

# Establishing Dashboard Assessments to monitor regional-scale biodiversity indicators



In October 2010, the world's governments agreed to a 2020 Mission and twenty associated Aichi Biodiversity Targets. The targets are supported by indicators for reporting on countries' efforts to reduce pressures on biodiversity, maintain and improve the state of biodiversity, implement conservation actions to ameliorate biodiversity loss, and harness the benefits that such conservation provides to human well-being. However, national capacity is often insufficient to measure many of these indicators through sustainable data collection on the ground. Moreover, if these indicators are to be useful to those who implement, manage, and fund conservation actions, countries and agencies need to be able to document and visualize them clearly. This program seeks to develop “dashboards” for presenting biodiversity indicator data, and to catalyze sustainable national investment in the data flow needed to sustain them.



## PROGRAM GOALS

The overall, long-term goals of the program are to:

- Establish regional dashboard assessments for reporting on trends in bio-diversity across a “pressure–state–response–benefits” indicator framework
- Build national capacity to input these data and integrate national experts into worldwide networks, for example the IUCN Commissions
- Develop the information infrastructure required for data upload, maintenance, analysis, and reporting of the dashboard assessments, including data sharing with global reporting systems

The dashboard assessments will strengthen biodiversity conservation action by highlighting the regional context of status, threats, and benefits to humanity, creating a more effective decision-support framework for adaptive management and investment.

The extinction risk faced by the yellow-eared parrot *Ognorhynchus icterotis* has been reduced from “Critically Endangered” to “Endangered” as a result of conservation action to safeguard the sites where it lives in Colombia. However, the extinction risk of the harlequin toad species *Atelopus peruensis* has deteriorated from “Near Threatened” to “Critically Endangered” as a result of water pollution in Peru and, presumably, the effects of fungal disease. (Photos (top): © Fundación ProAves, [www.proaves.org](http://www.proaves.org); (bottom) © Jörn Köhler.)

## OBJECTIVES FOR 2013–2015

**Develop the biodiversity dashboard platform** We will engineer a dynamic online prototype system that supports data upload, analysis, dissemination and reporting. Our initial prototype will support visualization of four indicators derived from global data —forest loss, species extinction risk, protected area coverage of key biodiversity areas, and freshwater provision from natural ecosystems — for three specific regions: the Tropical Andes, the Great Lakes region of East and Central Africa, and the Greater Mekong region. Subsequent prototypes will incorporate new indicators from national and regional data providers as they become available.

This program represents a contribution to the Biodiversity Indicators

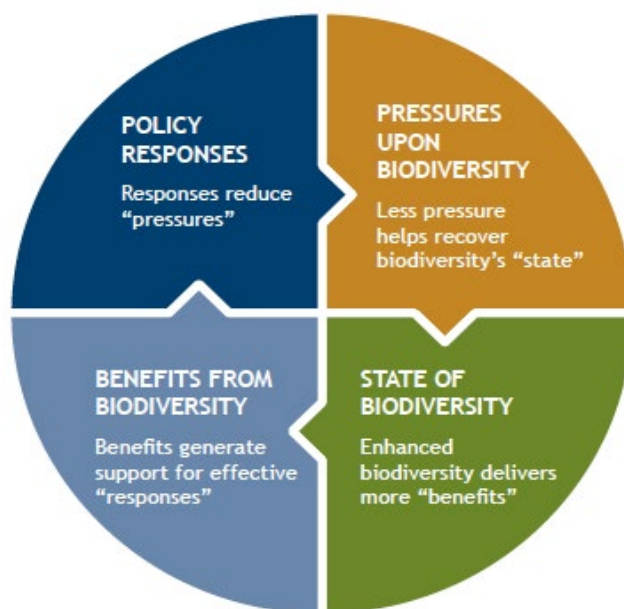
Partnership, a global initiative to promote the development and use of biodiversity indicators in support of the CBD and other multilateral agreements.

### Catalyze local processes to ensure sustainable data flow

We will convene local and national conservation stakeholders within each of these regions to mobilize the data that will maintain the dashboard assessments framework into the long term. While the proof-of-concept phase (2011–2012) focused on downscaling four global indicators, in this phase we will seek to build capacity in local partner institutions to collect and upload biodiversity indicators data into the prototype dashboard system.

### Analyze the dashboard data to assess conservation actions

We will complete a new watershed scale of analysis for each of the four indicators derived from global data; refine and calibrate the pressure (deforestation) and ecosystem service benefits (freshwater provision by natural ecosystems) indicators against high resolution remotely sensed data; incorporate an indicator representing drivers of biodiversity loss; and conduct impact analyses of the benefits of conservation actions to inform adaptive management and conservation investments.



## OVERALL IMPACT AND POLICY IMPLICATIONS

The overall impact of the program will be improvement in biodiversity conservation outcomes. Over the last decade, conservation investment from foundations, NGOs, and governments has slowed the global rate of biodiversity loss by a fifth. The dashboard assessments concept, supported by data from monitoring the delivery and impact of specific investments, will help guide conservation efforts to reduce biodiversity loss much further. Its policy implications, by design, cut across local, national, and international scales: Locally, the dashboard assessments will provide a broader context in which to evaluate the results of activities and adapt them accordingly. For national policy, the dashboard assessments will demonstrate the linkages between conservation and other sectors (the "benefits" component of the indicators framework), strengthening intra-governmental coordination and investment. Finally, the dashboard assessments will inform regional- and global-scale investment policy by agencies and private foundations, such as the John D. and Catherine T. MacArthur Foundation.



*Tropical Andes*



*African Great Lakes*



*Mekong Region*

