



REBIPP

Rede Brasileira de Interações Planta-Polinizador

27th April 2021

To Elizabeth Maruma Mrema
Executive Secretary of the Convention on Biological Diversity

Dear Elizabeth,

Currently Brazilian researchers organized a proposal about pollination and pollinators to contribute to the discussion on biodiversity conservation goals post-2020, a proposal on pollinator conservation for COP 15. We see this as an opportunity to join efforts in favor of the conservation of plant-pollinator interactions. The Brazilian Network of Plant-Pollinator Interactions (REBIPP) organized this proposal to forward this document to the CBD Secretariat and the co-chairs of the Open-ended Working Group (OEWG) where the negotiations for the Post-2020 Global Biodiversity Framework takes place. REBIPP is a collaborative network and has more than 80 scientists (from all Brazilian states including public and private institutions) who study pollination and pollinators in different contexts.

Since the 1990s, Brazil has been a leader in pollination and pollinator conservation issues. In 1998, the meeting “Conservation and Sustainable Use of Pollinators in Agriculture, with Emphasis on Bees” held at the University of São Paulo brought together 60 experts from around the world. This expert panel produced the “Sao Paulo Declaration on Pollinators”, proposing the establishment of an International Initiative for the Sustainable Use and Conservation of Pollinators (IPI). In 2000, the Conference of the Parties (COP5) of the Convention on Biological Diversity (CBD) approved the IPI. Then, the United Nations Food and Agriculture Organization (FAO) presented an action plan to encourage the implementation of the global program that was approved at COP6 in the Hague in 2002. In this context, a Brazilian Pollinators Initiative was established and developed projects on the pollination of several crops financed by the GEF/FAO, the Brazilian Sectorial Agribusiness Fund (CT-AGRO) and the Brazilian Fund for Biodiversity (Funbio) between 2009 and 2016.

On the international scenario, since 2012, Brazil is a member, together with 136 countries, of the Intergovernmental Science-Policy Platform for Biodiversity and Ecosystem Services (IPBES),

which interfaces science and decision-making for the conservation and sustainable use of biodiversity and ecosystem services, for human well-being and sustainable development. It is important to highlight that more than 30 Brazilian scientists participated in several IPBES reports, especially in the assessment on Pollinators, Pollination and Food Production, published by IPBES in 2016. In 2016, Brazilian scientists created the Brazilian Platform on Biodiversity and Ecosystem Services (BPBES) which has since produced national biodiversity assessment reports (one of them on pollination, pollinators and food production in Brazil.), all of them with summaries for policy makers. Therefore, Brazil has always given to global pollination initiatives, for pollinator conservation and sustainable use, as well as scientific contributions to this theme.

REBIPP is alerting and demonstrating to the Brazilian Government, through its Ministry of Agriculture, the importance to sign the “Declaration on the Coalition of the Willing on Pollinators”. We believe that this is a fundamental step towards the implementation of effective actions (such as national strategies, public policies and private initiatives) for the conservation and sustainable use of pollinators, to enhance and ensure agricultural production and food security. This year, Rebipp became an Observer of Promote Pollinators and with this action it will be possible to participate in international discussions about pollination service.

Attached is the Brazilian proposal for CBD Secretariat and to the co-chairs of the OEWG to influence the decision to be taken at COP15 on the Post-2020 GBF. **We kindly ask** for the attached file to be posted at the page of *Submissions for the Post-2020 Global Biodiversity Framework*, on behalf of REBIPP/Brazil.

Sincerely



Kayna Agostini

REBIPP Coordinator

Member of WG - Proposal for COP 15

Proposal for Long and Medium Term Objectives, Action Goals for 2030 and Indicators for Pollination and Pollinators within the Post-2020 Global Biodiversity Framework Scope

Brazilian Plant-Pollinator Interactions Network (REBIPP) coordinated this Initiative

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Framework

Pollination process is fundamental to the conservation of biological diversity and the maintenance of natural environments and the provision of ecosystem services, such as food production. Thus, pollination is a convincing example of how biodiversity is essential for sustainable development, including improving food security for the world population (IPBES 2016).

Pollinators conservation and the future of the pollinators and pollination service are threatened by several factors such as land use changes, intensive agricultural production systems, pesticide use, environmental pollution, invasive alien species, pathogens and climate change (IPBES 2016; Dicks et al. 2016; Settele et al. 2016; CBD 2018; REBIPP-BPBES 2019).

Actions are urgently needed to transform social, economic and environmental risks, which threaten pollination services into opportunities for sustainable development. Institutions are developing several tools and guidelines to conserve pollinators and to promote the pollination processes, but government policies and action plans have a greater potential to support public-private actions. Important and urgent actions are necessary regarding pollination services. The two objectives (outcomes) proposed below should assist different sectors of society (government, civil society, indigenous peoples and local communities, and the private sector) in decision-making:

Goal/Outcome 1. Pollination deficits reduced to zero by 2050 for cultivated plants (and extractive use plants) and, by 2030, for the most important plants for food security, ensuring the potential productivity of each cultivated variety;

Goal/Outcome 2. Restored and conserved landscapes with native vegetation and pollinator-friendly agricultural areas to ensure the resilience of native pollinators populations by 2050 and, by 2030, threatened and endangered pollinator species protected, restored and removed from red lists.

To achieve the above goals/outcomes we propose the following Action Targets for 2030:

Goal A) Monitor the conservation status and decline of pollinator populations, of their habitats and of the pollination services using standardized and continuous methods;

Goal B) Promote management practices that maintain the diversity and resilience of pollinators communities;

Goal C) Encourage the horizontal transfer of knowledge to promote actions to reduce and avoid the decline of pollinators;

Goal D) Implement national (as part of NBSAPs), regional and global policies for the conservation and sustainable use of pollinators, and improve technical information for policymakers;

Goal E) Promote actions to mitigate climate change of anthropogenic origin to protect pollinator species and support their adaptation to climate change by promoting connectivity of habitats.

Goal F) Open and transparent sharing of experiences obtained during the implementation of pollinator conservation strategies by 2030 including the organization of collaborative networks among private companies, civic sector, farmers, beekeepers, local communities, civil society and the academy to support pollinators and pollination services.

Table of Objectives, Action Goals and Indicators for the main Guidelines

Outcomes	Action Goal	Main Guidelines	Indicators (taking into account Geo Bon 2015; Hoban et al 2020)
<p><u>Outcome 1.</u> Pollination deficit reduced to zero by 2050 for cultivated and extractive plants and, until 2030, for the most important plants for food security, ensuring the potential productivity of each cultivated variety;</p> <p><u>Outcome 2.</u> Restored and conserved native landscapes and pollinator-friendly agricultural areas to ensure the resilience of native pollinator populations by 2050 and, by 2030, endangered pollinator species protected and removed from red lists;</p>	<p><u>Goal A)</u> Monitor the conservation status and pollinator populations decline, their habitats and the pollination services using systematized and continuous methods;</p>	<p>Develop medium and long-term monitoring programs at different spatial scales of pollinator communities and their habitats;</p>	<p>Finance Participative Pollinator Monitoring Programs (examples: POMS, UK Pollinator Monitoring Scheme, SPIPOLL, in France, and PELD - Long-term Ecological Research, funded by international institutions and by the Brazilian government;</p> <p>Reduce the taxonomic impediment by describing new pollinator species;</p> <p>Increase and monitor the spatial distribution of pollinators.</p>
		<p>Perform landscape mapping and modelling the spatial distribution of pollinator species to estimate the impacts of habitat loss, degradation and fragmentation on global biodiversity;</p>	
	<p><u>Goal B)</u> Promote management practices that maintain the diversity and improve the resilience of pollinator communities;</p>	<p>Define and promote pollinator-friendly practices in agricultural and urban areas, with different stakeholders collaboration;</p>	<p>Pollination services included as an input in 40% of agricultural systems (mainly crops that are independent of pollinators);</p> <p>100% of riparian forests, using plants species that provide resources for pollinators;</p> <p>Increase the number of pollinator biofactories.</p>
		<p>Promote connectivity, conservation, management and restoration of habitats for pollinator resilience</p>	
		<p>Promote sustainable pollinators-keeping</p>	

	<p>Goal C) Encourage the horizontal knowledge to promote actions to reduce and avoid the decline of pollinators;</p> <p>and</p> <p>Goal F) Open and transparent sharing of experiences obtained during the implementation of pollinator conservation strategies by 2030 including the organization of collaborative networks among private companies, civic sector, farmers, beekeepers, local communities, civil society and the academy to support pollinators and pollination services</p>	<p>Develop and promote educational and communication strategies to improve citizens to make social and environmental decisions</p>	<p>Promote educational events related to pollinators to encourage active participation in society;</p> <p>Increase environmental and scientific literacy;</p> <p>Number of Law Projects or Public Policies based on scientific knowledge about pollination and pollinators;</p>
	<p>Integrate national, regional and global databases with common information on plant-pollinator interactions</p>	<p>Number of national, regional and global databases in operation (e.g. Biosafety Clearing House for GMOs, REBIPP Database);</p> <p>Number of training programs for professionals to carry out engagement actions;</p>	
	<p>Promote the engagement of the citizens in the production of knowledge through participative and bidirectional processes.</p>	<p>Increase public support for pollinator conservation policies and their natural habitats;</p> <p>Increase the use of agriculture friendly practices for pollinator maintenance;</p> <p>Collections integrated into a National System in 2030 and 100% in 2050;</p>	
	<p>Organize small collections and integrate them into national databases</p>	<p>Replace 70% of chemical pesticides with biological ones.</p>	
	<p>Manage the engagement of the business and supply chain to mitigate the decline in pollinator populations</p>		

	<p>Goal D) Implement national, regional and global policies for the conservation and sustainable use of pollinators, and improve technical information for policymakers;</p>	<p>Develop and promote national, regional and global policies to protect wild and managed pollinators</p> <hr/> <p>Develop and implement pesticide regulatory policies</p> <hr/> <p>Develop policies to protect and promote indigenous and traditional knowledge</p> <hr/> <p>Develop and implement policies to control pollinator business and transportation and other impacts related to this practice</p> <hr/> <p>Develop and implement policies to include and regulate pollination services in payment for environmental services</p>	<p>Reduce deforestation by 100%;</p> <p>Restore 70% of degraded areas by 2050;</p> <p>Globally adapt the procedures for “Environmental Risk Analysis (ARA)” for pesticides;</p> <p>Include other non-<i>Apis</i> pollinator species in "Environmental Risk Analysis (ARA)" for pesticides;</p> <p>Formation of at least three Collaborative Networks by 2030 at the Regional level.</p>
	<p>Goal E) Promote actions to mitigate climate change of anthropogenic origin to protect pollinator species and facilitate their movement through suitable habitats.</p>	<p>Monitor the distribution of invasive species in response to global climate change</p> <hr/> <p>Perform landscape mapping, modelling spatial distribution of pollinator species and pollinator-plant interaction networks to estimate the impacts of climate change on global pollinator biodiversity</p> <hr/> <p>Promote connectivity between natural areas (especially between protected areas) through ecological corridors, encouraging the restoration of degraded areas and conservation of natural areas, as well as making agricultural landscapes more pollinator friendly.</p>	<p>Global databases on current and future distribution for invasive species, considering climate change;</p> <p>Global databases on potential scenarios related to the impacts on pollinators;</p> <p>Number of protected and connected areas adapted for pollinators, considering climate change scenarios</p>

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