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An Approach to Forest and Conservation Policy in Southeast Asia[1]

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Abstract

Forest and conservation policy in Southeast Asia is now at yet another crossroads. Despite decades of efforts, the challenges ahead remain formidable. These challenges include: (i) continued deforestation and degradation of forest; (ii) limited recognition of forests in climate change policy; (iii) increased impacts from a demand for bioenergy and biofuels; (iv) tenure and access conflicts; and, (v) continued loss of forest biodiversity. Overlaying these challenges are broader societal challenges of human population growth, poverty, changing patterns of consumption and the perceived need to continually grow economies.

The success in conserving and managing forests depends upon effective governance mechanisms that are transparent, participatory and accountable. It also requires tools that allow different policy actors to evaluate effectiveness at multiple scales: local, regional, national and international. Actions at one scale alone, whether global or local, are insufficient. The forests and its people need to find the energy and will to address the key forest problems we face in the 21st century with a new approach to policy and a new suite of tools to measure progress.

Keywords: accountable, forest-governance, multiple-scale, participatory, transparency

Biography

Currently, Gary Bull is a Professor and Head of Department, Forest Resources Management, at the University of British Columbia in Canada. He teaches courses in leadership, forest management and resource economics. His research is in natural resource and indigenous economics with a focus on carbon accounting and bioenergy; and multi-scaled forest estate, logistics and forest products trade models.

Gary is also a resource economics consultant to global forest products companies, oil and energy industries, several ENGOs, aboriginal organizations and all levels of government.

Previously he worked at the UN Food and Agriculture Organization in Rome as economist, responsible for preparing a global database on all forests in the tropical forest region. He worked with over 70 tropical countries and prepared briefings for international negotiations.

He has also undertaken economic studies of timber, tourism, ecosystems services, and mining, preparing scientific reports for international organizations such as SBP, IIED, IIASA, CIFOR, World Bank, WWF and Forest Trends.

Introduction

Forest and conservation policy is now at yet another crossroads. Despite decades of efforts, the challenges ahead remain formidable, indeed sometimes overwhelming. These challenges include: (i) continued deforestation and degradation of forest; (ii) limited recognition of forests in climate change policy[1]; (iii) increased impacts from a demand for bioenergy and biofuels; (iv) tenure and access conflicts; and, (v) continued loss of forest biodiversity. Overlaying these challenges are broader societal challenges of human population growth, poverty, changing patterns of consumption and the perceived need to continually grow economies. Addressing these challenges requires both new ways to connect the multiple spatial scales of forest and wild land planning, as well as innovative tools for transparency, participation and accountability.

A United Nations Environment Programme (UNEP) report in 2012, expressing the views of a wide range of experts, stated that the top challenge for the 21st century was aligning governance to the challenges of global sustainability.[2] As the report notes:

> The current system of international environmental governance, with its maze of interlocking multilateral agreements, evolved during the 20th century, and is believed by many to be unsuitable for the 21st century. Some commentators believe that this system lacks the necessary representativeness, accountability and effectiveness for the transition to sustainability, and that a much higher level of participation and transparency is needed.[3]

To address all of these challenges, innovative tools continue to be developed in the information, communication and technology (ICT) industry. For example, Hansen et al. published a new global analysis of forest change between 2000 and 2012 in which the spatial scales, from local to national and regional to global, could be evaluated.[4] Although there is, naturally, some controversy over the methodology[5], the study did, for example, indicate a significant decline in deforestation in Brazil but an increase in deforestation in Indonesia and many other countries. The Hansen et al. analysis challenges some of the earlier works by government ministries and the FAO Forest Resource Assessment[6]. The ICT tool application, in this case, focuses on a biophysical assessment and also develops a complementary set of social assessment tools, via social media, to assess forest use impacts. The suite of tools would prove very helpful in forest and conservation policy evaluation, and would start us on a path towards more policy successes. Presented below is a review of recent failures and successes as evidence to strengthen the argument above.

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[1] In addition to providing multiple local and national benefits, some claim the world's forests continue to absorb almost 25 per cent of global carbon dioxide emissions, which would otherwise contribute to global warming. For more information, see: Global Carbon Project (GCP), 'Carbon budget 2015: An annual update of the global carbon budget and trends', http://www.globalcarbonproject.org/carbonbudget/index.htm.

[2] United Nations Environment Programme (UNEP), '21 issues for the 21st century: Results of the UNEP Foresight Process on emerging environmental issues', accessed 15 December 2015, http://www.unep.org/pdf/Foresight_Report-21_Issues_for_the_21st_Century.pdf.

[3] Ibid., v.

[4] M. C. Hansen et al., 'High-resolution global maps of 21st century forest cover change', *Science* 342, no. 6,160 (2013): 850–3.

[5] Werner A. Kurz, 'An ecosystem context for global gross forest cover loss estimates', *PNAS* 107, no. 20 (2013): 9,025–6, http://www.pnas.org/content/107/20/9025.

[6] Food and Agriculture Organization of the United Nations (FAO), 'Global forest resources assessment 2010: Main report' (FAO Forestry Paper 163, Rome: FAO, 2010).

Failures

One example of the failure of a top-down global approach is the effort to use the Stern Report on Climate Change[7] to alter the policy debate. In the forest discussion, it noted that: 'Curbing deforestation is a highly cost-effective way of reducing greenhouse gas emissions … Policy to reduce emissions should be based on three essential elements: carbon pricing, technology policy, and removal of barriers to behavioral change …'.[8]

Admittedly, the report did refer to both national governments and local communities, but the perspective was essentially top-down; the idea was to implement a globally designed solution to climate change without sufficient local involvement or feedback loops for adaptive management.

Another example of failure is Reducing Deforestation and Forest Degradation in Developing Countries (REDD+), which was developed under the auspices of the United Nations Framework Convention on Climate Change (UNFCCC). Although REDD+ has progressed faster in the negotiations than many other issues, implementation on the ground has been slow, leading some to now ask, 'Is REDD+ dead?'. While some of the original proponents of REDD+ were from tropical countries, a lot of the impetus was from developed countries seeking a cost-effective mitigation option. Thus, in 2007, the Norwegian Prime Minister Jens Stoltenberg said: 'Through effective measures against deforestation, we can achieve large cuts in greenhouse gas emissions quickly and at low cost. The technology is well known and has been available for years. Everybody knows how not to cut down a tree'.[9] Unfortunately, as we know from the last 20 years of forest policy research, 'not cutting down a tree' looks a bit different to an impoverished villager in Indonesia than to a Norwegian politician.

While critical of efforts to impose top-down environmental governance solutions, this is not to suggest that a bottom-up approach to environmental governance is the solution on its own. As Sayer et al. have clearly indicated, there are serious challenges at the local level – referred to as the landscape level in the study – in governance.[10] The study concludes that, in both the theory and practice of landscape-level approaches for agriculture, conservation and other competing land uses: 'Numerous system influences and feedbacks affect management outcomes, but these impacts unfold under the influence of a diverse range of external influences and constraints …'.[11]

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[7] Sir Nicholas Stern, *The economics of climate change: The Stern review* (New York and Cambridge, UK: Cambridge University Press, 2006).
[8] Ibid.
[9] Speech at/to the Climate Conference, 13 December 2007, http://www.eu-norway.org/NR/rdonlyres/421371DCCBFF4561984DFAC4F50827A2/82595/StoltenbergBalispeech.pdf.
[10] Jeffrey Sayer et al., ' Ten principles for a landscape approach to reconciling agriculture, conservation, and other competing land uses', *PNAS* 110, no. 21 (2013): 8,349–56.
[11] Ibid.

The observations of Sayer et al.[12] are consistent with numerous studies[13] over the last three decades of the limited impacts of local conservation and development projects because they have failed to integrate key larger-scale social and economic drivers. Kilbane and Gray noted: '… a primary criticism has been that projects have failed to achieve either [a social or economic] goal. There has been little evidence that improving the economic well-being of people around protected areas will translate into conservation'.[14]

Projects tended to give local inhabitants little actual access to, or control over, natural resources.

Successes

So, are there indicators of successes, where policymakers have made efforts to use a multiscale approach to deal with environmental governance problems?

According to Hansen et al., Brazil is the one major tropical country where deforestation has declined in the last decade by over 70 per cent.[15] What can we learn from this? While Brazil certainly engaged in the UNFCCC negotiations on REDD+, the country had already reduced deforestation significantly by 2010 from a high in 2004. Brazil did not wait for international consensus or for international funding. A study by Assunção, Gandour and Rocha suggests that approximately half of the deforestation reduction could be attributed to policy initiatives by the Brazilian government and the other half to declining commodity prices.[16] The key related policy initiatives in Brazil in the last decade have been the establishment of: protected areas, indigenous territories and community forests. Collectively, the policies cover over 40 per cent of the Amazon. The government's Action Plan for the Prevention and Control of Deforestation in the Legal Amazon was launched in 2004, and it set in motion integrated actions by federal ministries and state governments to establish the means to: monitor deforestation, establish protected areas, crack down on illegal activities and provide incentives for improved management. Then, starting in 2008, municipalities with high deforestation rates were provided with increased monitoring tools, legal enforcement mechanisms and rural credit access; all with the idea of working with local farmers. So, for example, in response to this initiative, Para state created a 'green municipalities' programme to provide technical support and incentives for reduced deforestation. Although there is some leakage of deforestation into neighbouring Amazonian countries and to the Cerrado forests[17], commodity price have increased for local farmers. These programmes have been funded mostly by Brazil itself and benefit from strong support in public opinion. The private sector, particularly in the beef supply chain, which is a major driver of deforestation, has played a key role. It can be seen from the above that a multifaceted approach was taken involving international commitments and national, state and municipal actions.

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[12] Ibid.

[13] Thomas O. McShane and Michael P. Wells, eds, *Getting biodiversity projects to work: Towards more effective conservation and development* (New York: Columbia University Press, 2004); Michael Wells et al., 'Investing in biodiversity: A review of Indonesia's integrated conservation and development projects' (Washington, D.C.: World Bank, 1999).

[14] G. C. Kilbane and L. C. Gray, 'Integrating conservation and development in the Peruvian Amazon', *Ecology and Society* 14, no. 2 (2009): 11.

[15] Hansen et al., 'High-resolution global maps of 21st century forest cover change', op. cit.

[16] Juliano Assunção, Clarissa C. e Gandour and Rudi Rocha, 'Deforestation slowdown in the legal Amazon: Prices or policies' (CPI [Climate Policy Initiative] Working Paper, Rio de Janeiro: CPI, 2012), 3.

[17] Admittedly, there has been a recent weakening of Brazil's Forest Code that may have led to recent increases in deforestation, but Brazil's efforts overall have been remarkably successful.

Another success story in multi-scale approaches (and innovation) has been the California Governor's Climate and Forest Task Force to address climate change challenges and support forest conservation and management in Mexico and Brazil.[18] It is an example of innovation led by state governments, again without waiting for international agreements or national legislation. California has instituted a state-level cap-and-trade system to reduce its greenhouse gas emissions. This includes provision for forest carbon offsets both from within California and from collaborating jurisdictions in the tropics. So far, California has worked most closely with Acre in Brazil and Chiapas in Mexico.[19] The approach taken has been innovative. California negotiated a set of principles and requirements for the forest carbon offsets it will purchase, but did not specify the details about how the system will be implemented, leaving it to the local participant to sort this detail out. In short, we have a global problem – climate change – being addressed by subnational governments working with local participants; the multiple scales are connected.

Conclusion

Success in conserving and managing forests depends upon effective governance mechanisms that are transparent, participatory and accountable. It also requires tools to allow different policy actors to evaluate effectiveness at multiple scales[20]: local, regional, national and international. Actions at one scale alone, whether global or local, are insufficient.

Faced with the urgency of combatting deforestation and forest degradation, there is a temptation to revert to simplistic approaches and immediate solutions, such as logging bans, timber boycotts and protected areas that exclude local communities. In an earlier paper, Sayer et al. have argued against top-down 'grand design' solutions, instead proposing that forest problems require 'muddling through'[21]. The problem is that these grand-design solutions do not work. One must not lose sight of the urgency of conservation and management issues, and public engagement is vital too, but there is also a need for the humility to recognise that we do not have all the solutions in hand.

What can work, as seen from the example of Brazil and California, is agreement on principles at higher geographic scales and learning and adaptive management on the ground, with feedback loops connecting the two. Progress will still be vulnerable to increases in commodity prices and political changes (both of which have occurred in Brazil), but as long as national and international public opinion is supportive and civil society and the private sector remain engaged, progress will be made.

And, when it is made, progress can be surprisingly fast – had anyone asked in 2004 whether Brazil could reduce deforestation in the Amazon by 70 per cent, the answer would likely have been 'impossible'. Yet, this has happened, and it gives us optimism for the future.

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[18] The REDD Offset Working Group (ROW), 'California, Acre and Chiapas: Partnering to reduce emissions for tropical deforestation' (San Francisco: Green Technology Leadership Group, 2013).

[19] It is not an accident that California has been able to make more progress with Acre and Chiapas, where community forestry is relatively well developed, and less with jurisdictions in Indonesia and Nigeria, where this is not the case.

[20] Multisector analyses are also necessary, but this is a subject for another time.

[21] Jeffrey Sayer, Gary Bull and Chris Elliott, 'Mediating forest transitions: "Grand design" or "muddling through"', *Conservation & Society* 6, no. 4 (2008): 320–7.

Most current forest policy efforts do not have a connection between international, national, regional and local scales, and this frequently leads to poorly designed solutions at any scale. However, this is not to suggest that policy solutions are only required at the local level; isolated local projects are frequently influenced by broader economic and political realities. Surely, for the sake of the forests and its people, we have to find the energy and will to address the key forest problems we face in the 21st century with a new approach to policy and a new suite of tools to measure progress.