

Mainstreaming biodiversity into development cooperation

By: J. HUGÉ, L.E. VAN DIEJEN, B. VERBIST (KLIMOS); M.P.M. VANHOVE (FINNISH MUSEUM OF NATURAL HISTORY - UHASSELT); A.J. ROCHETTE, L. JANSSENS DE BISTHOVEN (RBINS-CEBioS)

Key message

The rural poor depend on biodiversity for daily food and shelter. As nature loss is most severe in developing countries, this results in a declining availability and quality of ecosystem services. Integrating nature conservation at all levels of development cooperation is key to sustainable socio-economic development.

This can be done by:

- Applying ex ante impact assessment of development projects, programs & policies (e.g. applying the KLIMOS toolkit);
- Capacity building in the South.

Context

Biodiversity is the variety of living organisms and the ecological systems to which they belong. It includes the diversity between species, within species, and of ecosystems (Convention on Biological Diversity, CBD, 1992). In short, it is the variety of life on Earth.

All benefits that people obtain from the environment are ecosystem services (ES) (Fig. 1). Ecosystems rich in biodiversity deliver more high-quality ES and are more resilient to natural disasters and climate change.

Over time, society has adhered to different views on biodiversity and nature. People are increasingly seen as part of nature themselves. Instead of a merely utilitarian role for biodiversity, currently, a two-sided inter-relationship between nature and people is emphasized.



Fig. 1. Nature provides supporting, regulating, provisioning and cultural ecosystem services.

Introduction

To successfully conserve ecosystem services in the global South, biodiversity should be integrated at all levels of policy and decision-making processes of development cooperation.

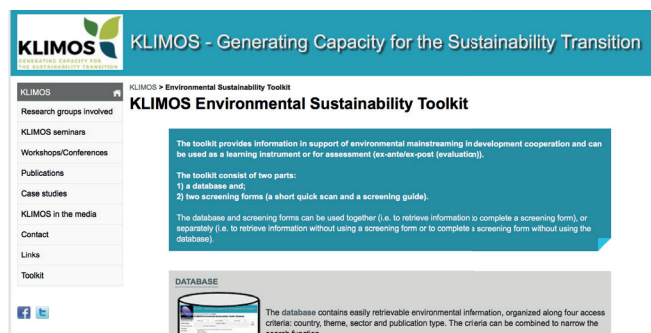
Mainstreaming biodiversity means integrating biodiversity conservation into (inter)national, regional and sectoral strategies, plans, policies, programmes, and projects.

Impact assessments

Impact assessment (IA) is a process for mainstreaming environmental issues that identifies future consequences for the environment of programs and projects. It also proposes alternatives to mitigate future negative impacts.

Environmental impact assessment (EIA) and strategic environmental assessment (SEA) focus on environmental issues at respectively project and policy level. The scope of sustainability assessment is broader and more comprehensive (Hugé et al., 2017).

A user-friendly online tool to apply IA is the KLIMOS Environmental Sustainability Toolkit (Fig. 2).



- A recent study by KLIMOS and CEBioS showed that most IAs carried out by the World Bank in West Africa considered, at best, only utilitarian aspects of biodiversity. Instead of complete descriptions of ecosystem functioning, mostly simple presence/absence lists of obvious mammals were used (Hugé et al., 2017).
- Ecosystem services can be used to guide IAs, and to integrate biodiversity issues explicitly.
- Quality of biodiversity baseline data can be improved by collaborating with local scientists. This also increases capacity building, as well as the involvement of, and ownership by the local community.
- IAs should yield freely accessible biodiversity baseline data. The effects of the proposed mitigation measures or environmental management plans should be monitored, evaluated and reported.

Fig. 2. The KLIMOS Environmental Sustainability Toolkit start screen.

Capacity building

Capacity building is about developing the ability of a human system to perform, to sustain itself and to self-renew.

CEBioS developed a call for biodiversity Monitoring, Reporting and Verification (MRV) projects for African partner countries of the Belgian development cooperation. A capacity building concept was created that links scientific data to policy development (Fig. 3). It revealed

that capacity building is especially needed for data collection, economic valuation of biodiversity, and the use of modern technologies in biodiversity monitoring.

Efforts for technology transfer have to be increased and local communities should systematically be included into biodiversity-related MRV initiatives (Vanhove et al., 2017).

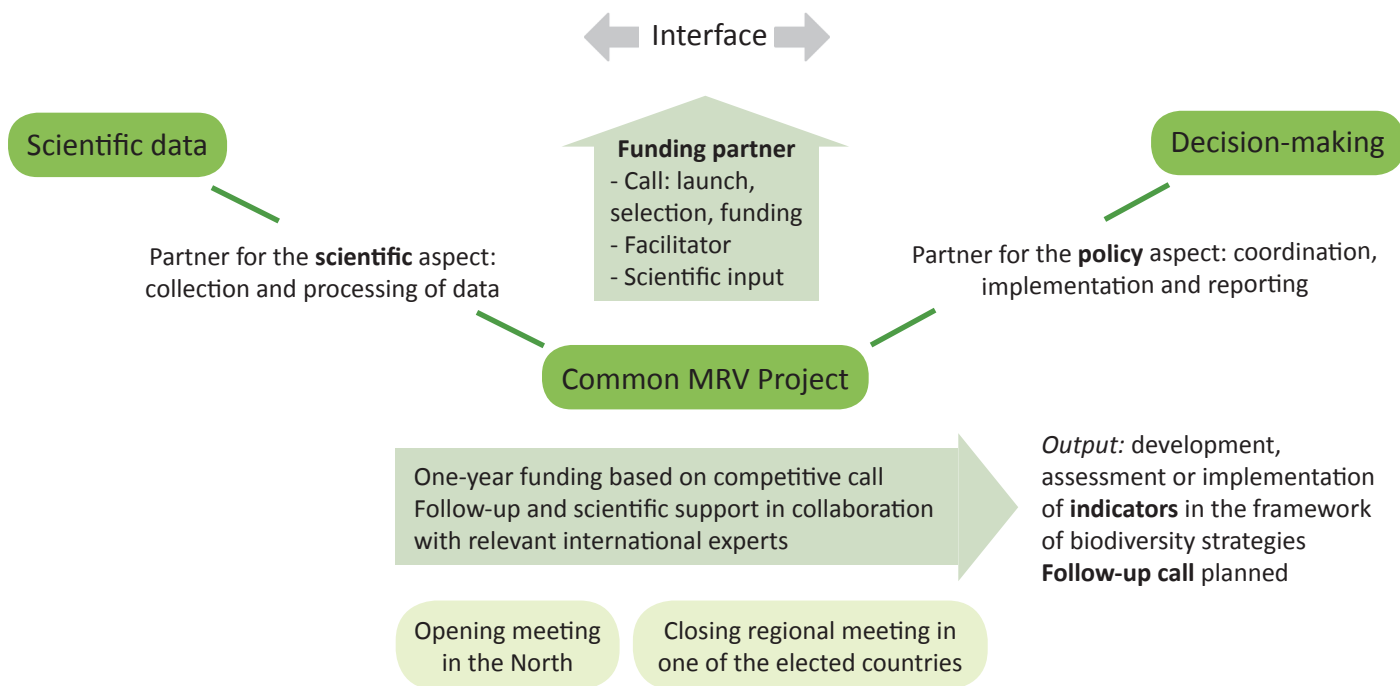


Fig. 3. Overview of a capacity development program for the MRV of biodiversity policy.

Development cooperation and conserving biodiversity go hand in hand

- Development cooperation agencies operate in critical areas where biodiversity needs to be conserved.
- Development cooperation actors and governmental agencies are increasingly mainstreaming biodiversity (Drutschinin et al., 2015).
- In developing countries, development cooperation is the largest source of financing for biodiversity conservation.
- The way the environment is managed affects the long-term success of development cooperation and plays a critical role in our progress towards UN's Sustainable Development Goals (Agenda 2030, UN, 2015).
- Mainstreaming biodiversity contributes to tackling poverty sustainably.



Fig. 4. Overview of development cooperation levels for mainstreaming biodiversity and ecosystem services.

Conclusions and recommendations

- Biodiversity and ES are essential for human wellbeing and socio-economic development, and hence need to be integrated in development cooperation activities.
- Mainstreaming biodiversity into (inter)national and sectoral policies, projects and plans contributes to sustainable development.
- Capacity building in the South requires stronger technology transfer and linkages between biodiversity science and policy development and implementation.
- Impact assessment reveals how biodiversity is framed and represented in projects, programs & policies, and provides key opportunities for systematic biodiversity integration. The KLIMOS Toolkit is an example of a quick impact assessment process.
- The importance of biodiversity has to be explicitly and systematically integrated in development cooperation missions and projects.

Sources of images

- Figure 1 Millennium Ecosystem Assessment 2005. « Ecosystems and Human Well-being. » Classic Edition Sources: Environmental Studies. Thomas A. Easton. 4th ed. New York: McGraw-Hill, 2012. 41-47. Print.
- Figure 2 Screenshot of the KLIMOS Environmental Sustainability Toolkit start screen. <https://ees.kuleuven.be/klimos/toolkit/>
- Figure 3 Adapted from Vanhove MPM et al., 2017.
- Figure 4 Adapted from Agrawala S. and Remy P. 2009. Integrating Climate Change Adaptation into Development Co-operation: Policy Guidance. OECD Publishing, Paris

References

- CBD. 1992. 'Text of Convention'. <http://www.cbd.int/convention/text/default.shtml>. Last accessed 11 November 2017
- Drutschinin A, Casado-Asensio J, Corfee-Morlot J, Roe D. 2015. Biodiversity and Development Co-operation. OECD Development Cooperation Working Papers, N°21. OECD Publishing, Paris.
- Hugé J, Mukherjee N, Fertel C, Waub JP, Block T, Waas T, Koedam N, Dahdouh-Guebas F. 2015. Conceptualizing the effectiveness of sustainability

assessment in development cooperation. Sustainability 7:5735-5751. doi:10.3390/su7055735

- Hugé J, Rochette AJ, Janssens de Bisthoven L, Dahdouh-Guebas F, Koedam N, Vanhove MPM. 2017. Utilitarian framings of biodiversity shape environmental impact assessment in development cooperation. Environmental Science and Policy 75:91-102. <https://doi.org/10.1016/j.envsci.2017.06.003>
- Vanhove MPM, Rochette AJ, Janssens de Bisthoven, L. 2017. Joining science and policy in capacity development for monitoring progress towards the Aichi Biodiversity Targets in the global South. Ecological Indicators 73: 694-697. <http://dx.doi.org/10.1016/j.ecolind.2016.10.028>
- UN General Assembly. 2015. Transforming our world: the 2030 Agenda for Sustainable Development, A/RES/70/1. <http://www.refworld.org/docid/57b6e3e44.html>. Last accessed 13 November 2017

Contacts

Jean Hugé (jean.huge@ulb.ac.be)
Anne-Julie Rochette (ajrochette@naturalsciences.be)
Maarten Vanhove (maarten.vanhove@uhasselt.be)

<https://ees.kuleuven.be/klimos/>
<http://cebios.naturalsciences.be>

Layout: Lucie Ongena, CEBioS, 2018