to the management of BFA, especially in and to developing countries.</p>	
<p>Target 21. Ensure that knowledge is available and accessible to guide biodiversity action</p>	<p>1.1.1 Improve the inventory, monitoring and characterization of associated biodiversity and wild foods, including at population level, as appropriate.</p> <p>1.1.2 Improve the assessment of how BFA, including associated biodiversity and wild foods, is being managed and, as appropriate, the monitoring of the extent to which management practices and approaches contributing to its sustainable use and conservation are being adopted, taking into account indigenous and local knowledge, as relevant, and the characteristics of local production systems.</p> <p>1.1.3 Improve the assessment and, as appropriate, monitoring of drivers of change and their effects on BFA.</p> <p>1.1.4 Take action to reduce knowledge gaps on the roles of BFA in the supply of ecosystem services, including on how these are influenced by management practices in the food and agriculture sector.</p> <p>1.1.5 For all relevant components of BFA, take action to reduce gaps in knowledge on their nutritional contents and their potential significance in efforts to improve food security, nutrition and health, including gaps in knowledge related to cultural and social aspects of their use.</p> <p>1.1.6 As relevant, identify priority species, ecosystems or ecosystem services for assessment and monitoring at national level.</p> <p>1.1.7 In strengthening and streamlining assessment and monitoring programmes for BFA, use and integrate – as relevant, and to the extent feasible – existing assessment and monitoring systems (e.g. those developed for the SDGs, CBD or the FAO Commission on Genetic Resources for Food and Agriculture) and existing data and indicators, at national, regional and global levels, and explore the potential of indicators that serve multiple purposes.</p> <p>1.1.8 Taking into account relevant initiatives and existing tools, methodologies and frameworks, strengthen existing and/or develop new tools, standards and protocols for the inventory, assessment and monitoring of BFA and support the development of voluntary international reference frameworks.</p> <p>1.1.9 Support the improvement of global, regional, national and local information systems for BFA.</p> <p>1.1.10 For aspects of the assessment and monitoring of BFA, strengthen the role of citizen scientists, indigenous peoples and local communities, and other participatory research stakeholders, as appropriate.</p> <p>3.1.3 Improve the communication of research findings on BFA, and promote their uptake and use by producers and policymakers.</p> <p>3.1.6 Strengthen research-related policy frameworks for BFA to ensure support for long-term research activities, and increase the availability of human, physical and financial resources for this purpose.</p> <p>3.1.7 Promote, through various means (e.g. increasing recognition, including through adequate remuneration, providing adequate infrastructure, such as laboratories, and logistical support), education and research in the field of BFA.</p> <p>3.2.12 Enhance national frameworks for the assessment and monitoring of BFA, in particular associated biodiversity and wild foods, engaging national agencies and strengthening interagency coordination.</p> <p>3.3.2 Improve cooperation on BFA between relevant stakeholders, including producers, researchers, consumers and policy-makers within the sectors of food and agriculture and natural resources management and more widely, in order to facilitate the development of more relevant and effective BFA-related policies and to support participatory innovation and transfer of knowledge.</p>	<p>SP 1, 2 15, 18, 19 SP 1.1, 1.2, 1.3, 4.2 SP 1, 3, 4, 26 PA 1, 15, 18</p>
<p>Target 22. Ensure participation in decision-making and access to justice and information related to biodiversity for all</p>	<p>1.1.10 For aspects of the assessment and monitoring of BFA, strengthen the role of citizen scientists, indigenous peoples and local communities, and other participatory research stakeholders, as appropriate.</p> <p>3.1.1 Raise awareness, at all levels, of the importance of BFA, of the ecosystem services it provides and of the need for its sustainable use, conservation and restoration, including by supporting regional and international awareness- raising campaigns, with a view to strengthening support from governments, institutions and other relevant stakeholders. Develop relevant capacity to support these efforts, as required.</p> <p>Operative Principle: The implementation of the actions should, where relevant, take into consideration the particular roles of indigenous peoples and local communities as</p>	<p>SP 6 SP 4.2 SP 9, 22 PA 1, 2, 4</p>

Targets of the KM GBF	Actions of the FA BFA	GPAs*
	managers of BFA and holders of BFA-related knowledge and should involve the effective participation of indigenous peoples and local communities.	
Target 23. Ensure gender equality and a gender-responsive approach for biodiversity action	Operative Principle: The implementation of the actions should, where relevant, take into consideration the particular roles of women as managers of BFA and holders of BFA-related knowledge and should involve the effective participation of women.	SP 4.2 PA 2, 4, 8
<p>* Global Plan of Action for Animal Genetic Resources Global Plan of Action for the Conservation, Sustainable Use and Development of Aquatic Genetic Resources for Food and Agriculture Global Plan of Action for the Conservation, Sustainable Use and Development of Forest Genetic Resources Second Global Plan of Action for Plant Genetic Resources for Food and Agriculture Note: SP = strategic priority; PA = priority activity</p>		

ANNEX III: GUIDING QUESTIONS TO ASSESS THE CURRENT SITUATION WITH RESPECT TO EACH STRATEGIC PRIORITY OF THE FRAMEWORK FOR ACTION ON BIODIVERSITY FOR FOOD AND AGRICULTURE

Planning effective national action to implement the Framework for Action on Biodiversity for Food and Agriculture (FA BFA) requires first assessing the current situation with respect to BFA, its drivers of change and its management. For each strategic priority of the FA BFA, the analysis could ask the following guiding questions.

Strategic Priority 1.1. Improve availability of, and access to, information on biodiversity for food and agriculture

- Is there an operational national (or subnational) inventory (-ies) on associated biodiversity and wild foods? Which components of associated biodiversity are addressed? What are the major gaps?
- Is there a national (or subnational) information system(s) on associated biodiversity and wild food which is updated periodically (e.g. annually) or whenever new data and information have become available? How effective have these been? How could information and data be shared more effectively? How could data sharing between the national system(s) and regional and global systems be strengthened?
- Are there national (or subnational) information system(s) on plant, animal, aquatic and forest genetic resources? To what extent are these integrated? How could they be strengthened and streamlined?
- For which species of associated biodiversity and wild foods is an up-to-date national distribution range available? What is the species abundance and/or risk status?
- How do the information system(s) support maintenance of traditional knowledge on biodiversity for food and agriculture, including associated biodiversity?
- Which management practices and approaches are considered to contribute to the sustainable use and conservation of BFA? What is their extent and effectiveness?
- Which factors are considered to directly or indirectly influence BFA and the ecosystem services it provides? Is there an up-to-date national information system(s) for each of these factors?
- What are the top priority knowledge gaps, including at the institutional and enabling environment levels, on the roles of BFA in the supply of ecosystem services?
- Is information available on the nutritional contents of all food species and sub-species (varieties, breeds, strains) of national relevance? What is their effect on food security and nutrition?
- Which species, ecosystems and ecosystem services are prioritized for assessment and monitoring at the national level? How is this prioritization determined?
- What are the top priority capacity needs and gaps, at the individual, institutional and enabling environment levels, for the inventory, assessment and monitoring of BFA? Are there existing tools, methodologies and frameworks which could be strengthened to fill these gaps? Are there new tools, standards and protocols which need to be developed?
- What mechanisms are in place for volunteers, scientists, Indigenous Peoples and local communities, and other participatory research stakeholders to contribute towards the national assessment and monitoring of BFA? How effective have these been? How could information and data be shared more effectively?

Strategic Priority 2.1. Promote sustainable use of biodiversity for food and agriculture and integrated approaches to its management

- What drivers of change are affecting BFA and the associated ecosystem services?
- How is the role of BFA in the supply of ecosystem services promoted? How can promotion be enhanced?

- Is use of any components of BFA having negative effects on biodiversity? If yes, what is being done to address such effects?
- Which approaches have been successful in enhancing the sustainability of the use of the components of BFA? What could be done to improve these efforts?
- How are management practices and approaches considered to contribute to the sustainable use and conservation of BFA promoted? Which management practices and approaches are covered by promotion activities? Which stakeholders are targeted? What are the gaps and how could activities be strengthened?
- How can the objectives of sustainably using, conserving and restoring BFA best be integrated with other objectives such as improving livelihoods, supporting economic performance and improving the supply of a range of ecosystem services?
- How can threats to BFA from the inappropriate use of chemical pesticides and veterinary medicines and from the excess use of fertilizers best be reduced? What roles can agricultural inputs and practices based on the use of BFA (e.g. organisms that contribute pest control and nutrient management) play in reducing these threats? How can the use of these inputs and practices best be promoted?
- How can threats to BFA from poor management of grazing and rangelands best be reduced?
- What management practices, including those based on indigenous and local knowledge, contribute to the sustainable use and conservation of BFA? How can the identification of such practices be improved? How can the implementation of these practices best be promoted? What tools and guidance are needed?
- What strategies, plans and actions to manage soil biodiversity to ensure soil health and soil fertility are being implemented? How could efforts of this kind be improved?
- Which purposes do production systems serve, such as the sustainable use, conservation and restoration of BFA, the supply of food, feed and fiber, and the supply of a range of other ecosystem services? How can these purposes best be integrated at production system level? What can be done to support such integration?
- Does landscape structure and connectivity need to be improved in order to provide habitats for associated biodiversity and wild foods? What can be done to achieve this?

Strategic Priority 2.2 Improve conservation and restoration of biodiversity for food and agriculture

- What species, ecosystems and ecosystem services should be regarded as national priorities for conservation and restoration? What targets or goals would be appropriate for them?
- Are there national (or subnational) conservation programmes for BFA, including associated biodiversity and wild foods? Are they constrained by any knowledge gaps, resource limitations and/or policy weaknesses? What can be done to strengthen conservation programmes for BFA?
- What can be done to ensure better complementarity between *in situ* (including on-farm) and *ex situ* conservation approaches?
- What is the state of infrastructure, including at the local level, for the *ex situ* conservation of BFA? Does this include microorganisms, invertebrates and other components of associated biodiversity, as well as wild foods? What can be done to improve the infrastructure?
- Do designated areas, such as protected areas (including International Union for Conservation of Nature Categories 5 and 6), relevant UNESCO sites and other effective area-based conservation measures, as well as Globally Important Agricultural Heritage Systems, need to be developed or expanded in order to provide adequate protection for BFA, including associated biodiversity, wild foods and wild relatives, and related ecosystem services? How could the management and governance of such designated areas be improved?
- How is the production of food, feed and fiber integrated into designated areas, and areas surrounding designated areas? How is BFA used within designated areas? Does the sustainability of these activities need to be strengthened?

Strategic Priority 3.1. Build capacity through awareness raising, research, education and training

- What is the general state of knowledge, at all levels (including farmers, fisherfolk, livestock keepers, forest dwellers and policymakers), on BFA, its importance and drivers of change, and BFA-friendly management practices? What is being done to raise awareness and sharing of information? How can these efforts be strengthened?
- What, if any, are the capacity gaps or weaknesses to undertake research on BFA? What can be done to address these gaps and/or weaknesses? Is there scope to make use of innovative ways of building capacity, such as the use of information and communication technologies and participatory approaches?
- What can be done to improve the capacity of citizen scientists to contribute to BFA-related research?
- Do research-related policy frameworks provide adequate support and resources for long-term research activities?
- How are research findings on BFA communicated to policymakers, producers and other stakeholders? What can be done to improve this communication?
- How is training and education on BFA-related topics provided to farmers, fisherfolk, livestock keepers and forest dwellers? Are there gaps or weaknesses in the training and education? How could provision be improved?
- Are there weaknesses in the teaching of BFA-related topics at any level of education? If yes, what can be done to address these weaknesses?

Strategic Priority 3.2. Strengthen legal, policy and incentive frameworks

- What components of your country's existing legislative, administrative and policy frameworks are relevant to the sustainable use, conservation and restoration of BFA? What gaps, weaknesses or inefficiencies are there in these frameworks? What can be done to address these gaps, weaknesses and/or inefficiencies?
- Do any legal frameworks constrain the conservation and sustainable use of BFA? What can be done to amend these frameworks?
- What can be done to ensure that all components of BFA are adequately mainstreamed into relevant frameworks?
- What can be done to improve the ways in which relevant frameworks address drivers of change affecting BFA?
- How closely are your country's legislative, administrative and policy frameworks for the management of BFA aligned to the Sustainable Development Goals? If such frameworks require updating, what can be done to ensure that they are well aligned with the Sustainable Development Goals and promote the contributions of BFA and its management to efforts to meet the Sustainable Development Goals?
- What assessments of the value of your country's BFA and its components have been conducted? What could be done to support the conduct of studies in this field?
- In your country's engagement on the revision of global agreements on biodiversity and agrifood systems, what is being done to encourage the consideration of BFA? How could this be strengthened?
- What can be done to promote the integration of the outcomes of economic analyses, including valuation studies, into conservation strategies and other aspects of BFA management in your country?
- What incentive schemes or other economic instruments related to the management of BFA exist in your country in the environmental and agrifood sectors (considering public, non-governmental and private schemes and instruments)? What gaps, weaknesses or inefficiencies are there in these instruments? What can be done to address these gaps, weaknesses or inefficiencies?
- What can be done in your country to promote and incentivize production systems and value chains that sustainably use and conserve BFA?

- What incentives harmful to biodiversity exist in your country? What can be done to ensure that they are eliminated, phased out or reformed?
- How are policies and investment decisions in the various agrifood sectors affecting BFA in your country? What can be done to adapt such policies and investment decisions so as to reduce ecosystem degradation and promote the sustainable management of biodiversity and sustainable production systems?
- What is being done in your country to promote sustainable consumption and production patterns, including through applying circular economy and other relevant approaches to resource-use efficiency? How can such efforts be strengthened?
- How is the implementation of access and benefit-sharing measures for genetic resources for food and agriculture affecting the sustainable use of these resources in your country? What can be done to ensure that these measures have a positive impact?
- Are there national framework(s) for the assessment and monitoring of BFA, in particular associated biodiversity and wild foods, in your country? What technical, institutional, financial and/or capacity challenges do they face? What could be done to improve them?
- To what extent is the importance of biodiversity to food and agriculture taken into account in the planning and implementation of designated areas, such as protected areas and other effective area-based conservation measures, in your country? What can be done to ensure that it receives sufficient attention?
- To what extent is the conservation, restoration and sustainable use of BFA mainstreamed into food value chain activities in your country? What can be done to improve such mainstreaming?

Strategic Priority 3.3. Improve cooperation and funding

- What institutions in your country and region have mandates related to the management of BFA? Through which mechanisms, if any, do they coordinate their work? What could be done to improve coordination?
- What, if any, mechanisms are in place in your country to support effective cooperation in BFA-related activities between stakeholders in the agrifood sectors, natural resources management and other relevant sectors? How effective have these been in facilitating policy development, participatory innovation and knowledge transfer? What could be done to improve such cooperation?
- What networks exist linking different groups of stakeholders in the management of BFA in your country? Are new networks of this kind needed? What could be done to strengthen existing ones?
- How does your country participate in international cooperation in the implementation of BFA-related capacity building, technical assistance, technology transfer and other management activities? How can this be further developed and/or strengthened?
- What opportunities are there to increase support, including financial support, for BFA-related activities?
- What opportunities are there to improve efficiency in the use of resources for BFA-related activities?
- How does your country support the funding strategies of the FAO Commission on Genetic Resources for Food and Agriculture's sectoral GPAs and/or the implementation of its Multi-year Programme of Work? Can this support be enhanced?
- How does your country contribute to the implementation of the international initiatives for the conservation and sustainable use of soil biodiversity and of pollinators? Can this contribution be strengthened?

ANNEX IV: KEY RESOURCES AND INDICATORS TO SUPPORT IMPLEMENTATION AND MONITORING OF THE FRAMEWORK FOR ACTION ON BIODIVERSITY FOR FOOD AND AGRICULTURE

Selected resources are provided below in general, as well as for each action specified in the Framework for Action on Biodiversity for Food and Agriculture (FA BFA). These lists are not exhaustive and further resources on biodiversity developed by FAO can be found in the [FAO Biodiversity Knowledge Hub](#).

General resources:

- [The State of the World's Biodiversity for Food and Agriculture](#)
- [IPBES Assessment Report on Pollinators, Pollination and Food Production](#)
- [State of knowledge of soil biodiversity - Status, challenges and potentialities](#)
- [Country Reports on the State of Biodiversity for Food and Agriculture](#)
- [The State of the World's Aquatic Genetic Resources for Food and Agriculture](#)
- The Second Report on the State of the World's Forest Genetic Resources (*under publication*)
- The Third Report on the State of the World's Plant Genetic Resources for Food and Agriculture (*under publication*)
- [The Second Report on the State of the World's Animal Genetic Resources for Food and Agriculture](#)

Table 1. Key resources and indicators/databases to support implementation and monitoring of the Framework for Action on Biodiversity for Food and Agriculture (FA BFA).

FA BFA Actions	Key resources to support implementation	Relevant indicators and databases
1.1.1 Improve the inventory, monitoring and characterization of associated biodiversity and wild foods, including at population level, as appropriate.	<ul style="list-style-type: none"> • Global Taxonomy Initiative • Genomic characterization of animal genetic resources • Guidelines for Development of Integrated Multipurpose Animal Recording Systems • Surveying and monitoring of animal genetic resources • Phenotypic characterization of animal genetic resources • Molecular genetic characterization of animal genetic resources • Benchmarking species diversification in global aquaculture • Protocol to detect and monitor pollinator communities: Guidance for practitioners • The plants that feed the world – Baseline data and metrics to inform strategies for the conservation and use of plant genetic resources for food and agriculture • Recent developments in biotechnologies relevant to the characterization, sustainable use and conservation of genetic resources for food and agriculture 	<p><i>The extent to which the following databases are populated with data can provide an indicator of activity:</i></p> <ul style="list-style-type: none"> • AquaGRIS – a global information system for aquatic genetic resources • FAO International Network of Food Data Systems (INFOODS) – Food composition database for biodiversity version 4.0 – BioFoodComp4.0 • Global Soil Biodiversity Observatory (GLOSOB) (<i>under development</i>) • FishStat • Fisheries and Resources Monitoring System (FIRMS) • Living Planet Index for utilized species (Global Biodiversity Framework [GBF] component indicator) • Nematode abundance and function group distribution – a global database of soil nematode abundance and functional group composition • Proportion of fish stocks within biologically sustainable levels (Sustainable Development Goal [SDG] Indicator 14.4.1; GBF Headline indicator [HI] 5.1) • Red List Index of fungi – The Global Fungal Red List Initiative • Red List Index (pollinating species) (GBF complementary indicator)

FA BFA Actions	Key resources to support implementation	Relevant indicators and databases
		<ul style="list-style-type: none"> • Red List Index (species used for food and medicine) (GBF complementary indicator) • Red List Index (wild relatives of domesticated species) (GBF complementary indicator) • Soil biodiversity index – Global Soil Biodiversity Atlas
<p>1.1.2 Improve the assessment of how BFA, including associated biodiversity and wild foods, is being managed and, as appropriate, the monitoring of the extent to which management practices and approaches contributing to its sustainable use and conservation are being adopted, taking into account indigenous and local knowledge, as relevant, and the characteristics of local production systems.</p>	<ul style="list-style-type: none"> • Protocol for the assessment of Sustainable Soil Management Tool for Agroecology Performance Evaluation (TAPE) • Good practices in sample-based area estimation • The trade and biodiversity product classification (2023) • Biotrade principles and criteria (2020) • Ecosystem approach to fisheries implementation monitoring tool • Phenotypic characterization of Animal Genetic Resources • Surveying and monitoring of animal genetic resources 	<p><i>Indicators listed for Activity 1.1.1 are relevant to monitoring the outcomes of this action.</i></p> <p>In addition:</p> <ul style="list-style-type: none"> • Domestic Animal Diversity Information System (DAD-IS) • Framework for Ecosystem Restoration Monitoring (FERM) • Global Forest Resources Assessment • SilvaGRIS – a global information system for forest genetic resources (<i>under development</i>) • World Information and Early Warning System on Plant Genetic Resources for Food and Agriculture (WIEWS)
<p>1.1.3 Improve the assessment and, as appropriate, monitoring of drivers of change and their effects on BFA.</p>	<ul style="list-style-type: none"> • elearning course: SDG Indicator 14.4.1 – Fish stocks sustainability • elearning course: SDG Indicator 2.4.1 – Sustainable Agriculture • elearning course: SDG indicators 15.1.1 and 15.2.1 – Forest area and sustainable forest management • Pesticide Registration Toolkit • The Adaptation, Biodiversity and Carbon Mapping Tool (ABC-Map) • Climate Risks Toolbox • Global Forest Resources Assessment (FRA) • Database on Introductions of Aquatic Species (DIAS) • Relevant chapters on drivers of change in <i>General resources listed above</i> 	<ul style="list-style-type: none"> • Index of coastal eutrophication potential (SDG 14.1.1a; GBF HI 7.1) • Aggregated total applied toxicity (GBF HI 7.2; <i>under development</i>) • Cropland nutrient balance (GBF component indicator) • Rate of invasive alien species establishment (GBF HI 6.1) • Database on Introductions of Aquatic Species (DIAS) • Proportion of fish stocks within biologically sustainable levels (SDG Indicator 14.4.1; GBF HI 5.1) • Red List Index (impacts of fisheries) (GBF complementary indicator) • Red List Index (impacts of utilization) (GBF complementary indicator) • Proportion of agricultural area under productive and sustainable agriculture (SDG 2.4.1; GBF HI 10.1) • Progress towards sustainable forest management (SDG 15.2.1; GBF HI 10.2) • Living Planet Index for utilized species (GBF component indicator) • Annual forest area change rate • Forest area as a proportion of total land area
<p>1.1.4 Take action to reduce knowledge gaps on the roles of BFA in the supply of ecosystem services, including on how these are influenced by management practices in the food and agriculture sector.</p>	<p><i>See resources for Actions 1.1.1 and 1.1.2</i></p>	<ul style="list-style-type: none"> • Services provided by ecosystems (GBF HI B.1) – possible disaggregation includes by realm and by ecosystem functional group

FA BFA Actions	Key resources to support implementation	Relevant indicators and databases
1.1.5 For all relevant components of BFA, take action to reduce gaps in knowledge on their nutritional contents and their potential significance in efforts to improve food security, nutrition and health, including gaps in knowledge related to cultural and social aspects of their use.	<ul style="list-style-type: none"> • International Network of Food Data Systems (INFOODS) - Food composition database for biodiversity version 4.0 – BioFoodComp4.0 	<ul style="list-style-type: none"> • Indicator on food composition – a count of the number of biodiverse foods with at least one value available for a nutrient or bioactive component. This provides a rough picture of the global availability of compositional data for biodiverse foods. • Indicator on food consumption – a count of the number of biodiverse foods reported by a survey instrument. This shows the extent to which biodiverse foods are featured in food consumption tools. • FAO International Network of Food Data Systems (INFOODS) – Food composition database for biodiversity version 4.0 – BioFoodComp4.0
1.1.6 As relevant, identify priority species, ecosystems or ecosystem services for assessment and monitoring at national level.	<p>Several global datasets can support identification at the national level:</p> <ul style="list-style-type: none"> • Ecosystem Integrity Index (under development) • Red List of Ecosystems • Red List of Threatened Species • Living Planet Index • Domestic Animal Diversity Information System (DAD-IS) 	
1.1.7 In strengthening and streamlining assessment and monitoring programmes for BFA, use and integrate – as relevant, and to the extent feasible – existing assessment and monitoring systems (e.g. those developed for the SDGs, CBD or the FAO Commission on Genetic Resources for Food and Agriculture) and existing data and indicators, at national, regional and global levels, and explore the potential of indicators that serve multiple purposes.	<ul style="list-style-type: none"> • Development of integrated multipurpose animal recording systems • National forest monitoring system assessment tool • Existing monitoring systems and indicators under FAO responsibility (relevant to this action) are collated on the following webpage: https://www.fao.org/biodiversity/knowledge-hub/data-and-indicators/en 	<i>Existing indicators listed for Activities 1.1.1–1.1.5 are relevant to this action.</i>
1.1.8 Taking into account relevant initiatives and existing tools, methodologies and frameworks, strengthen existing and/or develop new tools, standards and protocols for the inventory, assessment and monitoring of BFA and support the development of voluntary international reference frameworks.	<i>See resources for inventory, assessment and monitoring listed under the other actions.</i>	

FA BFA Actions	Key resources to support implementation	Relevant indicators and databases
1.1.9 Support the improvement of global, regional, national and local information systems for BFA.	<ul style="list-style-type: none"> • AquaGRIS – a global information system for aquatic genetic resources • Domestic Animal Diversity Information System (DAD-IS) • Global Soil Biodiversity Observatory (GLOSOB) (<i>under development</i>) • Fisheries and Resources Monitoring System (FIRMS) • FishStat • Framework for Ecosystem Restoration Monitoring (FERM) • Global Forest Resource Assessment • World Information and Early Warning System on Plant Genetic Resources for Food and Agriculture (WIEWS) • Global Information System for PGRFA 	
1.1.10 For aspects of the assessment and monitoring of BFA, strengthen the role of citizen scientists, indigenous peoples and local communities, and other participatory research stakeholders, as appropriate.		<ul style="list-style-type: none"> • Growth in species occurrence records accessible through the Global Biodiversity Information Facility (GBF complementary indicator) – analysis could potentially be disaggregated by species of particular relevance • Growth in marine species occurrence records accessible through the Ocean Biodiversity Information System (GBF complementary indicator) – analysis could potentially be disaggregated by species of particular relevance
2.1.1 When developing or implementing approaches to the management of BFA, identify and take into account drivers of change affecting BFA and associated ecosystem services.	<ul style="list-style-type: none"> • Red List of Threatened Species • Global Register of Introduced and Invasive Species • Red List of Ecosystems • Climate Risks Toolbox 	
2.1.2 Promote sustainable food and agricultural production practices and approaches, including integrated management approaches at production system, ecosystem, landscape and seascape levels, that make sustainable use of, conserve and restore BFA while improving livelihoods and supporting economic performance, healthy ecosystems and the supply of ecosystem services.	<ul style="list-style-type: none"> • Guidelines for Sustainable Aquaculture • Ecosystem approach to aquaculture management: handbook • A diagnostic tool for implementing an ecosystem approach to fisheries through policy and legal frameworks • Voluntary Guidelines for the Conservation and Sustainable Use of Farmers' Varieties/Landraces • Voluntary guidelines for the conservation and sustainable use of crop wild relatives and wild food plants • Sustainable Forest Management Toolbox • Agroecology Knowledge Hub • Toolbox for Sustainable Use of PGRFA • A Provisional Voluntary Code of Conduct on the Sustainable Use and Management of Plastics in Agriculture 	<ul style="list-style-type: none"> • Proportion of fish stocks within biologically sustainable levels (SDG Indicator 14.4.1; GBF HI 5.1) • Proportion of agricultural area under productive and sustainable agriculture (SDG 2.4.1; GBF HI 10.1) • Progress towards sustainable forest management (SDG 15.2.1; GBF HI 10.2) <ul style="list-style-type: none"> ○ Proportion of forest area with a long-term management plan (sub-indicator) ○ Forest area under an independently verified forest management certification scheme (sub-indicator) • Trends in cropland area under conservation tillage • Trends in area under organic agriculture (also FAOSTAT) • Status of implementation of the ecosystem approach to fisheries • Number of countries with policies on agroecology • Trends in area under agroforestry

FA BFA Actions	Key resources to support implementation	Relevant indicators and databases
2.1.3 Promote measures to reduce the risks to and impacts on BFA from the inappropriate use of chemical pesticides and veterinary medicines and from the excess use of fertilizers.	<ul style="list-style-type: none"> • The international Code of Conduct for the sustainable use and management of fertilizers • The International Code of Conduct on Pesticide Management • Sustainable use and conservation of invertebrate pollinators • Managing pesticides in agriculture and public health - An overview of FAO and WHO guidelines and other resources • Pesticide Registration Toolkit • BioProtection Portal 	<ul style="list-style-type: none"> • Cropland nutrient balance (GBF component indicator) • Index of coastal eutrophication potential (SDG 14.1.1a; GBF HI 7.1) • Aggregated total applied toxicity (GBF HI 7.2; <i>under development</i>) • Cropland nutrient balance (GBF component indicator) • Management of fertilizers (SDG 2.4.1 sub-indicator; GBF HI 10.1 sub-indicator) • Management of pesticides (SDG 2.4.1 sub-indicator; GBF HI 10.1 sub-indicator)
2.1.4 Promote measures to reduce the risk and impact of overgrazing and to enhance and promote best practices in rangeland management.	<ul style="list-style-type: none"> • Sustainable land management in rangeland and grasslands • Pastoralist Knowledge Hub • Pastoralism - Making variability work 	<ul style="list-style-type: none"> • Global Livestock Environmental Assessment Model (GLEAM)
2.1.5 Identify, and develop methodologies based on, best management practices (including those based on indigenous and local knowledge) that contribute to the sustainable use and conservation of BFA, and develop tools and guidance to facilitate their implementation, as appropriate.	<ul style="list-style-type: none"> • <i>See Action 2.1.2</i> 	
2.1.6 Promote, where relevant, agricultural inputs and practices based on the use of BFA, in particular associated biodiversity, for pest control and nutrient management.	<ul style="list-style-type: none"> • Sustainable use and conservation of microbial and invertebrate biological control agents and microbial biostimulants • Guide to the classical biological control of insect pests in planted and natural forests • BioProtection Portal 	<ul style="list-style-type: none"> • Index of coastal eutrophication potential (SDG 14.1.1a; GBF HI 7.1) • Aggregated total applied toxicity (GBF HI 7.2; <i>under development</i>) • Cropland nutrient balance (GBF component indicator)
2.1.7 Develop and implement strategies, plans and actions to manage soil biodiversity to ensure soil health and soil fertility.	<ul style="list-style-type: none"> • Revised World Soil Charter • Protocol for the assessment of Sustainable Soil Management • The international Code of Conduct for the sustainable use and management of fertilizers • Sustainable use and conservation of soil microorganisms and invertebrates contributing to bioremediation and nutrient cycling • The soil microbiome: a game changer for food and agriculture • State of knowledge of soil biodiversity 	<ul style="list-style-type: none"> • Global Soil Biodiversity Observatory (GLOSOB) (<i>under development</i>) • Soil organic carbon stock (SDG 15.3.1 sub-indicator) • Prevalence of soil degradation (SDG 2.4.1 sub-indicator; GBF HI 10.1 sub-indicator)
2.1.8 Promote, as appropriate, production systems that serve several purposes, including the sustainable use, conservation and restoration of BFA, the supply of food	<ul style="list-style-type: none"> • <i>See Action 2.1.2</i> 	<ul style="list-style-type: none"> • <i>See Action 2.1.2</i>

FA BFA Actions	Key resources to support implementation	Relevant indicators and databases
and other products, and the supply of a range of other ecosystem services.		
2.1.9 Improve, where appropriate, landscape structure, and connectivity in particular, to provide habitats for associated biodiversity and wild food species.	<ul style="list-style-type: none"> • <i>See Action 2.1.2</i> 	<ul style="list-style-type: none"> • Red List of Ecosystems (GBF component indicator) • Ecosystem Integrity Index (GBF component indicator; <i>under development</i>) • Forest fragmentation index (GBF complementary indicator) • Global Forest Resources Assessment (FRA)
2.2.1 Identify priority species, ecosystems and ecosystem services for conservation and restoration and establish targets or goals relative to these priorities at national level.	<p>Global datasets that can support the identification and prioritization of species and ecosystems include:</p> <ul style="list-style-type: none"> • Red List of Ecosystems • Ecosystem Integrity Index (<i>under development</i>) • Red List Index 	
2.2.2 Strengthen conservation programmes, in particular <i>in situ</i> and on-farm conservation, focusing on associated biodiversity and wild foods, and seek to optimize complementarity between <i>in situ</i> and <i>ex situ</i> conservation approaches, where appropriate.	<ul style="list-style-type: none"> • Breeding strategies for sustainable management of animal genetic resources • Technical guidelines for responsible fisheries and aquaculture development – 3. Genetic resource management • Voluntary Guidelines for the Conservation and Sustainable Use of Farmers' Varieties/Landraces • Voluntary guidelines for the conservation and sustainable use of crop wild relatives and wild food plants 	
2.2.3 Establish or strengthen effective infrastructure, including at the local level, for the <i>ex situ</i> conservation of BFA, including micro-organisms, invertebrates and other components of associated biodiversity, and wild foods, and improve documentation and overviews of collections within countries.	<ul style="list-style-type: none"> • Genebank Standards for Plant Genetic Resources for Food and Agriculture • Innovations in cryoconservation of animal genetic resources Practical guide • Practical guide for the application of the Genebank Standards for Plant Genetic Resources for Food and Agriculture: Conservation of orthodox seeds in seed genebanks • Practical guide for the application of the Genebank Standards for Plant Genetic Resources for Food and Agriculture: Conservation via <i>in vitro</i> culture 	<ul style="list-style-type: none"> • Number of plant genetic resources for food and agriculture secured in medium- or long-term conservation facilities (SDG Indicator 2.5.1.a; GBF component indicator) • Number of animal genetic resources for food and agriculture secured in medium or long term conservation facilities (SDG Indicator 2.5.1.b; GBF component indicator)
2.2.4 Maintain, develop or expand designated areas, such as protected areas (including International Union for Conservation of Nature Categories 5 and 6), relevant UNESCO sites and other effective area-based conservation measures, for BFA and related ecosystem services, as	<ul style="list-style-type: none"> • A handbook for identifying, evaluating and reporting other effective area-based conservation measures in marine fisheries • Study on the linkages between protected areas and the conservation of biodiversity for food and agriculture – Thematic Study for The State of the World's Biodiversity for Food and Agriculture • Marine protected areas: Interactions with fisheries livelihoods and food security 	<ul style="list-style-type: none"> • Coverage of protected areas and other effective area based conservation measures (SDG 14.5.1 and 15.4.1; GBF HI 3.1) – disaggregated by relevant realm and by ecosystem functional group • Coverage of Globally Important Agricultural Heritage Systems

FA BFA Actions	Key resources to support implementation	Relevant indicators and databases
well as Globally Important Agricultural Heritage Systems.	<ul style="list-style-type: none"> • FAO elearning Academy: Introduction to other effective area-based conservation measures in marine fisheries • FAO elearning Academy: Recognizing other effective area-based conservation measures in marine fisheries 	
3.1.1 Raise awareness, at all levels, of the importance of BFA, of the ecosystem services it provides and of the need for its sustainable use, conservation and restoration, including by supporting regional and international awareness-raising campaigns, with a view to strengthening support from governments, institutions and other relevant stakeholders. Develop relevant capacity to support these efforts, as required.	<ul style="list-style-type: none"> • How the world's food security depends on biodiversity • Delivering on the Kunming-Montreal Global Biodiversity Framework through agrifood systems • FAO elearning Academy: Biodiversity and agrifood systems (<i>under development</i>) 	<ul style="list-style-type: none"> • Number of countries that have taken significant action to strengthen capacity-building and development and access to and transfer of technology, and to promote the development of and access to innovation and technical and scientific cooperation (GBF binary indicator 20.b; <i>under development</i>)
3.1.2 Improve capacity for research on BFA, in particular soil biodiversity and other associated biodiversity, wild foods and ecosystem services, including through the formation of multi-, inter- and transdisciplinary research teams and by strengthening mechanisms for cooperation and exchange of information between scientists and producers and other stakeholders involved in the management of BFA. Promote innovative ways of building capacity, for example through the use of information and communication technologies and through participatory approaches involving, inter alia, indigenous and local communities of traditional-knowledge holders.	<ul style="list-style-type: none"> • Global Soil Doctors Programme • Recarbonization of Global Agricultural Soils (RECISOIL) Initiative 	<ul style="list-style-type: none"> • Number of countries that have taken significant action to strengthen capacity-building and development and access to and transfer of technology, and to promote the development of and access to innovation and technical and scientific cooperation (GBF binary indicator 20.b; <i>under development</i>)
3.1.3 Improve the communication of research findings on BFA, and promote their uptake and use by producers and policymakers.	<ul style="list-style-type: none"> • Guidance on strengthening national science-policy interfaces for agrifood systems 	

FA BFA Actions	Key resources to support implementation	Relevant indicators and databases
3.1.4 Assess gaps and strengthen the teaching of all relevant areas of knowledge related to BFA in universities, schools and in professional and informal education and training, targeting various stakeholders, including citizen scientists, and promoting interdisciplinary skills.	<ul style="list-style-type: none"> • The Youth Guide to Biodiversity • Pollinators Challenge Badge 	
3.1.5 Promote opportunities for ongoing training and education for farmers, fisherfolk, livestock keepers and forest dwellers, including via farmer field schools, producer group extension programmes or community-based organizations, to strengthen the sustainable use and conservation of BFA and the ecosystem services it supports.		<ul style="list-style-type: none"> • Number of countries that have taken significant action to strengthen capacity-building and development and access to and transfer of technology, and to promote the development of and access to innovation and technical and scientific cooperation (GBF binary indicator 20.b; <i>under development</i>)
3.1.6 Strengthen research-related policy frameworks for BFA to ensure support for long-term research activities, and increase the availability of human, physical and financial resources for this purpose.		<ul style="list-style-type: none"> • Number of countries that have taken significant action to strengthen capacity-building and development and access to and transfer of technology, and to promote the development of and access to innovation and technical and scientific cooperation (GBF binary indicator 20.b; <i>under development</i>)
3.1.7 Promote, through various means (e.g. increasing recognition, including through adequate remuneration, providing adequate infrastructure, such as laboratories, and logistical support), education and research in the field of BFA.		<ul style="list-style-type: none"> • Volume of official development assistance flows for scholarships by sector and type of study
3.1.8 Strengthen capacity to use assessment and monitoring systems, including by improving the dissemination of information to users.	<ul style="list-style-type: none"> • Voluntary guidelines on national forest monitoring • Development of integrated multipurpose animal recording systems • Good practices in sample-based area estimation • Biodiversity and the livestock sector - Guidelines for quantitative assessment • Peatland mapping and monitoring • Protocol to detect and monitor pollinator communities: Guidance for practitioners • Protocol for the assessment of Sustainable Soil Management • Tool for Agroecology Performance Evaluation (TAPE) • Surveying and monitoring of animal genetic resources 	<ul style="list-style-type: none"> • Growth in species occurrence records accessible through the Global Biodiversity Information Facility (GBF complementary indicator) – analysis could potentially be disaggregated by species of particular relevance • Growth in marine species occurrence records accessible through the Ocean Biodiversity Information System (GBF complementary indicator) – analysis could potentially be disaggregated by species of particular relevance

FA BFA Actions	Key resources to support implementation	Relevant indicators and databases
3.1.9 Promote awareness raising and sharing of information on BFA-friendly management practices and approaches, including through the use of participatory techniques (for instance community-made videos, photo, stories and infographics).		
3.1.10 Promote research, including interdisciplinary, transdisciplinary, cross-cultural and participatory research, on BFA and its roles in agrifood systems and on management practices and approaches that contribute or potentially contribute to the sustainable use, conservation and restoration of BFA.		<ul style="list-style-type: none"> • Volume of official development assistance flows for scholarships by sector and type of study (GBF complementary indicator)
3.2.1 Inventory and review existing legislative, administrative and policy frameworks relevant to the sustainable use, conservation and restoration of BFA, with a view to identifying gaps, weaknesses or inefficiencies. In reviewing and, as relevant, updating them, consider options for adequately mainstreaming all components of BFA and addressing drivers of change, as well as cross-sectoral considerations, as appropriate.	<ul style="list-style-type: none"> • A diagnostic tool for implementing an ecosystem approach to fisheries through policy and legal frameworks 	<ul style="list-style-type: none"> • Number of countries integrating biodiversity and its multiple values into policies, regulations, planning, development processes, poverty eradication strategies and, as appropriate, national accounts, within and across all levels and across all sectors, and progressively aligning all relevant public and private activities and fiscal and financial flows with the goals and targets of the Framework. (GBF binary indicator 14.b; <i>under development</i>)
3.2.2 In reviewing and, as relevant, updating legislative, administrative and policy frameworks for the management of BFA, ensure that they are aligned, to the extent feasible, with the SDG Framework and promote the contributions of BFA and its management to efforts to meet the SDGs.	<ul style="list-style-type: none"> • Voluntary guidelines for mainstreaming biodiversity into policies, programmes and national and regional plans of action on nutrition • Mainstreaming biodiversity in forestry 	
3.2.3 Encourage the governing bodies of relevant international organizations to consider – as appropriate and consistent with their respective mandates – the importance of BFA and the ecosystem services it supplies when revising global agreements on biodiversity and on crop and		

FA BFA Actions	Key resources to support implementation	Relevant indicators and databases
livestock production, forestry, fisheries and aquaculture.		
3.2.4 Promote the implementation of studies, including participatory assessments, that identify the use and non-use values of BFA and the ecosystem services it provides – and of other relevant economic analyses – including by developing and standardizing economic methodologies and tools. Such studies should, as far as possible, build on existing information and assessments.	<ul style="list-style-type: none"> • System of Environmental-Economic Accounting for Agriculture, Forestry and Fisheries (SEEA AFF) 	<ul style="list-style-type: none"> • Integration of biodiversity into national accounting and reporting systems, defined as implementation of the System of Environmental-Economic Accounting (SDG 15.9.1b; GBF component indicator)
3.2.5 Promote the integration of the outcomes of economic analyses, including valuation studies, into conservation strategies and other aspects of BFA management.		<ul style="list-style-type: none"> • Integration of biodiversity into national accounting and reporting systems, defined as implementation of the System of Environmental-Economic Accounting (SDG 15.9.1b; GBF component indicator) • Number of countries integrating biodiversity and its multiple values into policies, regulations, planning, development processes, poverty eradication strategies and, as appropriate, national accounts, within and across all levels and across all sectors, and progressively aligning all relevant public and private activities and fiscal and financial flows with the goals and targets of the Framework (GBF binary indicator 14.b; <i>under development</i>)
3.2.6 Document and map existing incentive schemes and other economic instruments related to the management of BFA across the environmental and food and agriculture sectors and the public, non-governmental and private sectors. Where gaps, weaknesses or inefficiencies are identified, address them by developing new instruments or strengthening or harmonizing existing instruments, as appropriate and in a manner fully consistent with relevant international agreements and obligations.	<ul style="list-style-type: none"> • A multi-billion-dollar opportunity – Repurposing agricultural support to transform food systems 	<ul style="list-style-type: none"> • Positive incentives in place to promote biodiversity conservation and sustainable use (GBF HI 18.1) • Value of subsidies and other incentives harmful to biodiversity that have been eliminated, phased out or reformed (disaggregation by sector) (GBF HI 18.2)

FA BFA Actions	Key resources to support implementation	Relevant indicators and databases
3.2.7 Promote and incentivize – in a manner fully consistent with relevant international agreements and obligations – production systems that sustainably use and conserve BFA, including markets, sustainable sourcing policies and value chains for products from production systems that favour the conservation and sustainable use of BFA.	<ul style="list-style-type: none"> • OECD-FAO Business Handbook on Deforestation and Due Diligence in Agricultural Supply Chains 	<ul style="list-style-type: none"> • Positive incentives in place to promote biodiversity conservation and sustainable use (GBF HI 18.1) • Value of subsidies and other incentives harmful to biodiversity that have been eliminated, phased out or reformed (disaggregation by sector) (GBF HI 18.2) • Monetary value of payments for ecosystem services (GBF component indicator)
3.2.8 Eliminate, phase out or reform incentives harmful to biodiversity, in a manner fully consistent with other relevant international agreements and obligations, taking into account national socio-economic conditions.	<ul style="list-style-type: none"> • A multi-billion-dollar opportunity – Repurposing agricultural support to transform food systems 	<ul style="list-style-type: none"> • Positive incentives in place to promote biodiversity conservation and sustainable use (GBF HI 18.1) • Value of subsidies and other incentives harmful to biodiversity that have been eliminated, phased out or reformed (disaggregation by sector) (GBF HI 18.2)
3.2.9 Adapt policies and investment decisions in the various sectors of food and agriculture in a way that reduces ecosystem degradation and promotes the sustainable management of biodiversity and sustainable production systems.		
3.2.10 Promote sustainable consumption and production patterns, including through applying circular economy and other relevant approaches to resource-use efficiency, in order to support the sustainable use, conservation and restoration of BFA.	<ul style="list-style-type: none"> • Sustainable healthy diets – Guiding principles • Public food procurement for sustainable food systems and healthy diets – Volume 1 • Public food procurement for sustainable food systems and healthy diets - Volume 2 • Aspirational principles and criteria for a sustainable bioeconomy • Dashboard on bioeconomy strategies and related actions for sustainable development 	<ul style="list-style-type: none"> • Food Waste Index (GBF component indicator) • Material Footprint per Capita (GBF component indicator) • Global Environmental Impacts of Consumption (GBF component indicator) • Ecological Footprint (GBF component indicator)

FA BFA Actions	Key resources to support implementation	Relevant indicators and databases
<p>3.2.11 Promote, as appropriate, the implementation of access and benefit-sharing measures for GRFA as a means of improving the sustainable use of these resources, raising awareness of their roles and values and building capacity to strengthen research, education and training for their sustainable use and conservation, while recognizing the special nature and distinctive features of GRFA.</p>	<ul style="list-style-type: none"> • ABS Elements: Elements to facilitate domestic implementation of access and benefit-sharing for different subsectors of genetic resources for food and agriculture – with explanatory notes 	<ul style="list-style-type: none"> • Monetary benefits received in accordance with applicable internationally agreed Access and Benefit-sharing instruments (GBF HI C.1) • Non-monetary benefits arising from applicable international access and benefit-sharing instruments (GBF HI C.2) • Total number of internationally recognized certificates published in the Access and Benefit-sharing Clearing-House (GBF component indicator) • Total number of transfers of crop material from the Multilateral System of the International Treaty on Plant Genetic Resources for Food and Agriculture received in a country (GBF complementary indicator; SDG 15.6.1 sub-indicator) • Number of countries that have adopted legislative, administrative and policy frameworks to ensure fair and equitable sharing of benefits (SDG Indicator 15.6.1) • Number of users that have provided information relevant to the utilization of genetic resources to designated checkpoints (GBF complementary indicator) • Number of checkpoint communiqués published in the Access and Benefit-sharing Clearing-House (GBF complementary indicator) • Number of internationally recognized certificates of compliance for non-commercial purposes in the Access and Benefit-sharing Clearing-House (GBF complementary indicator)
<p>3.2.12 Enhance national frameworks for the assessment and monitoring of BFA, in particular associated biodiversity and wild foods, engaging national agencies and strengthening interagency coordination.</p>	<p><i>See Action 1.1.1</i></p>	<p><i>See Action 1.1.1</i></p>
<p>3.2.13 In planning and implementing designated areas, such as protected areas and other effective area-based conservation measures, raise awareness of, and take into account, as relevant, the roles of components of BFA.</p>	<p><i>See Action 2.2.4</i></p>	<ul style="list-style-type: none"> • List of Globally Important Agricultural Heritage Systems
<p>3.2.14 Support the mainstreaming of conservation, restoration and sustainable use of BFA into food value chains.</p>	<ul style="list-style-type: none"> • Voluntary Guidelines for Mainstreaming Biodiversity into Policies, Programmes and National and Regional Plans of Action on Nutrition • Policy Analysis Paper: Policy Mainstreaming of Biodiversity and Ecosystem Services with a Focus on Pollination • Mainstreaming biodiversity in forestry 	<ul style="list-style-type: none"> • Number of countries integrating biodiversity and its multiple values into policies, regulations, planning, development processes, poverty eradication strategies and, as appropriate, national accounts, within and across all levels and across all sectors, and progressively aligning all relevant public and private activities and fiscal and financial flows with the goals and targets of the Framework (GBF binary indicator 14.b; <i>under development</i>)

FA BFA Actions	Key resources to support implementation	Relevant indicators and databases
3.3.1 Inventory and describe national and regional institutions with mandates related to the management of BFA to enable the establishment or strengthening of relevant coordination mechanisms.	<ul style="list-style-type: none"> • A Guide to Effective Collaboration Action 	
3.3.2 Improve cooperation on BFA between relevant stakeholders, including producers, researchers, consumers and policy-makers within the sectors of food and agriculture and natural resources management and more widely, in order to facilitate the development of more relevant and effective BFA-related policies and to support participatory innovation and transfer of knowledge.	<ul style="list-style-type: none"> • Engaging women and men equally in managing biodiversity: Guidelines to address gender equality in policies and projects related to biodiversity • Options for encouraging, guiding and promoting the realization of Farmers' Rights as set out in Article 9 of the International Treaty • Rethinking our food systems: A guide for multi-stakeholder collaboration • The soil microbe: a game changer for food and agriculture 	<ul style="list-style-type: none"> • Number of countries taking action towards the full, equitable, inclusive, effective and gender-responsive representation and participation, in decision-making, and access to justice and information related to biodiversity by indigenous peoples and local communities, respecting their cultures and their rights over lands, territories, resources, and traditional knowledge, as well as by, women, and girls, children and youth, and persons with disabilities and the full protection of environmental human rights defenders (GBF binary indicator 22.b; <i>under development</i>)
3.3.3 Strengthen existing and/or establish new networks, including at national and regional levels, linking users and communities that manage associated biodiversity and ecosystem services on-farm and in situ, research institutes, scientists and other relevant stakeholders, inter alia to facilitate the sharing of data and of best practices.	<ul style="list-style-type: none"> • The MSP Guide: How to Design and Facilitate Multi-stakeholder Partnerships • The International Network on Soil Biodiversity (NETSOB) 	<ul style="list-style-type: none"> • Number of countries taking action towards the full, equitable, inclusive, effective and gender-responsive representation and participation, in decision-making, and access to justice and information related to biodiversity by indigenous peoples and local communities, respecting their cultures and their rights over lands, territories, resources, and traditional knowledge, as well as by, women, and girls, children and youth, and persons with disabilities and the full protection of environmental human rights defenders (GBF binary indicator 22.b; <i>under development</i>)
3.3.4 Further develop and strengthen international cooperation to mainstream BFA within and beyond agriculture sectors. Disseminate examples of successful cooperation.		
3.3.5 Further develop and strengthen international cooperation, including triangular and South-South cooperation, to foster capacity-building, technical assistance and technology transfer related to the management of BFA, especially in and to developing countries.		<ul style="list-style-type: none"> • Number of countries that have taken significant action to strengthen capacity-building and development and access to and transfer of technology, and to promote the development of and access to innovation and technical and scientific cooperation (GBF binary indicator 20.b; <i>under development</i>; this indicator includes the following question: <i>Has your country established partnerships to foster joint technology development and joint scientific research programmes for the conservation and sustainable use of biodiversity and strengthening scientific research and monitoring capabilities, including through South-South, North-South and triangular cooperation?</i>)

FA BFA Actions	Key resources to support implementation	Relevant indicators and databases
<p>3.3.6 Promote facilitated access to GRFA and the sharing of benefits arising from their use through implementation of relevant international instruments and/or other domestic regulatory mechanisms, considering the importance of such monetary and non-monetary benefits to the conservation and sustainable use of GRFA, especially in developing countries, and the special nature of GRFA and its distinctive features.</p>	<ul style="list-style-type: none"> • ABS Elements: Elements to facilitate domestic implementation of access and benefit-sharing for different subsectors of genetic resources for food and agriculture – with explanatory notes 	<ul style="list-style-type: none"> • Monetary benefits received in accordance with applicable internationally agreed Access and Benefit-sharing instruments (GBF HI C.1) • Non-monetary benefits arising from applicable international access and benefit-sharing instruments (GBF HI C.2) • Total number of internationally recognized certificates published in the Access and Benefit-sharing Clearing-House • Number of internationally recognized certificates of compliance for non-commercial purposes in the Access and Benefit-sharing Clearing-House
<p>3.3.7 Explore opportunities to increase support, including financial, for activities related to BFA, including research, innovation, monitoring and assessment, sustainable use and conservation, outreach, training and capacity-building.</p>		<ul style="list-style-type: none"> • Positive incentives in place to promote biodiversity conservation and sustainable use (GBF HI 18.1)
<p>3.3.8 Identify opportunities for efficient use of resources, for example by promoting synergies and cooperation between projects at national and regional levels.</p>		
<p>3.3.9 Support the funding strategies of the FAO Commission on Genetic Resources for Food and Agriculture’s sectoral Global Plans of Action and the implementation of its Multi-year Programme of Work.</p>	<ul style="list-style-type: none"> • Funding Strategy for the Implementation of the Global Plan of Action for Animal Genetic Resources - Revised edition • CGRFA-17/19/Report, Appendix D - Funding Strategy for the Implementation of the Global Plan of Action for the Conservation, Sustainable Use and Development of Forest Genetic Resources • CGRFA-19/23/Report, Appendix E – Multi-Year Programme of Work (MYPOW) 2023–2031 of the Commission 	
<p>3.3.10 Contribute to the implementation of the international initiatives for the conservation and sustainable use of soil biodiversity and of pollinators.</p>	<ul style="list-style-type: none"> • CBD/COP/DEC/15/28, Annex – Plan of Action (2020–2030) for the International Initiative for the Conservation and Sustainable Use of Soil Biodiversity • CBD/COP/DEC/14/6, Annex I – Updated Plan of Action 2018-2030 for the International Initiative on the Conservation and Sustainable Use of Pollinators 	<ul style="list-style-type: none"> • Red List Index (pollinating species) (GBF complementary indicator) • Global Soil Biodiversity Observatory (GLOSOB) (<i>under development</i>)

ANNEX V: CASE STUDIES AND EXAMPLES OF NATIONAL LEVEL IMPLEMENTATION OF THE FRAMEWORK FOR ACTION ON BIODIVERSITY FOR FOOD AND AGRICULTURE

[This Annex is a placeholder pending a request for inputs to Members of the Commission.]

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