

# MINSTERIO DEL AMBIENTE SECRETARIA DE EDUCACIÓN SUPERIOR, CIENCIA, TECNOLOGÍA, E INNOVACIÓN INSTITUTO NACIONAL DE BIODIVERSIDAD





#### Research topics

#### Topic 1: Sustainable use of Biodiversity

Research proposals focused on the development of models, tools, applications or mechanisms for the sustainable use of Ecuador's vast biodiversity, considering climate change. The proposals have to take into account one or more of the specific or general subtopics.

#### **Topic 2: Provision of Ecosystem Services**

Research proposals focused on the development of models, tools, applications or mechanisms for the preservation or restoration and the sustainable use of Ecuador's ecosystem services, considering climate change. The proposals have to take into account one or more of the specific or general subtopics.

# Subtopics

#### Specific subtopics of topic 1

Agrobiodiversity and species diversification in aquaculture

How can agrobiodiversity / species diversification contribute to sustainable agriculture / aquaculture systems?

#### Best practices in sustainable aqua- and agriculture, farming and fishery

How can ecosystems be used for a sustainable food production on land and in water?

#### Traditional knowledge and uses

How can indigenous knowledge contribute to a sustainable use of biological and genetic resources and provide both knowledge gain for science and sustainable development of indigenous communities?

#### Applied biotechnology and bioprospecting

How can bioprospection and biotechnology contribute to the sustainable use of biological and genetic resources and promote bio-economy?



## General subtopics of topics 1, 2

#### Genetic resources

How can the genetic resources of Ecuador be explored and used in a sustainable way, preserving biodiversity and ecosystem services?

#### Food safety

How can the increasing need for a more efficient and secure food production be met, considering the sustainable use of the natural resources and ecosystem services?

#### Vulnerability and climate resilience

How vulnerable are biodiversity and ecosystem services due to climate change? Exploring the resilience of species and ecosystems in relation to climate change.

#### Information systems / information management

How can the access to research data about biodiversity and ecosystem services be ensured? How can information management tools help to improve the sustainable use of biodiversity and ecosystem services?

#### **Ecological restoration**

How can biodiversity and ecosystem services of degraded, damaged or destroyed ecosystems be renewed or restored?



# Specific subtopics of topic 2 Water regulation

How can water regulation be safeguarded and hydrological resources be used in a sustainable way?

# Ecosystem services in marine-coastal, interface or high Andean ecosystems (mountain forests and páramos)

Exploration, quantification, availability or evaluation of ecosystem services and potential impacts of their use.

#### Related to local and regional economy

How can ecosystem services help to support local and regional economy in a sustainable way?

## Natural resources management (including exotic species)

How can natural resource management contribute to the sustainable provision and use of ecosystem services? How are ecosystem services affected by exotic species?