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联合国 粮食及 农业组织

Food and Agriculture Organization of the United Nations Organisation des Nations Unies pour l'alimentation et l'agriculture Продовольственная и сельскохозяйственная организация Объединенных Наций Organización de las Naciones Unidas para la Alimentación y la Agricultura منظمة الأغذية والزراعة للأمم المتحدة

# COMMITTEE ON AGRICULTURE

# **Twenty- fifth Session**

# **Rome, 26 - 30 September 2016**

# **Observance of World Bee Day**

# **Executive Summary**

Bees and other pollinators (BOPs) are widely recognized for their important role and contribution to food security and nutrition, sustainable agriculture, the environment and ecosystem health, biodiversity conservation and enhancement and other relevant dimensions of sustainable development. Notwithstanding their importance, BOPs are in decline in some of the world's major agricultural regions. Moreover, a growing number of pollinator species worldwide are being driven towards extinction by diverse pressures, many of them human-made.

To help draw attention to the important contribution of bees to food production and to a balanced ecosystem, the Republic of Slovenia, with the support of Apimondia, the International Federation of Beekeepers' Associations, proposes to establish the observance by the UN system of a *World Bee Day* to be celebrated on 20 May each year. The purpose of such a *World Bee Day* would be to raise the awareness of the key role of bees and other pollinators, and to promote international efforts and collective actions to protect them and their habitats, to improve their density and diversity, and to support sustainable development of beekeeping.

Obtaining support from FAO is of great importance, bearing in mind that it is the UN specialized agency that leads international efforts to defeat hunger, food insecurity and malnutrition and is mandated to raise levels of nutrition, improve agricultural productivity, taking into account sustainable management and utilization of natural resources.

The proposal was first made by the Republic of Slovenia at the 30<sup>th</sup> Session of the FAO Regional Conference for Europe (Antalya, Turkey, 4-6 May 2016), which expressed strong support for the initiative<sup>1</sup>.

# Suggested action by the Committee

The Committee is invited to:

1) Review the proposal by the Government of the Republic of Slovenia to establish observance by the UN system of a World Bee Day to be celebrated on 20 May each year, and provide guidance as deemed appropriate; and

2) Make a recommendation on the Draft Conference Resolution, as contained in Appendix A, and to submit the proposal for the consideration of the 155<sup>th</sup> Session of Council (December 2016) and the 40<sup>th</sup> Session of the FAO Conference (July 2017).

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

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#### I. **Background**

Bees and other pollinators<sup>2</sup> (BOPs) are vital for our food security and nutrition, sustainable agriculture, the environment and biodiversity conservation, as well as many other dimensions of global sustainable development.

#### A. **Agriculture**

- 2. Over the past 50 years, global agriculture has become increasingly dependent on pollinators. Agricultural production requiring animal pollination has increased four-fold, compared to the two-fold increase in agricultural products that are not dependent on animal pollination.
- 3. BOPs pollinate more than three-quarters of leading types of global food crops. FAO estimates that out of some one hundred crop species, which provide 90 percent of food worldwide, 71 are beepollinated. These are fruit, vegetable, seed, nut and oil crops that are major sources of micronutrients, vitamins and minerals, indispensable for a balanced diet and essential for normal human physiological functions and development.
- 4. In addition to food, BOPs contribute to the production of crops for biofuels, fibres (e.g. cotton), medicines, forage and construction materials.
- 5. According to a recent FAO study<sup>3</sup> pollination is the agricultural input that contributes most to yields worldwide, beyond other agricultural management practices. Several pollination-dependant crops represent an important source of income for farmers, in particular small-holder farmers and family farms, especially in developing countries (e.g. cocoa and coffee).

#### В. Food security and nutrition

6. A recent study showed that for holdings smaller than two hectares, yields could be increased by a median value of 24 percent through improved pollination management, resulting in higher flower-visitor density<sup>4</sup>. By ensuring higher yields and successful agricultural production, BOPs contribute significantly to world food security and nutrition for a growing global population, but also to poverty alleviation and hunger eradication.

#### **Environment and biodiversity** C.

Through their activities BOPs have positive effects on the whole ecosystem and its services. Pollination is one of the important ecosystem services that contribute positively to biodiversity by safeguarding ecosystems, species and genetic diversity. Animal pollination plays a vital role as a regulating ecosystem service in nature. An estimated 87.5 percent (approximately 308,000 species) of the world's flowering wild plants depend, at least in part, on animal pollination for sexual reproduction<sup>5</sup>. Protection and conservation of biodiversity and associated ecosystem services prevents biodiversity loss and the degradation of ecosystem services.

<sup>&</sup>lt;sup>2</sup> There are more than 20,000 species of wild bees alone, plus many species of butterflies, flies, moths, wasps, beetles, birds, bats and other animals that contribute to pollination.

<sup>&</sup>lt;sup>3</sup> http://www.fao.org/news/story/en/item/383641/icode/

<sup>&</sup>lt;sup>4</sup> L.A. Garibaldi et al. (2016) "Mutually beneficial pollinator diversity and crop yield outcomes in small and large farms". Science: Vol. 351, Issue 6271, pp. 388-391

<sup>&</sup>lt;sup>5</sup> Summary for policymakers of the assessment report of the Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services on pollinators, pollination and food production Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services

8. BOPs are also important bio-indicators of the state of health of the environment. Environmental changes can have significant negative consequences on the pace of the development process and, consequently, on levels of human well-being.

### D. Other aspects

- 9. There are many other sectors that benefit from BOPs and their services; BOPs are economically, socially and culturally important. BOPs play a key role in the sustainable development of the agricultural system as a whole, which offers millions of employment opportunities.
- 10. Bees can, in a sense, be considered as livestock, and due to the increasing commercial value of honey, are becoming a growing generator of income, livelihood strategy and means of food security for many small-scale livestock producers in many developing countries.
- 11. Pollinators, especially bees, have also played a role throughout human history as an inspiration for music, religion, technology and last but not least art. Regarding the latter, bees serve as a leitmotif in folk art, for instance when depicted on wooden panels enriching the front of beehives.
- 12. Nowadays there are an increasing number of pollinator-focused projects, partnerships and citizen efforts to conserve pollinators.

### E. Threats to bees

- 13. Notwithstanding their importance, BOPs are in decline in some of the world's major agricultural regions. Moreover, a growing number of pollinator species worldwide are being driven toward extinction by a range of pressures, many of them human-made.
- 14. Changes in land use and landscape structure, intensive agricultural practices and use of pesticides have led to large-scale losses, fragmentation and degradation of their habitats. Pests and diseases resulting from reduced resistance of bee colonies and from globalization, which facilitates the transmission of pests and diseases over long distances, pose a special threat.
- 15. Furthermore, climate change also has an impact. Higher temperatures, droughts, floods, other extreme climate events and changes of flowering time hinder pollination.

### F. Objective of the World Bee Day initiative

- 16. Given the importance of BOPs for food security and nutrition, sustainable agriculture, the environment and ecosystem health, biodiversity and other relevant dimensions of the sustainable development, the Republic of Slovenia, with the support, *inter alia*, of the 30<sup>th</sup> Session of the FAO Regional Conference for Europe and Apimondia, the International Federation of Beekeepers' Associations, proposes to establish the observance by the United Nations system of *World Bee Day* to be celebrated on 20 May each year and requests the Committee on Agriculture (COAG) to endorse this proposal (see Appendix A).
- 17. Activities such as the Observance of the World Bee Day by governments, international and national organizations and civil society will contribute to raising the awareness of their key role for agriculture, the environment, and human livelihoods, wellbeing and health, as well as promote

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<sup>&</sup>lt;sup>6</sup> According to the IUCN report, their habitat is shrinking and the conditions for their survival and development are steadily worsening. IUCN report. European Red List of Bees. <a href="http://cmsdata.iucn.org/downloads/erl\_of\_bees\_low\_res\_for\_web.pdf">http://cmsdata.iucn.org/downloads/erl\_of\_bees\_low\_res\_for\_web.pdf</a>

<sup>&</sup>lt;sup>7</sup> IPBES. Thematic Assessment of Pollinators, Pollination and Food Production. http://www.fao.org/news/story/en/item/384726/icode/.

international efforts and collective actions to protect the pollinators and their habitats, improve their density and diversity, and support sustainable development of beekeeping.

### Appendix A

### **Draft Conference Resolution**

**Considering** the urgent need to address the issue of worldwide decline of pollinator diversity and the risks this implies for agriculture sustainability, human livelihoods and food supplies;

**Recalling** the work of the Food and Agriculture Organization of the United Nations (FAO) on pollination services for sustainable agriculture, and the leading role played by FAO in facilitating and coordinating the International Initiative for the Conservation and Sustainable Use of Pollinators, established by the Convention on Biological Diversity (CBD) in 2002;

**Taking into account** the Thematic Assessment of Pollinators, Pollination and Food Production, released in February 2016 by the Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services (IPBES);

**Noting** the dependence of global agricultural systems on pollination services and the significant contribution of bees and other pollinators to improving the production and yields of agriculture worldwide, and therefore their contribution to creating rural employment;

**Noting** the fundamental role and contribution of bees and other pollinators for sustainable food production and nutrition, thereby promoting food security for the world's growing population and contributing to poverty alleviation and hunger eradication;

**Noting** the contribution of the ecosystem services provided by bees and other pollinators to ecosystem health by safeguarding the state of biodiversity, species and genetic diversity, thereby promoting ecological and sustainable intensification of food production, and helping adaptation to climate change;

**Expressing concern** that bees and other pollinators are endangered by a range of factors, in particular due to the effects of human activities such as changes in land use, intensive agricultural practices and the use of pesticides, as well as pollution, pests and diseases and climate change, which threaten their habitat, health and development; Affirming that bees and other pollinators are relevant to all three dimensions of sustainable development, namely, the economic, social and environmental dimensions;

**Cognizant** of the urgent need to raise awareness at all levels and to promote and facilitate actions for the protection of bees and other pollinators, in order to contribute to their health and development, bearing in mind that enhancing pollinator services is important for the achievement of the Sustainable Development Goals, in particular the goals to eradicate hunger, achieve food security and improved nutrition and promote sustainable agriculture, protect limited natural resources and stem biodiversity loss, as well as many other dimensions of the 2030 Agenda on Sustainable Development;

**Recognizing** that the observance of a *World Bee Day* by the international community would contribute significantly to raising awareness at all levels on the importance of bees and other pollinators and promote global efforts and collective actions for their protection;

**Stressing** that additional costs of activities arising from the implementation of the World Bee Day be met through voluntary contributions, including from the private sector;

1) **Requests** the Director-General to transmit this Resolution to the Secretary-General of the United Nations with a view to having the General Assembly of the United Nations consider, at its next session, declaring 20 May each year as *World Bee Day*.