

# MORE AND BETTER SCIENTIFIC INFORMATION FOR 2010: INTERNATIONAL YEAR OF BIODIVERSITY

In The Hague in April 2002, the parties to the Convention on Biological Diversity (CBD) committed themselves to “achieve by 2010 a significant reduction of the current rate of biodiversity loss at global, regional, and national level as a contribution to poverty alleviation and to the benefit of all life on Earth.” The Convention defined three objectives: “the conservation of biological diversity, the sustainable use of its components and the fair and equitable sharing of the benefits arising out of the utilization of genetic resources.” To accomplish these objectives, a set of indicators was proposed to measure progress towards this 2010 biodiversity target.

When the parties to the CBD meet for the tenth time in Nagoya, Japan, in October 2010, they will need to re-launch the 2010 biodiversity target. The rate of biodiversity loss does not appear to have slowed, but most importantly, in most of the world the scientific information needed to quantify indicator trends simply does not exist. Fully five of the 22 indicators adopted by the CBD in 2006 are not being developed globally. The remaining indicators consist of 29 different measures, of which only nine are fully specified. Furthermore, no indicators presently measure how fair and equitable access to information and benefits derived from biodiversity is, in spite of the fact that this is one of the Convention’s three objectives.

Nonetheless, some sources of information already exist to evaluate the 2010 biodiversity target, particularly with regard to status, trends, and threats to global biodiversity. At the global scale, land cover maps are available at different scales and points in time; increases in protected areas are known; declines in the average trophic level of world fisheries have been measured; and between 1996 and 2009 the extinction risk of approximately 50000 species was estimated.

However, public policy is not implemented globally: it is implemented within countries, states, provinces, and municipalities, at the level where societies make decisions. Thus, indicators must be measured at spatial scales relevant to biodiversity management. Alternatives include measurement of land cover change using time series of satellite images (many of them freely available), ecosystem services provided to local communities (such as clean water, wood, and food), species’ extinction risk at national, regional and local scales (already available for at least one taxonomic group in more than 100 countries), average trophic levels in local fisheries, exotic species’ impact in protected areas, pesticide and fertilizer use, and trends in genetic diversity in agricultural species. The list is long, and little time remains to generate the necessary information, so a concerted response from the scientific community is crucial.

The United Nations declared 2010 as the International Year of Biodiversity. Though it may be naïve to hope that one year will be enough to significantly increase the quantity and quality of scientific information needed to monitor future CBD biodiversity goals, scientists can at least take two concrete steps now. First, they can increase collaboration between the social and natural sciences, and among government, the private sector, non-governmental organizations, and the general public. Second, they can communicate scientific information in ways tailored to the interests and needs of all stakeholders, guaranteeing free access to the data and analyses resulting from collaborations. These form the basis of a successful strategy for managing biodiversity information to benefit society as a whole.

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