



**Friends of
the Earth
International**

WHY COMMUNITY FOREST MANAGEMENT MATTERS:

A Background Briefing

November 2015

What is Community Forest Management?

Community Forest Management (CFM) allows people and communities to benefit from forests and land without depleting natural resources or damaging the climate. The term Community Forest Management encompasses many different communal resource management practices used by forest-dependent Indigenous Peoples and local communities around the world.

CFM offers an alternative to the industrial forest practices that have devastated forests and driven severe social injustices. It blends appropriate technology, ancestral knowledge and community practices relating to resource use.

However, CFM is not just a technical approach. It is also a major opportunity for communities to exercise political control of their territories and resources. It is a key component of Buen Vivir, a social and political alternative to the current drive to globalise the world's economies and commodify and privatise land, forests and biodiversity. Buen Vivir promotes a beneficial and respectful coexistence between human beings and nature in contrast with socially and environmentally destructive economic activities. For example, the Kuna people of Panama consider natural elements as 'big brothers' because they existed before human beings. (Houtart, 2011).

In many respects CFM is 'shorthand' for community management of and control over natural resources more generally. Forests are intricately linked to other aspects of the environment, such as soil health and water recycling. Thus CFM also incorporates the use of aspects such as water, pastures, fisheries, biodiversity, sacred spaces and territories in general (Pretty, 2003). It can include a wide variety of approaches, from the traditional and well-informed use of forests by Indigenous Peoples, through to peasant and urban communities that collectively use, take care of and/or restore vital resources (Baltodano and Díaz, 2004; Baltodano, 2012; GFC, 2015).

Indigenous Peoples and local communities, who have protected and managed our forests for generations, are not the only ones who benefit from CFM. It offers a win-win solution to biodiversity

loss and climate change, which also has the potential to benefit nearly 1.6 billion people who rely on forest resources for their livelihoods (FAO, 2015). As well as regulating local weather patterns and climate, and helping to mitigate climate change by sequestering carbon dioxide, forests provide Indigenous Peoples and local communities with almost all of the resources they need, including timber, fuel, shelter, biodiversity, seeds, honey, fruits, medicines and water. They also fulfil cultural and spiritual needs (Baltodano et al, 2007).

As well as being highly beneficial for forest-dependent local communities and Indigenous Peoples, CFM is an effective and economically viable alternative to destructive industrial logging. Research outlined in this briefing shows that CFM is often a more effective and equitable way of conserving forests and biodiversity than the Protected Areas approach. This makes it a critical tool in the drive to reach the internationally agreed target of stopping deforestation by 2020 (SDKP, 2015). However, communities only manage around 8% of the world's forests at present (Porter-Bolland et al, 2012). More of the world's forests need to be formally in the care of communities and Indigenous Peoples in order to achieve the 2020 target.

AN INDIGENOUS APPROACH TO COMMUNITY FOREST MANAGEMENT

The Ngobe Indigenous People in the southern region of Costa Rica and northern Panama weave palm fibres and forest lianas into high quality hats and baskets. A Ngobe woman will know and use dozens of forest plant species to create various woven products. The plants are harvested at specific times of the lunar cycle and the seasons, to conserve them, and so that they are in a suitable condition for use (Baltodano & Rojas, 2009).

The traditional agroforestry systems of the Bribri and other Indigenous Peoples in Costa Rica are true gardens, with a rich diversity of beans, pumpkins, different plantain and cacao varieties, maize, rice and a large range of trees that regulate the amount of light reaching the crops in a very precise way. These crops are integrated with primary forests to achieve impressive results in terms of biodiversity and agrodiversity (Baltodano, 2015).

What are the proven benefits of Community Forest Management?

Promoting, supporting and strengthening CFM offers a positive and socially beneficial way of reducing biodiversity loss, and mitigating and adapting to climate change. It also has the potential to stop global deforestation by 2020 (GFC, 2015b). CFM plays three key and distinct roles:

(1) Better protection of forests, biodiversity, soils and water

CFM is extremely effective in halting deforestation and biodiversity loss. This has important positive outcomes in terms of soil erosion and consequent flooding, and in terms of protecting water resources.

An increasing number of studies show that forests managed by local or indigenous communities can be equally, if not more, effective than those managed solely for the purposes of protection (Bray et al 2008; Ellis & Porter-Bolland, 2008; Nepstad et al 2006). For example, a meta-analysis of published case studies covering 40 Protected Areas and 33 CFM experiences in Mexico, South America, Africa and Asia found that as a whole the areas under CFM presented a lower annual deforestation rate than those under absolute protection regimes. The CFM deforestation rate was also less variable (Porter-Bolland et al, 2012).

Brazil has been particularly successful in bringing deforestation rates down—by 70% between 2005 and 2014. It has used a wide range of measures, including strong enforcement of laws on illegal logging and moratoria on deforestation by the soy and beef industries. Much of the success is attributed to the establishment and enforcement of collective tenure of indigenous lands. Although they have the right to use these forests for sustainable forest management, and may cut the trees, most Indigenous People have not done this (Boucher, 2014). Between 2000 and 2012 deforestation in indigenous community forests in Brazil was less than 1%, compared with 7% outside them (Stevens et al, 2014).

Similarly, in Costa Rica, indigenous territories, on average, have a larger and higher quality forest coverage than can be found in the rest of the country, including in Protected Areas (Porter-Bolland et al, 2012).

(2) Direct benefits for community rights and livelihoods

CFM helps to deliver social and economic justice, because it is very much focused on decentralised power and decision-making relating to forests, resources and territories, and protecting and strengthening communities' rights and livelihoods.

For example in Niger, over the course of 30 years, with government and NGO support, smallholder farmers have revitalised five million hectares of land, with a specific focus on soil and water conservation techniques combined with agroforestry. As new laws and regulations strengthened local rights to benefit from trees, farmers across southern Niger began

nurturing underground roots and tree stumps in their barren fields. This led to improved crop yields and incomes, and increased production of fuel wood, fodder, and other non-timber forest products, benefitting five million people (Stickler, 2012).

CFM is widespread in Nepal, where it was specifically established in the 1970s in order to enhance livelihoods and stop environmental degradation (Stevens et al, 2014). It has been very successful. Similarly Brazil's rapid reduction in deforestation rates has been achieved by recognising Indigenous Peoples' rights, after many decades of denial of those rights. This demonstrates that it is possible to implement an alternative model of development in tropical forest areas that does not involve deforestation (Boucher et al, 2013).

(3) Significant contributions to climate change mitigation and adaptation

Increasing the area of forests under CFM would make a significant contribution to mitigating climate change. Forests play a key role in regulating local weather patterns (Sanderson et al, 2012) and stabilising the planet's climate (CIFOR, 2015). In terms of climate change they absorb 2.6 billion tonnes of carbon dioxide each year, about a third of all the carbon dioxide released from burning fossil fuels (CIFOR, 2015). There is increasing evidence to show that CFM enhances high levels of carbon storage.

CFM can also play an important role in allowing Indigenous Peoples and local communities to adapt to and withstand the impacts of climate change. For example, forests and CFM activities such as mangrove restoration projects have been shown to provide protection against extreme weather events.

Similarly, the deaths and destruction caused by the December 2004 tsunami in South East Asia were avoided in Ranong, in Thailand, because of the presence of a lush green mangrove forest (Baltodano et al, 2007, p74).

Following the devastation wrought by Hurricane Mitch in Nicaragua, in 1999, impacts on conventional farms and 'sustainable' farms were compared. They found that soil conservation, forest cover and agroecological diversity on the latter led to more vegetation, topsoil and moisture retention, which translated into less erosion and lower economic losses after the hurricane (Holt-Giménez, 2002).

Community Forest Management: what are the secrets of success?

Research shows that there are a number of key factors underpinning successful CFM initiatives.

In particular a meta-study encompassing 69 cases around the world identified the following as variables that have a significant influence on the success of community forestry: tenure security, clear ownership, congruence between biophysical and socioeconomic boundaries of the resources, effective enforcement of rules and regulations, monitoring, sanctioning, strong local leadership and organisation, expectation of benefits, common interests among community members, and local authority. The authors of the meta-study relate the variables to

three different aspects of CFM: the relationship between the community and the forests, the community's ability to organise and act collectively; and the protection of benefits, rights and responsibilities in relation to common resource management (Pagdee et al, 2006). However, it is also important that these rights are recognised and protected by government (Stevens et al, 2014).

Another recent study analysing research into CFM identifies forests of sufficient size that have clear boundaries, predictable benefit flows, local autonomy in decision-making about access to and use of forests, and enforcement as key success factors (Agrawal & Angelsen, 2009).

(1) Clear land tenure and secure community rights

Of these variables, land tenure and clarity around tenure rights are identified as two key aspects (Pagdee et al, 2006). In Brazil for example, the government's recognition of indigenous and community rights to forest land has been a highly significant factor in the remarkable drop in deforestation that has been achieved. It has been calculated that deforestation of indigenous community forests in Brazil would probably have been 22 times higher without this legal recognition (Stevens et al, 2014). This makes a significant difference to Brazil's greenhouse gas emissions because lands reserved for Indigenous Peoples or protected by federal and state governments now cover more than half of the Amazon Basin in Brazil (Ricketts et al, 2013, cited in Boucher et al, 2013).

Other examples where tenure—and clarity about tenure—have clearly made a difference include Tanzania, where there has been a political process to return tenure and use rights over territories to local communities (Ylhäisi, 2005); Nepal, where legal changes in forest lands granted to communities from different castes allow for a more just and equal use of forests (Maharjan, 2005); and Honduras and Nicaragua, where indigenous communities have been able to partially forestall deforestation despite insufficient government efforts to protect their rights (Stevens et al, 2014).

In terms of formal land tenure, it is collective and community rights that are relevant because Community Forest Management is, by its very definition, a collective endeavour (Baltodano, 2015).

(2) The participation of forest-user communities in decision-making processes

A study examining biodiversity conservation and forest-based livelihood outcomes, which looked at data from 84 sites in six countries in East Africa and South Asia, found that participation in forest governance institutions by local forest users is strongly associated with positive outcomes for forests (Persha et al, 2011).

Other studies concur with this. Another meta-study finds that local ownership and autonomy in rule-making positively influences outcomes regarding forest dynamics (Chhatre & Agrawal, 2009). It is particularly evident that rules about forest use that are made and acknowledged by local forest users are important (Hayes, 2006; Porter-Bolland et al, 2012). Social taboos governing resource use are also significant (Colding & Folke, 2001; Porter-Bolland et al, 2012).

CFM AND CARBON STORAGE

- An analysis of 80 forests in 10 countries across Latin America, East Africa and South Asia shows that CFM is associated with high levels of carbon storage (Chhatre and Agrawal, 2009).
- In Brazil, 27 times more carbon dioxide emissions from deforestation were produced in areas outside indigenous community forests. Indigenous forests also contain 36% more carbon per hectare than other areas of the Brazilian Amazon (Stevens et al, 2014). Reductions in rates of greenhouse gas emissions from deforestation in indigenous community forests are about ten times higher than in neighbouring areas (Ricketts et al, 2013, cited in Boucher, 2014).
- In some community forests in Honduras, forest loss was 140 times lower under community-led forest rights initiatives (Stevens et al, 2014).
- Government protection of the forest rights of communities in Niger has resulted in the addition of 200 million new trees, absorbing 30 million tonnes of carbon over the past 30 years (Stevens et al, 2014).
- Support for community forestry in Nepal has improved forest health and generated a carbon stock of more than 180 million tonnes across 1.6 million hectares (Stevens et al, 2014).

For example, in the Solomon Islands there are seasonal prohibitions relating to mangrove forests (GFC, 2015c). Another example is the Guna Yala people in Panama, whose forests and biodiversity remain well protected. The Gunas enjoy what is probably one of the highest degrees of self-governance and autonomy among the Indigenous Peoples of Latin America, and are in charge of the management of their own territories on the basis of their customary law and traditional rights. One of the key ways in which the Gunas have protected their forests and forest resources is by having sacred areas, which are mainly primary forest, combined with rotating agriculture or 'Nainu', usually in the lowland areas (GFC, 2015d).

(3) Strong social heritage

Social heritage has also been identified as an important success factor. This includes social norms, trust within a community, common rules and sanctions. It has been observed that new CFM projects may need to prioritise capacity-building and exchange and technical support if there is a need to build new social heritage (Pretty, 2003).

It is important to have regard for gender-differentiated aspects of biodiversity conservation and management too. In many communities, women are the holders of relevant traditional knowledge, which makes it particularly important that they are involved in CFM decision-making processes.

In Cameroon, for example, the Moabi tree species is one of the most widely searched for and exploited because of its fine wood. It is endemic to the Congo River basin, and women from local communities are responsible for collecting Moabi fruits and extracting, processing and commercialising Moabi oil. They are therefore also the most opposed to the commercial destruction of Moabi by the timber industry.

(4) Supportive governmental processes

In addition to effective governmental support for community rights and land tenure, governmental measures that prevent the activities of and encroachment by industrial timber and agricultural sectors are also important. In Brazil for example, statements from slaughterhouses and supermarkets that they would buy only 'non-deforestation beef' have been enforced by prosecutors' warnings to supermarkets in Pará and Mato Grosso that they would be held responsible for the sale of beef produced in violation of environmental laws. This, combined with a new ability to enforce laws using GPS data, has effectively made the supply chain a part of the system through which ranchers are pressured, both economically and legally, to end deforestation (Boucher et al, 2013, p439).

Threats to Community Forest Management

There are many ways in which CFM and the benefits it brings can be undermined.

Threats to land and natural resource rights (especially communal rights) and other traditional processes are a major concern. Common property resources are extremely valuable for many people, and exclusion from them can worsen financial hardship for the poorest, as well as undermining traditional conservation by communities. It has been estimated that common resources contribute US\$5 billion a year to the income of the rural poor (Pretty, 2003).

Conflict between formal and customary laws is a threat to CFM. For example, in Cameroon ancestral community rights over forest areas managed collectively by the Bantu people and other groups were completely destroyed by the German colonial administration after 1896, when the concept of 'vacant lands' or 'lands without owners' was introduced. This began a process of erosion of their traditional knowledge about bees and honey, medicines and forest foods (Baltodano et al, 2015). Similarly in Uganda, some lands are classified as community land but the communities have no actual title to or control over it, while communities living on public land may be ousted and the natural resources they once depended upon destroyed (GFC, 2015e).

Pressure to switch from communal to individual rights is a threat to CFM. In Costa Rica, for example, indigenous territories are community territories. But there is pressure for each indigenous family to establish individual ownership rights to be able to receive credits and payments through Costa Rica's Payment for Environmental Services system. This situation is undermining traditional shared biodiversity management practices.

This uncertainty and disputes over land tenure and rights are fuelling **escalating land acquisitions and land grabbing**, for farming, industrial forestry or the extractive industries. Comprehensive data about land grabbing is difficult to acquire, partly because it is restricted in many countries, but the phenomenon is formally recognised. Existing data indicates an increased volume of large-scale land deals by agribusiness investments in the period starting from 2005, with renewed momentum following the food price hike of 2007-2008, including in sub-Saharan Africa, South East Asia and Latin America (Cotula, 2014).

The increasing value of forest products, especially when combined with corruption, can also exacerbate these problems. Research shows that lax enforcement coupled with corruption in the forestry sector is leading to loss of revenue for governments as well as loss of benefits for communities (Agrawal & Angelsen, 2009).

Many communities also talk about a general weakening of traditional governance systems, mostly due to the **influence of western lifestyles**, and **migration to cities for employment and education** (GFC, 2015d, GFC 2015). This is disrupting the application of traditional knowledge to ecosystem management, production methods and subsistence activities.

Climate change and environmental pollution are also debilitating factors, especially in relation to water. These two factors combined can generate water shortages through to intense droughts, water pollution, changing river flows, rivers silting up and the risk of flooding. Water shortages are exacerbated in areas where there are industrial tree monocultures; and water pollution is especially bad in areas with soy monocultures, especially in the Southern Cone of Latin America (GFC, 2015). The impact of rising sea levels and more frequent extreme weather events also threaten CFM—especially in relation to mangroves—in small island states. In particular, high tides and strong wave activities damage and uproot young mangrove trees, and sea level rise is encroaching on land and villages (GFC, 2015c; GFC, 2015d; GFC, 2015f).

Added to all this is the fact that many of the **solutions chosen by decision-makers to resolve the problems of biodiversity loss and climate change can also pose a direct threat to CFM.** For example, the Protected Areas approach employed in the Convention on Biological Diversity often results in the exclusion of communities from their territories, preventing CFM—even though it is now known that CFM is equally as effective as the Protected Areas approach, and in many cases is more effective (see above) (Bray et al 2008; Ellis & Porter-Bolland, 2008; Nepstad et al 2006). Many studies argue for the need to develop alternatives to strict forest protection (Ferraro, 2002; West et al., 2006; but see Andam et al., 2010).

Similarly the discussion about how to fund biodiversity conservation, which is ongoing in the Convention on Biological Diversity, is driving the financialisation of nature, which also poses a major threat to CFM. This is because this financialisation process is transferring control over nature from communities in to the hands of corporations, by creating new and profitable markets.¹

The market-oriented mechanisms in use and proposed by the UN Framework Convention on Climate Change can also be very problematic for communities and their ability to continue to conserve biodiversity. In addition to methodological failings, which mean they are not effective in reducing greenhouse gas emissions (for more information see FOEI, 2014), **the commodification of forests, carbon markets** (for detailed discussion see Lohmann, 2006) and **REDD+² policies based on carbon markets and offsets** are antithetical to CFM. These policies increase the risk that communities will suffer land grabbing by external investors seeking to profit from high value forests. They also increase the chance that communities will find themselves involved in long-term high-risk and complex legal contracts that may bring them little or no benefit and change their traditional ecosystem management practices (FOEI, 2014). In addition they are not effective in reducing greenhouse gas emissions (FoEI, 2014b).

Finally, there are significant issues relating to many false 'community forestry' processes that are actually oriented to involving communities in destructive commercial logging operations by large companies. These include many 'Community Forestry' and 'Sustainable Forest Management' programmes in which governments mandate the communities who inhabit forests to control or supervise industrial wood extraction operations for a very small percentage of the profits. These processes can also be driven by corruption and impoverishment, with communities unable to refuse even though it results in the degradation of forests they otherwise rely on (Baltodano et al, 2007, pp25-26). In particular, many of these cases are worsened by violence and high levels of corruption (Baltodano et al, 2007, pp 21-24 & 62-63; CELCOR & ACF, 2006). These processes are entirely different from genuine CFM in which communities control and use their forests and territories effectively and respectfully.

Conclusions and recommendations

There is an increasing body of research demonstrating that CFM is both a viable and equitable solution to deforestation, forest degradation, biodiversity loss and climate change.

CFM has been found to be extremely effective in halting deforestation and biodiversity loss. This in turn has important positive outcomes in terms of soil erosion, flooding and the protection of water resources. Indeed, a recent meta-study shows that forests managed by local communities or Indigenous Peoples can be equally, if not more, effective than those managed solely for the purposes of protection. This suggests that CFM (and community management of other resources) should be the policy of choice to deliver on the Convention on Biological Diversity Aichi Target 11, rather than Protected Areas.

Genuine CFM is an attractive win-win policy option because in addition to protecting forests it helps to deliver social and economic justice, by decentralising power and decision-making with respect to forests, resources and territories, and protecting and strengthening communities' rights and livelihoods. Research shows that participation in forest governance institutions by local forest users is strongly associated with positive outcomes for forests, as is the existence of strong social heritage (which includes social norms, trust within a community, common rules and sanctions).

CFM also contributes to both climate change mitigation—by reducing deforestation—and adaptation, especially in coastal communities. Forests and related community management activities have been shown to provide protection against extreme weather events.

In conclusion, CFM needs to be given much more prominence both internationally and nationally, as a solution that benefits Indigenous Peoples and local communities while addressing climate change and biodiversity loss. The research studies outlined in this briefing show that this can best be done by developing ways and means of promoting community autonomy, securing and clarifying land tenure, protecting communities' rights and their access to land and resources, and respecting and recovering traditional knowledge.

In terms of the Convention on Biological Diversity (CBD) and the UN Framework Convention on Climate Change (UNFCCC) this also means rejecting false solutions such as REDD+ and policies that cause the financialisation of nature; and ensuring that debates about funding biodiversity conservation and the mitigation of and adaptation to climate change focus on support for and the promotion of genuine decentralised Community Forest Management, instead of 'innovative financial mechanisms'.

It is also critical that Indigenous Peoples' and local communities' rights, access to natural resources, and traditional knowledge are recognised, protected and promoted at the national and international levels by governments. This will involve policies and laws to consolidate traditional territories under the control of communities, and financial support for the effective implementation of those measures. It will also involve recognition of the importance of communally held land tenure. Governments should also help to map community forest boundaries, expel illegal loggers and provide other practical assistance on delivering CFM.

This should be complemented by the promotion of small-scale wood production, and local markets and solidarity economies that are insulated from the rigours of global competition (Pretty, 2003). Important related activities include the expansion of agroecology and agroforestry activities, and support with relevant technical assistance and training.

CFM can also be promoted by better support to forest user communities themselves, including the public provision of basic infrastructure; the provision of strategic planning spaces for addressing resource and climate change issues; capacity-building on new technologies/information; and policies to finance and facilitate the recovery of traditional knowledge. It is important to have regard for gender-differentiated aspects of biodiversity conservation and management too. Women are often the holders of relevant traditional knowledge, which makes it particularly important that they are involved in CFM decision-making processes. In general capacity building is particularly important, with research finding it associated with success across the board, regardless of national context (Brooks et al, 2012).

In addition it is important to reverse or dismantle the many threats to CFM. This will include reducing the use of and demand for food and timber commodities and products, such as soya and beef, that are produced on the back of deforestation. This can, for example, be achieved through moratoria on 'deforestation beef' and 'deforestation soya', as currently being implemented in

Brazil. It will also involve making sure that incoming investments do not violate community rights.

Other threats that need to be addressed include ineffective 'false solutions' to climate change such as REDD+ carbon market and offsets, which are highly risky for communities and can work against CFM and Buen Vivir.

Above all, it is essential that any approach to CFM is based on a genuine move away from industrial forestry and the real devolution of decision-making over forests and resources to those who know and understand what is needed—the local communities and Indigenous People who have inhabited and interacted with them for generations.

Footnotes

(1) For more information see FoEI's position paper opposing the financialisation of nature:

<http://www.foei.org/resources/publications/publications-by-subject/forests-and-biodiversity-publications/friends-of-the-earth-internationals-position-paper-on-the-financialization-of-nature>

(2) REDD stands for Reducing Emissions from Deforestation and Forest Degradation in developing countries and the plus sign refers to the inclusion of conservation, sustainable forest management and the enhancement of forest carbon stocks, which means that monoculture plantations are eligible for REDD funding. To find out more go to REDD Monitor, <http://www.redd-monitor.org/redd-an-introduction/>

References

Agrawal, A., Angelsen, A. 2009. Using community forest management to achieve REDD+ goals, Center for International Forestry Research. www.cifor.org/library/2910/using-community-forest-management-to-achieve-redd-goals/

Baltodano J. and Díaz F. 2004. La restauración ecologista del bosque tropical. Coecoceiba-Friends of the Earth Costa Rica. <http://wrm.org.uy/oldsite/paises/CostaRica/restaura.PDF>

Baltodano, J., Paz L., Wormworth, J. 2007. Community-based forest governance: from resistance to proposals for sustainable use, Friends of the Earth International. <http://www.foei.org/wp-content/uploads/2014/07/community-based-forest-governance.pdf>

Baltodano J., 2012. Madera caída del bosque tropical. Una opción ambientalmente sana y socialmente justa para producir madera. Coecoceiba-Friends of the Earth Costa Rica. <http://coecoceiba.org/wp-content/subidas/2012/05/Madera-Caida-del-bosque-tropical-menores.pdf>

Baltodano, J., 2015. El Manejo Comunitario de Bosques (MCB): una oportunidad para conservar y restaurar recursos vitales para el Buen Vivir de las sociedades humanas, Javier Baltodano, Coecoceiba-Friends of the Earth Costa Rica, <http://www.foei.org/resources/publications>

Baltodano, J., Rojas, I. 2009. Los Ngobes y el Bosque. Asociación de Comunidades Ecologistas La Ceiba - Friends of the Earth. <http://coecoceiba.org/wp-content/subidas/2010/08/26.-Bosques-y-Ngobes-agosto-09.pdf>

Boucher, D., Roquemore, S., Fitzhugh, E. 2013. 'Brazil's success in reducing deforestation', Tropical Conservation Science, Special Issue, 6 (3):426-445. <http://tropicalconservationscience.mongabay.com/content/v6/TCS->

[2013_Vol_6%283%29_426-445-Boucher_et_al.pdf](http://tropicalconservationscience.mongabay.com/content/v6/TCS-2013_Vol_6%283%29_426-445-Boucher_et_al.pdf)

Boucher, D. 2014. 'How Brazil Has Dramatically Reduced Tropical Deforestation'. Solutions Vol 5, Issue 2, 66-75. <http://thesolutionsjournal.org/node/237165>

Bray, D.B., Duran, E., Romas, V.H., Mas, J.-F., Velazquez, A., McNab, R., Barry, B.D., Radachowsky, J. 2008. 'Tropical deforestation, community forests, and protected areas in the Maya Forest' Ecology and Society 13(2): 56. www.ecologyandsociety.org/vol13/iss2/art56/

Brooks, J.S., Waylen, K.A., Borgerhoff Mulder, M. 2012. 'How National Context, project design and local community characteristics influence success in community-based conservation projects'. Proceedings of the National Academy of Sciences of the USA Vol 109 (52). <http://www.pnas.org/content/109/52/21265.full>

Centre for Environmental Law and Community Rights & The Australian Conservation Foundation 2006 Bulldozing Progress: Human Rights Abuses and Corruption in Papua New Guinea Large Scale Logging Industry. www.acfonline.org.au/sites/default/files/resources/bulldozing_progress_full_report.pdf

Colding, J., Folke, C. 2001. 'Social taboos: "invisible" systems of local resource management and biological conservation'. Ecological Applications 11:2, pp.584–600. <http://www.esajournals.org/doi/abs/10.1890/1051-0761%282001%29011%5B0584%3ASTISOL%5D2.0.CO%3B2?journalCode=ecap>

Cotula, L., 2014 Addressing the human rights impacts of 'land grabbing', European Parliament, Directorate-General for External Policies of the Union. [http://www.europarl.europa.eu/RegData/etudes/STUD/2014/534984/EXPO_STU\(2014\)534984_EN.pdf](http://www.europarl.europa.eu/RegData/etudes/STUD/2014/534984/EXPO_STU(2014)534984_EN.pdf) pp9-10

Center for International Forestry Research. www.cifor.org/forests-and-climate-change/ accessed on 14 October 2015

Chhatre, A., and Agrawal, A. 2009. 'Trade-offs and synergies between carbon storage and livelihood benefits from forest commons', Proceedings of the National Academy of Sciences of the USA, 106(42). <http://www.pnas.org/content/106/42/17667.full>

Ellis, E.A., Porter-Bolland, L. 2008. Is community-based forest management more effective than protected areas? A comparison of land use/land cover change in two neighboring study areas of the Central Yucatan Peninsula, Mexico. Forest Ecology and Management 256, 1971–1983. http://www.researchgate.net/publication/222835706_Is_community-based_forest_management_more_effective_than_protected_areas_A_comparison_of_land_useland_cover_change_in_two_neighboring_study_areas_of_the_Central_Yucatan_Peninsula_Mexico_For_Ecol_Manage

Food and Agriculture Organization of the United Nations, 2015. <http://www.fao.org/forestry/livelihoods/en/> accessed on 14 October 2015

Friends of the Earth International. 2014. Traps and Dangers of REDD and other Forest Conservation Projects: Precautionary guide for communities. <http://www.foei.org/resources/publications/publications-by-subject/forests-and-biodiversity-publications/traps-and-dangers-of-redd-and-other-forest-conservation-projects-precautionary-guide-for-communities>

Friends of the Earth International, 2014b. Reducing emissions from deforestation and forest degradation (REDD) – FoEI's position. www.foei.org/about-foei/position-papers/reducing-emissions-from-deforestation-and-forest-degradation-redd-foeis-position

Global Forest Coalition, 2015. Community Conservation Resilience Initiative overview and case studies 2015, <http://globalforestcoalition.org/resources/supporting-community-conservation/>

Global Forest Coalition. 2015b Press release: Historic Deforestation Target in UN's Sustainable Development Goals Requires Real Transformation. <http://globalforestcoalition.org/press-release-historic-deforestation-target-in-uns-sustainable-development-goals-requires-real-transformation/>

Global Forest Coalition. 2015c. Community Conservation Resilience Initiative in the Solomon Islands. <http://globalforestcoalition.org/wp-content/uploads/2015/08/Solomons-flyer.pdf>

Global Forest Coalition. 2015d. Community Conservation Resilience Initiative in Guna Yala, Panama. <http://globalforestcoalition.org/wp-content/uploads/2015/08/Panama-flyer.pdf>

Global Forest Coalition. 2015e. Community Conservation Resilience Initiative in Uganda. <http://globalforestcoalition.org/community-conservation-uganda/>

Global Forest Coalition. 2015f. Community Conservation Resilience in Samoa. <http://globalforestcoalition.org/wp-content/uploads/2015/08/Samoa-flyer.pdf>

Hayes, T.M. 2006. 'Parks, people, and forest protection: an institutional assessment of the effectiveness of protected areas' *World Development* 34, no 12. pp2064–2075. <http://www.snre.umich.edu/~ifri/Publications/THayesWDev-%20Parks%20People%20and%20Forests.pdf>

Holt-Giménez, E. 2002. 'Measuring farmers' agroecological resistance after Hurricane Mitch in Nicaragua: a case study in participatory, sustainable land management impact monitoring', *Agriculture, Ecosystems and Environment* 93. <http://www.panna.org/sites/default/files/HurricaneMitch-Agroeco.pdf>

Houtart, F. 2011. 'El concepto de Sumak Kawsay (Buen Vivir) y su correspondencia con el bien común de la humanidad', *Revista de Filosofía*. 69, 2011. <http://produccioncientificaluz.org/index.php/filosofia/article/viewFile/18224/18212>

Lohmann L. (ed). 2006. 'Carbon Trading: a critical conversation on climate change, privatisation and power', *Developmental Dialogue* vol 48, set 2006. www.thecornerhouse.org.uk/sites/thecornerhouse.org.uk/files/carbonDDlow.pdf

Maharjan, K., 2005. 'Community participation in forest resource management in Nepal' *Journal of Mountain Science*, vol 2(1): pp32-41 <http://jms.imde.ac.cn/vol2no1-3>

Nepstad, D., Schwartzman, S., Bamberger, B., Santilli, M., Ray, D., Schlesinger, P., Lefebvre, P., Alencar, A., Prinz, E., Fiske, G., Rolla, A. 2006. Inhibition of Amazon Deforestation and Fire by Parks and Indigenous Lands. *Conservation Biology* 20, 65–73. http://icfcanada.org/docs/Nepstad_et_al_2006.pdf

Pagdee, A., Kim, Y., Daugherty, P.J. 2006. What Makes Community Forest Management Successful: A Meta-Study from Community Forests Throughout the World. *Society & Natural Resources*, 19: 33-53. http://digitalcommons.usu.edu/unf_research/36/

Persha L., Agrawal A., Chhatre, A. 2011. 'Social and ecological synergy: local rulemaking, forest livelihoods, and biodiversity conservation'. *Science* 331, pp1606-608. www.ncbi.nlm.nih.gov/pubmed/21436453

Porter-Bolland, L., Ellis, E., Guariguata, M., Ruiz-Mallén, I., Negrete-Yankelevich, S., Reyes-García, V. 2012. 'Community managed forests and forest protected areas: An assessment of their conservation effectiveness across the tropics', *Forest ecology and management*. Vol 268:6-17. www.cifor.org/publications/pdf_files/articles/AGuariguata1101.pdf

Pretty J., 2003. 'Social Capital and the Collective Management of Resources', *Science* 302, 2003, 1912-1913. <http://www.julespretty.com/wp-content/uploads/2013/09/3.-Science-302-1912-1915-Pretty.pdf>

Ricketts, T.H., Soares-Filho, B., da Fonseca, G.A.B., Nepstad, D., Pfaff, A., Petsonk, A., Anderson, A., Boucher, D., Cattaneo, A., Conte, M., Creighton, K., Linden, L., Maretti, C., Moutinho, P., Ullman, R., Victurine, R. 2013, 'Indigenous lands, protected areas, and slowing climate change' *PLoS Biology* 8. http://www.researchgate.net/publication/42372668_Indigenous_Lands_Protected_Areas_and_Slowing_Climate_Change

Sanderson, M., Santini, M., Valentini, R., Pope, E. 2012 Relationships between forests and weather, Met Office. http://ec.europa.eu/environment/forests/pdf/EU_Forests_annex1.pdf

SDPK (2015). Target 15.2, Sustainable Development Knowledge Platform, <https://sustainabledevelopment.un.org/topics>, accessed 21 October 2015.

Stevens, C., Winterbottom, R., Springer, J., Reyta K. 2014. Securing Rights, Combating Climate Change: How Strengthening Community Forest Rights Mitigates Climate Change World Resources Institute. http://www.criticalcollective.org/wp-content/uploads/wri14_report_4c_strengthening_rights_final.pdf

Stickler, M. 2012. Rights to Trees and Livelihoods in Niger, Focus on Land in Africa. <http://www.focusonland.com/countries/rights-to-trees-and-livelihoods-in-niger/>

Ylhäisi, J. 2005, 'Forest privatisation and the role of community in forests and nature protection in Tanzania' *Environmental Science and Policy* 6(3): pp229-239. http://www.researchgate.net/publication/248516161_Forest_privatisation_and_the_role_of_community_in_forests_and_nature_protection_in_Tanzania

This document has been produced with a financial contribution from the Swedish International Development Co-operation Agency through the Swedish Society for Nature Conservation, SSNC. The views herein shall not necessarily be taken to reflect the official opinion of SSNC or its donors.

Friends of the Earth International

info@foei.org
www.foei.org