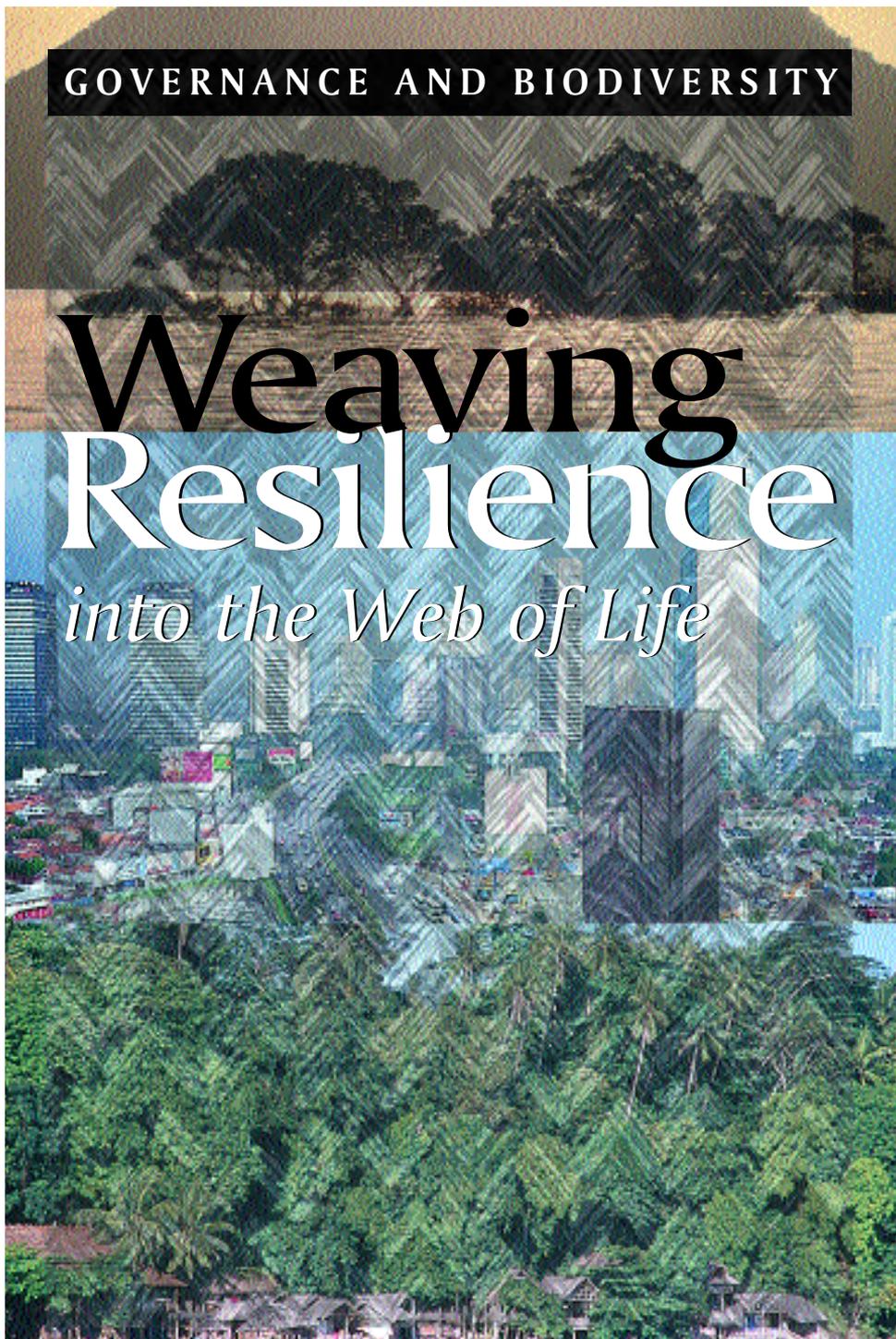


GOVERNANCE AND BIODIVERSITY

# Weaving Resilience *into the Web of Life*





## Weaving Resilience into the Web of Life

Resilience springs from vibrant, evolving institutions that govern people and their use of natural resources. Under good governance, populations of diverse species create productive and resilient ecosystems. Effectively governed ecosystems support productive social systems, while retaining their ability to recover and persist in the face of change.

Our Earth is an interwoven web of living ecosystems — arid deserts, lush rain forests, iridescent coral reefs, thunderous oceans, silent swamps, and vital human enterprises. Urban centers and economies have prospered, linked by global trade networks that transport products from seas, farmlands, and forests. As a result, people today are enjoying rights and livelihoods they could only dream of in the past.



Paradoxically, the same rich commerce that enhances our quality of life is undermining our future. Forests, fragmented by over-extraction, conversion, and fires, can no longer buffer climate changes. Soil runoff, caused by deforestation, is destroying productive fisheries. Essential water resources are being damaged by pollution and land-use changes. Irreplaceable genetic resources are lost every day.

Destruction of this web of life is not an inevitable result of commerce. Properly managed, ecosystems can rebound from local disasters and daily use. But if Earth's ecosystems continue to be dismantled, ecological resilience will be destroyed. The resulting environmental damage will exacerbate political instability and dim the hopes of future generations.

Good governance is the key to reversing these negative trends. Accountability, transparency, democratic participation, rule of law, and an active civil society are all required. Local self-governance over ecologically-defined areas is fundamental, but effective governance also requires cross-scale links between local, national, and international levels. Decentralization of authority and responsibility builds a responsive alliance between government and citizens. Decentralized initiatives can, place by place, weave resilience back into the web of life.



*Alain Compost*

# Weaving resilience: An example from Indonesia

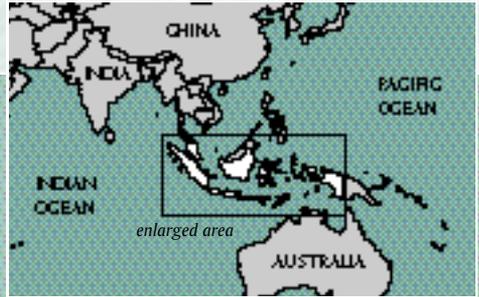
Indonesia, the world's fourth most populous country, is blessed with tremendous natural resources and mineral wealth. These 17,000 islands support a vital web of life linking forest and coast, island and ocean, people and nature. Bridging the Asian and Australian continents, Indonesia is home to orangutans, rhinos, the world's most diverse reefs, and more than 250 traditional cultures, each with its own ways of sharing space with nature. But decades of centralized management have eroded the country's social and ecological resilience. Plantations, mining, and logging are damaging this remarkable web of life. A revival of good governance is needed to repair linkages before ecosystem resilience is lost.



Indonesia's government is based on the principle of unity through diversity. Traditional governance institutions exist throughout Indonesia, each adapted to local conditions. By working with Indonesian nongovernmental organizations (NGOs), the **KEMALA** project supports the Indonesian government's efforts to decentralize biodiversity management. KEMALA supports local initiatives through targeted grants, training, and technical assistance to NGOs in key locations. These NGOs are encouraged to share information and skills, creating a network that links Outer Island focal areas in five provinces to the national capital in Jakarta. Better communication through this network of NGOs, communities, and government is improving the governance of millions of square kilometers of diverse forests, rivers, coasts, and reefs.



Don Hasman



Russell Mittermeier



Gerry Ellis

Map created by Conservation Science Program, WWF-US with data adapted from World Conservation Monitoring Centre

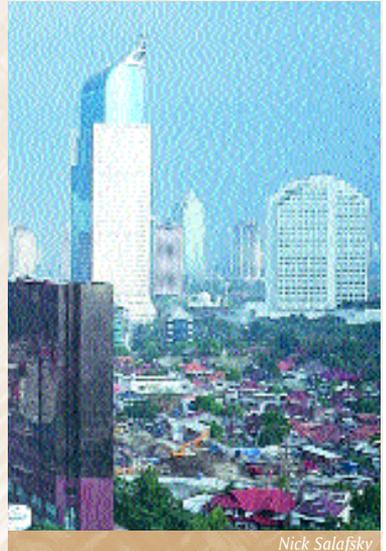
## *Improving links across governance scales*

Community, municipal, district, provincial, and national government play essential roles in managing diversity at their own scale. Their effectiveness depends on exchanges between them, and on respect for the rights and responsibilities of each level. In Indonesia, NGOs promote local self-governance by revitalizing traditional local institutions and creating opportunities for productive cross-scale cooperation.



*Martin Hardiono*

Focus groups are drawn from government, private sector, NGOs, and communities to shape new solutions to environmental problems. NGOs also promote decentralization by analyzing policies and facilitating meetings between community representatives and government agencies. KEMALA supports these NGOs' efforts.



*Nick Salafsky*

**Konsorsium Pendukung Sistem Hutan Kerakyatan** works with government to investigate the social and ecological impacts of marketing restrictions for rattan and rubber in East and West Kalimantan. The joint research is being used to negotiate anti-monopoly policies with the Ministry of Trade and Industry so that local forests can remain under community management for multiple non-timber forest products. **Lembaga Alam Tropika Indonesia** is leading a coalition of NGOs promoting reform of the Ministry of Forestry and Estates' policies to support community forestry.



*Alain Compost*



*Alain Compost*

**Telapak Indonesia** is developing appropriate tools for communities' participation in Indonesian ecolabel certification and international monitoring of the world's tropical forests, in cooperation with World Resources Institute's Global Forest Watch. **Lembaga Studi dan Advokasi Masyarakat** and the Center for International Environmental Law are training Indonesian lawyers to analyze community-based management policies and laws and to advocate on behalf of community groups. Through research and advocacy, Indonesian NGOs are assisting the government and civil society to agree upon the facts that require attention through policy reforms and accountability mechanisms at all levels of government.

## *Mapping communities' lands and waters*



YKSPK

Mapping clarifies rights and responsibilities at all levels of government. Participatory mapping contributes to better local governance by creating a shared community-level understanding of resources and their status. Problems become apparent to community members and their leaders; they work together to develop solutions. Maps also communicate local information to provincial and national government so that land-use conflicts caused by centralized planning can be resolved.

**Yayasan Karya Sosial Pancur Kasih (YKSPK)** is helping communities map half a million hectares in West Kalimantan. Communities use the maps to negotiate with commercial timber and palm oil plantation concessionaires infringing upon community forests.

**Jaringan Kerja Pemetaan Partisipatif**, a network of NGOs and communities, trains mapping facilitators across Indonesia.



Howard Buffett

## Creating inter-island agreements



Don Hasman

**Yayasan Hualopu** is helping to extend local reef traditions known as *sasi* to a larger area in Maluku. Through such inter-island agreements, communities are building a new model for sustainable management of small islands and coastal zones. In response to community concerns, local government regulations are supporting this extension of local rights, duties, and controls over coastal resources.

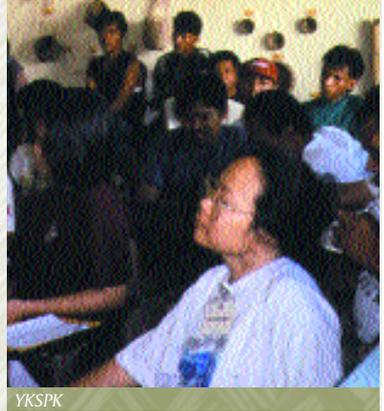


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## Creating community-based management plan

Decentralization brings planning decisions to local levels. Communities are developing management plans that increase protected forest, conserve rare species, improve economic conditions, and ensure that village boundaries are respected. When communities' land-use plans are integrated into provincial land-use plans, forests are protected from concessions and conversion to plantations.



YKSPK



Alain Compost

**Yayasan Karya Sosial Pancur Kasih (YKSPK)** is promoting local regulations that restrict commercial forest harvesting. YKSPK also encourages intercommunity agreements to control water pollution and fishing practices in a river basin that serves as a critical habitat for rare fish. District and provincial government are recognizing these local regulations.

**Forum Petaupan Katouan (FPK)** NGOs support community initiatives to develop land use and water-catchment agreements in North Sulawesi. FPK also works with district government to develop regulations strengthening public involvement in government land-use decisions.

## *Managing protected areas*

Policies for joint management of Protected Areas allow local communities to collaborate with national agencies. In Irian Jaya, WWF and local NGOs are promoting national recognition of the rights and responsibilities of six indigenous groups in and around Lorentz National Park. This remote World Heritage Site covers a range of spectacular ecosystems, but it is threatened by mining and ineffective management. By strengthening traditional governance and enhancing local resource management skills, **Yayasan Bina Adat Walesi** and **Lembaga Musyawarah Adat Asmat** are stabilizing local capacity to co-manage the park.



*Martin Hardiono*



*Alain Compost*

**Yayasan Pendidikan Lingkungan Hidup Cyclop Irian Jaya** is incorporating conservation values into school curricula, infusing future generations with a continued sense of environmental stewardship.

## Governance and Biodiversity: Seeing the Links

Increasingly, development assistance agencies recognize that new ways of thinking are needed to sustain economic growth and ecological resilience. Without economic pluralism and an active civil society, economic growth is unsustainable. Hence, donors are directing more investments into the governance sector.

Environment is traditionally viewed as a separate sector with separate interventions. Such sectoral division detracts from seeing that environment and governance are fundamentally linked. Loss of resilience creates volatile environmental issues that contribute to political turmoil. Agencies concerned with governance may find that the KEMALA project offers useful insights into ways for addressing root causes of societal instability while tackling global environmental problems. By supporting coalitions for good governance, projects like KEMALA can weave social and ecological resilience into the web of life.



*Alain Compost*

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