



Photo Credit: CI/Olivier Lanrand

A Changing Landscape

A report from an IUCN WCC workshop

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We live in a world where the many crises of natural resource conflicts and scarcity make it abundantly clear that conservation of biodiversity will only succeed if it also effectively addresses human well-being priorities. This shift towards a new paradigm was discussed in full during the workshop, "Making landscapes work for nature and people: Successes and Challenges from the field," which took place on October 9, 2008 at the International Union for the Conservation of Nature (IUCN) World Conservation Congress (WCC) in Barcelona. The workshop addressed the challenges of building a bridge between conservation and development priorities at different scales through case studies from around the world.

Integrating Conservation into Development



Achieving conservation success at the scale of landscapes requires a shift towards broad-scale sustainability and more effective integration of social, economic and cultural issues into biodiversity conservation strategies. It is at this scale where conservation actions can have impact on policy and institutions governing land, natural resource use, and economic development. Making this paradigm shift will require a more serious examination of how conservation and development are intricately linked together; how the two agendas can be addressed simultaneously to capture synergies and opportunities; and how conservation action contributes to improving human well being.



To examine the inter-relationships between conservation and development, the conservation community should address the following questions in their landscape-scale planning:



- How do biodiversity and ecosystem services impact or underpin long-term economic sustainability?
- How can we ensure that conservation actions contribute to poverty reduction, improvement of human well being and the generation of local benefits?
- How do we develop the types of inter-sectoral and inter-institutional alliances needed between conservation and development?
- How can we ensure that our goals have the buy-in and commitment of different types of stakeholders at the local, regional and national levels?

At the landscape scale, successful conservation needs to be locally relevant in order to obtain the buy-in and support of, and to be implemented by, multiple sets of actors, including indigenous peoples, local communities, private sector, government institutions and others. To enable engagement with this wide range of stakeholders, conservation groups should carry out analysis to:

- Identify the *level of development* that is sustainable for both biodiversity and livelihoods;
- Understand the *economic and spatial trade-offs* between different production possibilities and biodiversity conservation;
- Implement *innovative financing mechanisms* (such as Payments for Ecosystem Services) to generate local benefits and leverage the maintenance of ecosystems;
- Promote *diverse farming systems*, and best management practice in the land use mosaics in, and around protected areas;
- Use *participatory engagement tools* such as scenario planning and decision-support analyses to influence the values and ideas of decision-makers;
- Understand that the design and implementation of a sustainable landscape needs to be *highly contextualized* to the local socio-political, cultural, economic and geographic conditions; and
- Understand that the ideal spatial pattern will change due to global market shifts, population movements, climate change - and hence, realize the importance of *a framework that enables adaptive management*.



Women working in a rice field in Northern Sumatra. Photo Credit: CI/Shannon Earle

“WISA has incorporated wetland conservation and management actions into their climate change adaptation strategy as part of their overall sustainability vision in the regions.”

Examples from Case Studies

Wetlands International South Asia (WISA) reported on two cases in India in which they have succeeded in promoting the restoration of hydrological regimes for biodiversity and sustainable livelihoods in two highly biodiverse but degraded wetland systems. In Kolleru Lake on the East Coast of India and Wular Lake in Kashmir, they achieved this through early and extensive stakeholder consultations in development of participatory management plans and significant investment into community livelihood programs.

The South African National Biodiversity Institute (SANBI) reported on its efforts to mainstream biodiversity into the land-use planning process through bioregional plans. Bioregional plans are required by the 2004 National Biodiversity act and include a map of defined critical biodiversity areas (CBAs), developed by SANBI using systematic conservation planning methodologies. In addition, SANBI is also developing guidelines for ecologically-friendly land and resource uses (ranging from conservation to urban development) and best practices that should take place in areas surrounding natural and protected areas.

CI/Madagascar's diverse mosaic of projects has enabled success in generating connectivity in the Mantadia-Zahamena corridor.

Conservation International Madagascar reported on its work in the Mantadia-Zahamena corridor. As a result of a nearly ten year process of working with communities in the corridor, CI has been able to implement a unique participatory design and establishment of community conserved areas that fit into the national system of Protected Areas network. Understanding the intricate links between conservation and human wellbeing, it has implemented various other projects such as health projects (to improve access to quality reproductive health services, sanitation, and other health care services), a community-managed carbon reforestation project, community based ecotourism and a participatory ecological monitoring system.

Conservation International Bolivia reported on its efforts to maintain biodiversity and promote development in the Madidi Amoro Conservation Corridor, through a multilayered approach. These efforts have focused on: strengthening indigenous organizations and municipalities to support sustainable development and conservation; land use planning to integrate protected areas into other regional planning processes; and economic activities that generate sustainable income for local communities. In addition, the program has also developed a knowledge management system to build on best practices and lessons learned, and worked to incorporate biodiversity into formal and informal education systems, which is critical to the long-term sustainability and local ownership of the conservation agenda. This combination of actions has enabled a national political framework that supports conservation in this landscape and throughout the country.

The Nature Conservancy (TNC)'s Valuing Nature projects are designed to generate public awareness on the broader human benefits of protected areas beyond biodiversity, and have been implemented as country-wide assessments and site-base studies with partner organizations. Information from these studies is fed into a targeted communications campaign oriented towards key target groups to mobilize political and public will towards conserving/ funding? protected areas. While some aspects of these studies are site-based, they have clear corridor scale implications because in the discussion of ecosystem services, linkages between development, poverty reduction and conservation often leads to the realization that conservation needs to be integrated within development plans and policies.

CapeNature has long worked with private land owners to promote land stewardship and create connectivity in critical areas for biodiversity and ecological processes in the Western Cape region of South Africa. Private land owners either enter into a formal contract agreement to conserve part of their land or agree to adopt better land management practices and in turn receive fiscal incentives and technical support. By so doing, the program has helped to create a real sense of ownership in the program and increased capacity to adapt to climate change by managing critical areas for ecological processes, while at the same time succeeded in bringing about a significant increase in the area under conservation in this region.

Lessons and Challenges

Although conservation groups and development agencies often work in the same regions on similar issues, historically there has been little collaboration between the two groups. *Strong partnerships with development agencies* will allow for a better understanding of each other's mission and goals and will ideally foster integrated projects which address the needs of conservation and human well-being.

In Madagascar, a multitude of social projects have been implemented however their contribution to conservation has not been fully evaluated. Conservationists and development specialists both need to develop ways to *measure how these projects and the subsequent change in behavior* in the local populace contribute to conservation efforts in the region.

The TNC project, *Valuing Nature*, has highlighted the struggles of effectively evaluating Ecosystem Services (ES). The technical aspects of successfully *establishing the monetary value of on-site ES* can prove challenging and methods for valuation are continuously being refined.

Working with stakeholders that are not conservation-minded has proved to be a challenge, as shown by practically all the case studies. Project stakeholders often have very *different interests and goals*, particularly private land owners and development agencies, and the skills or approaches needed to persuade these stakeholders of the benefits of conservation need to be further developed.

The WISA case study has shown that *riverine and wetland landscapes* can represent a particular challenge for conservation. These landscapes have a nested mosaic of developmental activities - supporting water infrastructure in the form of dams, barrages, dykes, channels-that can lead to negative environmental effects that in turn limit the livelihood options of local people.

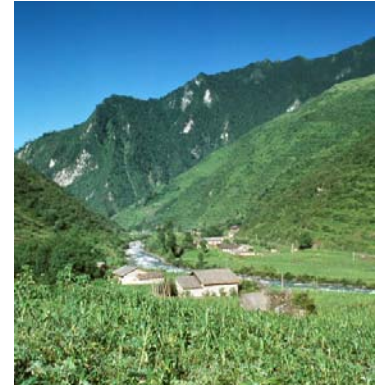
The SANBI case study described the efforts in South Africa to develop land-use guidelines for their priority areas. Their main challenge has been the lack of enforcement of their guidelines, without which they have no way of ensuring that the guidelines will be adopted and followed by the necessary parties.

Recommendations

- Conservation engagement with the development sector (and vice versa) is fundamental for achieving sustainable livelihoods and is a precondition for successful design of sustainable landscapes. As such, conservation organizations need to become more proactive in exploring synergies and developing partnerships with development organizations and regional planning institutions. There is a need for *integrated assessments which can reflect the intricate linkages between conservation and development*, for example, livelihood implications due to natural resources degradation (and vice versa); and need to initiate a process of dialogue at the start of project cycles.
- Conservation organizations need to place greater emphasis on *cross sectoral communication and outreach* based on win-win solutions.

Conservation organizations need to develop better/realistic target setting which can enable more productive partnerships.

- Conservation organizations need *a holistic vision wherein genuine development needs are mainstreamed into conservation planning*. To operationalize this vision, we need to have better developed decision-support tools that foster collaboration and participatory bottom up planning with decision-makers and other actors.
- For landscape scale conservation planning to be successful, we need to implement *mechanisms that enable us to build on the best practices and lessons learned* from prior experiences.
- We need to develop *stronger socio-economic arguments* to support conservation and do a better job of articulating the social, cultural and economic values of biodiversity.



Corn Plantation in Wolong preserve, China. Photo Credit: CI/ Russell Mittermeier

Additional Reading

Agrawal, A. & K. Redford. (2006) Poverty, Development, And Biodiversity Conservation: Shooting in the Dark? Wildlife Conservation Society Working Paper.

Leatherman, C. (2008). The Poverty Question. The Nature Conservancy Magazine: <http://www.nature.org/magazine/spring2008/features/art23458.html>.

Millennium Ecosystem Assessment, 2005. *ECOSYSTEMS AND HUMAN WELL-BEING: WETLANDS AND WATER Synthesis*. World Resources Institute, Washington, DC.

Singh, R. K., H.R. Murty, S.K. Gupta & A.K. Dikshit (2009). An overview of sustainability assessment methodologies. *Ecological Indicators* 9(2): 189-212.

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