

## Welcome - Bienvenido

#### **Biodiversity and pollinators in Latin America**

David Cooper, Deputy Executive Secretary, CBD & Raquel
Hilianova Soto Torres, Deputy Minister of Strategic
Development of Natural Resources, Ministry of the Environment
for Peru

#### **SPEAKERS**

**Frederic Castell:** Pollinators and the FAO Strategy on Mainstreaming Biodiversity across Agricultural Sectors

**Hien Ngo:** Building capacity for pollinator conservation in Latin America

**Andreas Gettkant:** Strengthening national strategies, knowledge management and governance mechanisms to improve the protection of pollinators in Latin America and the Caribbean







21 October 2024 – COP 16 Side-events – Pollinators in Latin America: Implementing the International Pollinator Initiative from the Region

# FAO's work on mainstreaming biodiversity

Biodiversity Mainstreaming Unit Office of Climate, Biodiversity and Environment (OCB) Food and Agriculture Organization (FAO) of the United Nations



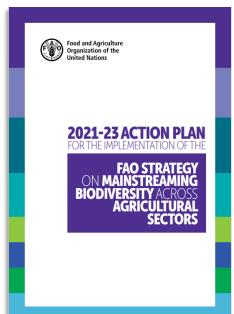


## FAO's work on biodiversity in the agrifood sectors

(crop and livestock production, forestry, fisheries and aquaculture)

- Neutral and open forum where biodiversity-related policies are discussed, and agreements negotiated between Members
- Biodiversity instruments and mechanisms
- Technical and policy support for national implementation
- Presence in over 130 countries with action on the ground
- Biodiversity Strategy and Action Plan
- Access to finance 185 FAO-GEF projects channeling USD 592 million towards biodiversity outcomes since 2006













COMMISSION ON GENETIC RESOURCES FOR FOOD AND AGRICULTURE













# FAO Strategy on Mainstreaming Biodiversity Across Agricultural Sectors



#### Four outcomes:

Support provided to Members, at their request, to enhance their capacity to mainstream biodiversity Biodiversity mainstreamed across FAO's policies, programmes and activities

Role of biodiversity and its ecosystem services for food security and nutrition globally recognized

Coordination and delivery of FAO's work on biodiversity strengthened

## TABLE 2.

# STRATEGY CORE ACTION AREAS, KEY ACTIONS, KEY DELIVERABLES AND TENTATIVE DELIVERY DATES OF THE 2024-27 ACTION PLAN

| Strategy core action areas   | Key actions  | Key deliverables  | Tentative<br>delivery<br>dates | References to decisions  | PPA                         | SDGs   | KMGBF             |
|--|--|---|--------------------------------|--|-----------------------------|--|-------------------|
| Improve the sharing and uptake by countries of knowledge, technologies and good practices relevant to biodiversity mainstreaming | Support countries in building capacity for good practices in invasive species monitoring, prevention, management and eradication | Countries supported in the digital exchange of phytosanitary certificates (the IPPC ePhyto Solution) and in the implementation of recommendations on container cleaning and contaminating pests  Countries assisted to access national phytosanitary systems that can be used to protect their plant life from invasive alien species (e.g. risk analysis, surveillance systems, eradication procedures and border controls)  Support provided for Phytosanitary Capacity Evaluations that result in the development of National Phytosanitary Capacity Development Strategies that include a component on how to address risks related to invasive alien species  Countries supported in the establishment and implementation of national forest biosecurity strategies and processes  Capacity building in the management of forest invasive species and restoration of degraded land following pest outbreaks supported  Regional Forest Invasive species networks supported | Ongoing                        | ISPM 12; CPM R-06<br>(2017); PPC National<br>Phytosanitary<br>Capacity<br>Development<br>Strategy (2010,<br>revised 2012); C<br>2021/23 (paras.<br>11.a,l, 15.d,f) | BE3,<br>BP5,<br>BL3,<br>BL4 | 1.4,<br>2.5,<br>5.b,<br>9.c,<br>14.4,<br>15.3,<br>15.4,<br>15.6,<br>17.8 | 6, <b>1</b> 0, 17 |
|  | Support the sustainable use and management of fertilizers  | Countries supported in the optimization of fertilizer use through capacity building in nutrient recycling and soil health management, and dissemination of best practices to actors along the fertilizer value chain  | Ongoing                        | C 2019/REP (para.<br>49)   | BE3                         | 2.5,<br>14.4,<br>15.1,<br>15.3,<br>15.4,<br>15.6                         | 7, 10, 11         |
|  | Support and strengthen the sharing and uptake of knowledge, technologies and good practices in the management of pollinators     | Possible modalities of a global pollinator platform explored  National and regional implementation of relevant elements of the International Pollinators Initiative 2.0 supported   | Ongoing                        | CGRFA-19/23/<br>Report (para. 86)  | BE3                         | 2.5,<br>14.4,<br>15.1,<br>15.3,<br>15.4,<br>15.6                         | 7, 10, 11         |

# Targets of the Kunming-Montreal GBF directly related to agrifood sectors

|                                  | Target 1: Spatial planning and management   |  |  |  |  |  |  |
|----------------------------------|---|--|--|--|--|--|--|
|                                  | Target 2: Ecosystem restoration   |  |  |  |  |  |  |
|                                  | Target 3: Protected and conserved areas   |  |  |  |  |  |  |
|                                  | Target 4: Extinction risk, genetic diversity and human-wildlife conflict          |  |  |  |  |  |  |
|                                  | Target 5: Sustainable use of wild species   |  |  |  |  |  |  |
| Target 6: Invasive alien species |   |  |  |  |  |  |  |
|                                  | Target 7: Pollution   |  |  |  |  |  |  |
|                                  | Target 8: Climate change  |  |  |  |  |  |  |
|                                  | Target 9: Benefits from the use of wild species                                   |  |  |  |  |  |  |
|                                  | Target 10: Sustainable agriculture, aquaculture, fisheries and forestry           |  |  |  |  |  |  |
|                                  | Target 11: Nature's contribution to people, including soil health and pollination |  |  |  |  |  |  |
|                                  | Target 13: Benefit sharing from genetic resources                                 |  |  |  |  |  |  |
|                                  | Target 14: Integration of biodiversity values                                     |  |  |  |  |  |  |
|                                  | Target 16: Sustainable consumption  |  |  |  |  |  |  |
|                                  | Target 17: Biosafety and biotechnology  |  |  |  |  |  |  |

Target 18: Reform of incentives



#### **International Pollinator Initiative**

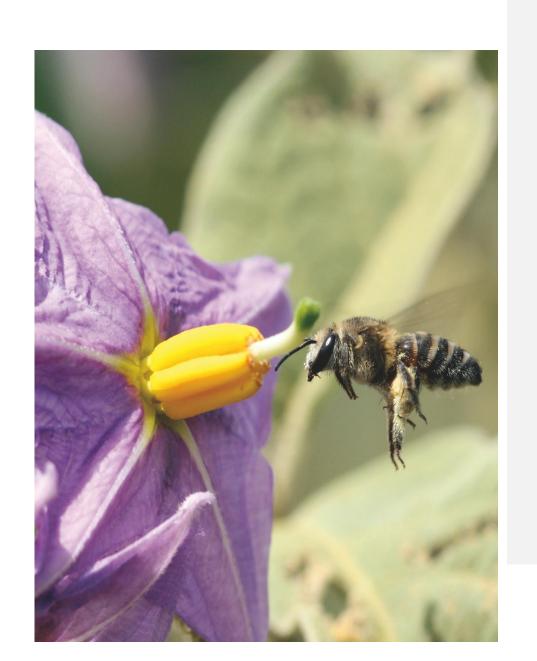
FAO Facilitates the implementation of the International Pollinator Initiative's Plan of Action 2018–2030

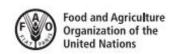
Objective 1: Implementing coherent and comprehensive policies

Objective 2: Reinforcing and implementing management practices

Objective 3: Promoting education and awareness of the values of pollinators and their habitats

Objective 4: Monitoring and assessing the status and trends of pollinators, pollination and habitats to address gaps in knowledge.





#### AGRI-NBSAPs SUPPORT INITIATIVE:

Supporting countries in their National Biodiversity Strategies and Action Plans for the agrifood sectors

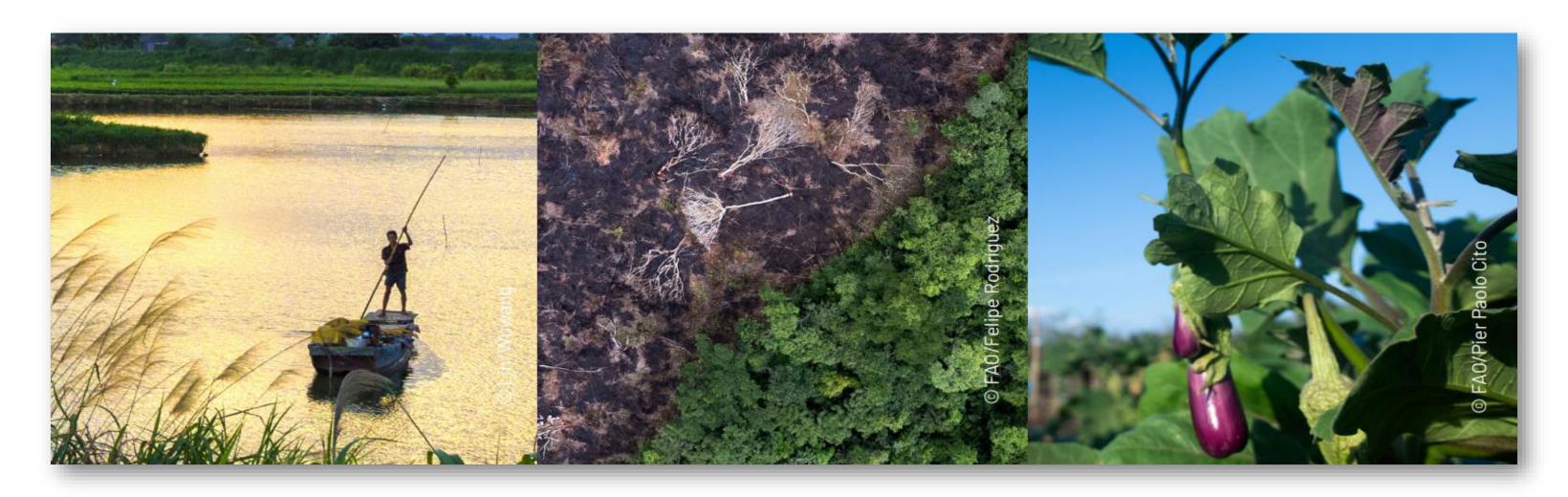


# **Agri-NBSAPs Support Initiative**

- To accelerate the integration of biodiversity into agrifood sectors and thus the implementation of the KMGBF
- Targeted support to governments in their efforts to identify and implement actions in agrifood systems that will enable them to meet the biodiversity commitments outlined in their NBSAPs.



## **Agri-NBSAP** components



#### **Enabling Environment**

- Policy and Framework alignment for agrifood systems and biodiversity.
- Institutional capacity for mainstreaming biodiversity

#### **Implementation**

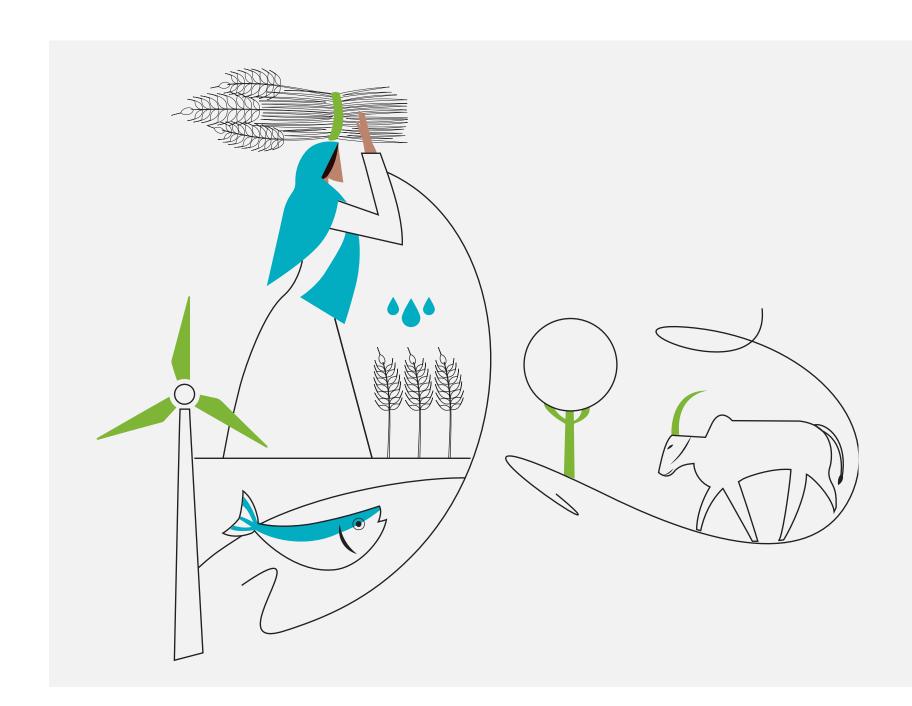
- Promote biodiversity-friendly practices and innovations
- Practices and approaches that promote biodiversity across agrifood systems

#### **Finance**

- Sustainable finance for mainstreaming biodiversity across agrifood systems
- Resource mobilization and private-sector engagement

### **Building Knowledge**

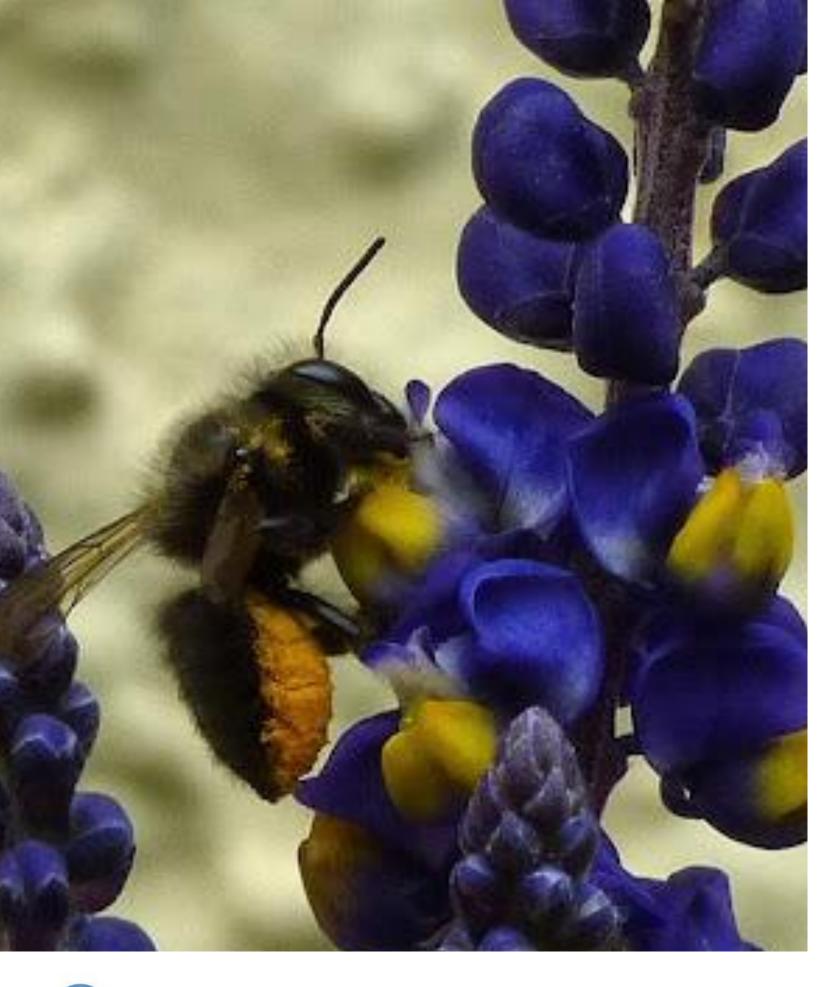
- Monitoring and reporting of national targets
- Knowledge on biodiversity for food and agriculture



Biodiversity@fao.org

www.fao.org/biodiversity





# Pollinators (bees) are a critical ecosystem service (nature's contributions to people) for

- the integrity of wild systems (flowering plants and habitats) and agricultural systems (crops)
- Human health
- Local livelihoods and the economy

#### Status/Trends

- •Wild pollinators are declining;
- drivers of this decline and of the risks they pose to pollinators differs from region to region;
- Basic information on invertebrate pollinator diversity, abundance, richness and occurrence is lacking because of taxonomic challenges and the absence of standardized monitoring protocols;
- Knowledge on the impact of management practices on invertebrate pollinators and pollination services is also lacking.







# CBD COP Decision XIV/6 Conservation and sustainable use of pollinators (2018)

Adopted the Plan of Action 2018-2030 for the International Initiative for the Conservation and Sustainable Use of Pollinators as contained in annex I to the present decision, for implementation according to national legislation and national circumstances – it is a COMMON FRAMEWORK that guides national strategy

Element 1: Enabling policies and strategies

Element 2: Field-level implementation

Element 3: Civil Society & private sector engagement

Element 4: Monitoring, research and assessment







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Abejas de América Latina: una introducción a su identificación taxonómica



Abejas sin aguijón: una introducción a la meliponicultura

# FAO LAC Project: Knowledge Management on Conservation and Sustainable Management of Pollinating Insects in Latin America

Responding to **Element 3**: **Civil society and private sector engagement -** To promote **education and awareness** in the public and private sectors of the multiple values of pollinators and their habitats, **improve the tools** for decision-making, and implement practical actions to reduce and prevent pollinator decline.

- Governments and other stakeholders disseminate information on best practices for pollinator protection.
- knowledge exchange
- Three self-learning courses on pollinators
- Network on best practices: establishment of a virtual network and in-person training workshop on meliponiculture







#### To date:

- 3300 enrolled
- 30 countries (Americas and Europe)
- 47% women
- Background: Academia, public administration, and independent professionals

**NEW** - (2025): Pollinators and pesticides

Network on best practices: establishment of a virtual network and in-person training workshop on meliponiculture

**NEW** - (2025): Working with EMBRAPA and ABELHA in Brazil to hold training session for women on stingless beekeeping: Paragominas







#### Science of the Total Environment



journal homepage: www.elsevier.com/locate/scitotenv

#### Review



# Pesticide impacts on insect pollinators: Current knowledge and future research challenges

P. Basu<sup>a,\*</sup>, H.T. Ngo<sup>b</sup>, M.A. Aizen<sup>c</sup>, L.A. Garibaldi<sup>d,e</sup>, B. Gemmill-Herren<sup>f</sup>, V. Imperatriz-Fonseca<sup>g</sup>, A.M. Klein<sup>h</sup>, S.G. Potts<sup>i</sup>, C.L. Seymour<sup>j,k</sup>, A.J. Vanbergen<sup>1</sup>





a Department of Zoology, University of Calcutta, Kolkata, India

b Food and Agriculture Organization of the United Nations (UN FAO), Regional Office for Latin America and the Caribbean (RLC), Región Metropolitana, Santiago, Chile

<sup>&</sup>lt;sup>c</sup> Instituto de Investigaciones en Biodiversidad y Medioambiente (INIBIOMA), Universidad Nacional del Comahue-CONICET, San Carlos de Bariloche, Río Negro, Argentina

d National University of Río Negro, Instituto de Investigaciones en Recursos Naturales, Agroecología y Desarrollo Rural, San Carlos de Bariloche, Río Negro, Argentina

<sup>&</sup>lt;sup>e</sup> National Council of Scientific and Technical Research, Institute of Research in Natural Resources, Agroecology and Rural Development, San Carlos de Bariloche, Río Negro, Argentina

World Agroforestry Centre, Nairobi, Kenya

<sup>8</sup> Biosciences Institute, University of São Paulo, São Paulo, Brazil

h Nature Conservation and Landscape Ecology, University of Freiburg, 79106 Freiburg, Germany

<sup>&</sup>lt;sup>1</sup> University, Reading, UK

South African National Biodiversity Institute, Kirstenbosch Research Centre, Private Bag X7, Claremont 7735, South Africa

k FitzPatrick Institute of African Ornithology, DST/NRF Centre of Excellence, Department of Biological Sciences, University of Cape Town, Rondebosch 7701, South Africa

<sup>&</sup>lt;sup>1</sup> Agroécologie, INRAE, Institut Agro, Université de Bourgogne, Université de Bourgogne-Franche-Comté, Dijon, France

## **Update: The Global Pollinator Platform**

#### CGRFA 17th Regular Session (2019)

• Recognized the importance of invertebrate pollinators and adopted its Work Plan for the Sustainable Use and Conservation of Micro-organism and Invertebrate Genetic Resources for Food and Agriculture and decided to address pollinators, including honey bees, at its Nineteenth Regular Session (FAO, 2019).

#### CGRFA 18th Regular Session (2021)

- Welcomed the Draft study on sustainable use and conservation of invertebrate pollinators, including honey bees
- 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.

#### CGRFA 19th Regular Session (2023)

• The Commission considered the needs and priorities to which a global pollinator platform could respond, and recommended that the FAO Council request FAO to explore the possible modalities of a global pollinator platform that could respond to the priorities and needs identified.







First Session of the Intergovernmental Technical Working Group on Microorganism and Invertebrate Genetic Resources for Food and Agriculture

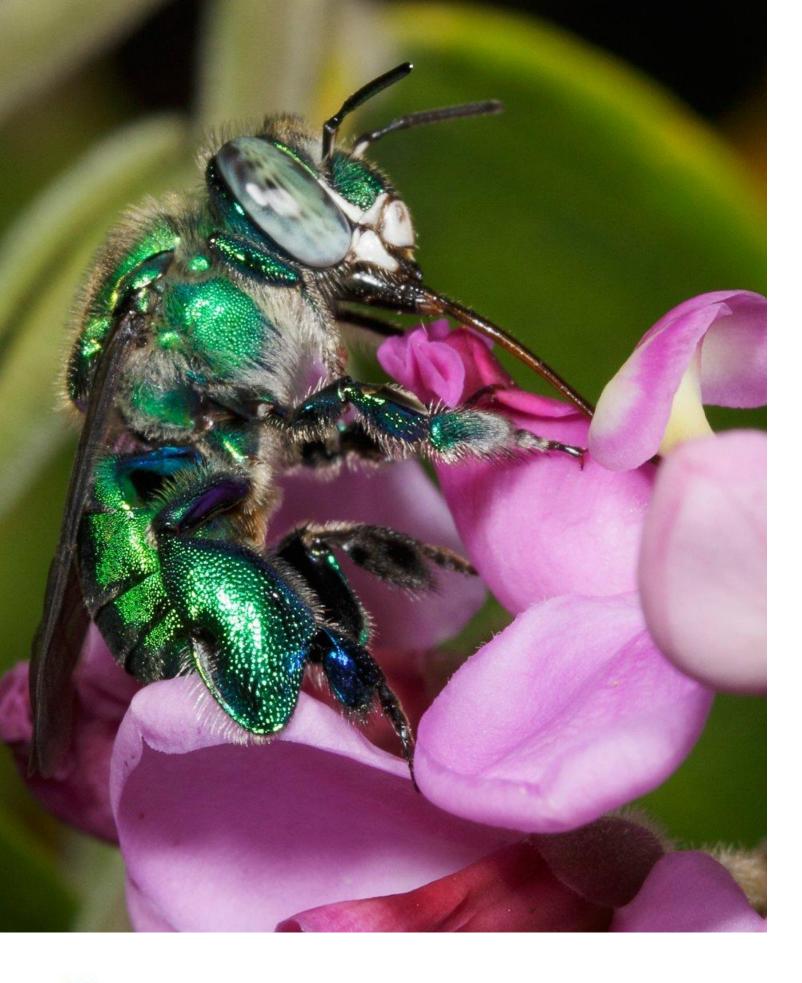
Rome, 25–27 September 2024

\*The Working Group recommended that FAO invite FAO Members, technical experts and potential partners to an informal initial meeting to consider next steps in the establishment of a global pollinator platform that responds to the priorities and needs identified by the Commission at its Eighteenth Regular Session. It stressed the importance of involving key partners, such as the CBD, in this process and of avoiding duplication of the efforts of others.

20th Regular Session of the Commission on Genetic Resources for Food and Agriculture (24 - 28 March, 2025)







Explore possible modalities of a global pollinator platform that could respond to the needs and priorities identified by the Commission:

- **1.facilitate and coordinate** international, regional and national action
- 2.promote **capacity building**, support reference studies at regional and national levels
- **3.collect and share information** on the conservation and sustainable use of pollinator genetic resources
- 4.agree on **activities** at global scale in line with and in support of existing activities and initiatives, in particular the International Pollinator Initiative (IPI) and any further work on pollinators that the Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services (IPBES) may undertake







# Thank you! Muchas gracias!

For more information - please feel free to contact me: hien.ngo@fao.org and hienthungo@gmail.com

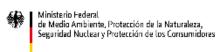








Fomentado por:







#### **Political partners:**

Ministries of Environment and Agriculture

#### **Commissioning parties:**

The German Federal Ministry for the Environment, Nature Conservation, **Nuclear Safety and Consumer** Protection (BMUV), with funds from the International Climate Initiative

Delegation of the European Union to Paraguay (co-funding)

#### **Consortium partners:**

GIZ, Endesu Mexico, Forever Costa Rica Association, IICA Brasil and Profonance Peru











### Countries of implementation: Brazil, Costa Rica, Mexico, Peru

and Paraguay



04/2024 - 12/2028

## Initial situation of pollinators in Latin America and the Caribbean

- ✓ FAO International Pollinators Initiative developed tools and guidance for safeguarding wild and managed pollinators
- ✓ Several Latin American countries became members of the Coalition of Volunteers on Pollinators and have driven initiatives, platforms and (sub)national strategies:
  - Costa Rica, Mexico and Brazil: National strategies/action plans for the conservation and sustainable use of pollinator species elaborated or planned
  - **Peru:** National Beekeeping Development Plan; Payment mechanism for ecosystem services; Pollinator technical group.
  - Paraguay: National Plan for Apiculture and Meliponiculture
  - Costa Rica, Mexico and Peru are also members of the Coalition of the





#### **Challenges:**

- There is a need to strengthen action at the landscape level for the protection of pollinators
- Lack of incentives and resources
- Information on pollinators and ecosystem service value remains scarce
- No mechanisms for structured exchange of experiences with pollinatorfriendly practices and lessons learned at the regional level

## Poli-LAC Objective and outputs

Governmental and non-governmental actors in selected countries in LAC have **expanded knowledge-based management and governance practices at local, subnational, national, and regional levels** that promote the ecosystem service of insect pollination.

01

knowledge
management on the
conservation and
sustainable
management of
insect pollinators

Target group actors

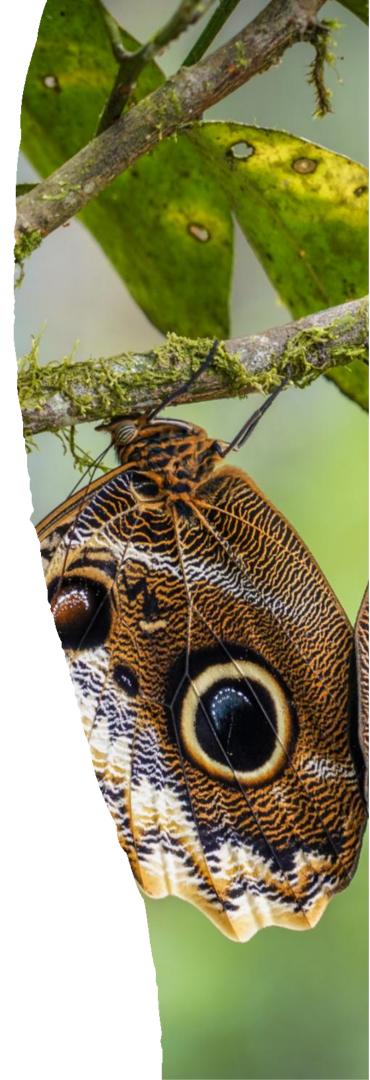
02

Decision-makers
support and develop
policies and
instruments that
encourage the
conservation and
sustainable use of
insect pollinators
and mobilize
financial resources

)3



Local actors in selected landscapes in Brazil, Costa Rica, Mexico, Paraguay and Peru implement insect pollinator-friendly practices and use monitoring tools



## Poli-LAC Objective and outputs

Output I: Regional (LAC) Knowledge Management

Output II: Policies,
Instruments and Finance

- Regional (LAC)

  Knowledge Management
- Initiation and technical support of South-South cooperation projects (LAC), associated small grants
- Public policies and instruments promoting the conservation of pollinating insects
- Financial solutions and mobilization of private sector contributions

Output III: Pollinatorfriendly Practices and Monitoring

- Implementation of pollinator-friendly practices in the prioritized pilot landscapes
- Use of monitoring tools in pilot areas, implemented by universities and research institutions



## Selected landscapes for local implementation

México (Local partner: ENDESU) **Brasil** (Local partner: IICA) **Agrobiodiversity corridor** Sierra de Manantlán **Brazil - Chapada** (State of Jalisco) **Diamantina** (State of Bahia) **Costa Rica** (Local partner: Forever Costa Rica Association) Península de Nicoya **Paraguay** (Sector of Guanacaste) (Co-financing: Forest 4 Life GIZ) Perú Mbaracayu-Itaipú Biosphere Reserves (Local partner: Profonanpe) San Rafael National Park Oxapampa Biosphere **Chaco Biosphere Reserves** Reserve (Pasco Region) D.

Technical

criteria

**Political** 

criteria

Safeguard

criteria

## **Target Groups and Stakeholders**







Environmental and agricultural authorities at the political and technical level

General public, especially young people (citizens in the countryside and urban population)





Local communities in situation of vulnerability and Indigenous Peoples, including farming families and their organizations, biodiversity conservationists, as well as organized beekeepers



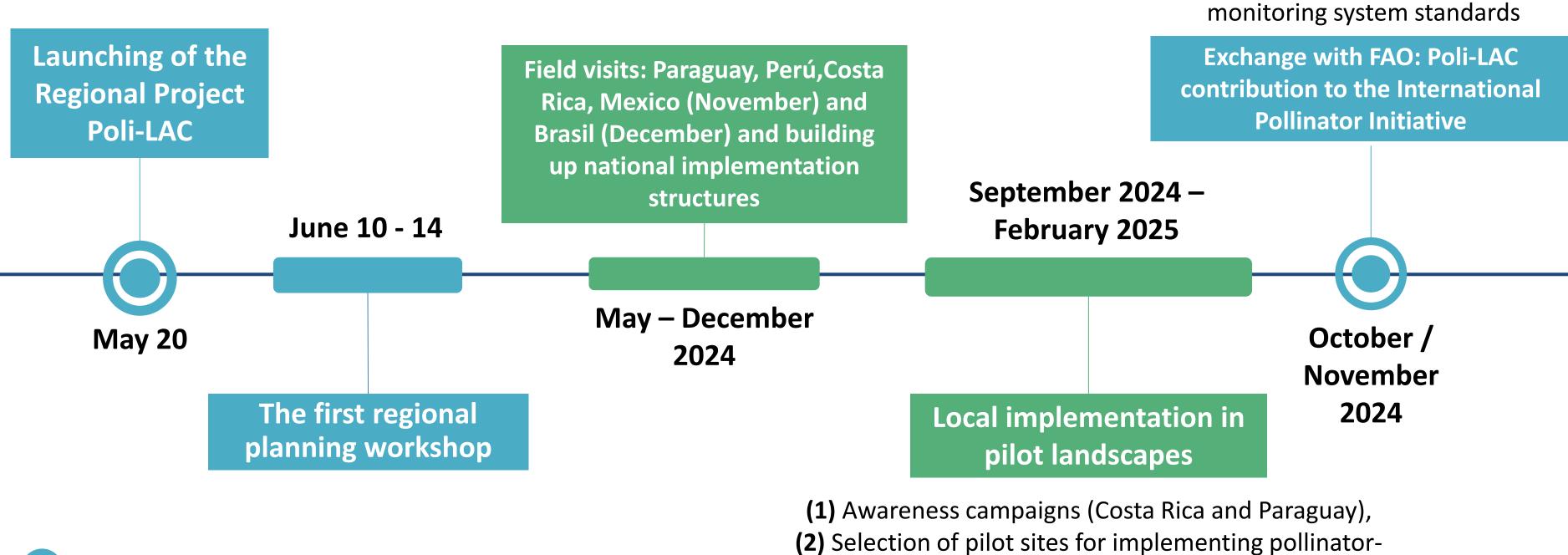


The private sector, especially small and medium enterprises, agricultural producers and private enterprises

# Organizational Arrangements



# Poli-LAC Project Timeline until mid 2025



friendly practices, (3) Design of monitoring systems/

tools

(1) Regional knowledge management

platform, (2) E-learning courses, (3)

Dago

2024

**Regional level** 

**Local level** 

Poli-LAC



## Poli-LAC: Next steps in 2024

- ✓ Analysis of the legal framework and institutional structures of promoting the conservation and sustainable use of pollinating insects
- ✓ Valuation studies of Pollination Services (Economics and others)
- ✓ Catalogue of pollinator-friendly practices
- ✓ Action plan for 2025 (regional and national)



# Scan the QR code and learn more about the Poli-LAC Project



¡Thank you for your attention !

#### **Contact GIZ:**

Andreas Gettkant, Regional Project Director Poli-LAC Lima, Perú andreas.gettkant@giz.de

