



ABOUT ROBIN

ROBIN has assessed the role of biodiversity in terrestrial ecosystems in South and Mesoamerica in mitigating climate change. It has evaluated socio-ecological consequences of changes in biodiversity and ecosystem services under climate change.

ECOSYSTEM INTEGRITY ASSESSMENT SERVES AS A COMMON APPROACH FOR MULTI-SECTORAL PUBLIC POLICY IN LATIN AMERICA

Context and trends

There is a clear and urgent need to cope with ecosystem degradation and biodiversity change. Crude estimates suggest that the monetary value of ecosystem services provided by ecosystems in some Latin American countries might well exceed its annual gross domestic product (table overleaf).

Usually a large number of governmental agencies are entrusted with the mandate of studying, safeguarding, and/or monitoring terrestrial, marine, and freshwater ecosystems including their biodiversity. This leads to a complex system of national programs with different constraints, operational requirements, and calendars. There is a clear need to consolidate the existing systems in a nationally and internationally coordinated and adaptive approach.

Ecosystem integrity (EI) is a suitable approach since it facilitates an integrated assessment of the impact of public policies on biodiversity as well as the capacity of ecosystems to provide ecosystem services needed for society.

Policy relevance

The ecosystem integrity approach:

- enables national and local governmental agencies to evaluate public policy and promote adaptive management
- generates key and standardized scientific information and policy-relevant tools for maximizing resources
- considers non-carbon benefits of biodiversity
- promotes conserving biodiversity and optimum levels of sustainable use by evaluating effectiveness of public policy.

Evidence

- Governmental agencies in Mexico with the mandate of studying, safeguarding, and monitoring ecosystems and their biodiversity have adopted this approach*.
- This approach shaped the National Biodiversity and Ecosystem Degradation Monitoring System currently implemented in Mexico at a national level.





- This approach is currently being discussed and explored outside the ROBIN project by Chile, Colombia and Peru within the Pacific Alliance.
- Within ROBIN the approach is being considered and tested in Bolivia and Brazil.
- See also Factsheets 3 and 10.

Opportunities

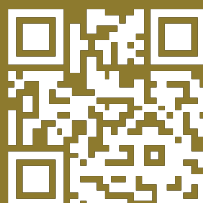
- International initiatives (CBD, UNFCCC, IPBES) recommend the integration of ecosystem-based approaches into their national policies and programmes.
- The Ecosystem Integrity approach supports coordination among national governmental agencies by addressing: (i) national goals related to sustainable use of biodiversity (ii) laws on natural resources, wildlife and their habitats**, and (iii) individual mandates of the agencies involved.

Land cover	Area (ha)	Flow value per ha per year (\$)	Total flow value per year per land cover in Mexico (Billion \$)
Cropland	7,265,149	5,600	40.45
Grass/Rangelands	138,271,119	2,900	396.98
Tropical forest	19,847,991	5,300	104.48
Temperate/Boreal forest	26,880,681	3,000	80.99
Swamps/Floodplains	1,539	25,700	0.04
Tidal Marsh/Mangroves	184,732	193,800	35.81
Urban	370,348	6,700	2.47
Desert	97,391	0	0.00
Lakes/Rivers	1,269,969	4,300	5.42
Ice/Rock	1,654	0	0.00
Total	194,190,573		666.63

Crude estimates suggest that the monetary value of ecosystem services provided by ecosystems in México might well exceed its annual gross domestic product

*the National Commission for the Knowledge and Use of Biodiversity (Comisión Nacional para el Conocimiento y uso de la Biodiversidad, CONABIO); the National Forestry Commission (Comisión Nacional Forestal, CONAFOR), and the National Commission of Protected Areas (Comisión Nacional de Areas Naturales Protegidas, CONANP), which belong to the Ministry of the Environment and Natural Resources (Secretaría de Medio Ambiente y Recursos Naturales, SEMARNAT).

**Examples: General Law for Sustainable Forest Development; General Wildlife Law; Official Mexican Standard on species protection (NOM-059-ECOL-2010); General Law on Climate Change; General Law of Ecological Equilibrium and Environmental Protection.



More information

www.robinproject.info

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