This chapter first appeared in *Livelihoods, Natural Resources, and Post-Conflict Peacebuilding,* edited by Helen Young and Lisa Goldman. It is one of six edited books on Post-Conflict Peacebuilding and Natural Resource Management (for more information, see www.environmentalpeacebuilding.org). The full book can be ordered from Routledge at https://www.routledge.com/products/9781849712330.

© 2015. Environmental Law Institute and United Nations Environment Programme.
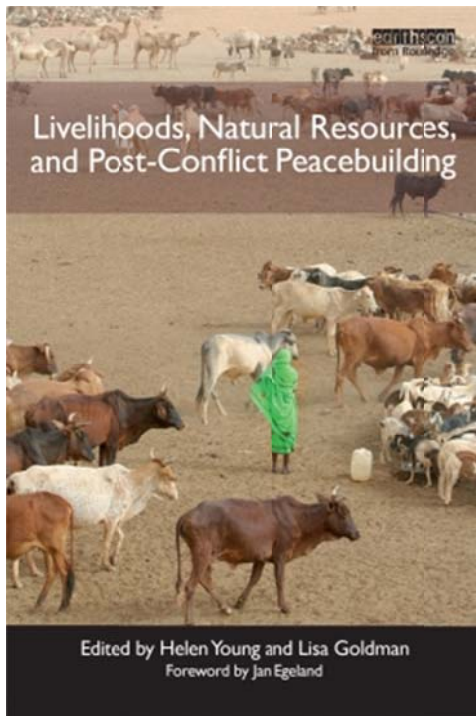
Building Resilience in Rural Livelihood Systems as an Investment in Conflict Prevention
Blake D. Ratner[a]
[a] *WorldFish Center*

Online publication date: November 2015

Building resilience in rural livelihood systems as an investment in conflict prevention

Blake D. Ratner

Post-conflict reconstruction focuses on restoring the capacity of key sectors of the national economy to meet the basic needs of the population in such areas as food production, transportation, and energy, as well as rebuilding or creating institutions for national and local governance. Planners and advisors engaged in such reconstruction efforts often underestimate the importance of building capacity to manage and adapt to future sources of conflict. Given the high rate of conflict recurrence in post-conflict societies, a critical challenge is finding ways not only to restore production systems but also to strengthen resilience to future stresses and shocks.

Particular attention needs to be placed on rural livelihoods, namely the ability of families to provide for themselves and sustain the rural economy, which in most post-conflict developing countries is heavily reliant on natural resources. A host of technical interventions—from improvements in water productivity in crop agriculture to integrated forestry and farming on sloping lands (agroforestry) to livestock health—can contribute to the productivity of rural livelihoods and strengthen people's ability to cope with future stresses and shocks, whether from natural disasters, climate variability, or civil unrest. But the initial success and especially the longer-term sustainability of such interventions depend on two key enabling factors: rights and governance.

The rights of rural people and governance systems that influence their livelihoods are intimately connected in numerous ways. This chapter highlights these connections and illustrates how they contribute to resilience in rural livelihoods, citing the experience of Cambodia in the years since the conclusion of the United

Blake D. Ratner is program leader for governance at the WorldFish Center, a member of the Consultative Group for International Agricultural Research, and served for five years as its regional director in Phnom Penh, Cambodia. Earlier, in 1995, he was a consultant to the World Bank on the design of its first rural development project developed with the post–United Nations Transitional Authority in Cambodia coalition government, focusing on agricultural rehabilitation, and in 1996, he participated in the Bank's first effort to assist with demobilization and reintegration of former combatants in the country.

Nations peacekeeping mission—the UN Transitional Authority in Cambodia (UNTAC)—in 1993.

The rights dimension considers not only rights of access to natural resources (such as land, water, fisheries, and forests), but also protections against abuses (for example, violence and discrimination against women or ethnic minorities) and rights of access to decision making and justice. The governance dimension focuses on the twin challenges of developing systems for equitable decision making across scales (from local to national and regional levels) and across economic sectors. Many of the most difficult cases of strengthening governance for rural livelihoods involve both cross-scale and cross-sectoral dynamics.

This chapter sketches three principles to reorient the design and implementation of livelihood interventions in post-conflict developing countries: (1) strengthen resilience of rural livelihoods as an essential investment toward reducing the risk of future conflict; (2) promote equitable governance to underpin resilience in rural livelihoods; and (3) reinforce rights of poor rural people and marginalized groups as an inseparable complement to improving governance.

The chapter opens with a brief background on official development assistance to Cambodia following the UNTAC peacekeeping mission, and the role of natural resources in post-conflict livelihood rehabilitation. It then examines the links between local rights and broader governance, highlighting examples from the forestry and fisheries sectors. The chapter then outlines the three principles to orient post-conflict livelihood interventions, and it closes with a discussion of some of the challenges to implementing these principles.

CAMBODIA'S TROUBLED PEACE

UNTAC, at the time of its operation (1992–1993), was the most ambitious, multifaceted, and costly UN peacekeeping mission ever mounted. Its tasks included disarming the former warring factions, ensuring law and order, reintegrating soldiers and combatants into civilian life, implementing a multiparty election, establishing institutions of democratic governance, and administering the government before the handover to newly elected authorities.

Measured against such expectations, most analysts deemed the mission a partial success (Brown and Timberman 1998). The Khmer Rouge resistance that had agreed to the peace accord later balked and resumed fighting sporadically through the mid-1990s, but there was no relapse into full civil war. Multiparty elections were institutionalized and to this day continue to be judged as fair, even amid perennial complaints about constraints on access to the media and intimidation of opposition parties. A broad and active nongovernmental organization (NGO) sector has taken root, though human rights organizations and grassroots activists frequently complain of intimidation and occasional violence directed at local leaders. The military successfully integrated former opposition fighters under a single command, but expectations for a withdrawal of military control and influence in natural resource sectors have not been met.

Indeed, the military has remained an active player in a post-conflict era of formally authorized large-scale resource concessions. The legacy of such large-scale commercial resource concessions—combined with a dysfunctional judicial system, the impunity of political and military elites, and the absence of alternative mechanisms for resolving disputes over access to natural resources—has significantly undermined efforts to rehabilitate rural livelihoods in the post-conflict period (Un and So 2009). The end of hostilities enabled a new, more intense phase of natural resource exploitation in the late 1990s and early 2000s, focused especially on forests. Logging operations remained a critical source of revenue for competing political groups, including former opposition factions that had been integrated into the coalition government (Le Billon 2000; Le Billon and Springer 2007). Despite a series of bans on logging and timber exports, commercial exploitation of the country's forest resources continued. The exploitation not only brought serious losses to the environment and local livelihoods but also undermined the significant international investment in promoting institutions of democratic governance in the country (Talbott 1998).

The international community has given significant attention to the links between resource exploitation and the financing of armed conflict. But it has shown less appreciation in the post-conflict period for the role of natural resource management in securing rural livelihoods, or the role of resource conflict in undermining livelihoods. Similarly, during and after the UNTAC years, international organizations focused on building support for human rights, particularly

civil and political rights. By contrast, they have been much slower to understand how rights to food and livelihoods link to natural resource management and resource allocation.

LINKING RIGHTS AND RESOURCE GOVERNANCE

Today, the livelihoods of a large portion of Cambodia's rural population are directly affected by ongoing struggles for community rights to access, manage, and derive benefits from natural resources—principally land, water, fisheries, and forests. Such common-property resources are especially important in Cambodia as a source of livelihoods and income for the poor (World Bank 2006). Many proximate factors fuel this resource competition: a steadily growing population; shifts in market demand and increasing integration of regional trade; external shocks related to the global spike in prices of food and fuel; the rise in foreign direct investment in Cambodia's land, mineral, and agro-industrial sectors; and limited alternative livelihood opportunities in rural parts of the country. Yet the most important factors enabling persistent, low-level conflict are (1) a failure to secure rights of the rural poor broadly speaking, and (2) a governance system that systematically frustrates poor people's efforts to assert their rights, leaving them vulnerable when faced with more powerful adversaries making competing resource claims.

To its credit, the Cambodian government's development strategy does recognize the need to address the roots of vulnerability in rural livelihoods, including not only access to natural resources but also food security, health, nutrition, and education. A range of policy and legal reforms in recent years have reinforced the legal basis for community-based management in both forests and fisheries, alongside a more general decentralization and devolution of authority to provincial-, district-, and commune-level development committees. With a combination of technical assistance and finance, the official development aid community contributed substantially to these policy and legal reforms. While far from perfect, this policy and legal framework today includes a plentiful range of safeguards that should, in theory, be accessible to local communities for protecting and strengthening their resource rights.

The key obstacle, therefore, is not the recognition of local rights in policy or law but rather people's capacity to exercise these rights. In the forestry sector, for example, the revised Forestry Law of 2002, the Sub-Decree for Community Forest Management of 2003, and a set of implementing regulations on community forestry from 2006 now offer a clear route to establishing community-based management. Yet they have not erased the underlying dynamics of resource competition, nor have they yet fundamentally shifted the distribution of economic benefits from the forest sector.

Today, most forest-dependent communities throughout the country find themselves in tenuous territory. By law they are guaranteed a range of protections against resource expropriation and a route for formalizing community tenure over forests, but in practice these communities are highly vulnerable, and many

are struggling to retain access to resources that are a pillar of their livelihoods (Ratner and Parnell 2011). Often, too, they face companies that have been granted tenure or resource extraction rights through a process that is completely opaque. In many instances, concessions for agro-industrial development or mineral exploration are valued because they offer an indirect route for companies to clear forested areas, or to establish tenure rights to the land itself, often in opposition to the claims of local communities.

The fisheries sector, similarly, has seen a steady strengthening of the legal basis for community management, following a dramatic series of reforms in 2000 and 2001 that reduced the area of commercial fishing lots in favor of community access in inland waters. While the early post-conflict years were characterized by intense competition over fisheries resources and de facto open access in the absence of a legal and institutional framework to replace the commercial lot system (Ratner 2006), this framework has now gradually been strengthened, in particular with the adoption in 2005 of the Sub-Decree on Community Fisheries Management, which provides communities a legal basis to establish authority to manage local fishing grounds.

Whereas in the past most fishing conflicts were local in character and stemmed from competition over fishing activity—between commercial fishing lot concessionaires and small-scale fishers, for instance, or among neighboring fishing villages—conflicts today are increasingly played out at larger scales and stem from intersectoral competition over resources. For example, there is competition over water when flood-recession fish refuges are pumped to irrigate crop agriculture; competition over infrastructure when reservoirs, irrigation systems, and roads block fish migration between Tonle Sap Lake, its tributaries, and the floodplain; and competition over land use when agricultural development schemes convert flooded forest zones to crop agriculture (So et al. 2013). Though community fishery organizations have so far had little voice in the matter, a major threat to the sustainability of inland fisheries is the proposed series of hydropower dams on the Mekong main stem that would alter the flood cycle and jeopardize migratory fish species, which constitute most of the commercial catch (Baran, Starr, and Kura 2007).

As these examples from forestry and fisheries illustrate, defending local livelihoods increasingly means resolving competing resource claims across sectors and scales. Community representatives find it exceedingly difficult to negotiate in such circumstances because they typically do not meet their competitors face-to-face, local authorities are either co-opted or feel disempowered to respond to community grievances involving higher-level decision makers, and the courts have systematically failed to provide impartial dispute resolution (UN 2008). As a result, villagers frequently resort to public protest, at significant personal risk for local community leaders, human rights organizers, and leaders of other domestic civil society organizations that lend support.

Where rights to legal recourse, protection from violence, and participation in public decision making are constrained, it is difficult to defend rights to food, livelihoods, and economic security. Likewise, to the extent that the governance

system fails to offer sufficient channels to resolve competing resource claims equitably or hold decision makers publicly accountable for their actions in practice, no amount of legal reform will offer remedy.

It would be unfair to say that official development assistance in post-conflict Cambodia is responsible for these failures in rights and governance, for the country is a sovereign state and the country's current conditions have deep historical roots. Yet the international development community can do better. What lessons, then, should we draw from the experience with post-conflict investments in livelihood security in Cambodia?

POST-CONFLICT LIVELIHOOD INTERVENTIONS AND THE ROOTS OF RESILIENCE: THREE PRINCIPLES FOR ACTION

Three principles should orient the design and implementation of livelihood interventions in post-conflict developing countries:

1. Strengthen resilience of rural livelihoods as an essential investment in reducing the risk of future conflict.
2. Promote equitable governance to underpin resilience in rural livelihoods.
3. Reinforce rights of poor rural people and marginalized groups as a complement to improving governance.

These linkages are examined below.

Strengthen resilience of rural livelihoods to reduce the risk of future conflict

Resilience is defined as the capacity of social-ecological systems to recover from shocks and stresses while retaining key functions (Folke et al. 2005). It applies to the capacity to recover from natural disasters (a shock), long-term trends such as climate variability (a stress), as well as social dynamics including population displacement due to conflict (a shock) or gradually increasing resource competition (a stress). Critically, the social and ecological components of the system are seen as parts of a whole—such that, for example, the capacity of a fishery to provide for the nutritional needs of nearby communities (a key function) depends on the status and productivity of the resource itself, as well as the social institutions that govern who has access to the resource and with what attendant responsibilities.

Livelihood investments should aim to strengthen resilience of rural communities and the resource systems on which they depend. Social-ecological resilience is not a predetermined set of scientific criteria (Anderies, Walker, and Kinzig 2006; Andrew et al. 2007). Rather, it is an organizing principle for describing the parameters of a social-ecological system and engaging in stakeholder-driven deliberation to define locally relevant outcomes. In other words, it is a

way of structuring conversations about the future that pays particular attention to risk—both social and ecological—and the capacity to adapt in the face of such risks.

Development interventions seeking improvements in, for instance, the management of forests, fisheries, or water for crop agriculture need to consider not only technical aspects such as economic efficiency or productivity, but also how such interventions contribute to adaptive capacity in the system. Community-based resource management institutions established for one purpose may offer additional benefits as a source of mutual support and resilience in times of stress. A case in point is Nepal, where community forest user groups sustained livelihoods and prevented the further spread of conflict when other elements of the rural economy were disrupted (Sanio and Chapagain 2012).

Promote equitable governance to underpin resilience in rural livelihoods

Much of the research on the institutional aspects of resilience has focused on the characteristics of local resource management institutions that enable self-organization, learning, and adaptation.[1] Less emphasis has been paid to the broader governance frameworks that can encourage or discourage the emergence of such local institutions, and which influence how effectively competing claims on resources can be managed across classes of resource users, across sectors, and across geographic scales.

Several recent contributions to the literature on social-ecological systems have begun to address this gap by proposing desirable characteristics of decision-making structures and processes that support or manage resilience. For example, Louis Lebel and colleagues propose three positive attributes of governance: (1) participation and deliberation in building trust and common understanding about potential courses of collective action, (2) polycentric and multilayered institutions as enablers of decision making that adapt to social and ecological change, and (3) accountability of public authorities in arriving at socially equitable outcomes (Lebel et al. 2006). Critically, each of the three describes attributes of governance in practice—which, as Cambodia's experience highlights, may vary greatly from the descriptions of decision-making or dispute resolution processes provided in policy or law.

Post-conflict development assistance therefore needs to focus early and often on promoting governance systems to identify, prevent, mitigate, and resolve resource conflicts equitably across sectors and scales, and to reinforce social accountability. Often, as has been the case in Cambodia, sectoral investments in agriculture and natural resource management are not linked closely to more cross cutting investments in public sector reform, judicial reform, decentralization,

---

[1] See, for example, Meinzen-Dick and Pradhan (2015); Berkes (2005).

civil society capacity development, or anticorruption efforts—thus missing opportunities for synergy that could reinforce good governance in practice.

Typically, linking resource management and governance also means engaging with civil society actors, which can push development assistance beyond the comfort zone of technical responses to identified needs and requires a strong appreciation of a country's social and political dynamics. The Philippine Environmental Governance (EcoGov) Project is exceptional in this regard because it focused explicitly on strengthening interagency, cross-sectoral relationships, and created a platform for engaging marginalized groups in joint forest and coastal zone management.[2]

Recognize that improvements to rights and governance are interdependent

In Cambodia, human rights organizations and civil society networks brought resource conflicts into the public spotlight by publicizing cases of villagers who suffered violence and intimidation or who had unwittingly signed over their resource rights to developers. In the fisheries sector, public attention toward violent attacks by armed guards of commercial fishing lots on local fishers in the late 1990s and community mobilization demanding increased access to fishing grounds helped build pressure for subsequent reforms (Ratner 2004, 2006). More recently, human rights organizations have raised the profile of land tenure conflicts and forest access rights. Many conservation and community development organizations, by contrast, have shied away from addressing resource-based conflicts out of a concern for jeopardizing their apolitical status or undermining progress on site-specific projects (Ratner and Parnell 2011).

In designing and implementing post-conflict development assistance, reinforcing local rights should be understood as an essential complement to the work of strengthening equitable systems of governance, as one cannot fully succeed without the other. For poor and marginalized groups whose livelihoods are most at risk when conflict threatens to destabilize rural economies and food production systems, development assistance should focus not only on securing their resource-access rights, but also on associated rights to access information on development planning, to participate in decision making on plans that affect them, to organize and communicate their interests publicly without fear of retribution, and to access justice through the courts and other conflict-resolution channels (WRI 2003).

Violence or the threat of violence against vulnerable or vocal groups needs to be addressed squarely as a fundamental obstacle to improvements in the broader

---

2 For a discussion of the EcoGov Project, see Cynthia Brady, Oliver Agoncillo, Maria Zita Butardo-Toribio, Buenaventura Dolom, and Casimiro V. Olvida, "Improving Natural Resource Governance and Building Peace and Stability in Mindanao, Philippines," in this book.

suite of rights. Similarly, where women and ethnic or religious minorities face systemic barriers to exercising their rights, whether by law or cultural practice, overcoming these barriers should be an explicit goal of development assistance. Sometimes official recognition of such rights can itself be a major component of peacemaking; the Guatemalan peace accords, for example, recognized indigenous mechanisms of dispute resolution as a legitimate system of justice in parallel to the courts (Buvollen 2002). In many instances, overcoming such barriers also entails targeted efforts at building awareness and capacity so that vulnerable groups are better able to exercise their rights in practice.

PUTTING THE PRINCIPLES INTO PRACTICE

If applied consistently, the principles outlined above would lead to fundamental shifts in post-conflict development assistance. Some might argue that there is nothing new here: peacemaking and post-conflict reconstruction efforts already routinely include elements addressing rural livelihoods, public-sector institution building, democratization, and other aspects of governance, and they often include efforts to build the capacity of civil society and buttress the rights of certain marginalized groups as a part of reconciliation efforts. Yet the linkages among such efforts are often weak, and their combined effectiveness is reduced as a result.

Making these links in a sustained way need not depend on the initiative of individual community development organizers, rights advocates, or grassroots leaders alone. Development professionals also have a responsibility to attend to the broader context of governance and rights that conditions the success of more narrowly focused rural livelihood interventions. What are some of the obstacles to achieving this, and how can they be addressed?

One obstacle is a lack of tools to guide investments in natural resource management and livelihood rehabilitation in post-conflict situations. Professionals dispatched from international agencies to plan such investments often have little sense of how the social, cultural, and political dimensions of a country's recent conflict affect current options and risks. Much post-conflict official development assistance remains rooted conceptually in post-World War II reconstruction efforts in Europe, with an emphasis on rebuilding physical infrastructure and reconstituting the institutions of national government. While these goals remain important, today's development professionals typically confront a more nuanced set of challenges caused by tensions at the subnational level, and need to be alert to how decisions about natural resource allocation or access can aggravate inequalities and grievances.

Reviews of experience by the World Bank and United Nations Environment Programme (UNEP) highlight these complexities and offer guidance on how to integrate principles of equity and adaptive capacity when addressing the role of natural resource management in post-conflict assessment and development planning (Ruckstuhl 2009; Conca and Wallace 2012; Jensen 2012). This guidance includes

ensuring that livelihood opportunities supported through development investments provide equal access to different socioeconomic groups, investing in community-based management institutions to help rebuild norms of trust and collective action, using independent advisory groups to support project implementation and monitoring, and supporting collaborative knowledge development and learning across diverse groups of resource users (Ruckstuhl 2009).

But tools for assessing the risks and opportunities for natural resource management in war-torn societies remain very basic. The resilience perspective can make a vital contribution to conflict assessment because it focuses on the capacity of social-ecological systems to adapt and reorganize in the face of shocks. This focus would include approaches to better measure vulnerability and to identify governance interventions to minimize social exclusion in natural resource management and use (Adger 2006). It would also provide tools to assess the dynamics of transitions in resource management regimes (Olsson et al. 2006), and guidance drawn from comparative analysis on the factors that influence how resource management institutions reorganize after crises.

A second obstacle is sectoral specialization that tends to divide groups working on different aspects of the linked challenges of improving natural resource management, rebuilding livelihoods, and securing improvements in rights and governance. While technical assistance on legal and institutional reform and capacity building for government agencies may address land and other natural resource issues, it is still relatively rare to find significant official aid investments that link those issues with support to domestic human rights organizations, advocacy groups, and independent media, or that draw systematically on local experiences to generate lessons for national policy. In Cambodia, the Program on Rights and Justice managed by the East-West Institute (and financed by the U.S. Agency for International Development) provides an example of how targeted support to a spectrum of local NGOs and community groups working on human rights protection, land rights, indigenous peoples' rights, forest and water management, and community development can help build linkages that increase the voice and effectiveness of all stakeholders. With such links, these groups have successfully lobbied, for example, for intervention of national policy officials in support of indigenous rights to communal land tenure as recognized by law but frequently ignored in practice (Ratner and Parnell 2011).

Better in-country coordination among international NGOs working, often separately, in support of human rights, rural development, and environmental protection can also improve their effectiveness in both policy dialogue and field-level interventions. Policy dialogue can be facilitated by umbrella organizations, a role played in Cambodia by the NGO Forum, which draws on the expertise of its members to ensure that a consolidated set of analyses and recommendations on development policy and investment priorities—from addressing land conflicts to combating corruption and protecting women's rights—are debated regularly at the high-profile consultative group meeting of major donors. At the local level, site-specific or sector-specific interventions for environmental and natural resource

management or conservation too often set up parallel institutional structures rather than investing in local governance (Ribot 2007). Particular attention is needed to ensure that development interventions strengthen the ability of communities to engage with and draw appropriate services from local government, and strengthen the capacity of local government to provide such services in turn.

A third obstacle to linking efforts at livelihood rehabilitation, environmental management, rights, and governance in the post-conflict situation is the interface between development assistance and private investment. As Cambodia's experience demonstrates, a host of well-intentioned efforts aimed at securing land tenure for rural households and communities, piloting and mainstreaming devolution of authority for development planning and natural resource management, and building capacity for an independent judiciary can be quickly undermined by government decisions to grant large-scale private concessions for logging, agro-industry, mining, or hydropower. Not that such schemes are universally unwarranted—some may deliver justifiable benefits—but far too often they circumvent safeguards meant to ensure informed, public deliberation over such weighty development choices.

The pressure on government officials to sign off on investment schemes that undermine local livelihoods can be tremendous. They may have an opportunity for corrupt financial gain. They also face political pressure, imbalances in the information available to them, and investment evaluation processes that typically focus on economic criteria with little assessment of the risks of exacerbating intergroup inequalities and triggering local conflict. The forest sector in Cambodia is a case in point, where a scramble for timber in the mid- and late-1990s caused extreme rates of forest loss. When the World Bank began to engage in forest sector reform, it focused initially on economic efficiency, aiming to improve official revenue capture by tightening regulation of timber harvesting. Gradually, the dialogue among donors broadened, highlighting the role of forest crimes in fueling corruption, spawning violence, and destabilizing rural communities and their livelihoods. The environmental watchdog group Global Witness played a critical role in bringing forward evidence of these links, and the heightened media attention aided the World Bank's efforts to build a broad coalition of donors to advocate for and invest in forest sector reform.

The past two decades have seen important advances in standards set by the World Bank and other major aid agencies for environmental and social safeguards, requirements for public review, and opportunities for civil society engagement in the infrastructure projects the agencies finance directly. But such rules do not apply to private investments in infrastructure or mineral extraction, nor to agricultural land grabs of the sort that toppled the government of Madagascar (Kugelman and Levenstein 2009). One key in anticipating and avoiding the destabilizing outcomes of large-scale private investment in the natural resource sectors is to broaden the dialogue from (largely economic) costs and benefits to encompass an analysis and deliberation over rights and risks. The extended multistakeholder consultation process organized by the World Commission on Dams (2000) produced guidance on such a rights-and-risks approach. It offers

essential applications in addressing large-scale investments in other sectors as well, where there is an important need to ask how a range of development options will serve various social goals, and how they will differentially affect the vulnerabilities and opportunities for different social groups.

CONCLUSIONS

The principles offered here are a sketch rather than an action agenda because their main value lies in orienting development practitioners toward a consistent set of questions:

- To what extent are we designing interventions that truly build resilience in the socioecological systems that sustain rural people's livelihoods, as opposed to introducing technical or institutional innovations that will be easily disrupted when conditions change or, worse, that accentuate intergroup inequalities?
- To what extent are we strengthening mechanisms for equitable governance as part and parcel of rural development and environmental management programs?
- To what extent are we reinforcing the ability of poor and marginalized groups not only to participate in development programs but also to exercise their broader social, political, and economic rights?

Periodically reflecting on these questions in the countries where we work, adapting our efforts in response, and sharing the lessons we learn will help foster a shift toward a culture of development assistance more suited to the challenges of post-conflict rehabilitation and conflict prevention.

REFERENCES

Adger, W. N. 2006. Vulnerability. *Global Environmental Change* 16 (3): 268–281.

Anderies, J., B. Walker, and A. Kinzig. 2006. Fifteen weddings and a funeral: Case studies and resilience-based management. *Ecology and Society* 11 (1): 386–397. www.ecologyandsociety.org/vol11/iss1/art21/.

Andrew, N., C. Béne, S. J. Hall, E. H. Allison, S. Heck, and B. D. Ratner. 2007. Diagnosis and management of small-scale fisheries in developing countries. *Fish and Fisheries* 8 (3): 227–240.

Baran, E., P. Starr, and Y. Kura. 2007. Influence of built structures on Tonle Sap fisheries. Phnom Penh: Cambodia National Mekong Committee and WorldFish Center.

Berkes, F. 2005. Commons theory for marine resource management in a complex world. *SENRI Ecological Studies* 67:13–31.

Brown, F. Z., and D. G. Timberman, eds. 1998. *Cambodia and the international community: The quest for peace, development, and democracy*. New York: Asia Society.

Buvollen, H. P. 2002. Identifying cultural and legal barriers to justice in Guatemala. Paper presented at the international workshop "UNDP's Role in Access to Justice," Oslo, Norway, March 3–6.

Conca, K., and J. Wallace. 2012. Environment and peacebuilding in war-torn societies: Lessons from the UN Environment Programme's experience with postconflict assessment. In *Assessing and restoring natural resources in post-conflict peacebuilding*, ed. D. Jensen and S. Lonergan. London: Earthscan.

Folke, C., T. Hahn, P. Olsson, and J. Norberg. 2005. Adaptive governance of social-ecological systems. *Annual Review of Environment and Resources* 30:441–473.

Jensen, D. 2012. Evaluating the impact of UNEP's post-conflict environmental assessments. In *Assessing and restoring natural resources in post-conflict peacebuilding*, ed. D. Jensen and S. Lonergan. London: Earthscan.

Kugelman, M., and S. Levenstein, eds. 2009. *Land grab? The race for the world's farmland*. Washington, D.C.: Woodrow Wilson International Center for Scholars.

Lebel, L., J. M. Anderies, B. Campbell, C. Folke, S. Hatfield-Dodds, T. P. Hughes, and J. Wilson. 2006. Governance and the capacity to manage resilience in regional social-ecological systems. *Ecology and Society* 11 (1): 230–250. www.ecologyandsociety.org/vol11/iss1/art19/.

Le Billon, P. 2000. The political ecology of transition in Cambodia 1989–1999: War, peace and forest exploitation. *Development and Change* 31 (4): 785–805.

Le Billon, P., and S. Springer. 2007. Between war and peace: Violence and accommodation in the Cambodian logging sector. In *Extreme conflict and tropical forests*, ed. W. de Jong, D. Donovan, and K. Abe. Amsterdam: Springer Netherlands.

Meinzen-Dick, R. S., and R. Pradhan. 2015. Legal pluralism in post-conflict environments: Problem or opportunity for natural resource management? In *Governance, natural resources, and post-conflict peacebuilding*, ed. C. Bruch, C. Muffett, and S. S. Nichols. London: Earthscan.

Olsson, P., L. H. Gunderson, S. R. Carpenter, P. Ryan, L. Lebel, C. Folke, and C. S. Holling. 2006. Shooting the rapids: Navigating transitions to adaptive governance of social-ecological systems. *Society and Ecology* 11 (1): 1–21. www.ecologyandsociety.org/vol11/iss1/art18/.

Ratner, B. D. 2004. Environmental rights as a matter of survival. *Human Rights Dialogue* 2 (11): 6–7.

———. 2006. Community management by decree? Lessons from Cambodia's fisheries reform. *Society and Natural Resources* 19 (1): 79–86.

Ratner, B. D., and T. Parnell. 2011. Building coalitions across sectors and scales in Cambodia. In *Forests and people: Property, governance, and human rights*, ed. T. Sikor and J. Stahl. London: Earthscan / Resources for the Future.

Ribot, J. 2007. Representation, citizenship and the public domain in democratic decentralization. *Development* 53 (1): 43–59.

Ruckstuhl, S. 2009. *Renewable natural resources: Practical lessons for conflict-sensitive development*. Washington, D.C.: World Bank.

Sanio, T., and B. Chapagain. 2012. Local peace building and conflict transformation in Nepal through community forestry and forest user groups. In *High-value natural resources and post-conflict peacebuilding*, ed. P. Lujala and S. A. Rustad. London: Earthscan.

So, S., B. D. Ratner, K. Mam, and S. Kim. 2013. Conflict and collective action in Tonle Sap fisheries: Adapting institutions to support community livelihoods. CDRI Working Paper No. 49. Phnom Penh: Cambodia Development Resource Institute.

Talbott, K. 1998. Logging in Cambodia: Politics and plunder. In *Cambodia and the international community: The quest for peace, development, and democracy*, ed. F. Z. Brown and D. G. Timberman. New York: Asia Society.

UN (United Nations). 2008. Report of the Special Representative of the Secretary-General for Human Rights in Cambodia, Yash Ghai. United Nations General Assembly, Human Rights Council, February 29.

Un, K., and S. So. 2009. Politics of natural resource use in Cambodia. *Asian Affairs: An American Review* 36 (3): 123–138.

World Bank. 2006. *Halving poverty by 2015? Poverty assessment 2006*. Report No. 35213-KH. Phnom Penh, Cambodia.

World Commission on Dams. 2000. *Dams and development: A new framework for decision-making*. London: Earthscan.

WRI (World Resources Institute). 2003. *World resources 2002–2004. Decisions for the Earth: Balance, voice, and power*. Washington, D.C.: United Nations Development Programme, United Nations Environment Programme, World Bank, and World Resources Institute.