

How granting Indigenous peoples' land titles contributes to forest conservation in Latin America

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This article investigates how the growing recognition of Indigenous land rights through international law, jurisprudence and government actions contributed to forest conservation in Latin America. Its theoretical framing is a critical comparison of Western and Indigenous perceptions of land, property and nature. The Indigenous concept of collective property has been recognised in international human rights law and increasingly also on the ground, as more communities obtain legal land titles. Scientific studies show low deforestation and forest degradation rates in Indigenous community-managed forests. However, global pressures on land continue to undermine the ability of Indigenous communities to protect their forests. Despite the acquisition of legal land rights, the ultimate success in conservation will depend on governments' protection. The article concludes that to reverse the trends of deforestation and climate change, perception of nature and property has to shift away from a Western anthropocentric view closer to the Indigenous worldview.

Introduction

Humanity is currently using 1.6 times as many resources as the earth can regenerate, which is putting enormous pressure on the oceans, forests,

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biodiversity and climate system.¹ The world is heading towards three to five degrees of global warming above pre-industrial levels,² and we are facing the sixth mass extinction of plants and animals.³ In the midst of this environmental crisis, which is caused by human activities, there is a growing realisation about the positive role of Indigenous peoples' traditional knowledge on forest and biodiversity conservation, ecosystem management and climate change adaptation.⁴ While Indigenous peoples and land-dependent communities represent 2.5 billion people and their historic customary use encompasses over 50 percent of the land on the planet, they legally own just one fifth.⁵ Giving these communities legal land titles is seen by many as one of the solutions to the environmental challenges of the 21st century.⁵

Two major global trends contextualise the issue of Indigenous land rights. The first is the global rush for land, which is leading to increased conflicts. Since the 2008 world food price crisis, land grabs have intensified. While there is no comprehensive data on the extent of land grabbing, the Land Matrix database has documented more than 1,000 large land

¹ Global Footprint Network, 'Ecological Footprint' (*Global Footprint Network*, 2016) <<https://www.footprintnetwork.org/our-work/ecological-footprint/>> accessed 16 December 2017.

² It is important to note that the estimate of around 3 degrees global warming includes the pledges that countries have made to comply with the non-binding Paris Agreement, in which countries have committed to keeping global warming below 2 degrees. Without these pledges, under current policies the world is on a trajectory of up to 5 or even 8 degrees global warming, which would make the planet much less hospitable and in many areas even uninhabitable. Climate Action Tracker, 'Effect of Current Pledges and Policies on Global Temperature' (Climate Action Tracker, 2017) <<http://climateactiontracker.org/global.html>> accessed 23 August 2017.

³ Center for Biological Diversity, 'The Extinction Crisis' (*Center for Biological Diversity*, 2017) <www.biologicaldiversity.org/programs/biodiversity/elements_of_biodiversity/extinction_crisis/> accessed 28 August 2017.

⁴ Birgitte Feiring, 'Indigenous Peoples' Rights to Lands, Territories, and Resources' (*International Land Coalition*, 2013) <www.landcoalition.org/sites/default/files/documents/resources/IndigenousPeoplesRightsLandTerritoriesResources.pdf> accessed 28 August 2017.

⁵ Fred Pearce, 'Common Ground: Securing Land Rights and Safeguarding the Earth' (*Oxfam International, International Land Coalition and Rights and Resources Initiative*, 2016) <https://landrightsnow.contentfiles.net/media/assets/file/GCA_REPORT_EN_FINAL.pdf> accessed 23 August 2017.

acquisitions of 39 million hectares of land – an area larger than Germany.⁶ This trend is leading to many casualties among environmental defenders, opposing industrial projects and land acquisitions. According to Global Witness,⁷ 2016 was the deadliest year on record, with 200 recorded killings of environmental defenders – almost 40 percent of whom were from Indigenous communities. Importantly, the establishment of protected areas has long been another driver of land conflicts and displacement of Indigenous communities. Dowie⁸ writes that around half the land chosen for conservation by the global conservation establishment in the 20th century was either occupied or regularly used by Indigenous peoples. In the Americas, this number was as high as 80 percent.

The second trend is a growing recognition of the land rights of Indigenous communities, both in international law and on the ground. On an international level, the UN Declaration on the Rights of Indigenous Peoples (UNDRIP) was adopted in 2007, and there has been positive jurisprudence by international courts. On the ground, the proportion of forests in low- and middle-income countries, where forest communities have statutory title, has risen from 21 to 31 percent since 2002.⁹ In addition, the environmental community has increasingly realised that giving land rights to Indigenous peoples is often the best way to protect forests, on which they depend. The World Resource Institute's (WRI) study of 80 forested areas in ten countries in South Asia, East Africa and Latin America showed that community-owned and -managed forests have delivered greater carbon storage than any other model of conservation.¹⁰

This paper investigates how and why granting Indigenous peoples' land rights contributes to environmental protection, with a specific emphasis on forest conservation. Its theoretical framing (presented in section two) is a critical comparison of Western and Indigenous

⁶ *ibid* 30.

⁷ Global Witness, 'Defenders of the Earth: Global Killings of Land and Environmental Defenders in 2016' (*Global Witness*, 13 July 2017) <www.globalwitness.org/en/campaigns/environmental-activists/defenders-earth/> accessed 23 August 2017.

⁸ Mark Dowie, *Conservation Refugees: The Hundred-Year Conflict between Global Conservation and Native Peoples* (The MIT Press 2011) xxi.

⁹ Pearce (n 5) 30.

¹⁰ Caleb Stevens, Robert Winterbottom, Jenny Springer and Katie Reitar, 'Securing Rights, Combating Climate Change: How Strengthening Community Forest Rights Mitigates Climate Change' (*World Resources Institute*, 2014) <www.wri.org/sites/default/files/securingrights-full-report-english.pdf> accessed 24 August 2017.

perceptions of land, property and nature. Western distinction between subjects and objects has turned nature into an object of property governed by law, while humans are subjects that hold certain legal (human) rights;¹¹ whereas Indigenous nationhood is ‘not based on control of territory or land, but instead founded on relationship and responsibility for land’¹² and on collective property.

Section three investigates how Indigenous peoples – despite their ambiguous relationship with colonial settler states and legal systems – have successfully established their collective rights to land under international and regional law. The geographical focus of this paper is Latin America, as the Inter-American Court (henceforth, ‘the Court’) and Inter-American Commission of Human Rights (IACHR) have repeatedly recognised Indigenous land rights, derived from the right to property under the American Convention on Human Rights.¹³ Regional jurisprudence has urged states to comply with their international human rights obligations by demarcating and protecting Indigenous lands and resources.

Section four, on Indigenous land titles and forest conservation, first discusses historical conflict between conservationists and Indigenous peoples, as well as recent science on forest conservation. It subsequently examines two case studies – a community of Kayapo in Brazil and Awas Tingni in Nicaragua – that represent two very different ways of recognising land rights for communities that traditionally sustainably manage forests. Recent developments in these two countries reveal that Indigenous rights in Latin America are facing setbacks from commercial and political interests. The land recognition process has slowed,¹⁴ as vested interests close to governments are pushing harmful industrial projects and

¹¹ Margaret Davies. ‘Material subjects and vital objects: prefiguring property and rights for an entangled world.’ (2016) 22 *Australian Journal of Human Rights* 37.

¹² Andrea Smith. *Against the law: indigenous feminism and nation-state.* (2011) 5 *Affinities: A Journal of Radical Theory, Culture and Action* 56.

¹³ Alexandra Xanthaki ‘Indigenous rights in international law over the last 10 years and future developments.’ (2009) 10 *Melbourne Journal of International Law.* 27
<http://law.unimelb.edu.au/__data/assets/pdf_file/0009/1686060/Xanthaki.pdf> accessed 28 August 2017.

¹⁴ According to Pearce (n 5) 30, the rate at which communities gained tenure of forest lands between 2008 and 2013 was only one fifth of the rate between 2002 and 2008, and in Peru, 20 million hectares of land await formal recognition.

legislative reforms that attempt to undo environmental protections and undermine Indigenous land titles.¹⁵

The final section shows that, while Indigenous peoples often successfully defend their rights, it is rarely easy; they have to risk their lives and safety, challenge encroachments in courts and build large alliances with other social groups and the international community. The stakes are high due to the power gap between Indigenous peoples and the governments, corporations and rich land-owners that want their land. I conclude that we are at a key moment in history, which will define the future of humanity on this planet, and that we could learn a lot from Indigenous peoples' relationship with land and nature.

1. Indigenous vs. Western perceptions of land, property and nature

In the Age of Discovery, the settler-colonial powers rationalised dispossessing Indigenous peoples using the concept of *terra nullius*, which declared Indigenous peoples too 'primitive' to bear rights to land and sovereignty.¹⁶ The key text that philosophically justified such dispossession were John Locke's writings on the concept of property.¹⁷ Locke¹⁸ wrote that man could claim property over land he had improved through his labour, which 'puts the difference of value on every thing'.¹⁹ He specifically referred to America as a vast uncultivated land where 'a King of a large Territory there, feeds, lodges and is clad worse than a

¹⁵ Mauricio Torres and Isabel Harari, 'Brazil on Verge of Legitimizing Amazon Land Theft on a Grand Scale, Warn NGOs' (*Mongabay*, 15 June 2017) <<https://news.mongabay.com/2017/06/brazil-on-verge-of-legitimizing-amazon-land-theft-on-a-grand-scale/>> accessed 31 July 2017.

¹⁶ Glen Sean Coulthard, *Red Skin, White Masks* (University of Minnesota Press 2014) 175.

¹⁷ Arneil writes that, until the end of 17th century, property was defined by occupation. When a new definition of property was needed to allow the English to supersede the Amerindians' occupation of the land, Locke's text provided the answer, suddenly opening the whole continent to English occupation. Barbara Arneil, *John Locke and America: The Defence of English Colonialism* (Oxford University Press 1996) 18.

¹⁸ John Locke, *Two Treatises of Government* (4th edn, Cambridge University Press 1965), 332, 338.

¹⁹ Locke (n 18) 335 also talks about a 'Rule of Property', according to which every man should have as much as he can make use of and modify from the State of Nature through his labour. Locke saw the importance of imposing limitations and controls on the colonisation of America, which was in line with the British Crown's proclamation to leave the Western frontier for Aboriginal peoples per Arneil (n 17) 10.

Labourer in England'.²⁰ Amerindians were still living in Locke's 'State of Nature'; their land could be taken away because they had not invested their labour therein, and therefore could not really own it.

Besides this text serving as justification for the 17th-century dispossession of Native peoples of their land,²¹ it also reflects a Western view of nature as something separate from humanity that needs to be transformed, mastered and subdued to have value. While Indigenous peoples recognise the earth's significance, the earth as a basic condition for humanity's existence has been almost entirely invisible in Western thinking.²² One building block of the liberal conception of property and rights is the Cartesian distinction between mind and body, which leads to a number of other dualities, including subject and object.²³ The idea of property is heavily reliant on the ability to distinguish between subjects and objects, and on the ethical argument for subjects to have legal rights over objects.²⁴ In this way, land and the natural world only have rights and value if they are somebody's property or potential property. This view has justified our extractive approach to nature and reduction of all things that are not human subjects into commodities.²⁵

Conversely, the world's approximately 4,500 surviving Indigenous communities (while remarkably different in many ways) share some important similarities in their cosmologies, the most important being the sacredness of land and nature,²⁶ which are considered a source of life and core of culture that not only supports but also teaches humanity. Many Indigenous communities have learned to sustainably manage their ecosystems, and this knowledge is passed down through generations.²⁷ Recently, Western science has confirmed that wisely practised human

²⁰ Locke (n 18) 339.

²¹ Arneil (n 17) 2.

²² Davies (n 11) 2.

²³ *ibid.* 4.

²⁴ Davies (n 11) 4 also points out the imperfection of this distinction in both law and society. Law has created artificial subjects (such as corporations and states), while historically and today certain groups of people have been objectified (women, slaves) or commodified (parts of human bodies).

²⁵ *ibid.* 9.

²⁶ Dowie (n 8) 108.

²⁷ *ibid.*

interference can enhance eco-complexity and species diversity,²⁸ meaning that most Indigenous peoples live in symbiosis with their environments.

Due to their cosmologies and experience of colonisation, fighting for land rights and titles has become many Indigenous peoples' main battle. A settler-colonial relationship is a particular form of domination, which continues today, in which power facilitates the dispossession of Indigenous peoples of their land and self-determining authority.²⁹ The primary motive of the colonialist is access to territory. According to Marx, primitive accumulation was a dual process consisting of accumulation of land through violent dispossession and creation of a new class of cheap labourers. Coulthard, Harvey³⁰ and others have criticised the temporal element of primitive accumulation, as capitalism continues to violently dispossess many in both domestic and global contexts.³¹ Marx's focus on proletarianisation as a consequence of dispossession has also been criticised; Nichols recasts 'dispossession as a distinct category of violent transformation independent of the processes of proletarianization and market formation',³² and Coulthard argues that colonial capitalist development required land first and Indigenous labour afterwards.³³

Land has been of central importance in Indigenous modes of being, thought and ethics. While Western philosophy, in defining the world's meaning, places *time* as the narrative of central importance, Amerindians 'hold their lands – *places* – as having the highest possible meaning, and all their statements are made with this reference point in mind' (Deloria³⁴). Hence, 'the *question of land* – a struggle not only for land in the material sense, but also deeply informed by what the land as system of reciprocal relations can teach us about living our lives in relation to one another and the natural world in nondominating and nonexploitative terms' –has

²⁸ *ibid* 134.

²⁹ Coulthard (n 16) 6-7.

³⁰ David Harvey, *The New Imperialism* (Oxford University Press 2004).

³¹ Importantly, Coulthard (n 16) 53 also points out that a vehicle of primitive accumulation in the recent past has been in part facilitated by the very mechanism of recognition that should have shielded Indigenous land and communities; that is, the negotiation of a land settlement, through which indigenous peoples had to either settle for a fraction of the land they had traditionally occupied, or be left empty-handed.

³² Robert Nichols. (2015). Disaggregating primitive accumulation. *Radical Philosophy*.

194(Nov/Dec), 18. p.25.

³³ Coulthard (n 16) 12.

³⁴ *ibid* 60.

become a foundation of Indigenous decolonial thought and practice of ethical engagement with the world and nature.³⁵ Connection to land is also ‘what distinguishes anti-colonial struggles from the classic Marxist accounts of the working class’, as ‘that oppression for the colonised is registered in the spatial dimension – as dispossession – whereas for workers, oppression is measured as exploitation, as the theft of time’ (Kulchynski³⁶). This links back to Locke, for whom labour (farmers’ time working the land) was of central importance and who disregarded nature and land as mere objects to control and transform.

Indigenous understandings of land and a spiritual connection with nature mean that land titles given to their communities often lead to successful conservation of forests and biodiversity, as we will see in section four. This is because Indigenous understandings of land encompass not only land but also people and animals, rocks and trees, lakes and rivers; humans are as much part of the land as any other material, and are as ethically obliged to the land, animals, plants and spirits as they are to other people.³⁷ Indigenous peoples’ relationship with their lands is recognised in international law, in which they possess a specific set of collective rights.

2. International legal recognition of collective rights of Indigenous peoples

Indigenous peoples’ rights have an important place in international human rights law, and an increasing amount of case law and jurisprudence confirms the need for this protection.³⁸ Feiring³⁹ writes that these are not special rights but articulations of universal human rights contextualised to the situation of Indigenous peoples, particularly by addressing the collective aspects of these rights. Indigenous peoples’ spiritual, emotional and historical connections with their ancestral lands are key to creating

³⁵ *ibid* 13.

³⁶ *ibid* 62.

³⁷ *ibid* 61.

³⁸ Marcus Colchester (ed.), Fergus MacKay, Tom Griffiths and John Nelson, ‘A Survey of Indigenous Land Tenure: A Report for the Land Tenure Service of the Food and Agriculture Organisation’ (*Forest Peoples Programme*, 2001)
<www.forestpeoples.org/sites/fpp/files/publication/2010/08/faolandtenurereportdec01eng.pdf>
accessed 23 August 2017.

³⁹ Feiring (n 4) 23.

and maintaining their cultural identity.⁴⁰ The customary law of Indigenous peoples prioritises a group land tenure system; therefore, guaranteeing their rights must account for both individual and collective aspects. The collective aspects of their rights to lands, territories and resources are ‘intrinsically linked to their collective rights to self-determination, non-discrimination, cultural integrity, and development as distinct peoples’.⁴¹

a. International legal system

The protection of Indigenous rights is multi-layered, involving several international and regional bodies. Many commentators have concluded that Indigenous rights have attained the status of customary international law, and are therefore generally binding on states.⁴² These rights stem from the four UN Conventions on human rights, via the right to self-determination, equal protection, prohibition of racial discrimination and cultural integrity. Others⁴³ claim that, despite the adoption of UNDRIP,⁴⁴ it is premature to view Indigenous rights as customary law for several reasons: the negative vote of states with significant Indigenous populations (discussed shortly), the statements of some states that voted in favour of the Declaration, and even the language of the Declaration itself.⁴⁵

The adoption of UNDRIP in 2007 is the most significant development in the protection of Indigenous rights, and largely satisfies the demands of Indigenous representatives.⁴⁶ Although in some respects (such as the

⁴⁰ Jernej Letnar Čerňič. (2013). State obligations concerning indigenous peoples’ rights to their ancestral lands: *lex imperfecta?* (2013) 28 *American University International Law Review*. 1130. <<http://digitalcommons.wcl.american.edu/cgi/viewcontent.cgi?article=1757&context=auilr>> accessed 28 August 2017.

⁴¹ Feiring (n 4) 18.

⁴² Colchester et al. (n 38) 7-8.

⁴³ Xanthaki (n 13).

⁴⁴ UNDRIP was adopted after the ILO Convention (C169), which is the only binding international piece of legislation that protects Indigenous and tribal peoples’ rights to own their land, based on ‘respect [for] the special importance for the cultures and spiritual values of the peoples concerned of their relationship with the lands or territories’ (Article 30).

⁴⁵ Xanthaki (n 13) argues that the wording of UNDRIP points towards the view that the rights are not to be legally binding, which is evident through phrases such as ‘a common standard of achievement’, striving ‘by teaching and education to promote respect’ and incorporating ‘progressive measures’.

⁴⁶ Xanthaki (n 13).

provision on demarcation of Indigenous lands) this Declaration is less progressive than the 1989 ILO Convention 169 (C169), a small number of ratifications to C169 has limited its scope of protection. UNDRIP has given Indigenous peoples long-awaited protection of their rights and significantly contributed to clarification and evolution in several areas of international law.⁴⁷ It has also reaffirmed the importance of free, prior and informed consent, obliging states to consult Indigenous peoples prior to approving any project affecting their lands or territories and other resources (Article 32.2).⁴⁸ Many international organisations use UNDRIP as guidance for allocating aid and implementing policies, and governments are encouraged to implement legal measures to guarantee the rights it establishes.

b. American legal system

The American Convention on the Rights of Indigenous Peoples was adopted on 15 June 2016 – almost a decade after UNDRIP – after lengthy negotiations. Its purpose is to clarify certain aspects that were typical for the region, such as protections for Indigenous peoples in voluntary isolation or internal armed conflicts, respect for Indigenous law and respect for treaties that exist in many Western countries. The American Declaration is one of the most important instruments of the inter-American human rights system; both the IACHR and the Court use it to contextualise other instruments such as the American Convention on Human Rights (the main regional human rights treaty) and the American Declaration on Rights and Duties of Man.⁴⁹ The Declaration also

⁴⁷ *ibid.*

⁴⁸ Free, prior and informed consent is key when it comes to decisions that affect Indigenous peoples, such as ‘adopting and implementing legislative or administrative measures that may affect them, and prior to the approval of any project affecting their lands or territories and other resources, particularly in connection with the development, utilization or exploitation of mineral, water or other resources’. This obligation has been first laid out in C169 and ILO published guidelines on how consultations should be implemented in practice.⁴ Stefania Errico ‘The American Declaration on The Rights of Indigenous Peoples. (2017) 21 *ASIL Insights*. <www.asil.org/insights/volume/21/issue/7/american-declaration-rights-indigenous-peoples> accessed 23 August 2017.

⁴⁹ Indian Law Resource Centre, ‘Indigenous leaders call for implementation of the American Declaration on the Rights of Indigenous Peoples’ (Indian Law Resource Centre, 20 June 2017) <<http://indianlaw.org/adrip/indigenous-leaders-call-implementation-american-declaration-rights-indigenous-peoples>> accessed 23 August 2017.

encourages members of the Organisation of American States (OAS) to develop national legislation to support implementation of its provisions.

Even before the Declaration was adopted, the IACHR and Court had developed binding case law based on cases of rights violations under the American Convention on Human Rights. This has led to Indigenous organisations presenting an increasing number of initiatives to the agencies of OAS, and their resolutions are having a significant effect on the protection of Indigenous rights at a regional level.⁵⁰ Pasqualucci,⁵¹ who analysed the Court's jurisprudence on Indigenous rights, concluded that the Court's decisions generally conform to the principles set forth in UNDRIP – except in the area of state expropriation of natural resources on Indigenous lands, in which the Court charts a middle ground, allowing states to develop some resources to the detriment of Indigenous peoples. This relates to the American Convention's explicit restriction on the right to property, which allows state law to subordinate individual (or collective) property rights in the interest of society or public interest.⁵² The Court has also taken the middle ground regarding free, prior and informed consent of Indigenous peoples, always requiring active consultation⁵³ but only requiring consent for larger projects on Indigenous territory, which would have a greater impact on people and environment. Although American case law on Indigenous rights is often considered among the most progressive, Pasqualucci concludes that in some respects the Court's jurisdiction has been less progressive than UNDRIP.

Besides adopting international legal instruments, the vast majority of Latin American states have constitutional and legislative provisions that recognise Indigenous rights.⁵⁴ The IACHR and the Court refer to these when making their judgments. However, no country complies with its own

⁵⁰ IWGIA, 'Indigenous Peoples in Latin America: A General Overview' (IWGIA, 2017) <www.iwgia.org/regions/latin-america/indigenous-peoples-in-latin-america> accessed 23 August 2017.

⁵¹ Jo M. Pasqualucci. (2009). International indigenous land rights: a critique of the jurisprudence of the Inter-American Court of Human Rights in light of the United Nations Declaration of the Rights of Indigenous Peoples. (2009) 27 *Wisconsin International Law Journal* 51.

⁵² *ibid* 82.

⁵³ Active consultation means that the state must ensure effective participation of Indigenous peoples, in line with their customs and traditions, and consult them 'in good faith, through culturally appropriate procedures and with an objective of reaching an agreement' (*ibid.* 89).

⁵⁴ Colchester et al. (n 38) 19.

constitution or with international treaties when it comes to these rights.⁵⁵ UN Special Rapporteur Erica-Irene A. Daes⁵⁶ pointed out that the greatest single problem for Indigenous peoples is the failure of states to demarcate Indigenous lands. Purely abstract or legal recognition of Indigenous rights is meaningless if their property is not physically determined and marked. Most commentators agree that the most significant case law here was the Court's judgment on the *Awas Tingni* case, which demonstrated that American states are obliged by inter-American human rights law to recognise and guarantee Indigenous property rights and land tenure rights⁵⁷ and demarcate their territories.⁵⁸ The next section looks at the impact on forest protection of demarcating Indigenous territories, and analyses the landmark *Awas Tingni* case more in detail.

3. Indigenous land and forest conservation: general trends and case studies

Tropical deforestation accounts for between 20 and 25 percent of total anthropogenic greenhouse gas emissions, and 80 percent of all emissions from least-developed countries.⁵⁹ Deforestation also presents a threat to biodiversity, which historically motivated the conservation and sustainable management of forests. Conservation efforts have often led to

⁵⁵ Van Cott quoted in Stocks, A., 2005, *Too Much for Too Few: Problems of Indigenous Land Rights in Latin America*. (2005) 34 *The Annual Review of Anthropology*, 85. DOI: 10.1146/annurev.anthro.33.070203.14384

⁵⁶ Erica-Irene A. Daes, 'Prevention of Discrimination and Protection of Indigenous Peoples and Minorities: Indigenous Peoples and their Relationship to Land – Final Working Paper Prepared by the Special Rapporteur, Mrs. Erica-Irene A. Daes, Commission on Human Rights, Sub-Commission on the Promotion and Protection of Human Rights' (*University of Minnesota Human Rights Library*, 11 June 2001) <http://hrlibrary.umn.edu/demo/RelationshipptoLand_Daes.pdf> accessed 24 August 2017.

⁵⁷ Colchester et al. (n 38) 19.

⁵⁸ Besides indigenous treaties and the jurisprudence of courts, international donors such as the World Bank also play an important role, and can use their power to encourage states to fulfil their international duty to demarcate indigenous lands. This is what happened in Nicaragua, when the World Bank conditioned the release of aid on the passing of land demarcation law per Pasqualucci (n 54) 54. However, the World Bank has been criticised because its policy on financing projects only requires 'free, prior and informed consultation' with indigenous peoples, which does not constitute active consent (ibid. 87).

⁵⁹ Andrew Nelson and Kenneth M. Chomitz. Effectiveness of strict vs. multiple use protected areas in reducing tropical forest fires: a global analysis using matching methods. (2001) 6 *PLoS ONE* <doi:10.1371/journal.pone.0022722>.

the creation of protected areas or national parks, which relied on the 'myth of wilderness': areas where 'the earth and its community of life are untrammelled by man, where man himself is a visitor, who does not remain'.⁶⁰ This worldview started a trend of exclusionary conservationism, which initiated in the United States and was then exported all over the world. Its basic idea is rooted in the anthropocentric view that humanity is apart from nature and holds authority over all other living and non-living things. The rationale of this exclusionary model of conservation was that the new national parks would remain in an undisturbed 'state of nature';⁶¹ as such, Indigenous peoples were again considered a disturbance that had to be dispossessed of their lands, this time for the purpose of conservation.⁶²

This traditional conservation model ignored the fact that humans are very much part of nature, and that many areas seen through Western eyes as 'wild' and 'pristine' were cultivated by their original inhabitants. Researchers have discovered that biodiversity in many parts of the world correlates with Indigenous population density.⁶³ Forests and other ecosystems were cultivated with such care and knowledge of the plants, seasons and animals that human influence on the landscape appeared invisible to the conservationists who wanted 'to protect' pristine wilderness.⁶⁴ The exclusionary model of conservation caused massive damage to Indigenous peoples, who were often evicted and became conservation refugees. These evictions caused a lot of bitterness among

⁶⁰ Dowie (n 8) 11.

⁶¹ *ibid.*

⁶² A 'state of nature' was always used against indigenous people in one way or another. First, it served as a justification for English and Spanish colonisers to take Native land because they were not using it; then, when the national parks were created, the Natives were often considered disruptive to a pure state of nature and were again dispossessed and relocated.

⁶³ Stocks (n 58) 91.

⁶⁴ A recent study in *Science* has shown that '[p]lants domesticated by pre-Columbian peoples are much more likely to be dominant in Amazonian forests than other species. Furthermore, forests close to archaeological sites often have a higher abundance and richness of domesticated species. Thus, modern-day Amazonian tree communities across the basin remain largely structured by historical human use'. C. Levis, Flavia Costa, Frans Bongers, M. Peña-Claros, C. Clement, André Junqueira, E.G. Neves, Eduardo Tamanaha, Fernando Figueiredo, R.P. Salomão, Carolina Castilho, William Magnusson, Oliver Phillips, Juan Guevara, Daniel Sabatier, Jean-François Molino, D. Cárdenas López, A.M. Mendoza, Nigel Pitman and Hans ter Steege. (2017). Persistent effects of pre-Columbian plant domestication on Amazonian forest composition. *Science*. 355(6328), 925–931. <doi:10.1126/science.aal0157>.

Indigenous communities, who often lost their traditional livelihoods, culture and knowledge of how to sustainably manage their ancestral lands.⁶⁵ Evictions also often led to damages to the ecosystem, resulting in overgrazing, loss of biodiversity and overpopulation of species that Indigenous peoples had regulated with their interventions.⁶⁶

From the 1980s onwards, a significant section of the biodiversity conservation community started arguing against human-excluded natural parks and in favour of community conservation, in which local people become the main protagonists of conservation.⁶⁷ Scholars have argued that Indigenous peoples are the best guardians of land when the objective is conservation.⁶⁸ This has been confirmed by several empirical studies, and seems especially typical in Latin America.

Nelson and Chomitz⁶⁹ studied the effectiveness of different types of protected areas in Latin America, Asia and Africa, comparing the levels of deforestation to unprotected areas. They concluded that multi-use protected areas are more effective than strictly protected areas, while Indigenous areas are almost twice as effective as any other form of protection. Despite the Indigenous areas in Latin America being located in areas of higher than average deforestation pressures, the incidence of fire (which was used to evaluate deforestation) was 16 percent lower. A different set of data on deforestation in Brazil for 2014 confirmed that Indigenous peoples are the best land stewards; 59 percent of that year's illegal deforestation occurred on privately held lands, 27 percent in conservation units, 13 percent in agrarian reform settlements and a mere 1 percent on Indigenous lands.⁷⁰ The aforementioned WRI study, which tried to translate some of this information into carbon sequestration, concluded that Indigenous community-based forests contain 36 percent

⁶⁵ Mark Dowie, 'Clash of Cultures: The Conflict between Conservation and Indigenous People in Wild Landscapes' (*The Guardian*, 3 June 2009) <www.theguardian.com/environment/2009/jun/03/yosemite-conservation-indigenous-people> accessed 23 December 2016.

⁶⁶ Dowie (n 8) xxvii.

⁶⁷ Stocks (n 58) 91.

⁶⁸ *ibid.*

⁶⁹ Nelson and Chomitz (n 62) 8.

⁷⁰ Sue Branford and *Maurício* Torres, 'Indigenous groups, Amazon's best land stewards, under federal attack' (*Mongabay*, 5 April 2017) <<https://news.mongabay.com/2017/04/indigenous-groups-amazons-best-land-stewards-under-federal-attack/>> accessed 28 August 2017.

more carbon per hectare than other forests.⁷¹ This is relevant because it includes not only deforestation but also forest degradation, which depletes forests' carbon stocks and damages biodiversity.

Although recognition of Indigenous peoples' rights to own and manage their traditional lands does not automatically mean that land will be used more sustainably, Native communities are likely to 'be more respectful to their local environments than most societies, owing to their close ties with their ancestral lands, their common property management regimes, and their sense of holding land for future generations'.⁷² Dowie⁷³ writes that not all Indigenous people are perfect land stewards, and good stewardship can also erode over years due to factors such as population growth, erosion of culture, market pressures and new destructive technologies. He describes an example of Ache foragers in Eastern Paraguay, who – after acquiring a legal title to their land – began cutting and selling old-growth hardwood trees and spending money on gambling and luxury goods. Toohey⁷⁴ also warns against idealising Indigenous peoples, some of whom may be exploited into abandoning their cultural norms because of their economic, social and political vulnerability. In Brazil, Kayapo, Surui and Cinta-Larga, Indigenous peoples were logging on land the Brazilian government federally demarcated to them. However, both Toohey and Dowie claim this is a small minority of Indigenous peoples, who are sometimes manipulated by resource extraction companies and become less favoured partners in these businesses arrangements.⁷⁵ Dowie⁷⁶ concluded that this particular group of Ache people was an anomaly; not far from their settlement, other Ache groups initiated a carefully planned sustainable forestry programme on their land.

We will now turn to two case studies of Indigenous land titles: Awas Tingni community in Nicaragua and Kayapo community in Brazil. These cases were chosen because both Nicaragua and Brazil host large areas of tropical forests that are under pressure. This is illustrated in deforestation

⁷¹ Stevens et al. (n 10) 3.

⁷² Colchester quoted in Dowie (n 8) 90.

⁷³ Dowie (n 8) 111.

⁷⁴ David E. Toohey. (2012). Indigenous peoples, environmental groups, networks and the political economy of rainforest destruction in Brazil. *International Journal of Peace Studies*. 17(1).

<www.gmu.edu/programs/icar/ijps/vol%2017_1/Indigenous%20Peoples%20FINAL.pdf> accessed 23 August 2017.

⁷⁵ *ibid.*

⁷⁶ Dowie (n 8) 111.

rates and land conflicts, which result in numerous casualties of environmental defenders and Indigenous peoples.⁷⁷ However, both of these Indigenous communities represent relatively successful models of forest conservation. Awas Tingni was chosen because it represents a landmark legal case: the first time the Court decided on the case of Indigenous land rights. Kayapo community represents an example of successful bottom-up conservation and cooperation between the Indigenous community, conservation NGOs and the Brazilian government. Despite the successful acquisition and official recognition of legal title to their territories, both communities remain under development pressures, and the fight for their land is far from over.

a. The case of Awas Tingni in Nicaragua

Outside of the Amazon, Nicaragua has one of the highest expanses of rainforest and has also experienced significant deforestation; about 21 percent of its forests disappeared between 1990 and 2005. However, levels of deforestation are much lower in areas where Indigenous peoples have received land titles. The government now legally recognises 49 percent of the remaining forests as community-owned forests – more than other Latin American countries like Honduras, Guatemala, Brazil and Bolivia.⁷⁸ Bosawas Biosphere Reserve forms one of the largest protected tropical forests in Central America, and six Indigenous communities have their Native titles there. The government provides little support against encroachments to these communities; nor does it give technical assistance such as approving their sustainable management plans.⁷⁹ Still, the data show that communities are nonetheless protecting their forests; deforestation rates in neighbouring reserve areas occupied by settlers were 14 times higher than in the Indigenous reserve. Furthermore, during the same time period, three times more forest was lost outside of the reserve.⁸⁰

⁷⁷ According to Global Witness (n 6) Brazil had the highest number of deaths of environmental defenders in 2016, while Nicaragua had the highest number of deaths per capita.

⁷⁸ Robert Winterbottom, Caleb Stevens and Asa Strong, 'Nicaragua's Indigenous Peoples Protect their Forests Even Without Government Support' (*WRI Blog*, 14 November 2014) <www.wri.org/blog/2014/11/nicaragua's-indigenous-peoples-protect-their-forests-even-without-government-support> accessed 31 July 2017.

⁷⁹ Stevens et al. (n 10) 38.

⁸⁰ *ibid.*

The major incentive for the Nicaraguan government's recognition of Native land titles was the Mayangna (Sumo) Awas Tingni case in 2001.⁸¹ In this case, the Inter-American Court became 'the first international tribunal to hold that the state must protect Indigenous communities' collective rights to their traditional lands' and their lands' natural resources.⁸² Indigenous land rights were already formally recognised in the 1987 Nicaraguan Constitution and the Autonomy Law, which granted administrative autonomy to the Atlantic region of Nicaragua, where the majority of the Indigenous population lives.⁸³ But the government has been very slow at recognising Indigenous lands and has often undermined their rights, putting Indigenous groups in a vulnerable position. Among other orders, the Court ordered Nicaragua to demarcate and title all Indigenous land in Nicaragua.

The Court case was based on a petition the community of Awas Tingni filed with the IACHR. This community is one of several ethnically Sumo or Mayangna Indigenous communities of the Atlantic Coast region. They use their land for subsistence agriculture, hunting and fishing, and the land is collectively held based on the people's traditional law and culture.⁸⁴ The community alleged that the government of Nicaragua had not met its legal obligations under the Nicaraguan constitution and international law by failing to recognise and safeguard the community's rights to the lands its members have traditionally occupied and used. Instead of supporting Awas Tingni community to formally demarcate and achieve other specific legal recognition of its traditional lands, the government of Nicaragua granted a concession to a Korean timber company to start logging nearly 65,000 hectares of forests traditionally

⁸¹ *Mayagna (Sumo) Awas Tingni Community v. Nicaragua* Inter-Am. Ct. H.R. (ser. C.) No. 79 (Aug. 31, 2001).

⁸² In a subsequent case in 2007, *Saramaka People v. Surinam*, the Court extended these land rights to tribal peoples, making this a binding norm in the Americas. Lisl Brunner. 'The rise of people's rights in the Americas: the Saramaka people decision of the Inter-American Court of Human Rights.' (2008) 7 Chinese Journal of International Law 699.

⁸³ Roque Roldan Ortega, 'Models for recognising indigenous land rights in Latin America' (The World Bank Environment Department, 2014) <<http://documents.worldbank.org/curated/en/608941468743178264/pdf/308860PAPER0EDP099.pdf>> accessed 23 August 2017.

⁸⁴ Jennifer A. Amriott. 'Environment, equality and indigenous peoples' land rights in the Inter-American Human Rights System: *Mayagna (Sumo) Indigenous Community of Awas Tingni v. Nicaragua*. (2002) 32 Environmental Law 873.

held by Awas Tingni. This concession was made behind the community's back without any consultation.⁸⁵

The Court ruled in favour of the community, saying that the state violated the community's rights to property and judicial protection, the obligation to provide equal protection and the duty to conform its domestic laws to give effect to the rights and duties of the American Convention on Human Rights.⁸⁶ The Court also affirmed the existence of Indigenous peoples' collective rights to their land and the importance of customary law of Indigenous peoples. Finally, the Court ordered the state to delimit and demarcate Atlantic Coast lands and grant official titles to Indigenous peoples. The implementation of the Awas Tingni decision has been delayed due to overlapping claims to the land by three Indigenous communities. Land-titling procedure very much depends on the state; possible competing and overlapping claims may take longer to resolve than the period the Court granted to the state for the land dispute in question.⁸⁷ On the positive side, the legislature adopted a comprehensive law for the demarcation and titling of Indigenous lands along the Atlantic Coast, and the President of Nicaragua assigned his personal adviser to supervise the implementation of the Court's decision.⁸⁸

After setting a legal precedent and becoming an international success story, how is the Awas Tingni community coping today? Besides the WRI study in 2014, which confirmed that Awas Tingni was one of the Indigenous communities in Bosawas reserve that was protecting the forests (regardless of the lack of government support), it was difficult to find information. However, it is clear from the limited media coverage that official land title has not shielded the community against continuing threats of timber companies, illegal squatters and cattle ranchers.⁸⁹ While the government attempted to remove some illegal settlers in 2001 and 2010, the problem worsened over time. In 2013, Indigenous communities reported that invading land speculators and peasants had destroyed 150,000 hectares of rainforest in the reserve, and that a Mayangna

⁸⁵ Daes (n 59) 18.

⁸⁶ Amiot (n. 84) 900.

⁸⁷ Pasqualucci (n 54) 74.

⁸⁸ Indian Law Resource Centre, 'Nicaragua / Awas Tingni Community' (*Indian Law Resource Centre*, 2017) <http://indianlaw.org/projects/past_projects/nicaragua> accessed 23 August 2017.

⁸⁹ Martin Mowforth, 'The Mayangna of The Awas Tingni Community, Nicaragua' (*The Violence of Development*, 2017) <<https://theviolenceofdevelopment.com/category/chapter-8/conservation-and-indigenous-peoples/>> accessed 28 August 2017.

community leader was shot dead when an Indigenous scouting party found illegal settlers clearing forest.⁹⁰

According to a recent article,⁹¹ many politicians – and even some members of the Indigenous community – are involved in illegal sales of land, and settlers are still moving in from the Pacific Coast region after selling their properties to large livestock producers. Although the land in and around the reserve should not legally be sold, bought or exchanged, illegal transactions are carried out easily and continuously.⁹² The so-called ‘land traffickers’ first sell high-value timber, then clear the land and sell it to cattle producers – the fastest-growing Nicaraguan production sector. They then move into new areas, pushing deforestation frontiers further. This has led to violent conflicts between settlers and Indigenous communities. Communities also claim to have been disenfranchised by their own corrupt Indigenous leaders, who sold off the land for an average of 860 USD for a 0.7-hectare plot.⁹³

The crisis seems to be deteriorating. In Awás Tingni, more than 800 families of outsiders occupy over 90 percent of Indigenous lands.⁹⁴ These settlers have destroyed 40 percent of the forest in that territory,⁹⁵ and supposedly also resort to all sorts of violence to access land: kidnappings, rape and burning crops. Between September 2015 and June 2016, 28 Indigenous people were killed according to NGO estimates, and over 3,000 people are currently displaced according to IACHR.⁹⁶ People in over 50 Indigenous communities live under a permanent state of violence and risk of a full-blown war. Both sides agree that the government decided to take a completely passive stance – despite the IACHR injunction in October

⁹⁰ Jeremy Hance, ‘Central America’s Largest Forest Under Siege by Colonists’ (*Mongabay*, 6 May 2013) <<https://news.mongabay.com/2013/05/central-americas-largest-forest-under-siege-by-colonists/>> accessed 29 August 2017.

⁹¹ Natalie Koper, ‘“Conservation Keeps the Spirit of our Ancestors Alive,” Say Indigenous Awás Tingni Abandoned by Nicaraguan State’ (*Lifegate*, 21 September 2016) <www.lifegate.com/people/news/awas-tingni-community-nicaragua> accessed 31 July 2017.

⁹² Michelle Carrere, ‘Cattle Ranching Devours Nicaragua’s Bosawás Biosphere Reserve’ (*Mongabay*, 10 March 2017) <<https://news.mongabay.com/2017/03/cattle-ranching-devours-nicaraguas-bosawas-biosphere-reserve/>> accessed 29 August 2017.

⁹³ *ibid.*

⁹⁴ Mowforth (n 91).

⁹⁵ Carrere (n 92).

⁹⁶ Michelle Carrere, ‘Nicaragua’s Hidden War’ (*Irinnews.com*, 4 October 2016) <www.irinnews.org/feature/2016/10/04/nicaraguas-hidden-war> accessed 29 August 2017.

2015 requesting measures be taken to protect ten Indigenous communities from further violence, and despite the UN's special rapporteur urging them to find a long-term solution to the conflict, which would involve relocating the settlers.⁹⁷

b. The case of Kayapo in Brazil

Brazil is home to 900,000 members of 305 Indigenous groups speaking 274 languages.⁹⁸ Brazil's 1988 constitution states that Indigenous peoples are the original inhabitants of Brazilian land and that their rights take precedence over others' land rights. The government is obliged to demarcate their lands, and they have an exclusive right to property of all the resources on their lands (Article 231, Brazilian Constitution). Article 232 also clearly states that they have the right to sue to defend their interests. The organisation in charge of the demarcation process is Fundação Nacional do Índio (FUNAI), and the deadline to finalise the process of demarcating *Terras Indígenas* (TIs) was 1993. However, in that year only 291 of 559 TIs have been demarcated, and the system came under pressure from the powerful agricultural and mining lobbies. In 1996, President Cardoso adopted Decree 1775, which gave 'states, municipalities and individuals' the right to contest demarcation at any point in the process. Of the 559 TIs identified at the time, 344 were opened to contestation.⁹⁹ This law has also significantly slowed the process; between 1993 and 2004, only 89 new TIs were added.¹⁰⁰

By 2007, around 300 TIs were legally recognised in Brazil. The lands are officially owned by the government, but the communities have rights to exclude others and to manage and use the forest sustainably, while the government is generally barred from giving mineral rights to others.¹⁰¹ As forests represent 62 percent of total Brazilian land, many TIs are in forests: 28 percent of the forest is under Indigenous title.¹⁰² This is significant

⁹⁷ *ibid.*

⁹⁸ Branford and Torres (n 73).

⁹⁹ This Decree was contested by national and international NGOs, because it was retroactive and could have led to the reduction of already demarcated land. In practice, the vast majority of claims and grievances against the existing TIs were dismissed, and the primacy of indigenous rights was upheld per Ortega (n 85) 6.

¹⁰⁰ Stocks (n 58) 92.

¹⁰¹ Stevens et al. (n 10) 27.

¹⁰² *ibid* 18.

because the Brazilian Amazon contains about half the world's remaining tropical rainforest and 10 percent of the carbon stored in all land ecosystems.¹⁰³ Again, the Brazilian case demonstrates that Indigenous peoples are the best guardians of forests' biodiversity and carbon stock; from 2000 to 2012, forest loss was only 0.6 percent inside Indigenous lands compared with 7 percent outside.¹⁰⁴

One example of such a TI is the community of Kayapo. Around 10,000 Kayapo live in 46 villages scattered on their land of 28.4 million acres of forest in Para, a Brazilian state notorious for its high rates of deforestation.¹⁰⁵ Kayapo were considered a warlike tribe and lived largely in isolation until 1960s, not least because they often killed intruders on their lands. In their interactions with nature, Kayapo have always been low-impact, hunting small game and fish and cultivating gardens. Their land represents 'the most frequently cited model for a new conservation paradigm whereby Indigenous people not only control and manage a protected area, but also serve as an impetus for its establishment'.¹⁰⁶ On their territory is a large protected area, which was a result of collaboration between Western conservationists and the Kayapo tribe.

In the 1980s, Kayapo leaders negotiated secret contracts with logging and mining companies, granting them concessions on their land in exchange for kickbacks.¹⁰⁷ International conservationists and anthropologists feared that Kayapo were becoming collaborators in the destruction of their own forest. The turning point happened in 1988, when two Kayapo leaders, Paiaka and Kube'i, found out about a 10.6 billion USD World Bank project to build dams on Xingu river complex, which would inundate almost 20 million acres of land – the majority of which belonged to Indigenous tribes.¹⁰⁸ They began fighting the dams, and have succeeded in mobilising other Indigenous and non-Indigenous groups. Their international travel to counter this project also resulted in two important developments: First, Paiaka met Barbara Zimmerman from Conservation International, who later helped him establish a conservation and biological

¹⁰³ *ibid* 27.

¹⁰⁴ *ibid* 28.

¹⁰⁵ Jenny Peng, 'Unconquered Kayapó Warriors Fighting for their Amazon Land' (*Deutsche Welle*, 22 September 2015) <www.dw.com/en/global-ideas-brazil-native-agriculture-pec215/a-18729288> accessed 24 August 2017.

¹⁰⁶ Dowie (n 8) 202.

¹⁰⁷ *ibid* 203.

¹⁰⁸ *ibid*.

research zone with the Brazilian government's support;¹⁰⁹ second, Paiaka established a partnership with Body Shop, which enabled Kayapo to harvest Brazil nuts for export and guaranteed revenues for the communities without destroying their forest.¹¹⁰ Such sustainable economic alternatives have contributed to a general turning against contracts with Brazilian extractive industries, which played a dominant role in the Kayapo economy in the 1980s and early 1990s.¹¹¹ There are now only a handful of minor exceptions involving subgroups in a few communities that continue cooperating with miners and loggers.^{112,113}

Kayapo efforts to stop the dam culminated in a rally in Altamira in 1989. Besides 600 Kayapos and representatives of 40 other Indigenous tribes, the rally was supported by British rock star Sting, which attracted the attention of world media and documentary film-makers. The World Bank also attended the meeting, and soon afterwards decided to stop its support for the project. These protests successfully stopped the dam for ten years, when it re-emerged under the name Belo Monte – this time, almost entirely funded by the Brazilian development bank.

Kayapo were also at the frontline of the fight against the Belo Monte dam, which would destroy a part of the Xingu river (called the Big Bend) that Kayapo and other Indigenous communities consider the cradle of civilisation. Its destruction would represent nothing less than a cosmological catastrophe to them.¹¹⁴ Together with other Indigenous and non-Indigenous groups, they mounted an impressive resistance against

¹⁰⁹ *ibid* 204.

¹¹⁰ Hank Whittemore, 'Fighting for the Rainforest: the Kayapo of Brazil and a Man Who Would Save the World' (*Hank Whittemore's Memoir*, 12 April 1992) <<https://hankmemoir.wordpress.com/2010/01/21/fighting-for-the-rainforest-the-kayapo-tribe-and-a-man-who-would-save-the-world/>> accessed 24 August 2017.

¹¹¹ Survival International, 'Kayapó Set to Fight Massive Dam Project' (*Survival International*, 27 April 2006) <www.survivalinternational.org/news/1577> accessed 31 August 2017.

¹¹² *ibid*.

¹¹³ Kayapo, as well as other indigenous groups, are also obliged to fight loggers, ranchers and other intruders on their lands. Historically, the Brazilian government has not allocated enough resources to prevent illegal encroachment and invasions of indigenous lands Daes per (n 59) 17. In the light of invasions of their territory and the fact that FUNAI was not doing enough to tackle the crisis, Kayapo self-organised and have set up more than sixty guard posts at strategic points along the frontiers of their reserves (Survival International (n 113)).

¹¹⁴ Sara Diamond and Christian Poirier, 'Brazil's Native Peoples and the Belo Monte Dam: A Case Study' (*NACLA*, 2010) <<https://nacla.org/article/brazil-s-native-peoples-and-belo-monte-dam-case-study>> accessed 31 July 2017.

the dam. Despite obligation in Article 231 of Brazilian constitution to consult Indigenous groups, Brazilian government¹¹⁵ built the dam without their consent – and with catastrophic consequences: 80 percent of the Xingu's flow has been diverted.¹¹⁶ Kayapo and other Indigenous groups depend on the Xingu river for their livelihoods, and the reduction of its flow is likely to destroy vibrant fishery and lead to degradation of the ecosystem.¹¹⁷ In 2015, Brazil's Public Federal Ministry charged the federal government and the Norte Energia construction company with committing ethnocide against seven Indigenous groups living along the Xingu river, who were either displaced or heavily disrupted during the construction of the dam.¹¹⁸

This situation shows that, despite strong and positive laws requiring demarcation of Indigenous lands in Brazil, the government ignores these laws when it wants to build large industrial projects. Furthermore, the situation has rapidly deteriorated since the impeachment of President Dilma Roussef in 2016.¹¹⁹ The government, led by the conservative Michel Temer, is strongly influenced by the powerful agribusiness lobby, which is trying to abolish a lot of environmentally and socially progressive legislation. The budget of FUNAI has been halved, forcing it to close a dozen of its regional offices, while a congressional commission is trying to

¹¹⁵ The latest evidence also points to a corruption scandal with regards to the dam. Two of Brazil's main political parties, the Workers' Party (PT) and the Democratic Movement Party of Brazil (PMDB), are alleged to have received roughly 46.5 million USD in bribes and kickbacks related to the award of dam contracts while they were in power.¹¹⁷

¹¹⁶ Amazon Watch, 'Brazil's Belo Monte Dam: Sacrificing the Amazon and its Peoples for Dirty Energy' (*Amazon Watch*, 2017) <<http://amazonwatch.org/work/belo-monte-dam>> accessed 31 July 2017.

¹¹⁷ Zoe Sullivan, Z., 'Brazil's Dispossessed: Belo Monte Dam Ruinous for Indigenous Cultures' (*Mongabay*, 8 December 2016) <<https://news.mongabay.com/2016/12/brazils-dispossessed-belo-monte-dam-ruinous-for-indigenous-cultures/>> accessed 30 August 2017].

¹¹⁸ *ibid.*

¹¹⁹ It is important to mention that both Dilma Roussef and President Luiz Inacio Lula da Silva, who was in power before her, have not met the expectation of Indigenous and social movements in terms of putting in place progressive policies and recognising TIs. Roussef in particular followed the logic of economic development at all cost, implementing a growth acceleration programme that relied heavily on investments in highways, energy projects and other projects aimed at increasing exports per (Branford and Torres (n 73)).

strip the agency of the power to demarcate new reserves.^{120,121} The new administration also published guidance, entitled *Marco Temporal*, which President Temer signed in July 2017 and could lead to the loss of land for many Indigenous groups. It states that Indigenous groups should only have the right to legally claim land if they were physically occupying it on 5 October 1988, the day the current Brazilian Constitution was passed. This is very problematic, as many Indigenous communities were forcibly evicted from their land during two decades of military government, which ended in 1985.¹²²

Recent developments in Brazil again point to the importance of courts and Indigenous resistance in fighting for their lands. Indigenous organisations challenged *Marco Temporal* in court, but the ruling will take time.¹²³ This delay may cause a lot of damage to Indigenous communities, who see their window of opportunity to obtain legal land rights closing. In addition, these attacks on Indigenous rights might encourage land grabbers eager to steal the land claimed by Indigenous communities.¹²⁴ On the positive side, Indigenous groups won the case brought to Supreme Court by Mato Grosso state, which wanted compensation for Indian reserves established on its land by the federal government.¹²⁵ While the ruling did not directly address *Marco Temporal*, it did set a positive precedent; all the judges agreed that ‘traditional occupation’ is based on criteria different to whether or not Indigenous groups occupied a specific plot of land at a certain date.¹²⁶ Several commentators see this latest ruling as significantly damaging the concept of *Marco Temporal*.

¹²⁰ Dom Phillips, ‘Brazil’s Indigenous People Outraged as Agency Targeted in Conservative-Led Cuts’ (*The Guardian*, 10 July 2017) <www.theguardian.com/world/2017/jul/10/brazil-funai-indigenous-people-land#img-1> accessed 31 July 2017.

¹²¹ This amendment, known as PEC 2015, would take the right to demarcate TIs away from FUNAI and give it to the Congress, which is always firmly in the hands of the farm lobby per Peng (n 107).

¹²² Sue Branford and *Maurício* Torres, ‘Brazil’s Temer Threatens Constitutional Indigenous Land Rights’ (*Mongabay*, 1 August 2017) <<https://news.mongabay.com/2017/08/brazils-temer-revokes-constitutional-indigenous-land-rights/>> accessed 31 August 2017.

¹²³ *ibid.*

¹²⁴ *ibid.*

¹²⁵ Sue Branford, ‘Indigenous Groups Win Key Land Rights Victory in Brazil’s Supreme Court’ (*Mongabay*, 17 August 2017) <<https://news.mongabay.com/2017/08/indians-win-key-land-rights-victory-in-brazils-supreme-court/>> accessed 31 August 2017.

¹²⁶ *ibid.*

c. Analysis of case studies

Both of these case studies demonstrate that Indigenous land tenure is good for forest protection, when these communities have legal land titles and governments' support.¹²⁷ The communities investigated in this paper have strong legal rights, but the governments in both countries are becoming less and less supportive, which is consequently eroding the communities' roles as ecosystem guardians. Stevens et al.¹²⁸ claim that even where Indigenous communities receive little support from the government, forest loss can be low if the communities have strong legal rights and organise to resist deforestation pressures. This was the case in Nicaragua, where forest loss was 14 times higher in the areas surrounding Bosawas Indigenous reserve than inside the reserve.¹²⁹ However, in the last couple of years the Nicaraguan situation has rapidly deteriorated, resulting in conflict, displacement of Indigenous communities and ultimately significant forest loss, driven by settlers entering their territory. The situation in Brazil is also changing fast; the new government is clearly signalling to encroachers that Indigenous land is up for grabs, undermining the entire constitutional basis for Indigenous land rights, defunding FUNAI and watering down environmental regulations. These measures, combined with weak economic growth and dry climatic conditions, led to a 29 percent rise in deforestation in the Amazon in 2016 – the highest level recorded since 2008.¹³⁰

The Nicaraguan and Brazilian examples show that Indigenous leadership is key to ensuring their communities resist outside pressure. In both case studies, some leaders decided to benefit from the sale of traditional lands, or to cooperate with proponents of industrial projects.

¹²⁷ Positive actions undertaken by the government are documenting rights, registering community forests, enforcing rights such as expelling illegal settlers and loggers and providing technical assistance. Negative actions undertaken by the government are imposing excessive bureaucratic burdens that prevent or delay land registration, failing to act against illegal settlers, siding with local elites and illegal loggers and/or granting concessions within the forests (Stevens et al. (n 10) 14).

¹²⁸ Stevens et al. (n 10) 4.

¹²⁹ *ibid* 38.

¹³⁰ Rhett A. Buttler, 'Brazil: Deforestation in the Amazon Increased 29% Over Last Year' (*Mongabay*, 30 November 2016) <<https://news.mongabay.com/2016/11/brazil-deforestation-in-the-amazon-increased-29-over-last-year/>> accessed 31 July 2017.

In Nicaragua, leaders' involvement in illegal land sales has led to violent conflicts with the settlers, who thought they legally owned the land.¹³¹ The case of Belo Monte dam illustrates how Norte Energia co-opted Indigenous leaders and used 'divide and conquer' tactics to destroy united opposition to the dam.¹³² Many of these Indigenous communities had little previous contact with industrial world, and the company showered them with money and consumer goods. The ethnocide lawsuit initiated against the federal government for the failure to protect Indigenous communities describes how 'the company operated the "shopping list" approach, through which it managed to "attract Indigenous people to their doorstep, keeping them far away from their communities where the Belo Monte dam was being built"; this was "a massive silencing and pacification program that was carried out using [monetary] resources"'.¹³³ Both the Nicaraguan and Brazilian governments, which should have protected Indigenous peoples against such practices, adopted passive stances – or even sided with the encroachers.

However, the case of Kayapo also shows an example of positive Indigenous leadership. Despite the community benefiting from cooperating with the activities of extractive industries on its lands, the leaders actively sought other opportunities for more sustainable development. This resulted in the aforementioned partnership with Body Shop for harvesting Brazil nuts, and the promotion of other projects to communally produce forest products.¹³⁴ Sustainable livelihoods are key to supporting Indigenous conservation efforts, as they provide incomes that are not dependent on forest destruction or resource extraction. These efforts, in the case of Kayapo community, are motivated by awareness of both the importance of protecting the natural environment and the urgency to prove their forests are utilised and occupied at the invader-threatened frontiers.¹³⁵ International NGOs and other organisations can also provide funding for development projects that help Indigenous communities to establish sustainable livelihoods and defend their territory

¹³¹ Carrere (n 94).

¹³² Sullivan (n 119).

¹³³ *ibid.*

¹³⁴ Survival International (n 113).

¹³⁵ *ibid.*

against illegal encroachments.¹³⁶ However, as numerous bad conservation and development projects show, this has to be done in partnership with actively participating communities.

When governments fail to protect Indigenous rights, international legal institutions, and even environmental or human rights NGOs, can play an important role. Historically, relations between big conservation NGOs and Indigenous communities have often been controversial; but this is slowly changing, as NGOs¹³⁷ have recognised Indigenous peoples' contributions to sustainable ecosystem management. NGOs can pressure major international financing institutions to develop guidelines on Indigenous rights and hold private companies responsible for respecting them, regardless of governments' duty to uphold those rights.¹³⁸ They can give visibility and voice to Indigenous peoples, who otherwise would not be heard in the headquarters of companies or institutions that build or finance destructive projects. Indigenous communities are increasingly aware of the benefits of such partnerships, as demonstrated by the Kayapo leaders, who have built both domestic and international coalitions against the dams. Their explanation was that the solution to the problems that threaten the lives of communities in the Xingu Valley had to be resolved through a common struggle with all the people there, which will ultimately also guarantee effective protection of rivers and forests.¹³⁹

¹³⁶ For example, Conservation International established a Kayapo fund in 2011, which aims to support conservation by helping the community to control its lands and supporting its development enterprises. Paulo Prado, 'New Kayapó Fund Helps Indigenous People Preserve Environment and Culture' (*Humanature: Conservation International Blog*, 11 July 2011) <<http://blog.conservation.org/2011/07/new-kayapo-fund-helps-indigenous-people-preserve-environment-and-culture/>> accessed 31 August 2017.

¹³⁷ It is important to mention that the NGO landscape is also very diverse, and that not all NGOs had conflicts with indigenous communities. NGOs like Survival International and Cultural Survival were specifically established to support indigenous rights. Big international NGOs such as Conservation International, WWF and The Nature Conservancy pushed human-excluded conservation models, but many have changed their views since (Dowie, (n 8)).

¹³⁸ Survival International, 2010. *Serious Damage: Tribal Peoples and Large Dams*. [pdf] Available at: http://assets.survivalinternational.org/documents/373/Serious_Damage_final.pdf <Accessed 31 August 2017>.

¹³⁹ Survival International (n 113).

Kayapo also regularly say that protecting the Amazon is key to protecting the planet,¹⁴⁰ which shows they are thinking beyond the preservation of their own territory and community. Davies,¹⁴¹ Klein¹⁴² and Coulthard¹⁴³ describe this mentality as a regenerative mindset and a philosophy that views everything as connected. It points to the special traditional relationship of Indigenous communities with land that is considered sacred and has to be preserved for future generations. This very much contradicts the mindset of extractive industries as demonstrated by encroachers on their lands, loggers, miners or settlers that threaten Indigenous ways of life and ecosystems on which they rely.

Unfortunately, as these two case studies demonstrate, just acquiring land titles is not enough to protect the Indigenous way of life. Within the globalised neoliberal economy, Indigenous peoples are still being dispossessed of their lands, primarily motivated by access to territory and appropriation of resources.¹⁴⁴ When Indigenous peoples have legal land titles, this dispossession happens illegally, but it nonetheless destroys their culture and identity. The communities displaced by Belo Monte dam ended up homeless or at the outskirts of cities, disoriented, facing unemployment and unable to buy food.¹⁴⁵

As governments often fail in their protection mandate, the ultimate guardians of Indigenous rights in today's world are national and international courts. International law is essentially anthropocentric; only people, states and corporations are considered legal subjects, excluding nature and public interest causes, such as the interests of future generations. However, international law has recognised the collective aspect of Indigenous rights, including their spiritual and emotional connection with lands, which is crucial for preserving their culture and

¹⁴⁰ 'The world must know what is happening here, they must perceive how destroying forests and indigenous people destroys the entire world' (Kayapo leaders quoted in Survival International (n 113)).

¹⁴¹ Davies (n 11).

¹⁴² Naomi Klein, *This Changes Everything* (Penguin 2014).

¹⁴³ Coulthard (n 16).

¹⁴⁴ Coulthard (n 16).

¹⁴⁵ Sullivan (n 119) explains how displaced Indigenous communities are compelled to look for jobs in an economically depressed urban development. They find it very difficult to get a job, especially as they have to compete with all the workers who became jobless after the dam was built and in a time of economic stagnation. Food, which used to be plentiful when they lived on their lands, has to be bought with money they do not have.

survival. Indigenous peoples are the only group that has such rights enshrined in the international law. Courts' jurisprudence generally supports Indigenous rights and obliges states to go further in protecting them, for example, by demarcating Indigenous lands, as decided in the *Awas Tingni* case. The problem is that the implementation of courts' decisions still depends on governments, which tend to prioritise the short-term economic and commercial interests of more powerful players, such as corporations and rich land-owners. The interests of Indigenous communities often fall through the cracks of this power gap.

4. Conclusion: Moving away from anthropocentrism

Scientific studies clearly show that giving Indigenous peoples secure land titles contributes to environmental protection, as demonstrated by low levels of deforestation and forest degradation in Latin America's Indigenous reserves. At a time when the world is warming and species are becoming extinct at unprecedented levels, Indigenous land stewardship can offer some solutions. But with the rising extraction of natural resources, Indigenous land defenders find themselves at the frontline of deadly struggles in which governments are rarely their allies. In a way, this problem is not new – Indigenous peoples in Latin America have been dispossessed of their territories since the arrival of European colonisers in the 15th century – rather, this is how it manifests in the context of a globalised neoliberal economy, where Indigenous peoples often live in pristine, resource-rich areas.

Unlike dispossession, international recognition of Indigenous rights is a relatively new phenomenon. Although legal systems are largely based on colonial legacy and an anthropocentric worldview, Indigenous peoples understand the growing authority of international human rights law and use it to claim their rights.¹⁴⁶ This major advancement of international law means that their lands can no longer so easily be 'the sacrifice zones'¹⁴⁷ – areas sacrificed in the name of economic development. States and corporations are now legally obliged to consult Indigenous peoples, share benefits or pay indemnities for damages.

¹⁴⁶ Amriott (n 86) 882.

¹⁴⁷ Klein (n 144).

When such procedures are not applied, Indigenous communities can seek legal remedies, which significantly raises the stakes for corporations and governments with an extractivist mindset. Courts can stop projects or order remedial actions or payment of indemnities. They sometimes instruct governments to change their policies (such as demarcation of Indigenous lands in Nicaragua). Positive jurisprudence of national and international courts can therefore result in policy advances by governments. However, Stocks¹⁴⁸ highlights that advances in policy are not necessarily advances in application; it takes more than a couple of documents to change 500 years of colonial and postcolonial practice. Although it is significant that Indigenous peoples' rights are now viewed as legitimate and legal, on the ground, policy seems far away and men with guns often just take whatever they want.¹⁴⁹ This is evident in both case studies examined here: in Nicaragua, the settlers are taking the land inside the Indigenous reserve; in Brazil, the government is prioritising industrial and commercial interests over constitutional and legislative obligations to its Indigenous peoples.

Another complicating factor is that court cases demand an enormous amount of time, energy, resources and psychological efforts from some of the poorest and most marginalised peoples in a society. Indigenous communities often fight for their rights against not only the encroachers but also the government in which their territories are based. Even when the court rules in favour of Indigenous rights, it is up to the state to implement the judgment, and courts allow significant discretion in how this is done. Especially on property rights, American case law allows the states to grant concessions on Indigenous lands to third parties if this is in the 'interest of society'; this places the whole system under question, as the decision is at the discretion of the state that sought concessions for exploiting natural resources in the first place.¹⁵⁰ Special Rapporteur of the UN Working Group on Indigenous Populations, Erica-Irene A. Daes,¹⁵¹ further highlights discriminatory practices of several states, which essentially maintain the rights to extinguish Native land titles as they please without offering any legal remedies. This is not the case with the property of any other group in those countries. So, despite the existence

¹⁴⁸ Stocks (n 58) 86.

¹⁴⁹ *ibid.*

¹⁵⁰ Pasqualucci (n 54) 84-5.

¹⁵¹ Daes (n 59) 17.

of special land rights, their practical enjoyment remains very much at the mercy of the states where these communities are based.

Despite the gravity of the situation that many Indigenous peoples are facing, they are also getting better organised, and have recognised that their cosmologies can offer an alternative vision to the world. Cultures, whether 'traditional' or Western, are not monolithic but rather constantly evolve. Not everyone in 'the Western world' subscribes to the mindset prevalent in extractive industries which is often highly neoliberal, just as not all Indigenous peoples subscribe to the regenerative mindset. However, legal and economic institutions often force individuals to participate in the destructive consumerist society. The realisation that the planet is under pressure and undergoing significant changes makes many people seek alternatives regarding our relationship with nature. The good news is that relations can be changed as new social values and norms gain support. In the case of property, Davies¹⁵² points out that 'property is only ever an effect of inter-human relationships, primarily created by law, but supported by a wider social consensus'. Law not only recognises and protects property but also creates and distributes it, meaning it can also be construed to acknowledge human reliance on the earth and its resources, and to place certain responsibilities and obligations on land-owners or title holders to communities and future generations. Some examples of positive redefinition include legislative reforms such as environmental and heritage protection or recognition of Indigenous land rights.

Predictions of catastrophic climate change and massive extinctions of species call for a re-evaluation of the anthropocentric view of the world, especially how nature is viewed. Some people have suggested giving animals, plants and ecosystems legal personality to guarantee them a higher level of protection.¹⁵³ However, Davies¹⁵⁴ dismisses this solution, as extending rights to animals and nature cannot work within a worldview that allows unchecked exploitation. Hence, the challenge currently faced is much bigger but part of this starts with understanding that property rights are a legal construction; they are undeniably anthropocentric and

¹⁵² Davies (n 11) 16.

¹⁵³ Davies (n 11) 2-3.

¹⁵⁴ *ibid.*

idealist, even if they could theoretically be integrated with land, environment and the material world.