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# **COMMISSION ON GENETIC RESOURCES** FOR FOOD AND AGRICULTURE

# Item 9.3 of the Provisional Agenda

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# THE NEED FOR AND POSSIBLE MODALITIES OF A GLOBAL **POLLINATOR PLATFORM**

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Documents can be consulted at www.fao.org

# I. INTRODUCTION

1. At its Eighteenth Regular Session, the Commission on Genetic Resources for Food and Agriculture (Commission) welcomed the *Draft study on sustainable use and conservation of invertebrate pollinators, including honey bees*<sup>1</sup> and stressed the importance of all bees, and of other invertebrate pollinators, for food security. Following the Commission's request<sup>2</sup>, FAO finalized the study Sustainable use and conservation of invertebrate pollinators, published it as background study paper No 72 and disseminated it.<sup>3</sup>

2. The Commission also noted that follow-up actions are needed in response to the findings and recommendations of the study.<sup>4</sup> It invited countries, and requested FAO, to ensure that the findings of the study are taken into consideration in their work relevant to pollinators and in the implementation of the International Initiative for the Conservation and Sustainable Use of Pollinators (IPI), and to ensure that regional specificities in terms of main invertebrate pollinators and food crops are taken into consideration.<sup>5</sup> It further requested FAO to continue its support to the IPI and collaborate with pollinator initiatives and networks, such as Promote Pollinators, and encourage increased engagement.<sup>6</sup>

3. The Commission requested the Secretariat, in order to maintain momentum in addressing the various functional groups of micro-organisms and invertebrates, to collaborate with relevant expert groups in the drafting of recommendations for further consideration by the Commission.<sup>7</sup> It also requested FAO to consider the need for, and modalities of, a global pollinator platform to address pollinators and pollination services at global level, and to report on this matter to the Commission at its next session.<sup>8</sup>

4. This document briefly reports on relevant FAO activities, recalls the findings of the study, and seeks the Commission's guidance on future work on invertebrate pollinators. It also provides an overview of the global institutional landscape for the management of pollinators and discusses the potential role and possible modalities of a global pollinator platform, for consideration by the Commission. The status of implementation of the IPI is described in the document *Progress report on the implementation of the International Initiative for the Conservation and Sustainable Use of Pollinators*.<sup>9</sup>

# II. FAO ACTIVITIES ON POLLINATORS

5. As important components of "associated biodiversity", pollinators are covered by the Framework for Action on Biodiversity for Food and Agriculture<sup>10</sup> (FA BFA), including under an action referring to the implementation of the IPI.

6. Pollinators and pollination services also feature in the FAO Strategy on Mainstreaming Biodiversity across Agricultural Sectors<sup>11</sup> and the 2021–23 Action Plan for the Implementation of the FAO Strategy on Mainstreaming Biodiversity across Agricultural Sectors, which was endorsed by the 166th Council,<sup>12</sup> as well as in the draft 2024–27 Action Plan.<sup>13</sup>

<sup>&</sup>lt;sup>1</sup> CGRFA-18/21/11.1/Inf.1.

<sup>&</sup>lt;sup>2</sup> CGRFA-18/21/Report, paragraph 80

<sup>&</sup>lt;sup>3</sup> Aizen, M.A., Basu, P., Bienefeld, K., Biesmeijer, J.C., Garibaldi, L.A., Gemmill-Herren, B., Imperatriz-Fonseca, V.L. *et al.* 2023. *Sustainable use and conservation of invertebrate pollinators*. Background Study Paper No. 72. Commission on Genetic Resources for Food and Agriculture. Rome, FAO.

<sup>&</sup>lt;sup>4</sup> CGRFA-18/21/Report, paragraph 81.

<sup>&</sup>lt;sup>5</sup> CGRFA-18/21/Report, paragraph 81.

<sup>&</sup>lt;sup>6</sup> CGRFA-18/21/Report, paragraph 81.

<sup>&</sup>lt;sup>7</sup> CGRFA-18/21/Report, paragraph 93.

<sup>&</sup>lt;sup>8</sup> CGRFA-18/21/Report, paragraph 83.

<sup>&</sup>lt;sup>9</sup> CGRFA-19/23/9.3.1/Inf.1.

<sup>&</sup>lt;sup>10</sup> CGRFA-18/21/Report, Appendix C, Action 3.3.10.

<sup>&</sup>lt;sup>11</sup> CL 163/11 Rev.1.

<sup>&</sup>lt;sup>12</sup> CL 166/REP, para 24 h, CL 166/9 Add.1.

<sup>&</sup>lt;sup>13</sup> CGRFA-19/23/6.2, Annex 2.

7. At its 14th meeting, the Conference of the Parties (COP) to the Convention on Biological Diversity (CBD) adopted the Plan of Action 2018–2030 for the International Pollinator Initiative (second Plan of Action for the IPI) and invited FAO to facilitate its implementation.<sup>14</sup> In line with the request of the Commission at its Eighteenth Regular Session,<sup>15</sup> FAO has continued its support to the IPI and collaborated with pollinator initiatives and networks, such as Promote Pollinators. As in the case of the International Initiative for the Conservation and Sustainable Use of Soil Biodiversity,<sup>16</sup> FAO facilitates the implementation of the IPI by providing guidance and technical advice to countries and supporting decision-making processes. Owing to the cross-cutting nature of pollinators and pollination, the work of several different units in FAO contributes to the implementation of the IPI.

8. FAO has supported capacity-building and training activities among farmers and other relevant stakeholders to promote agricultural practices that favour sustainable pollination management, including through the ongoing development of a Latin American regional project. FAO has produced a range of guidelines and awareness raising materials that stress how pollinators could be used to improve sustainable production. Data entry on domesticated bees into DAD-IS has improved.<sup>17</sup> More details are given in the document *Progress Report on the implementation of the International Initiative for the Conservation and Sustainable Use of Pollinators*.<sup>18</sup>

#### III. SUSTAINABLE USE AND CONSERVATION OF INVERTEBRATE POLLINATORS

#### Status and trends

9. Recent global studies confirm that wild pollinators are declining. These findings support those of earlier studies that showed that wild bee populations were declining in occurrence and diversity (and abundance for certain species) at local and regional scales, with the evidence for this coming primarily from northwest Europe and North America. The earlier studies reported that data limitations in some regions (Asia, Africa, Latin America and the Caribbean, the Near East and the Pacific) precluded general statements on the status of wild bees in these regions or globally.

10. Globally, the number of managed honey-bee hives has increased by about 80 percent over the last 60 years. However, trends and data availability vary greatly from region to region. For example, in Africa there was a continuous increase in the number of hives (about 150 percent in total) over the period between 1961 and 2019, while the increase in Asia over the same period was 300 percent.

11. There have been few studies of the status of subspecies (geographic races) of invertebrate pollinators. The subspecies-level information discussed in this document focuses on honey-bee subspecies and honey-bee genetic resources, some of which are under threat. Native or indigenous honey-bee subspecies have adapted through evolution to local environmental conditions. They have greater resilience and resistance to threats and provide critical reservoirs of genetic resources and diversity.

#### Threats

12. The importance of drivers and the risks they pose to pollinators differs from region to region. Evidence shows that the most important direct drivers across all regions are land-use change, intensive agricultural management and pesticide use. Additional drivers of pollinator loss include environmental pollution, invasive alien species, including introduced bees, pathogens and climate change. Climate change is likely to increase in importance as a driver, probably exacerbating the risks associated with other drivers.

13. In 2016, the Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services (IPBES) reported that pesticides, particularly insecticides, have a broad range of lethal and sublethal effects on pollinators under controlled experimental conditions and noted that few results

<sup>&</sup>lt;sup>14</sup> Decision CBD/COP/DEC/14/6.

<sup>&</sup>lt;sup>15</sup> CGRFA-18/21/Report, para 81.

<sup>&</sup>lt;sup>16</sup> CGRFA-19/23/9.1/Inf.2.

<sup>&</sup>lt;sup>17</sup> CGRFA-19/23/10.2; CGRFA-19/23/10.2/Inf.3.

<sup>&</sup>lt;sup>18</sup> CGRFA-19/23/9.3.1/Inf.1.

were available from field-level studies of the effects of pesticides and their combinations on bees (other than honey bees) at field-realistic doses.<sup>19</sup> Since then, studies conducted in Europe and North America on the effects that actual field exposure to pesticides have on wild bees have detected adverse, including sublethal, impacts: for example, reductions in the numbers of nests and offspring among ground-nesting bees and reductions in bee density, colony growth and reproduction among bumble bees and other solitary bees nesting above ground. There is still a lack of available evidence from other regions.

# Conservation and sustainable use

14. A variety of *in situ* and *ex situ* conservation strategies can be used to safeguard honey-bee subspecies and genetic diversity and meet the demands of beekeepers, including genetic assessment of populations, gamete cryoconservation, effective breeding strategies for genetic improvement of local subspecies (e.g. selection programmes and artificial insemination programmes) and establishment of a common repository for characterization data.

15. To date, only a few honey-bee conservation programmes exist, the majority of which are concentrated in Europe. There is a need for stronger networking and collaboration among institutions and researchers, and for common approaches to collecting, cataloguing, storing and using genetic material.

16. There are three types of honey-bee breeding programmes – commercial, conservation and research. Breeding programmes provide the opportunity to conserve genetically attractive local subspecies. Such programmes are important for many European native subspecies, which may be hybridized with, or replaced by, other subspecies.

17. Pollinator-friendly management systems, practices and processes, such as sustainable intensification, agroecology, organic farming and integrated pest management, have the potential to maintain rich and abundant wild-pollinator communities if sustained over time. The findings of recent studies support the view that focusing on ecological intensification can help reduce pollinator decline while also maintaining and delivering other benefits such as natural biocontrol, better soil function and sustained food security.

18. Many broader conservation efforts, for example maintaining habitat diversity or increasing habitat richness, benefit invertebrate pollinators and plants along with other organisms, but co-benefits of this kind have not been well researched.

# Gaps and needs

19. Basic information on invertebrate pollinator diversity, abundance, richness and occurrence is lacking because of taxonomic challenges and the absence of standardized monitoring protocols. Data on bee distribution are highly heterogeneous, with records largely missing for most of Asia, Africa and the Middle East and for parts of South America. Data on diversity, abundance, richness, occurrence and population trends are generally lacking globally. The proposed European Union Pollinator Monitoring Scheme (EUPoMS) (see below for further information) provides a model that could potentially be applied in other regions and would enable direct comparisons of pollinator data across different contexts. Efforts to improve monitoring could be complemented and supported by citizen scientists.

20. Although land-use change has been identified as the largest threat to pollinators, understanding of the proximate causes of pollinator decline associated with habitat loss and fragmentation is limited. The impacts of individual drivers of change are poorly understood, and this is even more the case for the combined impacts of multiple drivers. Knowledge of the pollination dependency of most crop varieties is also limited, which means that estimates of the importance of pollinators remain vague.

<sup>&</sup>lt;sup>19</sup> IPBES (2016). The assessment report of the Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services on pollinators, pollination and food production. S.G. Potts, V. L. Imperatriz-Fonseca & H. T. Ngo (eds). Secretariat of the Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services, Bonn, Germany. 552 pages. https://doi.org/10.5281/zenodo.3402856

21. Knowledge on the impact of management practices on invertebrate pollinators and pollination services is also lacking, including in the following areas: meta-analyses of the effects of organic farming on pollinators, pollination and crop yield; the effect of reducing pesticides (e.g. as part of an ecological-intensification approach) on both crop productivity and pollinator populations – no information is available on how organic pesticides affect pollinators and how this differs from the effects of synthetic pesticides; changes to the resilience of pollinator populations and communities and pollinator-food webs following ecological intensification interventions; and the direct and indirect effects of honey bees and other managed bees (including stingless bees) on wild plants and wild pollinators via competition and pathogen spillover.

22. Pollinator-related issues are rarely addressed by a single dedicated law, regulation or entity at national level and are instead often addressed through time-bound projects.<sup>20</sup>

## IV. NEEDS A GLOBAL POLLINATOR PLATFORM COULD RESPOND TO

23. The Commission, when requesting FAO to consider the need for, and modalities of, a global pollinator platform to address pollinators and pollination services at global level, and to report on this matter to the Commission at its next session, noted that such a platform should facilitate and coordinate international, regional and national action, promote capacity-building, support reference studies at regional and national levels, collect and share information on the conservation and sustainable use of pollinator genetic resources and agree on activities at global scale in line with and in support of existing activities and initiatives, in particular the IPI and any further work on pollinators that the IPBES may undertake.<sup>21</sup>

## **Current institutional landscape**

# Policy and regulations

24. Work on pollinators and pollination under the CBD dates back to 1996 when the third meeting of the COP to the CBD acknowledged the importance of pollinators for crop production and yields and chose pollinators as one of two initial topics for case studies on agricultural biological diversity.<sup>22</sup>

25. In 2000, the IPI was established as a cross-cutting initiative within the CBD's Programme of Work on Agricultural Biodiversity. In 2002, the COP to the CBD adopted the Plan of Action for the International Initiative for the Conservation and Sustainable Use of Pollinators (first Plan of Action for the IPI). The first Plan of Action for the IPI emphasized: i) monitoring pollinator decline, its causes and its impact on pollination services; (ii) addressing the lack of taxonomic information on pollinators; (iii) assessing the economic value of pollination and the economic impact of the decline of pollination services; and (iv) promoting the conservation, restoration and sustainable use of pollinator diversity in agriculture and related ecosystems.

26. Reports from CBD Parties and observers, and by FAO, on the implementation of the first Plan of Action for the  $IPI^{23}$  showed that about 30 percent of national biodiversity strategies and action plans (NBSAPs) include actions related to the sustainable use and conservation of pollinators. While an increasing number of countries have adopted national pollination strategies, pollinator-related issues are, as noted above, rarely addressed by a single dedicated law or regulation. They are instead usually integrated or mainstreamed into – or covered by – national laws of various kinds, such as those addressing the conservation of endangered species, the authorization and use of pesticides, trade in bee products (honey, etc.) or livestock breeding.

27. As noted above, at its 14th meeting, the COP to the CBD adopted the second Plan of Action for the IPI,<sup>24</sup> the four objectives of which are to support countries and other stakeholders:

<sup>&</sup>lt;sup>20</sup> CGRFA-19/23/9.3.1/Inf.1.

<sup>&</sup>lt;sup>21</sup> CGRFA-18/21/Report, paragraph 83.

<sup>&</sup>lt;sup>22</sup> CBD/COP/Dec/3/11

<sup>&</sup>lt;sup>23</sup> CBD/SBSTTA/22/10; CBD/SBSTTA/22/INF/19.

<sup>&</sup>lt;sup>24</sup> CBD/COP/DEC/14/6.

a) "In implementing coherent and comprehensive policies for the conservation and sustainable use of pollinators at the local, subnational, national, regional and global levels, and promoting their integration into sectoral and cross-sectoral plans, programmes and strategies;

b) In reinforcing and implementing management practices that maintain healthy pollinator communities, and enable farmers, beekeepers, foresters, land managers and urban communities to harness the benefits of pollination for their productivity and livelihoods;

c) In promoting education and awareness in the public and private sectors of the multiple values of pollinators and their habitats, in improving the tools for decision-making, and in providing practical actions to reduce and prevent pollinator decline;

d) In monitoring and assessing the status and trends of pollinators, pollination and their habitats in all regions and to address gaps in knowledge, including by fostering relevant research."

28. The same decision noted that FAO would facilitate the implementation of the IPI through guidance and technical advice to countries and support decision-making processes on pollination, including on the use of chemicals in agriculture, protection programmes for native pollinators in natural ecosystems, promotion of biodiverse production systems, crop rotation, monitoring of native pollinators and environmental education.<sup>25</sup>

29. The 15th meeting of the COP to the CBD adopted the Kunming-Montreal Global Biodiversity Framework (KM GBF)<sup>26</sup>. Pollination is mentioned in Target 11 (ecosystem services) of the KM GBF; the other most relevant targets are Target 7 (pollution) and Target 10 (areas under sustainable agriculture, forestry and fisheries).<sup>27</sup> Both the Green Status Index and the Red List Index of pollinators are proposed as complementary indicators for the KM GBF monitoring framework (for Goal B1, Target 10.2).<sup>28</sup> The review of NBSAPs requested for the implementation of the KM GBF offers an opportunity to strengthen the implementation of the IPI. A strategic review and analysis of the CBD's programmes of work will be undertaken in the context of the KM GBF to facilitate its implementation.<sup>29</sup>

30. At national and regional levels, administrative responsibility for laws related to pollinators and pollination frequently lies with several different government agencies. This often makes it difficult to develop and implement coordinated management strategies for pollinators. National laws specifically addressing pollinators usually focus on honey bees in the context of beekeeping (trade, biosecurity, pests and diseases).

31. At the international level, responsibility for pollinator-related issues lies with a number of different bodies and instruments. There is also no single dedicated body at global level that systematically evaluates and monitors the status of pollinators at regular intervals, coordinates action on the use and conservation of pollinators across relevant fora and instruments, or coordinates the exchange of pollinator-related knowledge, information and experiences. CBD COP Decision 14/6, for example, makes reference to the FAO Committee on Forestry (COFO), the Committee on Agriculture (COAG), the Commission, the Committee on World Food Security (CFS) and the Secretariats of the International Plant Protection Convention and the International Treaty on Plant Genetic Resources for Food and Agriculture as well as to the Secretariats of the Basel, Rotterdam and Stockholm Conventions.<sup>30</sup> The Action Plan for the Implementation of the FAO Strategy on Mainstreaming Biodiversity across Agricultural Sectors,<sup>31</sup> which presents FAO's coordinated approach to biodiversity, makes several references to pollinators and pollinators and pollination in relation to the above-mentioned

<sup>&</sup>lt;sup>25</sup> CBD/COP/DEC/14/6, paragraph 10.

<sup>&</sup>lt;sup>26</sup> CBD/COP/DEC/15/4.

<sup>&</sup>lt;sup>27</sup> CBD/COP/DEC/15/4.

<sup>&</sup>lt;sup>28</sup> CBD/COP/DEC/15/5.

<sup>&</sup>lt;sup>29</sup> CBD/COP/DEC/15/4, paragraph 9.

<sup>&</sup>lt;sup>30</sup> CBD/COP/DEC/14/6, paragraph 8.

<sup>&</sup>lt;sup>31</sup> CGRFA-19/23/6.2.

bodies. As well as the Commission, both COAG<sup>32</sup> and COFO<sup>33</sup> have considered pollinators, pollination services and the IPI.

## Initiatives and coalitions

32. Since the establishment of the International Pollinator Initiative, four regional initiatives (the African Pollinator Initiative, the European Pollinator Initiative, the North American Pollinator Protection Campaign and the Oceania Pollinator Initiative) have been established. A fifth, the Asian Pollinator Initiative, is being developed. At the time of writing, approximately 30 national initiatives have also been established or are in the process of being developed. However, these initiatives are not equally distributed across the regions of the world and vary in their scope and ambition, with North America and Europe being the best covered and little or no progress having been made in other regions.

33. The Indigenous Pollinators' Network<sup>34</sup> was established under the first International Pollinator Initiative following a training event on detecting pollinator deficits held in India (2013) in collaboration with the Indigenous Partnership,<sup>35</sup> the Keystone Foundation<sup>36</sup> and other partners. The success of this event inspired local partners to form the Indigenous Pollinators' Network. The name of the network has been changed to the Indigenous Peoples' Pollinator Network, and the intention is to continue joint activities with FAO under the second Plan of Action for the IPI.

34. The Coalition of the Willing on Pollinators (now referred to as Promote Pollinators)<sup>37</sup> was formed in 2016 during the 13th meeting of the COP to the CBD. Fourteen countries signed a declaration containing a general commitment to protect pollinators. As of April 2023, 31 countries were members of Promote Pollinators.<sup>38</sup>

# Organizations working on pollinator monitoring

35. The International Union for Conservation of Nature (IUCN) Red List of Threatened Species<sup>39</sup> is the most comprehensive database of species risk status. Coverage of insect pollinators in the global Red List is limited. Red List assessments of risk status at regional scale have been completed for European bees<sup>40</sup> and butterflies.<sup>41</sup> A potentially important indicator for the KM GBF may be the Red List Index for pollinator species.<sup>42</sup>

36. The Global Biodiversity Information Facility (GBIF) is an international network and data infrastructure funded by the world's governments that aims to provide open access to data on all types of life on Earth. Estimates of pollinator occurrences, populations and their trends are lacking for most countries.

37. The Domestic Animal Diversity Information System (DAD-IS)<sup>43</sup> is a global information system developed and maintained by FAO that is used by countries to record information on their livestock breeds, including on the status and trends of breed populations. In 2017, the Commission requested FAO to consider including data on honey bees in DAD-IS.<sup>44</sup> This request was subsequently

<sup>&</sup>lt;sup>32</sup> COAG/2022/2, paragraph 56; COAG/2020/2, paragraph 40, 87; COAG/2016/14.

<sup>&</sup>lt;sup>33</sup> COFO/2020/5 Rev.2.

<sup>&</sup>lt;sup>34</sup> https://www.theindigenouspartnership.org/pollinators-network

<sup>&</sup>lt;sup>35</sup> https://www.theindigenouspartnership.org

<sup>&</sup>lt;sup>36</sup> https://keystone-foundation.org

<sup>&</sup>lt;sup>37</sup> https://promotepollinators.org

<sup>&</sup>lt;sup>38</sup> https://promotepollinators.org/members

<sup>&</sup>lt;sup>39</sup> https://www.iucnredlist.org

<sup>&</sup>lt;sup>40</sup> Nieto, A., Roberts, S., Kemp, J., Rasmont, P., Kuhlmann, M., García Criado, M., Biesmeijer, J. *et al.* 2014. *European Red List of Bees.* Luxembourg, Publications Office of the European Union.

https://op.europa.eu/en/publication-detail/-/publication/85452815-51f6-4d84-926c-8230d55385d6/language-en <sup>41</sup> Van Swaay, C., Cuttelod, A., Collins, S., Maes, D., López Munguira, M., Šašić, M., Settele, J. *et al.* 2010. *European Red List of Butterflies.* Luxembourg, Publications Office of the European Union.

<sup>&</sup>lt;sup>42</sup> CBD/COP/DEC/15/5.

<sup>&</sup>lt;sup>43</sup> https://www.fao.org/dad-is/en

<sup>&</sup>lt;sup>44</sup> CGRFA-16/17/Report Rev.1, paragraph 46.

implemented.<sup>45</sup> Countries are encouraged to regularly report on honey-bee subspecies (and other bee species, including those in the genus *Melipona*) and on hive numbers. They are also encouraged to work with FAO to upload best practices, guides and other publications to DAD-IS.

38. The proposal for EUPoMS was published in 2021 as a technical report led by the Joint Research Centre in collaboration with a group of 21 experts from 12 European countries.<sup>46</sup> The proposal provided a comprehensive methodology for monitoring pollinators, and suggested potential indicators, including a tailored indicator for the European Union's Common Agricultural Policy. In June 2021, the European Commission launched a EUR 5 million project, Strengthening Pollinator Recovery through Indicators and Monitoring,<sup>47</sup> which will build taxonomic capacity with regard to pollinating insects, support preparation for the implementation of EUPoMS and pilot the scheme in all 27 member countries of the European Union.

39. As referred to above, IPBES published the first global assessment of the importance of pollinators, pollination and food production in 2016, a report prepared by almost 80 expert authors and intended to inform decision-makers at all levels.<sup>48</sup> FAO is one of four United Nations agencies supporting IPBES.

# Beekeepers' associations

40. Professional and hobby beekeepers and their associations are important stakeholders in pollinator management. For example, Apimondia, the International Federation of Beekeepers' Associations,<sup>49</sup> is a large and long-established beekeeper network that operates five "regional commissions" and seven "scientific commissions". FAO collaborated with Apimondia to provide direct support to five countries in Asia and Africa<sup>50</sup> with the collection of data related to the diversity of honey bees managed for food and agriculture and the entry of these data into DAD-IS.

# The potential role of a global pollinator platform

41. The information provided above demonstrates that gaps exist at the level of international, regional and national coordination and implementation, and with regard to a range of technical issues. The following analysis is structured in accordance with the objectives of the IPI and requests by the Commission,<sup>51</sup> as well as addressing other identified gaps.

# Facilitate and coordinate international, regional and national action

42. A global pollinator platform could facilitate and, as appropriate, coordinate and support pollinator and pollination related national, regional and international actions. It could become the central hub for the coordination of activities at global scale in line with and in support of existing activities and initiatives, in particular the IPI.

43. The implementation of the FA BFA and the KM GBF, including the upcoming NBSAPs review, and the establishment and implementation of policies or policy instruments such as national pollinator strategies are opportunities for action at national level. This may include monitoring of wild pollinators, implementing conservation programmes for wild pollinators across both managed and natural systems, facilitating environmental education and promoting biodiverse production systems and/or biodiversity-friendly practices within production systems. Pollinators could also be considered

<sup>&</sup>lt;sup>45</sup> CGRFA-18/21/10.2/Inf.3; CGRFA-19/23/10.2/Inf.3.

<sup>&</sup>lt;sup>46</sup> Potts, S., Dauber, J., Hochkirch, A., Oteman, B., Roy, D., Ahnre, K., Biesmeijer, K., Breeze, T., Carvell, C., Ferreira, C. et al. 2020. *Proposal for an EU Pollinator Monitoring Scheme*. Luxembourg, Publications Office of the European Union. https://publications.jrc.ec.europa.eu/repository/handle/JRC122225

<sup>&</sup>lt;sup>47</sup> https://wikis.ec.europa.eu/pages/viewpage.action?pageId=23462107; SPRING project

<sup>&</sup>lt;sup>48</sup> IPBES (2016). *The assessment report of the Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services on pollinators, pollination and food production*. S.G. Potts, V.L. Imperatriz-Fonseca & H. T. Ngo, eds. Bonn Germany, Secretariat of the Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services. https://doi.org/10.5281/zenodo.3402856

<sup>49</sup> https://www.apimondia.org

<sup>&</sup>lt;sup>50</sup> Botswana, Lesotho, Philippines, Thailand, Viet Nam.

<sup>&</sup>lt;sup>51</sup> CGRFA-18/21/Report, paragraph 83.

in the development or revision of national strategies for the implementation of the Commission's global plans of action.

44. The Action Plan for the implementation of FAO's Biodiversity Mainstreaming Strategy includes provision of support to the implementation of the IPI, including through guidance and technical advice to countries on the conservation of pollinators through pollinator-friendly management practices.

45. Action on pollinators and IPI implementation could be regularly reported to the global pollinator platform, and the platform could report, on behalf of its members, to the CBD, relevant bodies of FAO and other relevant instruments and organizations in order to help coordinate action, build synergies and avoid duplication of efforts.

46. Lack of regular funding has been a challenge for action on pollinators. The global pollinator platform could therefore also raise and channel funds for regional or national implementation through a multi-donor trust fund or through bilateral mechanisms.

## Promote capacity-building

47. There is an urgent need to reinforce and implement management practices that benefit pollinators – from breeding to biodiversity-friendly practices at a landscape scale – and to promote education on, and public awareness of, the value of pollinators and their habitats. The global pollinator platform could amplify and leverage work on capacity development at different levels, on improving tools for decision-making and on providing practical actions for reducing and preventing pollinator decline, including with respect to pesticide use and landscape heterogeneity.

48. The second Plan of Action for the IPI targets the development of a number of tools and guidance documents at national, regional and global levels. FAO could continue to develop pollinatorand bee-related tools and technical and guidance documents and to undertake virtual events for a wide range of stakeholders, including but not limited to, webinars and trainings. The Commission and its Members could promote and encourage the use of the guidance and technical documents and the implementation of the tools at the national and sub-national levels.

#### Knowledge management

49. The global pollinator platform could support fundamental research (baseline studies, national checklists of invertebrate pollinator groups) at regional and national levels and collect and share information on the conservation and sustainable use of pollinators, including, where appropriate, genetic resources.

50. Knowledge co-produced through an inclusive, participatory process among many groups of stakeholders, including Indigenous Peoples and local communities, can result in better, more acceptable, meaningful and tailored solutions for local contexts. The work of FAO and the Commission on pollinator-related activities and initiatives should therefore continue to acknowledge Indigenous Peoples, women and youth, and deliberately promote their participation in decision-making.

51. As no further pollinator assessment is foreseen under IPBES, the global pollinator platform could prepare a pollinator and pollination assessment for 2030 based on progress made in the IPI, the FA BFA and the KM GBF. It is expected that pollinator research and monitoring will improve, and that pollination as an ecosystem service will in future be better reflected in the United Nations System of Environmental-Economic Accounting (SEEA).<sup>52</sup>

# V. POSSIBLE MODALITIES OF A GLOBAL POLLINATOR PLATFORM

52. The modalities of a global pollinator platform should reflect its functions. Multiple governance models for global platforms exist. Platforms may be driven by relevant stakeholders, including governments, and they may focus on providing policy-relevant information, knowledge

<sup>&</sup>lt;sup>52</sup> https://seea.un.org/content/homepage ; SEEA 2021. System of Environmental-Economic Accounting— Ecosystem Accounting: Final Draf, available at https://unstats.un.org/unsd/statcom/52nd-session/documents/BG-3f-SEEA-EA\_Final\_draft-E.pdf

management and information exchange, supporting policy development and implementation, capacitybuilding and the coordination of activities. However, it would seem wise to first consider the specific priorities and needs to which a global pollinator platform should respond and to then develop options for the governance of the platform, including its placement.

## VI. GUIDANCE SOUGHT

- 53. The Commission may wish to:
  - (i) consider, in light of the information provided, the needs and priorities to which a global pollinator platform could respond;
  - (ii) recommend that FAO explore the possible modalities of a global pollinator platform that could respond to the priorities and needs identified;
  - (iii) recommend that FAO continue to develop tools and technical guidance documents, including standardized monitoring protocols for pollinators, as appropriate; and
  - (iv) invite countries to implement the IPI, establish or strengthen national monitoring programmes for invertebrate pollinators, promote research on drivers of pollinator decline such as land use change, the impacts of agricultural practices (both harmful and pollinator-friendly practices) on invertebrate pollinators and the impacts of managed bees on wild plants and wild invertebrate pollinators, and insert data on managed honey bees into DAD-IS.