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Organización de las  
Naciones Unidas para la  
Alimentación y la Agricultura

منظمة  
الأغذية والزراعة  
للأمم المتحدة

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# COMMISSION ON GENETIC RESOURCES FOR FOOD AND AGRICULTURE

## Item 7.3 of the Provisional Agenda

### Seventeenth Regular Session

Rome, 18–22 February 2019

## SUBMISSIONS BY COUNTRIES ON THE DRAFT NEEDS AND POSSIBLE ACTIONS FOR THE CONSERVATION AND SUSTAINABLE USE OF BIODIVERSITY FOR FOOD AND AGRICULTURE

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## I. INTRODUCTION

1. At its Sixteenth Regular Session, the Commission requested the Secretary to invite Members and observers to submit comments on the needs and possible actions contained in *Appendix I* of the document CGRFA-16/17/4 and proposals for additional needs or possible actions for the conservation and sustainable use of biodiversity for food and agriculture, taking into account the findings of the revised draft report on *The State of the World's Biodiversity for Food and Agriculture*.<sup>1</sup> In response to this request, the Secretariat, through Circular State Letter C/CBD-8 of 28 February 2018, invited Members to provide relevant inputs.

2. This document contains the inputs received in response to the Secretariat's invitation. The inputs have been grouped into the following sections: (a) General comments and inputs; (b) assessment and monitoring of biodiversity for food and agriculture (c) sustainable use and conservation of biodiversity for food and agriculture; (d) policies and programs, capacity development and cooperation relevant to biodiversity for food and agriculture; and (e) cross-cutting themes.

## II. GENERAL COMMENTS AND INPUTS

Several countries submitted comments and inputs on the draft needs and possible actions for the conservation and sustainable use of biodiversity for food and agriculture (BFA) at a more general level. Their relevant contributions are listed below.

**Australia:** *The document would benefit from more information about its intent and desired outcomes (including that each country will have different requirements).*

*The proposed needs and actions must be within the mandate of the Commission on Genetic Resources for Food and Agriculture and must not duplicate existing work. The document should also state how these needs and actions relate to the priorities in the existing Global Plan of Actions.*

*The document should state what the purpose of developing the list the needs and actions is and how they will be progressed e.g. voluntary guidance.*

*Add: The needs and actions are guidance only, which can be undertaken by members on a voluntary basis in accordance with national circumstances and international obligations.*

**Brazil:** *The document presents the basic needs and actions to implement/ improve use of biodiversity for food and agriculture. However, it tends to generate more obligations and reports to countries if needs and actions are approved by the Commission. In our particular case, we have a national legislation that already protects native breeds and most of the actions can be cumbersome to implement. This is the main reason we suggest the reduction of text in order to make the document more straightforward.*

**Canada:** *The Secretariat and other members of the Commission should indicate their views on the final purpose of these needs and actions. If it could be clearer about what the needs and actions might be used for, it would be easier for the Secretary, NFPs and member countries to provide guidance. Canada feels that a description of needs and possible actions may be useful to assist countries to better manage associated biodiversity for food and agriculture that is not addressed in any of the sectoral Global Plans of Action (GPA) already adopted by the Commission. The needs and possible actions must not duplicate needs and actions of sectorial GPAs. Most needs and possible actions are suggested for countries, some for FAO level. That should be specified.*

*A more logical sequence would be to first finalize the SOW-BFA report, and only afterwards identify "needs and possible actions".*

*No distinction appears to be made in the document between a "need" and a "possible action". Making this distinction would assist the Commission and its member countries.*

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<sup>1</sup> CGRFA-16/17/Report/Rev.1, paragraph 16.

*In many cases, the term “BFA” is used when it seems that “associated biodiversity” is meant. The text needs to be written more carefully. If not, many proposed needs and actions would duplicate the already adopted GPAs. In most cases, it is appropriate to replace “BFA” by “associated biodiversity” so as to avoid duplication of efforts in sectoral Plans of Action. A definition of what “associated biodiversity” includes may be required.*

*Many of the proposed actions are expressed too categorically. Certain should be qualified “as appropriate” or “consistent with relevant international obligations”.*

**Norway:** *There are very many points and suggestions in the current list. If this is intended to constitute a basis for a global “to-do-list” (or a GPA), there might be more useful to get an agreement on fewer, prioritised tasks and leave the rest as more “nice to have”, which could serve as inspiration for countries for possible further activities. If there are fewer priorities, it also makes it easier to report on globally, and they are more likely to be suitable to be used as indicators.*

*All needs and actions should be more clearly defined as either national, regional or global responsibility*

*There is a need to ensure that BFA is more coherently defined and used throughout the document. The current SoW BFA is naturally focusing more on the part of BFA not covered by the sub-sector SoW reports (microbes, ecosystem services etc), but still, the ideal should be that the SoW BFA treats all BFA in a balanced way.*

#### **Switzerland:**

*Identification of the actors*

*The document lists many relevant needs and possible actions to enhance Biodiversity for Food and Agriculture (BFA). In order to facilitate the concrete action upon them the document would gain value from identifying the relevant actors and what actions they should ideally take. This could either be realized by amending the existing paragraphs or by reorganizing the paper and regrouping the needs and actions along stakeholder groups.*

*Further consider the link between BFA with its corresponding ecosystem services*

*The document focuses on the notion of BFA and sometimes mentions its corresponding ecosystem services. BFA is indeed fundamental for the provision of ecosystem services and, consequently, both are interdependent. Changes in biodiversity can influence the supply of ecosystem services. If those ecosystem services (e.g. pollination, erosion control, water filtration, nutrient cycling/supply, clean air/drought/flood regulation, pest and disease control, etc.) decline further and have to be replaced by humankind activities, it would generate tremendous costs. Therefore, in order for farmers, consumers, policy makers (etc.) to understand biodiversity and the ecosystem services as a whole, this document would be an excellent opportunity to strengthen the message on this interrelation and to complement “BFA” by “BFA and its ecosystem services” where this is most appropriate.*

*Highlight examples of already existing sustainable farming concepts/methodologies that promote BFA*

*The document lays out different actions that should be taken to promote BFA. BFA is relevant for all farming systems. However, nowadays, there are defined farming concept/methodologies that are particularly apt to enhance BFA such as agroecology (as defined by FAO). Therefore, the paper should establish a list of examples of the existing sustainable farming concepts/methodologies that promote BFA.*

*Needs and actions for the conservation and sustainable use of biodiversity for food and agriculture (BFA) address the different sectors of genetic resources for food and agriculture (GRFA), ecosystem services, associated biodiversity and wild foods.*

**Thailand:** *The draft needs and possible actions contained in Appendix I (CGRFA-16/17/4) provide useful guidance to policy makers and relevant stakeholders on the conservation and sustainable use of biodiversity for food and agriculture (BFA). The draft contains a comprehensive list of guidelines which is corresponded with most of the national biodiversity strategies as well as being in line with the global future trends. The draft covers nearly all elements of BFA and is agreeable to me. I would*

like to propose just few additional needs to strengthen capacities, i.e., providing new learning opportunities for different stakeholders (e.g. establishing online learning center).

**United States of America:** In general, the Needs and Possible actions should reinforce but not duplicate work being done under the Global Plans of Action (GPAs). It would be useful to acknowledge where the Needs and Possible Actions outlined in Appendix 1 overlap with the GPAs.

### III. ASSESSMENT AND MONITORING OF BIODIVERSITY FOR FOOD AND AGRICULTURE

**Colombia:** Lo expuesto en este capítulo se considera de suma importancia, pertinente y necesario para ser incluido en las esferas gubernamentales de los Estados, a continuación, los comentarios del punto 1:

Respecto al establecimiento de normas, en especial lo referente a alcanzar un acuerdo del “concepto de biodiversidad para la alimentación y la agricultura”, se recomienda tener en cuenta las especies que han sido naturalizadas o bien denominadas en algunas regiones del mundo como criollas y que por tanto forman parte de la biodiversidad y en especial para la alimentación y la agricultura desde un enfoque de recursos fitogenéticos y conocimientos tradicionales asociados a los mismos para su uso y conservación, teniendo como base el concepto de recursos fitogenéticos para la Alimentación y la Agricultura (RFAA) definido por la FAO, así:

“Los recursos fitogenéticos son la base biológica de la seguridad alimentaria y, directa o indirectamente, sostienen los medios de subsistencia de todos los habitantes de la Tierra. Los Recursos Fitogenéticos para la Alimentación y la Agricultura (RFAA) consisten en una diversidad de semillas y materiales para la siembra de variedades tradicionales y de cultivares modernos, de variedades silvestres afines a los cultivos y de otras especies de plantas silvestres. Estos recursos se utilizan para la alimentación humana y animal, para fibras, vestimenta, vivienda y energía”.<sup>2</sup>

**Yemen:**

#### واستخدامه المستدام

في ضوء الدعوة من منظمة الأغذية والزراعة للبلدان الأعضاء في المنظمة، ومنها اليمن لإبداء الملاحظات حول الوثيقة المعنونة بـ مشروع الاحتياجات والإجراءات الممكن اتخاذها لصون التنوع البيولوجي للأغذية والزراعة واستخدامه المستدام، وذلك مصحوباً بخطاب رقم 8-C/CBD وتاريخ 28 فبراير 2018م. وبهذا الخصوص، نود احظتكم علماً بأنه قد تم تعميم الخطاب والوثيقة المذكورة من خلال البريد الإلكتروني على العديد من المختصين والخبراء الوطنيين الذين يرتبط عملهم بالتنوع البيولوجي في بلادنا، وفي ضوء الاطلاع على الوثيقة ومناقشتها نود ان نؤكد على:

- إننا في اليمن نتفق مع كل ما ورد في الوثيقة من نقاط الاحتياجات والإجراءات الممكن اتخاذها من أجل صون واستخدام التنوع البيولوجي للأغذية والزراعة.
- نشدد على ضرورة مراعاة منهجية الاستدامة في كل الإجراءات المطلوب اتخاذها من أجل صون وتقييم واستخدام التنوع البيولوجي للأغذية والزراعة.
- لا يستطيع اليمن الذي يعاني اليوم من ازمان مركبة ممثلة بالفقر والجوع والصراع المسلح وغياب مؤسسات الدولة والأوضاع المالية والاقتصادية المتردية من القيام بالدور المطلوب في مجال حماية التنوع البيولوجي للأغذية والزراعة. ولذا، ندعو الدول الاعضاء في منظمة الاغذية والزراعة (الفاو) والمنظمات الدولية المهتمة بالتنوع البيولوجي للأغذية والزراعة إلى الوقوف الى جانب اليمن في ازمته الحالية وحثّ بلدانهم للمساعدة في إنهاء الصراع في اليمن ومدّ يد العون والمساعدة

<sup>2</sup> FAO. Semillas y recursos fitogenéticos: una base para la vida. Disponible online: <http://www.fao.org/agriculture/crops/mapa-tematica-del-sitio/theme/seeds-pgr/es/>. Consultado el: 04 de Abril de 2018.

للمؤسسات الوطنية المختصة بما يمكنها من القيام بدورها في هذا الصدد وبما يعزز دورها في رصد وتقييم وتشجيع استخدام التنوع البيولوجي للأغذية والزراعة في بلادنا بصورة منهجية ومنتظمة ومستدامة.

- وبشأن بعض الملاحظات حول ما ورد في الوثيقة التي تم الاطلاع عليها باللغة العربية، يسرنا موافاتكم ببعض الآراء والملاحظات بصورة موجزة على النحو التالي:

## 1.1 Improve availability and access to information and knowledge

1.1.1 Standard setting: clarify terms and concepts used in biodiversity for food and agriculture (BFA)-related discussions. Standardize data collection, protocols and inventory systems for BFA, particularly for associated biodiversity and wild foods; reach institutional agreement on the concept of BFA.

**Colombia:** *Adicionalmente, en el marco de la conservación de la Biodiversidad para la Alimentación y la Agricultura (BAA) y con base en lo expuesto anteriormente, es necesario tener en cuenta la pertinencia cultural de los alimentos*

**Ecuador:** *En el acuerdo sobre el concepto de BAA se debería indicar claramente el alcance de la BAA. Existe una línea poco clara entre las especies silvestres y los “wild relatives”.*

**France:** Suggests insertions: ‘Standard setting: *in relation to the Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services (IPBES)*’

‘*Taking into account the international initiatives in this realm, standardize data*’

**Switzerland:** *When defining BFA, consider ecosystems and ecosystems services as well in order to enable the various stakeholders (farmers, consumers, policy makers etc.) to better link all 3 words and to see them as a whole. It would also help if the BFA-related discussions could integrate examples of already defined farming concepts/methodologies that promote BFA such as agroecology defined by the FAO.*

*So 1.1.1 could be amended as follows:*

‘Standard setting: clarify terms and concepts used in biodiversity for food and agriculture (BFA)-related discussions *and integrate examples of already defined farming concepts/methodologies that promote BFA such as agroecology defined by the FAO.* Standardize data collection, (...) reach institutional agreement on the concept of BFA, with integration of the already defined terms of ecosystems, ecosystem services.’

1.1.2 Overview of existing knowledge on BFA: compile and structure existing data at national level, identify existing indicators, and explore potential of indicators that serve multiple purposes (including Sustainable Development Goals and Aichi targets).

**Canada:** *This paragraph should be deleted. It is one of the steps in the development of the SOW-BFA itself, at national level. It should only need to be done for this purpose. How can this be identified as a need when it was already one of the objectives of the SOW-BFA?*

**Ecuador:** *A excepción a plantas, animales y forestales que existen indicadores aunque no completos, se debe indicar que para los otros subsectores hay que generar indicadores.*

**France:** *Combiner les paragraphes 1.1.2., 1.1.3. et 1.1.5. pour ne faire qu'un point sur les monitoring systems.*

**United States of America:** *It seems that agreeing on the definition and terms and concepts associated with BFA might be a separate item.*

1.1.3 Review, and where feasible make use of or adapt, existing monitoring systems (e.g. Sustainable Development Goals, Convention on Biological Diversity [CBD], European Union Biodiversity Strategy) relevant to BFA, and strengthen monitoring systems developed under the auspices of the Commission.

**Canada:** *If “BFA” is retained this would duplicate monitoring under existing GPAs. Replace with “associated biodiversity”? The phrase “strengthen monitoring systems developed under the auspices of the Commission” is unclear. What does it mean in terms of additional work under the Commission?*

**Ecuador:** *También fortalecer los sistemas de seguimiento nacionales con la finalidad de fortalecer las capacidades nacionales*

1.1.4 Identify priority species, production systems or ecosystem services, within and across sectors, for monitoring, sustainable use and conservation of BFA at national, regional and global levels.

**Australia:** *How does this relate to the priorities in the existing Global Plans and Actions?*

**Canada:** *Identify to what end countries should carry this out. If related to “BFA” it appears duplicative with sectorial Plans of Action.*

**Colombia:** *Respecto a la utilización sostenible y la conservación de la BAA a nivel nacional, regional y mundial se hace necesario definir los sistemas de producción y prácticas adecuadas para tal fin y por tanto el fomento a estos sistemas a los niveles mencionados, entre estos la agricultura orgánica y agroecológica.*

*Para lo anterior se cita lo expuesto en el “Documento de preparación del estado de la biodiversidad para la alimentación y la agricultura en el mundo” (CGRFA-16/17/3), capítulo de resultados preliminares: “Se ha notificado un incremento del uso de una serie de prácticas de gestión consideradas favorables al uso sostenible y la conservación de la biodiversidad para la alimentación y la agricultura. Muchos países informan sobre tendencias al alza en la aplicación de prácticas como la agricultura orgánica, el control de la polinización, la gestión sostenible de los suelos, el manejo integrado de nutrientes de las plantas y la gestión integrada de plagas”.*

**Ecuador:** *Considero que lo que se debe identificar es zonas prioritarias en base a criterios biológicos, ecogeográficos, económicos, demográficos, culturales, etc. Donde se desarrollen programas para la conservación y uso sostenible de la BAA.*

**France:** *Préciser qui identifie les espèces prioritaires, les systèmes de productions ou les services écosystémiques pour un suivi au niveau régional et global.*

1.1.5 Strengthen and establish monitoring systems and assessment tools for BFA in a participatory way; review frameworks for the assessment of BFA (including the classification of production systems), for measuring the status and trends of ecosystem functions and the prevalence of management practices that impact on BFA and the delivery of ecosystem services.

**Canada:** *Should note that this would take many years, if it is at all feasible. Less so if the scope is “associated biodiversity” not “BFA”.*

**Ecuador:** *‘Strengthen and establish monitoring systems and assessment tools for BFA in a participatory way’ Esto podría ser parte del punto 1.1.3.*

*‘review frameworks for the assessment of BFA’ Considero que se debería en primera instancia caracterizar los sistemas de producción y luego examinar los marcos sobre evaluación.*

**Germany:** *Definition of production systems varies. Production systems tend to suit from an agricultural perspective, but from a biological perspective landscape would be more appropriate to combine indicators bearing reference to agriculture or environment.*

1.1.6 Collect baseline information and monitor various aspects related to BFA, including management practices, impacts of management decisions on BFA, land-use pattern, ‘culturally relevant’ foods, socio-economic and environmental characterization of production systems, characterization of ecosystem services, traditional knowledge, risks and threats from drivers, including pests and diseases.

**Canada:** *Replace “BFA” with “associated biodiversity”. Who would collect this information? At what level?*

**Ecuador:** *También los riesgos ocasionados por factores abióticos e incluir la importancia de los polinizadores.*

1.1.7 Develop knowledge management systems and improve exchange and dissemination of BFA-related knowledge, including on its sustainable use and conservation.

**Gabon:** Suggests additional paragraph: ‘1.1.8 Développer les outils de collecte et de diffusion des informations et données sur la biodiversité’

**Switzerland:** *should be complemented as follows:*

*‘Improve/update the capacity building/training of farmers/extension services/agricultural engineers regarding BFA (including knowledge about concepts promoting BFA and its ecosystem services such as organic farming and agroecology).’*

## 1.2 Improve cooperation and financial support

1.2.1 Strengthen the involvement of informal research systems, including citizen science, in monitoring, particularly in relation to associated biodiversity.

**Canada:** *Delete “informal”. Why limit the scope of involvement?*

**Ecuador:** *Sería más conveniente indicar la investigación participativa antes que informal que no se entiende muy bien a que se refiere.*

**France:** *Combiner les points 1.2.1 et 1.2.4.*

**United States of America:** *This may require guidance on how to effectively use citizen science, and how to evaluate the quality and accuracy of data. Suggests insertion: ‘Strengthen the involvement of informal research systems, including citizen science, as appropriate, in monitoring, particularly in relation to associated biodiversity.’*

**Yemen:**

البند 1-2-1 أضافة كلمة (الغير) قبل كلمة (الرسمية). تصبح الجملة (تعزيز مشاركة نظم البحوث الغير رسمية)

1.2.2 Set clear goals for monitoring BFA and identify responsibilities. This could involve mandating a national agency to collect data, monitor and assess BFA (e.g. from the agriculture or environment sectors, or both).

**France:** *Le point 1.2.2 devrait devenir le point 1.2.1.*

**Ecuador:** *Importante, sin embargo, antes de eso se debe fortalecer las capacidades institucionales que son muy débiles.*

1.2.3 Strengthen cooperation, as appropriate, between ministries, in particular agriculture sectors and environment, and different levels of government (local, regional, national) with respect to the assessment and monitoring of BFA.

**Ecuador:** *Fortalecer la cooperación y definir competencias en BAA, si fuera el caso.*

**Switzerland:** Suggests insertion: ‘(...) as appropriate, between sectors, in particular agriculture and environment sectors, between ministries, and different levels (...)’

1.2.4 Increase public support for the assessment and monitoring of BFA, by promoting the roles of public–private partnerships, farmers, livestock keepers, forest dwellers and fisherfolk and other sources of provision such as citizen science.

**Australia:** *add ‘pastoralists and rangers’ after livestock keepers*

**Canada:** *Clarify how promoting these roles would increase public support. What about adding scientists and ecologists?*

**United States of America:** *See comment on 1.2.1 re. citizen science*

**Gabon:** Suggests additional paragraphs:

*‘1.2.5 S’assurer de l’implication des organisations de la société civile dans le processus de suivi-évaluation de la biodiversité.*

*1.2.6 Mettre en place des cadres de concertations nationaux sous forme de plateforme de suivi-évaluation de la biodiversité.*

*1.2.7 Allouer un fonds devant soutenir les activités de suivi-évaluation de la biodiversité.’*

**Germany:** Suggests insertion: ‘forest dwellers, forest managers, forest workers’

**Yemen:**

وضع تشريعات خاصة تمكن المجتمعات المحلية من الاستفادة من حماية التنوع البيولوجي للأغذية والزراعة 1-2-5 إضافة بند جديد

#### IV. SUSTAINABLE USE AND CONSERVATION OF BIODIVERSITY FOR FOOD AND AGRICULTURE

**Colombia:** *Lo expuesto en este capítulo se considera de suma importancia, pertinente y necesario para ser incluido en las esferas gubernamentales de los Estados*

##### SUSTAINABLE USE

###### 2.1 Improve research and knowledge

2.1.1 Document use and management practices related to BFA to generate knowledge on how management practices influence BFA and identify best practices that could contribute to its sustainable use.

**Canada:** *If this relates to all BFA, then it duplicates sectoral GPAs. Should specify something like “BFA not already addressed in sectoral GPAs” or “associated biodiversity”.*

**Ecuador:** *También difundir las mejores prácticas.*

2.1.2 Conduct research on various aspects related to the use of BFA, including on the roles of micro-organisms and invertebrates in ecosystem functioning, their interactions, the sustainable use of locally adapted plants and animals for food and agriculture, the impacts of practices that are believed to promote BFA, opportunities for using native species to strengthen the delivery of ecosystem services, and the contribution of wild foods to food security and nutrition.

**Brazil:** suggests replacing ‘locally adapted’ with ‘native’

*“native” seems to fit better with our biodiversity.*

**Canada:** suggests inserting ‘Conduct research on various aspects related to the use of BFA *without duplicating actions of sectorial GPAs*’

**Ecuador:** *Así como al cambio climático.*

**France:** Suggests insertion: ‘the impacts of practices that are believed to promote BFA *including on genetic diversity at local, national and global level*’

**Switzerland:** Suggests insertion: (...) related to the use of BFA (*e.g. nutritional benefits and agronomic properties of old/local crop varieties*) including its ecosystem services for sustainable agriculture, including the role of micro-organisms and invertebrates (...)

2.1.3 Develop guidelines and tools to facilitate the implementation of best practices.

**Canada:** *The scope is too wide. “Best practices” for what?*

**Colombia:** *Respecto a la elaboración de directrices e instrumentos que faciliten la aplicación de las mejores prácticas (2.1.3), es de suma importancia hacerlo de forma diferenciada y no generalizada, considerando las características propias de cada territorio, al menos a nivel nacional. Debido a que*

*la diferencia en ecosistemas, costumbres culturales y marco normativo de cada país. Solo así se podrán tener conceptos idóneos.*

**Ecuador:** *Y la validación de las mejores prácticas.*

**Namibia:** *We are of the opinion that this should be the first heading to talk to improving research and knowledge. Then 2.1.1 and 2.1.2 will be subheading under this point. Those two supposedly subheadings only talk of getting information and not how research is improved.*

2.1.4 Integrate knowledge of BFA, including associated biodiversity and wild foods, in natural resources management, including of protected areas and other effective area-based conservation measures.

**Canada:** *Delete “including of” to avoid duplicating sectoral GPAs.*

**Ecuador:** *En vez de zonas geográficas, áreas prioritarias de conservación identificadas con metodología objetiva.*

2.1.5 Document and promote the use of traditional knowledge, including through knowledge sharing between countries.

**Australia:** suggests deletion.

*This is the remit of the Convention on Biological Diversity (Article 8(j) of the CBD).*

**Brazil:** suggests deletion of ‘including through knowledge sharing between countries’

*To share TK depends on each national law and depends on Prior Informed Consent from indigenous and local communities in accordance to the Brazilian Law n° 13123/2015*

**Canada:** *Scope is too wide and duplicates sectoral GPAs. Suggests insertion: ‘... traditional knowledge associated with BFA not already treated in sectoral GPAs...’*

**Colombia:** *Hay que limitar el alcance del numeral 2.1.5, ya que el conocimiento tradicional es un conocimiento que no es de uso público, que no se encuentra publicado o compartido en bases de datos y sí está asociado a productos genéticos o productos derivados de la biodiversidad. De conformidad con las leyes nacionales, cada Parte adoptará medidas, según proceda, con miras a asegurar que se acceda a los conocimientos tradicionales asociados a recursos genéticos que están en posesión de comunidades indígenas y locales con el consentimiento fundamentado previo a la aprobación y participación de dichas comunidades indígenas y locales, y que se hayan establecido condiciones mutuamente acordadas, como lo establece el CBD y el Protocolo de Nagoya.*

**Ecuador:** *De acuerdo las leyes de acceso vigentes en los países.*

2.1.6 Promote diverse production systems (e.g. integrated and agro-ecological farming systems).

**Australia:** Suggests rewording: ‘Promote sustainable production systems’

*The Australian Government does not dictate which production systems farmers should use. If this suggestion is not accepted, we ask the words “provided this is done in a way that does not distort production or trade” after the brackets.*

**Canada:** *Delete, or rephrase to avoid duplicating sectoral GPAs.*

**Colombia:** *Respecto a la promoción de diversos sistemas de producción (por ejemplo, sistemas de producción agropecuaria integrados y agroecológicos) (2.1.6), será necesario contar con el fomento de los mismos desde el gobierno (Ministerio de Agricultura y Desarrollo Rural), evidenciado en el aumento de hectáreas sembradas bajo sistemas de producción orgánica y agroecológica, incentivos ambientales y económicos y el fortalecimiento de capacidades técnicas orientadas a la calidad. Para esto, será importante con el apoyo en el fortalecimiento institucional para tal fin.*

**Ecuador:** *Promover sistemas de producción biodiversos.*

**France:** Suggests insertion: ‘Promote diverse production systems *which combine economic performance and BFA conservation and/or restoration*’

**Switzerland:** Should be amended to: ‘Promote diverse *sustainable* production systems (e.g. integrated, *intercropping, agroforestry* and agro-ecological farming systems)’

*Explanation: Needs to be in line with the 2030 Agenda which calls for sustainable agricultural systems until 2030.*

**United States of America:** *To maintain a broader focus, we recommend deleting the parenthetical reference to specific system types:*

Suggests deletion: ‘Promote diverse production systems (~~e.g. integrated and agro-ecological farming systems~~).’

2.1.7 Identify and implement appropriate technologies and strategies for restoration of biodiversity in production systems, including re-introduction and domestication.

**Canada:** Suggests insertion: ‘production systems, *as appropriate*’

*Clarify how domestication restores biodiversity (or delete).*

**Ecuador:** *La reintroducción desde bancos comunales o bancos de germoplasma.*

2.1.8. Develop GIS tools for the monitoring and management of BFA in landscapes and seascapes.

**Canada:** *Scope is too wide. Suggest to insert ‘...BFA not already addressed in sectoral GPAs ...’ or ‘associated biodiversity’.*

**France:** *Supprimer le 2.1.8, redondant avec le 1.1.*

**United States of America:** *We note that GIS is a tool for geographically displaying information, and would need to be paired with robust data sets or remote sensing data to be useful for monitoring and management.*

**Yemen:**

البند 2-1-8 هو أحد جوانب البند 1.1.7. فالمشكلة العامة هي غياب وفي أحسن الأحوال ضعف نظم إدارة المعرفة بشكل عام ونظم المعلومات الجغرافية أحدها وذلك لأسباب هيكلية وازدواجية وتداخل المهام وتشتت الموارد والقدرات .. فإذا تأسست نظم لإدارة المعرفة بصورة متكاملة وجيدة وبرؤية استراتيجية وخطط وبرامج زمنية عملية وملائمة لا شك أنها ستشمل أيضاً تطوير أو تحسين أدوات نظم المعلومات الجغرافية واستخدامها بشكل موجه لتحسين التنوع الحيوي للأغذية والزراعة من حيث الرصد والاستخدام والتقييم الخ.

**Germany:** Suggests inserting new paragraphs:

‘2.1.9 *Strengthen transfer of technology and know-how to optimize agricultural production systems worldwide regarding agroecology*

2.1.10 *Promote research to analyse the contributions of new technologies like digitalization and new breeding techniques to integrate the concept of agroecology/sustainable agriculture.*

2.1.11 *Strengthen research activities on the interrelation of yield, soil management systems and greenhouse gas imitation and carbon sequestration.*’

**Switzerland:** Suggests inserting new paragraph:

‘2.1.9 *Promote knowledge/awareness raising through e.g. multistakeholder approaches (farmers, consumers/population, extension services, policy makers, etc.).*’

**2.2 Develop markets and value chains**

**Switzerland:** Suggests insertion: ‘Develop markets and *sustainable* value chains’

2.2.1 Further develop markets and value chains for products from production systems that favour the maintenance and sustainable use of BFA and promote the use of local/traditional foods to improve nutrition and health, and raise consumer awareness.

**Australia:** Suggests insertion: ‘Further develop markets and value chains for products from production systems that favour the maintenance and sustainable use of BFA and promote the use of local/traditional foods *in accordance with international obligations* to improve nutrition and health, and raise consumer awareness.’

*We have added the words “in accordance with international obligations” to ensure countries do not use this action to circumvent obligations under the Convention on International Trade in Endangered Species of Wild Fauna and Flora.*

**Canada:** *This appears entirely duplicative of the GPA-PGR (at least).*

**Ecuador:** *Alimentos y/o tradicionales y promover el consumo de agrobiodiversidad biodiversa*

**France:** *Combiner le 2.2.1 et 2.2.4 (tout en gardant les exemples de la parenthèse du 2.2.4)*

**Switzerland:** Suggests insertion: ‘Further develop markets and sustainable value chains (...)’

**United States of America:** *Developing markets for some traditional foods, such certain types of bushmeat, may lead to overexploitation and raise health concerns.*

Suggests insertion: ‘Further develop markets and value chains for *certain* products’

**Yemen:**

البند 2-2-1 " ... نظم الإنتاج الداعمة أو المعززة لـصون التنوع .... " ربما أفضل من " .. التي تؤيد... "

2.2.2 Strengthen linkages between research and markets.

**Canada:** *Unclear. What does this mean?*

**Ecuador:** *No solo entre estos dos eslabones sino en toda la cadena de valor.*

**Switzerland:** *Should be amended to: ‘Strengthen linkages between research, markets and policy makers.’ Explanation: For a better link between research and markets politics and policies are inevitable.*

**Switzerland:** *2.2 should be complemented by an additional point between 2.2.2. and 2.2.3 as follows: ‘Consider enhancing short circuits and alternative retail infrastructures in order to strengthen linkages between farmers and consumers.’*

2.2.3 Conduct assessment, including participatory assessments, of the value of BFA, including ecosystem services, associated biodiversity and wild foods.

**Brazil:** suggests deletion.

*This action is covered by 2.2.2 and 2.2.4*

**Canada:** *Unclear. Please clarify what kind of value.*

**Ecuador:** *Tambien el monitoreo.*

**Switzerland:** *For the assessment of the value of BFA, the existing study called "How should we value nature in a human-dominated world?" from Prof. Dame Georgina Mace could be considered*

**United States of America:** *To the extent possible, we should make use of existing assessments and information and avoid duplicating efforts.*

Suggests insertion: ‘associated biodiversity and wild food, *making use of existing information or building on existing assessments to the extent possible.*’

2.2.4 Add value to products and services that depend on BFA (e.g. through labelling, certification, traceability, denomination of origin, geographic identification, branding, gastronomy, tourism, etc.)

and share information on product quality and positive environmental impact of production with consumers.

**Australia:** Suggests insertion: ‘Add value to products and services that depend on BFA (e.g. through labelling, certification, traceability, denomination of origin, geographic identification, branding, gastronomy, tourism, etc, *in accordance with international obligations.*) and share information on product quality and positive environmental impact of production with consumers.’

**Brazil:** suggests edit: *Estimate* and add value to products and services in relation to ~~that depend on~~ BFA

*Every product and services (ecosystems services) depend on BFA.*

**Canada:** *Certification is always voluntary. To whom is this proposal directed?*

**Ecuador:** *Incluir sellos y sistemas de garantía locales.*

**Switzerland:** Suggests rewording: ‘Add value to products and services *coming from production systems that make an effort to enhance BFA (...)*’

*Explanation: All agricultural systems depend on biodiversity and its ecosystem services.*

Suggests rewording: (...) on product quality and *on the sustainability status* of production (...)

*Explanation: consumers should also be informed about social and economic impacts, not only about environmental impacts.*

**Gabon:** Suggests additional paragraph: ‘2.2.5 *Favoriser le développement du commerce équitable sur les produits locaux et rares*’

**Switzerland:** Suggests additional paragraph: *There should be an additional point “2.2.5” which describes the need for marketing regulation to enable the consumers to receive adequate information about sustainable production systems, in order to foster responsible purchasing choices and behavior. It could be formulated as follows:*

‘Support marketing which fosters the consumers to make responsible and sustainable purchasing choices.’

**Yemen:**

أضافة بند 2-2-5 الربط بين الأنشطة الثقافية والمناسبات المجتمعية وحماية التنوع البيولوجي

## CONSERVATION OF BIODIVERSITY FOR FOOD AND AGRICULTURE

### 2.3 Improve in situ and ex situ conservation

**Colombia:** *Respecto a la conservación in situ y ex situ (2.3), se menciona conservar la biodiversidad asociada. Sin embargo, es importante ampliar el concepto mismo de biodiversidad para la alimentación y la agricultura, entiendo también las características de los territorios de cada nación.*

*Adicionalmente las estrategias de conservación deberán contemplar estrategias tanto para la conservación in situ y ex situ, entre estas el fortalecimiento de Bancos de Germoplasma de los países y capacidad para la investigación (infraestructura, conocimiento: capacidad técnico-científica) como herramienta para la conservación ex situ. Simultáneamente deben apoyarse las iniciativas locales de conservación de la BAA existentes y fomentar nuevas, esto a partir del fortalecimiento técnico en materia de infraestructura y conocimiento, teniendo en cuenta la importancia de la resiliencia frente al cambio climático.*

**Germany:** Suggests insertion: ‘Improve in situ and ex situ conservation ‘*of associated biodiversity and related ecosystems*’

2.3.1 Establish priorities for the conservation of associated biodiversity and related ecosystem services.

**Brazil:** *It is important to explain which methodology will be used for establishing priorities in the final text*

**Canada:** *Clarify at what level priorities are proposed to be established – within associated biodiversity or between it and other biodiversity and ecosystem services?*

**France:** *Suggests insertion: ‘Establish priorities for the conservation of genetic resources for food and agriculture and of associated biodiversity and related ecosystem services.’*

2.3.2 Ensure complementarity between *in situ* and *ex situ* conservation approaches for BFA, in particular for associated biodiversity and wild foods.

**Brazil:** *suggests deletion. The action 2.3.3 already cover this action and it has better writing.*

**Canada:** *Everyone now knows that in situ and ex situ conservation are complementary. The next step needed should be to ‘Seek to optimize complementarity...’.*

**Ecuador:** *Considero que no es necesario especificar ya que el enfoque de complementariedad en todos los subsectores es fundamental.*

**Namibia:** *Is this referring to Field Genebanks and Conventional seed storage as well?*

2.3.3 Promote the conservation of BFA, when appropriate, through a combination of traditional management practices and modern technologies, promote research on new techniques for the long-term conservation of BFA and improve the use of modern technologies for characterization, collection, storage, documentation and data management.

**Canada:** *Suggests insertion: ‘modern technologies, as appropriate’. This should also be specific to ‘associated biodiversity’ as the sectorial GPAs address this.*

**Ecuador:** *Base fundamental para la seguridad alimentaria mundial y la adaptación al cambio climático.*

2.3.4 Strengthen and establish effective gene banks, including for the conservation of micro-organisms and invertebrates, and improve recording and overviews of collections within countries.

**Canada:** *Suggests insertion: ‘gene banks, as appropriate’. In many cases in situ conservation may be more effective for micro-organisms and invertebrates.*

**Ecuador:** *Con el apoyo de la comunidad internacional.*

2.3.5 Ensure safe duplication of genetic material of relevance to food and agriculture to ensure this material is maintained in the case of human-made and/or natural disasters (resilience).

**Brazil:** *suggests deletion of ‘to ensure this material is maintained in the case of human-made and/or natural disasters (resilience)’*

*There are other reasons to duplicate material.*

**Canada:** *This duplicates the GPA-PGR, which states it better.*

**Ecuador:** *Mejorar las capacidades nacionales para mantener duplicados de seguridad*

**Namibia:** *Clarity required whether it means creating another facility where we are going to deposit our material as this can only mean their access to such resource for use. SPGRC can be put to standards to cater for animal genetic and microbes. Or does ensuring means facilitate or strengthening or mobilize resource for collection to obtain sufficient quantities to be able to back up genetic material?*

**Yemen:**

البند 2-3-5 أضافة الجملة التالية الى نهاية الفقرة ( الدعم السريع لبنوك الجينات ورفع قدرتها على صون وحفظ التنوع البيولوجي عند الكوارث والحروب).

2.3.6 Maintain and strengthen on-farm management efforts and programmes and the involvement of communities through awareness raising activities and capacity-building.

**Canada:** Suggests insertion: ‘involvement of communities, *as appropriate*’

**Ecuador:** *Asociatividad*

**United States of America:** Suggests insertion: ‘Maintain and strengthen on-farm management efforts and programmes to promote the conservation and sustainable use of GRFA’

2.3.7 Promote the development and/or expansion of protected forest areas, national parks, wildlife sanctuaries, marine protected areas and zoological gardens or other effective area based conservation measures for BFA and related ecosystem services.

**Ecuador:** *Generar, cuando aplique, e implementar políticas ambientales para la conservación adecuada de estas zonas.*

*[...] identificar los agroecosistemas y generar políticas sobre conservación y uso sostenible de estas zonas.*

**Switzerland:** Suggests rewording: Promote the *sustainable* development (*including the fact to be socially acceptable*) and/or expansion of (...)

*Explanation: it can have negative social impacts including food insecurity as a result, if peasants suddenly have to move from the land they cultivate.*

**Yemen:**

البند 2-3-7 حذف (القائمة على المناطق) من الفقرة.

2.3.8 Strengthen networks related to the conservation of BFA, including at national and regional levels between users and communities that maintain biodiversity on-farm and/or *in situ* and between research institutes and/or scientists.

**Ecuador:** Suggests insertion: *universidades.*

2.3.9 Develop national policy guidelines to strengthen *in situ* and *ex situ* conservation networks for BFA.

**Canada:** *The scope ‘BFA’ is too wide and duplicates sectoral GPAs. Suggest ‘...BFA not already addressed in sectoral GPAs ...’ or ‘associated biodiversity’.*

**Ecuador:** Suggests insertion: *y ejecutar políticas.*

2.3.10 Improve infrastructures and ensure the maintenance of facilities for the conservation of BFA.

**Brazil:** *This is a strong compromise. It is necessary to discuss the sources of additional financial resources that would be required.*

**Ecuador:** Suggests insertion: *Equipamiento y capacitación de recursos humanos.*

2.3.11 Strengthen research on the domestication, conservation and utilization of wild food species.

**Australia:** Suggests insertion: ‘Strengthen research on the domestication, conservation and utilization of wild food species, *in accordance to international obligations.*’

**Colombia:** *Respecto a la investigación sobre domesticación, conservación y utilización de especies de alimentos silvestres es pertinente incluir esquemas de mejoramiento participativo (2.3.11)*

**Colombia:** *Reconocer ante todo la labor del conocimiento tradicional y trabajo de las comunidades frente a la conservación que a la fecha existe de los BAA. Por tanto, la infraestructura también deberá ser fortalecida a nivel local (entiéndase en este caso local como el lugar en el que habitan y desarrollan actividades las comunidades rurales (campesinas, afrodescendientes, indígenas). Las prácticas locales*

*deberán ser consideradas también para la distribución de beneficios y mecanismos existentes para el intercambio de RGAA.*

**Ecuador:** Suggests insertion: *microorganismos, invertebrados y acuáticos.*

**Gabon:** Suggests additional paragraph: ‘2.3.12 *Promouvoir la création des jardins botaniques*’

**Germany:** Suggests insertion: ‘wild food species *where wild food plays an important role to food security.*’

**Yemen:**

التواصل مع المراكز البحثية في ايجاد الوسائل والأطر الفعالة لحفظ التنوع البيولوجي.2-3-12 إضافة بند جديد

## ACCESS AND BENEFIT-SHARING

**Namibia:** *Not to pre-emptive the process currently going on under the CBD i.e. utilization of Digital Sequence Information on Genetic Resources. One of our possible needs will be a text that carter for the ensures that synthetic biology techniques on BFA do not undermine the efforts made to date to implement the ABS.*

### 2.4 Regulatory frameworks

2.4.1 Coordinate national access and benefit-sharing schemes to facilitate exchange of BFA among countries and ensure fair and equitable benefit-sharing.

**Canada:** *The scope ‘BFA’ is too wide and duplicates sectoral GPAs. ABS is already a cross-cutting theme of the Commission.*

**Colombia:** *En cuanto al numeral 2.4.1 se sugieren cambios en la redacción así: ‘Coordinar los sistemas nacionales de acceso y distribución de los beneficios a fin de facilitar el intercambio de BAA entre países, Garantizando el acceso a los recursos genéticos y la distribución justa y equitativa de los beneficios de conformidad con las leyes nacionales.’*

**Ecuador:** *Considero que en muchos países no existen sistemas de ABS por lo que se debería indicar implementar, cuando proceda, y coordinar...*

**Namibia:** Suggests insertion: ‘Coordinate national, regional and international’

*Encompass of this three level scheme will enable us to facilitate exchange of BFA among countries while ensuring that ABS is met though either bilateral or multilateral mechanisms.*

**United States of America:** Suggests replacing ‘exchange of’ with ‘access to’

2.4.2 Identify needs and resources required to facilitate access and benefit-sharing for genetic resources for food and agriculture in line with the Nagoya Protocol.

**Brazil:** add ‘and the “Treaty”.’ at the end of the sentence.

*Comment: to include the “Treaty” because it is also related to ABS.*

**Canada:** Suggests insertion: ‘as relevant’ at the end of the sentence.

*Some countries are not members of the Nagoya Protocol and should not be expected to operate in line with it.*

**Colombia:** *En cuanto al numeral 2.4.2, se sugiere la siguiente redacción: ‘Coordinar los sistemas nacionales de acceso y distribución de los beneficios a fin de facilitar el intercambio de BAA entre países, Garantizando el acceso a los recursos genéticos y la distribución justa y equitativa de los beneficios de conformidad con las leyes nacionales.’*

**Ecuador:** *Tomar en cuenta que todavía existen países que son parte de la CRG pero no del Protocolo de Nagoya.*

**United States of America:** ‘Identify needs and resources required to facilitate access and benefit-sharing for genetic resources for food and agriculture in line with *relevant international agreements, including, as appropriate, the Nagoya Protocol and the International Treaty on Plant Genetic Resources for Food and Agriculture.*’

2.4.3 Raise awareness of existing mechanisms for the exchange of genetic resources for food and agriculture.

**Ecuador:** *Considero que no es sensibilizar sino es dar a conocer sobre las leyes de acceso que están vigentes a nivel nacional sobre intercambio.*

**Gabon:** Suggests additional paragraph: ‘2.4.4 *Elaborer des cadres réglementaires nationaux relatif à l'accès aux ressources phytogénétiques et aux partages des avantages conformément au protocole de Nagoya*’

**Germany:** Suggests additional paragraph: ‘2.4.4 *Identify main uses of microorganism and invertebrates in agriculture and food and establish standardised and simplified access regulations for the identified uses in food and agriculture.*’

#### **Yemen:**

البند 2-4-3 الاصطلاح "زيادة الوعي" تكرر استخدامه في أكثر من موضع داخل الوثيقة .. والتعليق عليه هو أنه أقرب إلى "الهدف" منه إلى "الاحتياج" أو "الحاجة" فهو "الحل" وليس "المشكلة". وبهذا الصدد، ينبغي التأكيد على أن الاحتياج هنا هو: "تأسيس وتفعيل أطر ملائمة للمعلومات والتوثيق والاتصال أو النشر العلمي أو بمعنى آخر لإدارة المعرفة، وفق سياسات واستراتيجيات واضحة وبحيث تتوفر لها الموارد المادية والبشرية المطلوبة لتطوير خطط وبرامج زمنية معينة مواكبة لمختلف الأنشطة الأخرى ومندمجة معها لخدمة التنوع الحيوي رصداً وتوثيقاً واستخداماً وتقييماً، وبما يعزز عملية مشاركة كافة الأطراف ذات العلاقة على المستوى المحلي والإقليمي والدولي. ويتضح من ذلك جلياً أن "زيادة الوعي" بشأن الآليات القائمة ... الخ هي نفسها بحاجة إلى "ألية" وهي حالياً غائبة غالباً وخاصة تحت ظروف بعض الدول كاليمن مثلاً. وللأسف فإنه من غير الواضح كيف يمكن أن يحدث أو يتحقق "زيادة الوعي" .. فهو ليس شيئاً يحدث بذاته، بل أنه يأتي نتاجاً لمتطلبات ومدخلات معينة (إطار تنظيمي أو وحدة متخصصة، سياسة واضحة معينة، آليات أو استراتيجيات وخطط عمل واضحة محددة، وموارد مادية، وموارد بشرية .. الخ" مثله مثل أي نشاط نوعي تخصصي داعم آخر لمفهوم "التنوع الحيوي".

## **V. POLICIES AND PROGRAMS, CAPACITY DEVELOPMENT AND COOPERATION RELEVANT TO BIODIVERSITY FOR FOOD AND AGRICULTURE**

### **3.1 Policies and programmes**

**Switzerland:** *3.1 should be amended as follows: ‘Develop, strengthen national policies, strategies and laws that support integrated seed systems, recognizing and integrating all relevant stakeholders, both from the formal and informal sectors, to create a viable seed system that takes into account farmers’ rights, the needs and realities of smallholders and the important role of farmers’ varieties/landraces.’*

3.1.1 Review and upgrade existing strategies on biodiversity (e.g. National Biodiversity Strategies and Action Plans (NBSAP), Global Plans of Action (GPA)) to include BFA. Mainstream BFA into existing policies, regulations and programmes.

**Australia:** Suggests rewording: ‘Review and upgrade, *if relevant*, existing strategies on biodiversity (e.g. National Biodiversity Strategies and Action Plans (NBSAP), Global Plans of Action (GPA)) to consider including BFA. Mainstream BFA into existing policies, regulations and programmes.’

**Canada:** *What level – national? global? any level?*

**Ecuador:** *Si, sin embargo, los PAM antes de ser nuevamente actualizados se deben evaluar sobre su implementación.*

**Switzerland:** Suggests insertion: ‘to include BFA, *in line with the 2030 Agenda for sustainable development.*’

**United States of America:** *This item should also highlight the need to identify where there is already overlap between needs and actions for BFA and current GPAs.*

3.1.2 Review existing policies, including their implementation and the extent of their (negative or positive) impact on sustainable use of BFA.

**Australia:** Suggests insertion: ‘Review, *as appropriate, ...*’

**Canada:** *Too wide – what policies?*

**Ecuador:** Suggests insertion: ‘*sobre la conservación y utilización*’

3.1.3 Develop, maintain or strengthen national strategies for the conservation and sustainable use of BFA in line with other relevant strategies such as NBSAPs and agro-ecological programmes. Develop policy frameworks/umbrellas for all sectors of BFA at national and (sub) regional levels, and addressing climate change. Promote the development of cross-sectoral policies and programmes at national and regional levels through the establishment of cross-sectoral working groups taking into account existing efforts.

**Australia:** Suggests insertion: ‘Develop, maintain or strengthen national strategies, *as appropriate,...*’

**Brazil:** suggests deletion of ‘in line with other relevant strategies such as NBSAPs and agro-ecological programmes. Develop policy frameworks/umbrellas for all sectors of BFA at national and (sub) regional levels, and addressing climate change.’

*Comment: there are other strategies to be mentioned.*

**Switzerland:** Suggests insertion: ‘climate change *and the SDGs.*’

3.1.4 Engage and empower communities in the development and implementation of policies related to the conservation and sustainable use of BFA.

**Ecuador:** *A qué tipo de comunidades?*

3.1.5 Strengthen and establish national policies and strategies that improve support, including through incentives and technical support, to farmers, livestock keepers, forest dwellers, fisher folks and other stakeholders applying practices that favour the maintenance and sustainable use of BFA and contribute to strengthening food security and nutrition and climate change resilience.

**Australia:** Suggests insertion: ‘Strengthen and establish national policies and strategies that improve support, including through *non-trade-and-production distorting* incentives and technical support, to farmers, livestock keepers, *pastoralists and rangers, ...*’

**Brazil:** suggests deletion of ‘*and contribute to strengthening food security and nutrition and climate change resilience.*’

*Comment: not necessary to include this part as we might have many more reasons to list.*

**Canada:** *Insert ‘consistent with relevant international obligations’ after ‘technical support’ which is a widely used phrase to denote consistency with other international agreements that involve transfer of technology.*

**Switzerland:** *3.1.5 could be complemented as follow:*

*Become aware of society’s dependency on biodiversity’s ecosystem services to move toward sustainable food systems. Thus support/introduce incentive mechanisms for a shift towards sustainable farming systems that enhance BFA and its ecosystem services (e.g. such as the ones that follows the concept of agroecology, as defined by the FAO).*

3.1.6 Provide public support to smallholder family farming that promotes BFA.

**Australia:** Suggests deletion. *This action is too broad and is also covered under 3.1.5 when read with action 4.3. If action 3.1.6 remains, then the words “non-trade and production distorting” need to be inserted before “public”.*

**Canada:** *Add to the end ‘consistent with relevant international obligations’ to avoid the term ‘public support’ from being interpreted too widely, e.g. as allowing trade distortion.*

**Ecuador:** *Desarrollar políticas públicas sobre agricultura familiar.*

**United States of America:** *The US cannot agree with this as currently written. ‘Public support’ is too vague. Also, this does not include other types of farms that might promote BFA.*

Suggests rewording: ~~Provide public support to] Promote different types of farming, including smallholder family farming that promotes that advances that advance the conservation and sustainable use of BFA.’~~

3.1.7 Make an inventory of national legal acts regulating use, conservation, access to and exchange of BFA, including farmer’s right regulations.

**Australia:** Suggests insertion: ‘Make an inventory of national legal acts regulating use, conservation, access to and exchange of BFA, including *intellectual property and farmers’ rights* regulations.’

**Canada:** *Delete because it duplicates the PGR Treaty. If retained, replace ‘farmers’ right regulations’ with the more general ‘those related to Farmers’ Rights’.*

**Germany:** Suggests deletion: *Already addressed by 3.1.5.*

3.1.8 Involve scientists in policy development, training/workshops, regional and international meetings.

**Brazil:** suggests insertion: ‘Involve scientists *and regulator officials* in policy development’

*Comment: Not only scientists, but also regulator officials should be involved in policy development, training/workshops, regional and international meetings*

**Canada:** Suggests insertion of ‘*as appropriate*’ at the end of the sentence.

**Switzerland:** Suggests insertion: ‘Involve scientists *and relevant stakeholders (e.g. Intergovernmental science-policy platform on Biodiversity and Ecosystem Services (IPBES), International Panel of Experts on sustainable food systems (IPES), farmers’ organizations, etc.)*’

*See for further information the policy recommendations by IPES in this document : [http://www.ipes-food.org/images/Reports/UniformityToDiversity\\_FullReport.pdf](http://www.ipes-food.org/images/Reports/UniformityToDiversity_FullReport.pdf)*

**Yemen:**

البند 3-1-8 اضافة فقرة (الزام كافة المشاريع التي يمكن ان تؤثر على التنوع البيولوجي بالإسهام في صيانة هذا التنوع في مناطق نشاطها).

## 3.2 Strengthen capacities

3.2.1 Improve research capacity related to taxonomy, the functions of associated biodiversity in the provision of ecosystem services in production systems, wild foods, crop wild relatives and sustainable management practices, and other areas related to BFA.

**Brazil:** suggests insertion: ‘Improve research capacity related to taxonomy *and animal/plant breeding*’

*Comment: Animal/plant breeding is also important for research capacity related to BFA.*

**Canada:** Suggests insertion: ‘taxonomy *related to food and agriculture*’.

*The phrase at the end ‘and other areas related to BFA’ is too much or not enough – if retained, it should specify ‘that do not duplicate the sectoral GPAs’.*

**Germany:** Replace ‘Improve’ with ‘*Ensure sufficient*’

3.2.2 Improve the teaching of taxonomy in universities, schools and in professional and informal education (e.g. by NGOs) targeting different stakeholders, such as citizen scientists, age groups and gender.

**Brazil:** *Action 3.2.3 already covers this subject*

**Canada:** Suggests insertions: ‘*taxonomy related to food and agriculture*’ [...]

‘such as *students*’

*Is ‘gender’ really a ‘stakeholder’?*

**Ecuador:** *Considero que no solamente en taxonomía sino promover maestrías y doctorados en conservación y uso sostenible en RGAA.*

**Germany:** Replace ‘Improve’ with ‘*Promote*’

**Sweden:** Replace ‘Improve’ with ‘*Expand*’

**United States of America:** *We believe the focus should be broader than support for taxonomy, as other areas are important for increasing capacity around BFA.*

Suggests insertion: ‘*Improve the teaching of taxonomy, soil science, ecology, systems biology, and other relevant subject matter in universities*’

**Yemen:**

البند 2-3-2 تكرر استخدام هذا الاصطلاح (العلم للجميع) مرة أخرى .. ولكن هذه المرة وكأنه نشاط غير رسمي تقوم به المنظمات ولكن هذا غير صحيح فبعض مبادرات العلم للجميع تقوم به مؤسسات الدولة، وفي بعض الدول كاليمن يحدث ضمن بعض برامج التعليم غير الرسمي كالإرشاد الزراعي مثلاً أو الاعلام والتنقيف البيئي أو برامج الاتصال والإعلام الصحي .. الخ. لذلك، يقترح أن يتم استخدام تسميات واصطلاحات معينة بحيث تعبر عن المقصود بها وتشمل الصور والأنشطة أو الأطر المختلفة لها والتي ربما تكون سائدة أو شائعة بشكل أكبر في بعض دول العالم.

3.2.3 Increase the number of qualified researchers/scientists, in particular taxonomists, working on BFA. Incentivize through different means (e.g. increase recognition, for example through competitive compensation; provide adequate infrastructure, such as laboratories; logistical support) education and research in the field of biodiversity especially in certain specialties (e.g. taxonomy, ethnobiology).

**Brazil:** suggests insertion: ‘*in particular taxonomists and breeders, To include breeders.*

*This is a strong compromise. It is necessary to discuss the sources of additional financial resources that would be required*

**Canada:** Suggests insertions: ‘*different means, consistent with relevant international obligations*’ [...]  
‘*population genetics, ethnobiology*’.

**Ecuador:** *Se necesita investigadores en varias áreas sobre RGAA y la formación de equipos multidisciplinarios.*

**Germany:** Replace ‘Increase’ with ‘*Ensure an appropriate level*’

**Yemen:**

البند 3-2-3 هذه الفكرة غامضة (من خلال التعويض التنافسي) وحتتاج إبل توضيح

3.2.4 Secure life-long education in sustainable use and conservation of BFA for farmers, fisherfolks, livestock keepers and forest dwellers.

**Australia:** Suggests insertion: ‘... *pastoralists and rangers*, and forest dwellers.’

**Canada:** Suggests insertion: ‘*scientists*, farmers’

Delete the ‘s’ from ‘*fisherfolks*’ [sic]

**Ecuador:** *Mejor que educación es capacitación.*

**Germany:** livestock keepers, *forest managers*, *forest workers* and forest dwellers

**Switzerland:** Suggests insertion: ‘education in sustainable use and conservation of BFA *and its ecosystem services*, for farmers’

*Explanation: BFA and its ecosystem services are inseparable.*

**United States of America:** Suggests replacing ‘Secure life-long’ with ‘*Promote opportunities for continuing*’

**Yemen:**

البند 3-2-4 اضافة كلمة (والدعم) بعد تأمين التعليم

**Australia:** Suggests insertion:

‘3.2.5 *Promote innovative ways to share capacities, e.g. ICT.*’

*It may be more efficient to share capacities.*

### 3.3 Improve cooperation

**Canada:** *There is a lot of redundancy among the sub-points of 3.3*

3.3.1 Map and profile relevant institutions and their mandates to enable the development of coordination mechanisms.

**Australia:** Suggests insertion: ‘Map and profile relevant *national* institutions...’

**Canada:** *Do you mean ‘inventory and describe’ rather than ‘map and profile’?*

**Ecuador:** *Identificar*

**Yemen:**

البند 3-3-1 حذف كلمة (وتصنيف) واستبدالها بكلمة (وحتديد)

3.3.2 Consider formalizing collaboration between institutions (including the private sector and community organizations) by identifying focal points/experts;

**Canada:** *Is ‘identifying focal points/experts’ the only way to formalize collaboration? If not, delete.*

**Ecuador:** *Considero que no se debe estudiar la posibilidad sino que se debe formalizar la colaboración utilizando varios mecanismos.*

**France:** Suggests insertion: ‘Consider formalizing collaboration between institutions (including the private sector, community organizations and *informal research systems, including citizen science*) by identifying focal points/experts’

**Switzerland:** Suggests insertion: ‘between institutions and sectors’

*Explanation: The 2030 Agenda calls for breaking down the silos between sectors enhanced collaboration and partnerships (SDG 17).*

3.3.3 Consider establishing a national BFA steering committee, or identifying leading agencies together with other supporting partners, to strengthen collaboration between the institutions involved, seek synergies and harmonize activities. Such a steering committee could be composed of representatives from the different relevant institutions.

3.3.4 Develop coherent national policy for BFA, addressing the different sectors of GRFA, ecosystem services, associated biodiversity and wild foods and establishing a system/mechanism that provides integrated and multi-sectorial support at national level.

**Canada:** *A more practical first step might be to elaborate voluntary guidelines to establish national biodiversity and genetic resources policies for food and agriculture. This topic would intersect with a number of other national policy areas. It could be complicated by shared national/sub-national shared jurisdictions.*

3.3.5 Strengthen cooperation in the area of sustainable use and conservation of BFA between sectoral networks for GRFA, universities, governments, NGOs, communities, the private sector, research institutions and other relevant stakeholders, at all levels.

**Canada:** *Fails to explain how cooperation would be ‘strengthened’.*

3.3.6 Improve cooperation and coordination among ministries to ensure coherence of governments’ submissions on BFA across fora.

**Ecuador:** Suggests insertion: *‘y definir claramente sus competencias’*

**Australia:** Suggests deletion.

*This is essentially the same as 1.2.3.*

**Germany:** Replace ‘Improve’ with ‘Ensure’

**United States of America:** *Improved cooperation and coordination are essential. It would be useful if this item were more specific about ways that ministries might coordinate—for example creating standard templates and possibly identifying common indicators, etc., to report against.*

*‘Improve cooperation and coordination among ministries to ensure coherence of governments’ submissions on BFA across fora, including by identifying common indicators and utilizing standard reporting templates, as appropriate.’*

3.7 Improve the coordination and implementation of BFA programs at national level and relevant national reporting, including with respect to the implementation of biodiversity related conventions. This could involve the establishment of a single institution (e.g. National Focal Point) that would be responsible for coordinating the implementation of all the different programs related to BFA.

**Brazil:** suggests deletion. *This paragraph brings a very strong commitment for the countries and items 3.3.3 and 3.3.6 might already cover this subject.*

**Germany:** Replace ‘Improve’ with ‘Ensure’

3.3.8 Strengthen regional and international collaboration to control invasive alien species.

**Brazil:** suggests inserting: *‘to control invasive alien species, as established in national legislations and in accordance with it.’*

*A risk analysis is necessary for qualifying a species as IAS. The control could vary from country to country and the status as IAS too. National efforts to establish IAS lists should be strengthened before regional and international collaboration.*

**Australia:** Suggests deletion.

*This is the remit of the Convention on Biological Diversity.*

**United States of America:** *This item should also include strengthening of national efforts to control invasive species.* Suggests insertion: *‘Strengthen national, regional and international collaboration to control invasive alien species.’*

3.3.9 Strengthen regional and international cooperation within existing initiatives, establish a working group at regional level to improve the conservation and sustainable use of BFA and establish regional networks and clearinghouse mechanisms.

**Australia:** Suggests deletion: ~~establish a working group at regional level to improve the conservation and sustainable use of BFA and establish regional networks and clearinghouse mechanisms~~

*Our preference is to use existing mechanisms (if they exist) rather than establish new ones.*

**Brazil:** suggests deletion.

*This paragraph brings a very strong commitment for the countries.*

**Canada:** *Specify that this relates to ‘associated biodiversity’.*

**United States of America:** Suggests rewording: ‘Strengthen regional and international cooperation within *relevant* existing initiatives, ~~establish a working group at regional level including through establishment of regional-level working groups~~ to improve the conservation and sustainable use of BFA and establish regional networks and clearinghouse mechanisms, *as appropriate.*’

3.3.10 Develop national, regional or global information hubs linking key experts and scientists, for sharing information on relevant areas such as research priorities and funding sources for BFA.

**Brazil:** suggests insertion: ‘Develop national, regional or global information hubs, *utilizing the existing national and regional hubs, as a first step,*’

*Comment: Develop and utilize existing national and regional hubs as a first step, before going to a global information hub.*

**Canada:** Suggests insertion: ‘develop *non-duplicative*’

**Yemen:**

البند 3-3-10 اضافة كلمة (واجياد) بعد كلمة (تطوير) لتصيح الفقرة على النحو التالي ( تطوير واجياد مراكز املعلومات .....اخذ).

3.3.11 Further develop and strengthen international cooperation in research activities on ecosystem services, associated biodiversity and wild foods.

**Yemen:**

البند 3-3-11 اضافة الجملة التالية في نهاية الفقرة (والتركيز على الأنظمة الإيكولوجية والتنوع البيولوجي المتضررة)

**Gabon:** Suggests additional paragraphs:

‘3.3.12 *Identifier au niveau international les pays membres ayant des difficultés à fournir leur politique nationale et rapports nationaux.*

3.3.13 *Mettre en place des stratégies de coopérations diverses avec les pays faisant régulièrement ces exercices, afin que les pays en difficultés s’inspirent de ces derniers.*’

**Switzerland:** Suggests additional paragraph: ‘3.3.12 Improve cooperation between farmers, researchers and policy makers in order to prevent a gap between policies and the reality on the ground.’

*Explanation: This would enhance an active dialogue for the development of new policies and prevent a gap between policies and the reality on the ground.*

## VI. CROSS-CUTTING THEMES

### 4.1 Awareness raising

4.1.1 Raise awareness on the importance of the sustainable use and conservation of BFA among farmers, livestock keepers, fisher folks and forest dwellers, the broader public, donors, policy-makers, consumers and the media.

**Australia:** Suggests insertions: ‘Raise awareness on the importance of the sustainable use and conservation of BFA among farmers, livestock keepers, *pastoralists and rangers*, fisher folks and forest dwellers, the broader public, donors, policy-makers, *private sector*, consumers and the media.’

**Gabon:** Suggests additional paragraph:

‘4.1.2 *Inculquer aux jeunes dès le bas-âge les notions de la biodiversité et l’importance de l’utilisation durable et de la conservation de la biodiversité pour l’alimentation et l’agriculture.*’

**Germany:** Suggests insertion: ‘forest dwellers, *forest managers, forest workers*’

**Switzerland:** Suggests insertions: ‘Raise awareness *throughout sectors*’

*Explanation: The 2030 Agenda calls for enhanced collaboration and partnerships (SDG17) between sectors in order to break down silos.*

‘sustainable use and conservation of BFA, *as well as the necessity of its ecosystem services*, among’

*Explanation: BFA and ecosystem services are inseparable.*

**Yemen:**

البند 4-1 صفحة 9 سبق التعليق على هذا الأمر (زيادة الوعي) أعلاه والسؤال هو كيف يمكن أن يتم أو يحدث أو يتحقق ذلك وما هي متطلبات تحقيقه فهذا هو (الاحتياج) أو (المشكلة) الملحة لتحقيق "زيادة الوعي" في أوساط الفئات المختلفة!؟

## 4.2 Funding

4.2.1 Secure financial support for training, capacity development, assessment and monitoring, sustainable use, in-situ and ex situ conservation.

**Canada:** *Specify to whom this is directed, and how would it be ‘secured’?*

**Ecuador:** Suggests insertion: ‘*garantizar el apoyo financiero tanto a nivel nacional como internacional*’

**France:** Suggests insertion: ‘Secure financial support for training, capacity development, assessment and monitoring, sustainable use, in-situ and ex situ conservation *and ensuring coordination between research, development and training sectors.*’

**Switzerland:** Suggests insertion: ‘support for training and capacity development (*including for farmers, extension services, agricultural engineers etc.*), assessment and monitoring,

4.2.2 Invest in research on techniques for the characterization, monitoring, conservation and sustainable use of the different components of associated biodiversity and related ecosystem services.

**Canada:** *Specify to whom this is directed, and how would it be entrenched.*

**Ecuador:** Suggests insertion: ‘*así como en infraestructura, equipamiento y capacitación de recursos humanos*’

**France:** Suggests insertion: ‘Invest in research on techniques for the characterization, monitoring, conservation and sustainable use of the different components *of genetic resources for food and agriculture* and of associated biodiversity and related ecosystem services.’

**Yemen:**

البند 4-2-2 تعديل الفقرة على النحو التالي ( دعم البحوث في مجالات تقنيات التوصيف...الخ

4.2.3 Establish fund raising mechanisms; identify priority areas to maximize efficient use of resources; evaluate existing projects at the regional level to identify overlaps and expertise that can be shared between countries; and establish investment plans for the sustainable use and conservation of BFA.

**Ecuador:** *es necesario el apoyo internacional hacia los países en desarrollo que están en centros de origen de la BAA*

**United States of America:** Suggests replacing ‘Establish’ with ‘*Explore opportunities for*’

### 4.3 Gender and family-farming

**Australia:** Suggests rewording: ‘Gender and *smallholder farmers*’

*Our preference is for the term “smallholder farmers” to be used instead of “family-farming”. In Australia, our family farms are large and commercial.*

**Canada:** *Perhaps mention the particular role of women as knowledge keepers for BFA.*

4.3.1 Ensure special attention to gender and family-farming is given across areas and actions.

**Australia:** Suggests rewording: ‘Ensure special attention to gender and *smallholder farmers* is given across areas and actions.’

*It would be helpful for the document to specify what “special attention” involves?*

**Ecuador:** Suggests insertion: ‘*sostenibilidad de la agricultura familiar*’

#### Yemen:

البند 3-4 الاصطلاح (المساواة بين الجنسين) عمومي وإشكالي يلفه الغموض. فمن الأفضل التأكيد على مسألة "الاستجابة أو التحسس للنوع الاجتماعي كمفهوم متعلق بأدوار اجتماعية واقتصادية معينة يقوم بتأديتها مختلف فئات المجتمع رجالاً ونساءً كباراً وصغاراً في إطار / سياق مفهوم وعملية التنوع الحيوي من حيث المحافظة عليه ورصده واستخدامه وتقييمه الخ.

**France:** Suggests insertion:

#### ‘4.4. Climate change

*Ensure special attention to climate change is given across areas and actions.’*