



# BioCAM4 Planet People & Human Health

Biodiversity Integration in Climate  
Adaptation and Mitigation Actions

Climate change accelerates biodiversity decline and biodiversity loss intensifies climate breakdown. Current national commitments under the Paris Agreement and the Kunming-Montreal Biodiversity Framework do not live up to these challenges. Nature-based Climate Action (NBCA) are multi-actor, cross-sectoral collaborative commitments that integrate nature and biodiversity considerations within climate mitigation and adaptation strategies. They have the potential to complement national commitments, while responding to climate change-induced risks to (i) terrestrial and ocean ecosystems, (ii) living standards, and (iii) human health.

The overall objective of **BioCAM4** consortium project is to develop methodologies for mapping NBCA trends worldwide and assessing local opportunities and challenges through deep-dive studies in two biodiversity hot-spot world regions: East Africa and Central America, where vulnerable groups and communities are among the most affected by climate impacts, least responsible for it, and have reduced adaptive capacity due to social and economic fragility.

We engage in research co-creation and policy outreach at global and local levels strengthens capacity for NBCAs.

BioCAM4 consortium project pursues three specific objectives:

1. **A comprehensive global mapping and analysis of NBCAs** and an open-access database to offer insights on global NBCA distribution, patterns, and performance. Understanding of global trends will inform global climate change and biodiversity processes.
2. **Context-specific and locally relevant exploration of local dynamics of NBCAs** in four localities across two regions that are highly biodiverse: Virunga and Lake Victoria regions in East Africa, and Trifinio and Brunca regions in Central America. We uncover how biophysical, cultural and institutional factors affect community action for implementing NBCAs, understand action situations and actor interactions therein, and their outputs, outcomes, and impacts to inform performance assessments at global level and provide evidence-based, justice-driven insights for multi-level policy guidance.
3. **Co-creation of knowledge mobilization and policy outreach to translate research insights into policy guidance** for equitable funding flows and resources that strengthen the capacity of local actors to design, implement and maintain effective and inclusive NBCAs in the project's focus areas and worldwide.

## TEAM

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## ABOUT

BioCAM4 is organized into three research work packages:

- **Work Package 1.** Global mapping and analysis: A comprehensive global mapping and analysis of NBCAs will be co-produced by social scientists, biologists, and stakeholders. The resulting open-access database will offer insights on global NBCA distribution, patterns, and performance.
- **Work Package 2.** Context-specific exploration of action situations for NBCAs in focus areas in the Global South: We will complement the global analysis with deep-dive studies that engage stakeholders and communities in four countries: Rwanda (Virunga region) and Kenya (Lake Victoria region) in East Africa, Costa Rica (Brunca region) and Guatemala (Trifinio Region) in Central America. The vulnerable groups for BioCAM4 are communities surrounding conservation and restoration sites in the above regional focus areas. We understand vulnerability in terms of exposure, sensitivity, and adaptive capacity. The communities in the focus areas are among the most affected by climate impacts, least responsible for it, and have reduced adaptive capacity due to social-economic fragility. We will explore existing and potential NBCAs in focus areas, identifying facilitating and hindering factors, to understand their outputs, outcomes, and impacts. Participatory design with practitioners, social scientists, vulnerable populations, and local and regional research end-users in our focus areas will engage local actors to implement effective and inclusive NBCAs, while providing bottom-up insights for improving indicators for tracking outcomes and impacts for the global database. Ethicists and biologists will support integration of justice principles and sound conservation science and social science perspectives with attention to local relevance.
- **Work Package 3.** Research translation and policy guidance: Leveraging community-based and international partnerships, science-policy specialists with expertise in biology, political science and science diplomacy will translate research insights from both global and local analyses into actionable recommendations for growing and scaling-up NBCAs. These recommendations will guide implementers (local authorities, governments, UN Climate Change, and UN Biodiversity processes) and global funders (Global Environment Facility, Green Climate Fund) to direct funding and resources effectively toward NBCAs, and enhance capacity at community level.

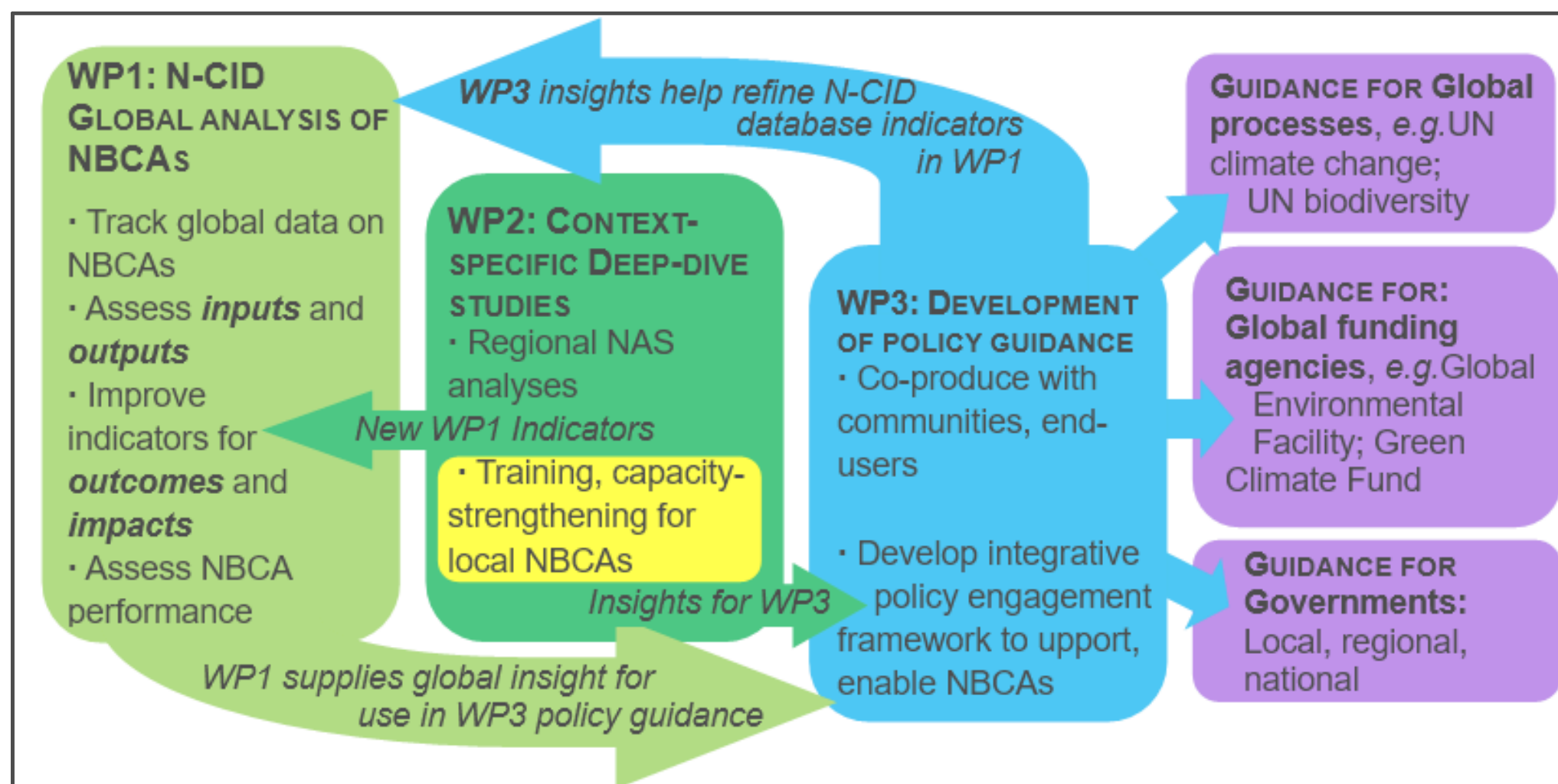


Figure: Overview of BioCAM4 research activities and their relationship to one another

*BioCAM4 is dedicated to North-South research collaboration to advance people-positive nature-based climate actions (NBCAs) that support nature and biodiversity.*

**BioCAM4 is supported in part by funding from the Government of Canada's New Frontiers in Research Fund (NFRF).**

**BioCAM4 est financé en partie par le fonds Nouvelles frontières en recherche du gouvernement du Canada.**

Funded by



Deutsche  
Forschungsgemeinschaft  
German Research Foundation



Government of Canada  
Gouvernement du Canada



Economic  
and Social  
Research Council