

Contested understandings of nature in Nicaragua's South-east

Concepciones en disputa sobre la naturaleza en el sureste de Nicaragua

Conceitos em disputa sobre a natureza no sudeste da Nicarágua

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Abstract: Departing from theoretical and empirical insights from Political Ecology, this case study analyses the claims of different social groups about Nature in south-eastern Nicaragua. The analysis draws on expert interviews conducted during field research in 2014, 2015, and 2016 and contextualizes the findings within the history of Nicaragua. Environmentalists refer to the area as habitat of endangered species, whereas peasants perceive it as “agricultural frontier”. Politicians see a high potential of this sparsely populated territory for the extraction of resources or the construction of an Interoceanic canal. For most indigenous and afro-descendent leaders, however, this is the land of the ancestors. From their point of view, the attitudes of the Nicaraguan government and the peasants are a continuation of centuries of colonialism and racism.

Keywords: Nicaragua, land conflicts, territory, Political Ecology, Societal Nature Relations.

Resumen: Partiendo de los conocimientos teóricos y empíricos de la Ecología Política, este estudio de caso analiza las reivindicaciones de diferentes grupos sociales sobre la Naturaleza en el sureste de Nicaragua. El análisis se basa en entrevistas con expertos realizadas durante la investigación de campo en 2014, 2015 y 2016 y contextualiza los resultados en la historia de Nicaragua. Los ambientalistas se refieren a la zona como hábitat de especies en peligro de extinción, mientras que los campesinos la perciben como una "frontera agrícola". Los políticos ven en este territorio poco poblado un alto potencial para la extracción de recursos naturales o la construcción del canal interoceánico. Sin embargo, para la mayoría de los representantes indígenas y afrodescendientes, esta es la tierra de los ancestros. Desde su punto de vista, las actitudes del gobierno nicaragüense y de los campesinos son una continuación de siglos de colonialismo y racismo.

Palabras clave: Nicaragua, conflicto de tierra, territorio, ecología política, relaciones sociales con

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la naturaleza.

Resumo: Partindo dos conhecimentos teóricos e empíricos da Ecologia Política, este estudo de caso analisa as reivindicações de diferentes grupos sociais sobre a Natureza no sudeste da Nicarágua. A análise baseia-se em entrevistas com especialistas realizadas durante a pesquisa de campo em 2014, 2015 e 2016 e contextualiza os resultados na história da Nicarágua. Os ambientalistas referem-se à zona como habitat de espécies ameaçadas de extinção, ainda que os agricultores a percebam como uma "fronteira agrícola". Os políticos veem neste território pouco povoado um alto potencial para a extração de recursos naturais ou a construção de um canal interoceânico. Porém, para a maioria dos representantes indígenas e afrodescendentes, esta terra é dos seus ancestrais. Desde este ponto de vista, as atitudes do governo nicaraguense e dos agricultores são uma continuação de séculos de colonialismo e racismo.

Palavras-chave: Nicarágua, conflito de terra, território, ecologia política, relações sociais com a natureza.

1. Theoretical and empirical insights from Political Ecology

The emerging field of Political Ecology is a stimulating perspective on the relation between nature and society. Research from this broad field is often characterized by a theoretical, a methodological and a political commitment. First, Political Ecology has a “theoretical commitment to critical social theory and a post-positivist understanding of nature and the production of knowledge about it, which is inseparable from social relations of power” (Bridge et al., 2015). Political Ecology is conceptualized as a study of power relations and political conflicts over access to natural resources and distribution of ecological benefits and hazards as well as social struggles for and against the appropriation of nature. It focuses on power strategies and their influence on both the distribution of ecological risks and costs as well as potential constructions of sustainability. Political Ecology explores how these discourses are linked to power relations and personal interests (Leff, 2015:34). Second, Political Ecology has a methodological commitment to do in-depth, direct observation and/or document analyses, often within a mixed methods approach (Bridge et al., 2015:7). Interviews and direct observation are often combined with quantitative data and embedded into a historical approach that reveals how the current situation came about (Davis, 2015:263ff). Methodologically, Political Ecology mostly consists in empirical, research-based explorations to explain linkages between changes in social and environmental systems and the way

these changes are connected to power relations (Robbins, 2012). Third, Political Ecology has a political commitment to social justice and political change and aims at making the struggles, interests and voices of marginalized populations visible (Bridge et al 2015: 8). Political Ecology is not a theory, but a kind of lens to apply when looking at socio-environmental relations. It is conducive to analyzing the different perceptions of nature, which are linked to incompatible judgments about who has the right to decide about the future of a certain place or region, how decisions are to be made, and who should be involved. In what follows, I will introduce three different empirical analyses from the field of Political Ecology to exemplify how such an approach allows us to grasp the co-existence of different perceptions of nature in a specific place and at a particular time.

Mara Goldman and Paul Turner, working at the intersection of Political Ecology and Science and Technology Studies, describe the different understandings of a barren stretch of ground in the Sahel region of West Africa (Goldman and Turner, 2011). Their main hypothesis is that “knowing nature is a complex, multiple, and highly political process” (Goldman et al., 2011:1). Different social groups perceive and value different intrinsic properties, qualities and capabilities of the land: For livestock herders, the proximity of water and the seasonality of rain are key. Remote sensing experts from the US declare the land to be degraded by local mismanagement on the basis of a cluster of twelve pixels on their computer screen. A government official perceives local herders and their missing ties to the land as reason for degradation. He sees the area as a suitable location for a mango plantation due to the organic fertilizer produced by the grazing animals, and tries to convince a development agency to fund such a plantation and its irrigation system. Local villagers in meetings with that agency, in turn, express interest in irrigation to build their own gardening projects. An international environmental group characterizes the zone as one of low biodiversity and concludes that its potential in vegetative productivity could rise if stocking rates of livestock were reduced (Goldman et al., 2011:2). Each and any of these claims is not merely about different intrinsic qualities of the land, but all include knowledge claims about what created the land’s “degradation” or “barrenness” and how best to overcome it. Each of them is a mix of observation, experience and truth claims that includes hypotheses about global climate change, regional trends in land degradation, and productive potentials of the land if used in a certain way (Goldman et al., 2011).

Against this backdrop, Goldman and Turner call for a systematic inclusion of

environmental knowledge, their productions and the conditions under which they are created and circulate. In this view, it is key to analyze how nature is perceived, studied, presented and represented by different social groups – from local resource users to scientific “experts”. The perceptions of nature are linked to the ways in which environmental knowledge is produced among them, and therefore differ in line with the broader social relations they are embedded in.

As other works have argued, there are limits to the variety of possible understandings, which are rooted in the materiality of nature: If researchers insist on the fact that nature is ‘always already socially mediated’, this is to say that nature as we see it today has been constituted by processes of social construction and interpretation. At the same time, it has a physical materiality. Climate change, the amount of rainfall or the rise of the sea level measured are interpretations, but not arbitrary ones (Dietz and Engels, 2014:75). Nature and society should therefore not be conceptualized as independent entities, but as mutually constitutively mediated (Görg, 2004). Contributors to this debate with roots in the Frankfurt School of Critical Theory have thus coined the concept of “societal nature relations”. It underlines the fact that all societies are based on relationships with nature and that the concept of ‘nature’ itself only makes sense in contrast to a ‘society’ deemed to be different from it (Becker and Jahn, 2003; Görg and Brand, 2006). The transdisciplinary concept also stresses that it is not humankind as a whole or ‘a society’ as such that have a specific relation to and understanding of nature, but that these understandings can differ. Society consists of different social groups and differentiated social and natural elements that are selectively and dynamically linked (Becker and Jahn, 2003).

This understanding serves as a point of departure for empirical research on the different understandings of nature that coexist in one specific place. A particularly interesting example of such a study is the qualitative inquiry undertaken in Cape Horn Biosphere Reserve in Chile by Uta Berghöfer and others (Berghöfer et al., 2008, 2010). They analyze the diversity in how nature is configured by different people, i.e., in how they think about, relate to, and inhabit it. From the results, they develop a framework to illustrate how different “natures” are created in the three-way relationship between the individual, society, and the physical world. Distinguishing between the dimensions of “knowledgescape,” “interactions,” and “identity”, they empirically show how the local plants, animals and landscapes are fundamentally different when perceived and described by indigenous groups, soldiers and their families, or local farmers. Whereas navy personnel, settlers and employees working for the public authorities generally referred to ornamental plants and

flowers when asked to name characteristic flora and fauna of the area, permanent residents and people from the indigenous community named edible plants. Inhabitants of towns did not mention any areas that were not directly accessible by car or boat. The ways of talking about and relating to nature also differ in how they refer to global discourses of conservation and diverse knowledgescapes (Berghöfer et al., 2010:14).

Compared to Goldman and Turner's example from the Sahel, which merely served as an opener to the introduction of a book, Berghöfer's research is a much more in-depth empirical analysis of differing society-nature relations. Both examples stress that global discourses on conversation shape the way most social groups relate to nature, and refer to different sets of knowledge and experience. Berghöfer et al. develop relationships with nature with more dimensions and describe how it characterizes the own identity; whereas Goldman and Turner stress more that all perceptions include claims about the future use of the land and that these are linked to specific interests.

A third interesting example is Gijis Cremers and Elisabet Dueholm Rasch's (2016) analysis of the variety of territorial narratives in the Western highlands of Guatemala. There are frequently competing ideas of what nature 'is' and what it 'should be': nature as a commodity to be extracted, nature as territory, and nature as a sacred and cultural tourist destination are all applied to the same territory (Cremers and Rasch, 2016). All of these narratives connect both to local and to global (environmental) dynamics and discourses on development, indigenous rights and/or conservation. Conflicts over the meaning of nature represent power relations; most of them are linked to natural resources and the question of who decides about (what kind of) development (Cremers and Rasch, 2016:72).

The Guatemalan government and the mining companies view nature as a resource for large-scale development. They claim to implement "sustainable mining", which would not bring social or environmental harm but rather economic development to the country. They present mining as being in local people's interest of getting out of poverty, which corresponds to the narrative used by the World Bank to justify the credit it provided for the mining project.

In contrast, the indigenous population argues against mining and views it as a threat to Mayan identity and territory. Their arguments relate to indigenous rights as established in international agreements as well as in national legislation. Indigenous people position themselves as the real owners of the land, inhabitants of nature endowed with the historic right to decide how

nature is defined and what is to happen to it. They frame nature in terms of territorial rights, relating both to political and to sacred dimensions. Their way of presenting nature is informed by globalized discourses on indigenous rights to territory, which are of special importance because of past injustice and violence (Cremers and Rasch, 2016:83). The last narrative Cremers and Rasch describe is that of nature as a cultural and ecological tourist destination, which combines environmental knowledge, specificities of a particular landscape, and spiritual elements. It is tied to a specific worldview presented to – and probably co-constituted by – ecotourists. This fast-growing group among the tourists visiting the area values the vision of an “authentic” and “pristine” culture and nature. Within Cremers and Rasch’s analysis, there is a certain gap between the “real” indigenous perception of nature – which is to protect it from destruction from mining – and the multiple stories presented to tourists.

Whereas Berghöfer et al present an analysis that stresses the importance of direct personal and collective experiences in relative independence of conflicts, Goldman and Turner’s analysis is more strongly tied to interests and ideas concerning the future of the region. Cremers and Rasch use a mixed approach; whereas they present the government’s arguments as strategic and interest-driven, the indigenous population appears as a force of resistance against the project, based on a more complex and much broader understanding of nature, of which they only present a certain part and interpretation to others. Inspired by these three empirical studies and the ways in which they capture the socially different meanings of nature, I will examine in the following the different understandings of nature and territory in south-eastern Nicaragua.

2. Methods and Data

In line with the Political Ecology framework, the analysis follows a qualitative research design and aims to analyze one case in-depth and situate it in its historical context. It is an empirical, research-based exploration into the perceptions of nature present among different social groups in south-eastern Nicaragua. The region is especially interesting, as different proposals have been made on how to transform its economic basis with large implications for the landscape and the population in the area; at the same time different livelihood strategies co-exist, including those of indigenous and afro-descendant groups.

The article is based on different sources: The core type of information is direct observation and semi-structured expert interviews conducted during field research from October 2014 - January 2015 and in May - June 2016 in Nicaragua. Within a broader research project on socio-

environmental change in south-eastern Nicaragua, 27 interviews were realized. These interviews were fully transcribed, coded and subsequently interpreted, following an interpretive approach within the method of qualitative content analysis (Gläser and Laudel, 2010; Mayring, 2010). Additionally, the interpretation draws on secondary literature on the history of south-eastern Nicaragua, written in Nicaragua (Kinloch Tijerino, 2012; Rabella, 2013) and abroad (Nietschmann, 1973; Dozier, 1985; Gabbert, 1992; Nietschmann, 1995; Nygren, 2000, 2004).

3. Different perceptions of nature in Nicaragua

A description of the societal nature relations in Nicaragua's south-east calls for multiperspectivity, as different groups make different claims in this respect. What the main characteristics and potentials of the area are, how it should be transformed in the future, and who is entitled to making decisions on this, or at least to being heard in that decision making process, are highly contested issues.

On paper, the terrain at issue here is called the 'South-eastern Biosphere Reserve', which is divided up into three different zones (Quintero et al., 2003): in the *core zone*, called *Reserva Indio Maíz*, an area covered with forest considered to be pristine, nobody is supposed to live. Within the *buffer zone*, only sustainable livelihood strategies are allowed, while transforming forests into any other land use is prohibited. Within the *transition zone*, more activities are permitted, and only particularly polluting practices of industry and agriculture are forbidden.

In the following, I will present four different understandings of nature, each in the context of its historical origins, the forms of knowledge they rely on, and the properties of nature they value and perceive as important.

3.1 Environmentalists: habitat of threatened animals which need to be protected

Environmentalists point to the extremely high biodiversity within the *Reserva Indio Maíz*, which, with a size of 3,157 km² (Quintero et al 2003: 21), has a greater biodiversity than the entirety of Europe. Indio Maíz is covered by almost intact rain forest and serves as the 'lung' of the entire region. It is the habitat of very rare animals, listed on the IUCN Red List of Threatened Species as Manatí (*trichechus manatus/Manatee*) or Jaguar (*panther onca/Jaguar*), making it the subject of conservation activities for environmentalists in Nicaragua and elsewhere. The international NGO Rainforest Rescue expresses this view:

Indio Maíz in South-eastern Nicaragua is the second largest rain forest reserve in the country. Between 70 and 80 percent of all species of the Central American country live in

the reserve, a fifth of which are endangered. The reserve is home to big cats like jaguars and rare manatees. It is also a unique bird sanctuary with more than 270 different species².

In 1994, the fact that the species of the Lapa Verde (*ara ambiguus*/*Great Green Macaw*), had been decimated by 90% contributed to the introduction of a binational program between Nicaragua and Costa Rica to monitor and protect this bird and its nesting trees. This led to the establishment of a biological corridor, *the San Juan-La Selva Biological Corridor*. Another international NGO, Global Wildlife Conservation, is pushing projects to protect tapirs, which are endangered due to settlers arriving to the area and starting to develop slash and burn agriculture or cattle ranging³:

The Indio-Maíz Biosphere Reserve in Nicaragua is one of the country's last strongholds for the Baird's Tapir (*Tapirus bairdii*), a species considered a "living fossil" because the species' body shape hasn't changed much over the past 35 million years (...) A rapidly encroaching cattle-ranching frontier and high rates of illegal poaching, however, threaten the reserve. GWC is working here to combine research projects on jaguar and Baird's tapir ecology with forest conservation initiatives to ensure the survival of this biodiverse region and two of its most emblematic species of wildlife. The IUCN Red List of Threatened Species lists Baird's Tapir as Endangered and the Jaguar as near threatened.⁴

Both quotes show that the key reason for advocating conservation is that Indio Maíz is a habitat of rare animals. The underlying argumentative structure corresponds to knowledge within a global biological science frame, for which the IUCN red list functions a key reference. The quotes identify cattle farming and poaching as the main threat. Therefore, the NGOs advocate for research and forest conservation; the need to protect the endangered animals and their habitat determines all decisions about the future of the region, and is presented as a necessity based on global science.

Nevertheless, Indio Maíz was only declared a reserve in 1990, and originally as part of the international system SI-APAZ, a binational program between Costa Rica and Nicaragua. The main aim pursued by the Nicaraguan government back then was to improve its control over the area, as it was known that training camps for *Contra* combatants were located at both sides of the border. In the 1990s, local peasants feared a loss of access to resources and livelihoods, as reserve managers advocate restricted resource use throughout the reserve's buffer zone (Nygren, 2003).

² <https://www.rainforest-rescue.org/petitions/820/nicaragua-german-tax-money-destroys-the-environment#more>, last access: 1.8.2018

³ This is a typical continuation of the old narrative that local peasants are the key drivers of deforestation - despite an intensive academic discussion about the reasons of deforestation of the 1990s that showed that small peasants are very often blamed for being guilty of deforestation in order to omit the complex driving forces (Robbins 2012; Utting 1993).

⁴ <https://www.globalwildlife.org/our-work/regions/central-america/taking-action-for-the-tapirs-and-jaguars-of-the-indio-maiz-biosphere-reserve/>

3.2. Peasants: rich soils and sufficient waters: preconditions for agricultural success

The local people, most of them small peasants, have a radically different approach. For many families in the area, south-eastern Nicaragua is still a “land reserve”, a place where agricultural land is still available and the state may be expected to sooner or later give them a small plot of land, which has become a very scarce resource in the Pacific part of the country. Additionally, due to climate change rainfall is missing in the West, and with the population growing, migration towards the Caribbean Coast is seen as an alternative. For many families, the South-east is therefore an agricultural frontier, where life is hard, but it appears possible through hard work to build a better future. They expect the state to give them a land title, especially after having “improved” (i.e., deforested) the land.

Three years ago, one of my nephews paved the way within a spot outside the [Indio Maíz] Reserve. He told me: Aunt, its so beautiful out there, and I am going to have a farm with a size of 50-70 manzanas, I already paved the way. And I said to him: No, don´t make a mistake; the government pays somebody for protecting the area, it´s not for our land. They cannot sell the land, because it is private property. He took my words seriously and did not return to this area. But, there is a bunch of people who would disagree, who perceive this land as empty. They appropriate it any moment they like (Resident of Comunidad de Santa Isabel del Pajarito, 22.6.16).

In the quote echoes an old mechanism in Nicaragua, which can also be observed in Guatemala or the Amazon, where colonization programs set incentives for farmers to “conquer the jungle”. For decades, people were promised to get ownership of the land if they make it arable. However, the experience showed that the knowledge and farming practices the migrants brought were not conducive to the soils and the conditions of the rainforests, so that they contributed to a fast rate of deforestation (Utting, 1993:17). As a local environmentalist remembers:

The arriving population was illiterate; many of them were very poor and very young families, which did not have any relation with tropical forests. They came from other areas of the country, from the Pacific, from bigger cities. Therefore, they had a fear of the jungle, a negative relation. Their dream was to cultivate beans, corn and other fruits for their own survival [...] During the Contra war against the Sandinista Revolution, even more people feared the forest, as there were armed disputes, and everybody avoided to go there. (Member of an environmental NGO, 24.9.14, Managua).

This relationship with nature is a very distant one, insofar as the rainforest is perceived as a threat and was, during the 1980s, even as a site of social terror⁵. Many people wished to banish

⁵ During the second half of the 1980s, the contra war against the Sandinistas contributed to a spiral of escalation, militarizing both agricultural areas and the rainforests. The settlements, which had to be organized as cooperatives, had their own “vigilancia”, and farmers were armed working in the fields. They constantly feared combatants arriving from the forest, which they used for refuge, supply routes, and ambushes. When civilians had to go to the forest, they rushed along the trails, and hunting was minimal because wandering in the forest constituted a risk (Nygren (2003:375).

the forest by transforming it into their own farm, dreaming of a rich harvest of food.

During the 1960s and 1970s, a series of colonization programs were launched; peasants from the Pacific region, who had lost their land due to the cotton boom, were given plots. For example in 1964, the Agrarian Institute of Nicaragua started to hand over 140.000 hectares of land, attracting migration from the León and Chinandega provinces towards the area (Rabella, 2013:133). These colonization programs were always a strategy to avoid agrarian reform (Utting, 1993:17).

In many cases, the farmers simply took land or bought it from somebody without formally registering it as their property (which is normally expensive and entails taxation). A woman from Nueva Guinea, a locale with a classical agricultural frontier dynamic, remembers:

The governments never cared about who lived here. We just bought these properties and got the right of ownership; it was just a paper from a lawyer, and a defined price and the sale is real. [...] As there was never any trouble, nobody worried about it. [...] We are hard working people; as you can see, there's agriculture everywhere; we have water, we have cattle, and us producers, we are working with our own strength. This country can develop, this country has rich soils, there is plenty of water; we have achieved all that, and we never received training. This is what we need, because we are this kind of people that like to work, and by doing so we can bring the country forward. (Resident of Nueva Guinea, 13.6.16)

The interviewee is very proud of the fact that the farmers, despite total abandonment by the government and despite a lack of training, are able to bring the country forward. Through hard work, they make the land productive. She does not speak about nature as such, but about the land, with its good soils and a lot of water. For her, these are the key conditions for developing agriculture. Although she would appreciate trainings offered to the peasants, she is proud that they, with their local knowledge and especially their hard work, managed to transform the area and thus to “develop” the country. For her, the people working the land, the farmers of the region should decide about the future of the area. For this reason, she is active in the resistance movement against the Interoceanic canal, a large-scale development project that threatens her and the entire village with displacement.

3.3. Politicians and Agronomists: vast marginal areas and national lands to develop

For many politicians in Pacific and Central Nicaragua, most of the South-east appears as sparsely populated land with a lot of potential. This potential is seen in opportunities for extracting resources such as gold, minerals, petroleum, and timber, or for constructing an interoceanic canal, which in their view would enrich and “develop” the country. In 2013, the Nicaraguan parliament

passed a law granting concession to the Hong-Kong Nicaragua Development Company (HKND) to build an Interoceanic Canal and operate it for 50 years, with an option to prolong it for an additional 50 years (Huete-Perez et al., 2013; Academia de Ciencias de Nicaragua, 2014). The law grants far-reaching rights to the investor to use land and resources considered necessary for the realization of the project anywhere in the country (Lopez Baltodano, 2014).

Paul Oquist, a key presidential adviser, predicts that the project will double Nicaragua's GDP by 2020, make the country more resilient to global financial shocks, and provide the funds needed to help it adapt to climate change, raise incomes and create 250,000 jobs.

This is the opportunity for Nicaragua – the second poorest country in Latin America and the Caribbean – to overcome extreme poverty and to be able to offer a more prosperous and just life and society to our children and grandchildren, [...] There is nothing else in Nicaragua that could achieve that within our lifetimes.⁶

The project of the Interoceanic Canal was presented as the opportunity to overcome poverty and to fulfill an old dream of increasing Nicaragua's importance in the regional and global economy and modernize its infrastructure. Nevertheless, it is a highly conflictive project (Tittor, 2018). The peasants in Nueva Guinea, together with local environmental groups, mobilize against the concession given to the investor from Hong Kong. They perceive the canal plans as a huge environmental and social catastrophe that would bring irreparable damage.

Against this narrative, the government and the investment company present the project as the best option to “rehabilitate” and “develop” the environment of the entire zone. They have promised programs to protect regional water sources, control erosion and realign plots, and even a reforestation of 40.000 km². Before the Interoceanic Canal idea was (re-)established on the political agenda, similar ideas of large-scale development had been promoted in the form of plans for immense palm oil plantations (Tittor, 2017). In 2006, a study from the Inter-American Institute for Cooperation on Agriculture (IICA) found that Nicaragua has more than two million hectares suitable for the cultivation of oil palm in the Atlantic Coast of Nicaragua, and the Río San Juan region. Two million hectares is more land than all the palm oil cultivation areas in all other Latin American countries in 2013 combined. Based on the 2006 demand figures for diesel, the study calculated that growing oil palm on 100,000 hectares could satisfy Nicaragua's fuel demand (Sáenz

⁶ Quoted by Guardian, <http://www.theguardian.com/world/2015/jan/20/-sp-nicaragua-canal-land-opportunity-fear-route> (accessed: 28.1.2015)

⁷ These promises are from the investor's website <http://www.hknd-group.com/>, last access: 1.8.2016; and from a detailed presentation by the Canal Commission from 2014.

Mejia, 2006: 1). It further argued that about one million hectares were already deforested (sic!) and that hence, conservation was unnecessary. This is an interesting example for how allegedly neutral, 'scientific' knowledge is used to produce a representation of an area, which is still predominantly covered by rainforest, as so-called 'marginal' and 'degraded' lands, which could be 'improved' by serving as farmland to grow commodity crops in general, and those for producing biofuels in particular.

Had this plan been realized, it would have transformed the entire agricultural and forest system of Nicaragua. To compare, in 2014 Nicaragua had 449,600 hectares of land used for cereal production, including corn⁸. The areas that are supposed to be suitable for the cultivation of palm oil coincide with the areas of the so-called agricultural frontier. Interestingly, the plan framed the form of common land use as "nomadic agriculture" (Sáenz Mejía, 2006). Oil palm figured as an opportunity to limit this form of agriculture, which is presented as non-desirable, and at the same time reinforces the image that there is plenty of land available – the old narrative of "terra nullis"⁹.

The forms of knowledge referred to are basically studies about possible economic effects of a certain investment or project, which are written by agencies asked for evaluating the potential of certain projects. They tend to calculate investments, nature's potentials and risks in monetary terms. Nature is seen as a resource or a condition to restore. The government has no doubt that it is the only institution to legitimately taking decisions about the land involved. Most politicians allow for the idea of designating some small areas as territories reserved for indigenous and afro-descendent groups, or as protected areas whose nature should be conserved. However, to them the vast majority of the region is "National Land", the use of which the government can legitimately preside over for the benefit of the country. The government of Nicaragua still tends to view the Atlantic Coast as "National Lands", a term that appeared after 1896, when the Nicaraguan government unilaterally decided to incorporate the Atlantic Coast into its national territory. All of the land in the new department was now considered property of the nation, which could be sold to

⁸ <https://knoema.com/atlas/Nicaragua/Land-under-cereal-production?origin=knoema.de>; last access: 9.1.17.

⁹ Terra nullis means "nobody's land" and served as a legitimation to appropriate land. In the sixteenth century in Europe royal letters were given to conquerors to appropriate land in "the new world" (Stam and Shohat (2014:28). Locke's trias of life, freedom, and property had immense impacts for black people in the Americas as they were reduced to things and could not possess land (or anything else). The communal forms of land use of indigenous people were violently suspended, with the argument that they did not have royal documents or written titles on it (Stam and Shohat 2014:27, 54). Several papal bulls did legitimize the conquest of territories in the Americas and argued that approval from indigenous groups was not necessary. The doctrine of conquest originally had been developed as part of the crusades, was then expanded to the Americas, and used in the US to legitimize the appropriation of "Indian" land in 1823 (Stam and Shohat 2014: 22).

foreign companies, landowners interested in buying more land, or given to members of the Managuan elite. In this process of appropriation, all forms of established indigenous and afro-descendant land use practices in the region were ignored, and the elites grabbed the land according to their own interest. The “land question” dating back to this event constituted to be an import issue of conflict during the 1980s.

3.4. Indigenous and afro-descendant representatives: land of the ancestors, not national lands

In contrast, the indigenous and afro-descendant representatives¹⁰ perceive most land at the Atlantic coast as their territory. Prominent indigenous leaders and intellectuals claim, that indigenous and afro-descendant groups have territorial rights that are older than the creation of the State of Nicaragua and therefore have to be entitled immediately (Williamson Cuthbert, 2006:250). It is the lands of their ancestors, holding locations with a high spiritual value that is intimately connected to their survival as a people. The indigenous group of Rama has been living in this territory for about 5000 years; the Kriol population is of African descent and arrived to the area in the seventeenth and eighteenth century as well as through more recent labor migration. They integrated themselves into the Rama population and have a shared history of about nine generations. Both groups together have built a territorial government and successfully claimed territorial rights in south-eastern Nicaragua. In their argumentation for why the land should be entitled to them, claims of historical rights are entangled with arguments of environmental protection:

About 70% of the Biological Reserve Indio Maíz is entitled to us, the Territorial Government Rama y Kriol (GTR-K). The part of the Indio Maíz that belongs to the Rama and Kriol government has the best conserved forest in all of Nicaragua. Our indigenous and afro-descendant communities have preserved and managed this land for centuries. (Declaration of the GTR-K, 11.7.2017).

The Rama and Kriol population present themselves as the most successful in managing forests – as these forests are the best preserved ones in the country. The indigenous groups themselves argue, that all threats to nature and their own way of living come from outside:

¹⁰ There is always a certain danger of essentializing heterogeneous social groups, especially when talking about ethnically or racially constituted groups. Of course, there are different orientations, e.g. between young indigenous boys migrating to find work elsewhere and elderly women living from subsistence agriculture who never left their community. Therefore, in this article, I will only portray the view of the representatives of the indigenous and afro descendant groups within Nicaragua, which is the territorial government of the Rama-Kriol, as well as the diagnostic study they sent to a commission to declare land titles.

There is a threat caused by human presence, because of the bad practices, that other people have, these citizens invade the territory. When they arrive at the Indio Maíz reserve, they bring the practices with them from the places they had developed their economic activities before. This is something, which is forbidden by law, even on the international level. If we do not develop a good coordination [...] these problems will continue, and the future generations will only see a destroyed reserve, which is a shame, as nowadays human beings are the major threat to the Indio Maíz reserve, due to their culture, their bad forms of acting. (Interview with a Rama Ex community leader, 18.10.14, Rio Indio)

The indigenous leader is therefore not only blaming the arriving population for deforestation, but refers to national and international laws, which the migrants ignore. He perceives the arriving migrants as “invaders”; their presence is a threat for nature. His understanding of nature is antagonistic to the orientation of the peasants, whose intention is to make the land work, to transform “pristine nature” into the farmland they aspire to. Indigenous leaders are conscious, that colonization by arriving migrants is only one form of pressure on their land:

In recent times, the Rama-Kriol territory has been exposed to several external pressures, which were a product of successive cyclical resources booms, geopolitical projects and speculative initiatives. The current ones are seriously threatening the ecological balance, the territorial integrity and the sphere of economic activities and social and cultural reproduction due to the extending deforestation and the violent colonization of land in this territory. [...] Although the ancestral Rama territory was exposed to these pressures, the Rama people have conserved a considerable territorial consciousness, [...] Because of the strong link of their identity with their territory, it is probable that the cultural survival of the Rama depends to a large extent on the possibility to stay on the land they are traditionally living on. (GTR-K, Gobierno Territorial Rama y Kriol 2007).

The historical experience to have protected nature despite foreign interests, is used as an argument why they should get own land titles to protect the land in the future. A part of the historical argument, a kind of essentialization is also presented: There is a claim that especially the Rama have an intrinsic relation with the territory on which they have been living for generations. In contrast, all problems are presented to come from the Nicaraguan state and its perception that these areas are “National lands”. From their point of view, the attitudes of the Nicaraguan government and the discourse of “National Lands” are a continuation of centuries of colonialism and racism, combined with an overall ignorance of the government concerning indigenous and afro-descendant forms of living and their specific political and cultural rights.

Legally, a process of demarcation of indigenous and afro descendant territory has started from 2003 onwards (Acosta, 2009). Leaders of the afro-descendant community perceive that, despite the legal process of demarcation of indigenous and afro-descendant territories, the state still appropriates their land:

Their plan is to grab our land, to colonize it; this has always been the main aim of the Nicaraguan state. Now we have the law 445 and the state has the inescapable duty;

nevertheless, until now the state does not want to finalize the process of demarcation and entitlement. (Interview with a representative of the Communal Black Government of Bluefields, 26.5.16)

Law 445 is the framework for indigenous and afro descendant groups to claim territorial rights. Nevertheless, the process is slowly and complicated and in some cases the indigenous and afro descendent groups got only a small part of the land they claimed for. Furthermore, they feel that the Nicaraguan state does nothing to protect their rights against infrastructural projects, private enterprises or arriving migrants – instead they even perceive that the state supports all these actors in grabbing indigenous lands.

4. Discussion: incompatible views on Nature

As the analysis in this article has shown, different actors in south-eastern Nicaragua have diverging understandings of nature, which play out in the ongoing conflicts around land use in the region. They consider different elements and properties of nature to be important. It is highly contested how the area should develop in the future.

The empirical research shows that there is in practice a pluralism of societal nature relations. As Görg and Brand stress, particularly under bourgeois-capitalist conditions, this pluralism is characterized by hierarchical relationships (2006: 104). Even in times, when cultural interpretations and the forms of knowledge become globalized, differences clearly continue to exist. The analysis has shown, that especially the “traditional” forms of knowledge and intrinsic societal nature relations, which indigenous leaders express, are adapted to global settings: Both the argumentation of internationally granted indigenous rights, as well as certain preservation claims resonate with international policy.

At the same time, when thinking about an open and plural dialogue, the question of the hierarchical relationships is key, as the Nicaraguan government is not willing to start a dialogue with anyone at the moment. On the contrary, there is an open conflict about land and there is plenty of resistance against different large-scale infrastructure or extractivist projects. Since the police killed hundreds of protesters in Nicaragua in 2018, which first were protesting against a pension reform, and the unwillingness of the government to effectively fight fires of the rainforest in Indio Maíz, later on the protest did condemn the authoritarian Ortega regime. Dialogue between the protest movement and the government failed, violence escalated. The barriers for a plural dialogue

are therefore much higher than before and the governing elite does not seem to have an intent to speak to those not being part of their party structure.

But even if this barrier could be overcome, the dialogue would not be easy, as the different actors have very different views on the societal nature relations. There are radical differences in the ways different groups perceive and think about nature and considering the significance they attach to land and territory. Furthermore, there are incompatible views on who has the right to decide about the future of the region and on how decisions are to be made. The following table summarizes the different understandings:

| Actor/ social group | Key properties of nature | Relation to nature | Knowledge appreciated | threat | Decision about future |
|--|---|--|--|---|--|
| Environmentalists | Habitat for animals | Distinct – beauty-emotional | Scientific: IUCN list | Local farmers (and for some large-scale development) | Based on IUCN list; need to act =protect |
| Peasants | Rich soils, availability of water | Distinct – can be transformed with hard work into agricultural success | Farming experience, local knowledge; training wanted | Huge-scale development projects (canal, mining) | Should be made by farmers, the people working the land |
| Afro-descendant and Indigenous Representatives | Basis of own life, sacred land, lands of the ancestors | Consciously mutually dependent - Protect nature from bad practices others have brought, reforest | Experience of the ancestors + international law, national laws for indigenous rights | “bad practices”, “invaders”, intentions of government to appropriate land | Should stay as it was; afro and indigenous government decide over their land |
| Government and investors | Natural resources as option for large-scale development | Nature as abstract potential: ‘resources’ as basis of development; damage can be compensated elsewhere | Expert and company reports on potential extraction | Protests, “protesters against development” | Made by government, informed by expert studies |

Because of the aforementioned reasons, an open dialogue is currently quite difficult to achieve. Nevertheless, maybe in the future the social setting can change. A deeper look into the past tells us, that the understandings of nature held by different social groups are neither static nor homogenous. Many actors can start to acknowledge that their claim about the area is not the only one; they therefore try to integrate different views on nature and territory into their discourse. A clear example is the document presented by the Ministry of Natural Resources and Environment to argue why the area should be a biosphere reserve:

The management of the territory under the international concept of biosphere reserve permits to recognize and harmonize the various interests and ethno-cultural visions in relation to the use of resources and natural systems to secure the long-term conservation of the area. We expect a better protection of the autochthonous genetic resources, the plants and animals, ecosystems and landscapes with a great value for the conservation of the biological diversity in the world. We expect a better compromise and participation of all social sectors to harmonize the aims of conservation with the policies and priorities of their local socio-economic development. (Quintero et al., 2003:3)

Currently the search for the integration of different interests is not an aim of the government. Nevertheless, the possibility exists. In the past, some local actors within state institutions have changed their opinions about the indigenous population, as the following quote shows:

In former times, the municipality has accused the Rama population of deteriorating the forest. But this is not true, it is not them who deteriorate. They live on fishing and hunting, but they are not destroying the forest, they conserve the forest as habitat for the animals, so that they can continue to live there. (former member of the Ministry of Natural Resources and Environment, 16.10.14, San Carlos)

While in the first years after the declaration of the Indio Maíz Reserve and the South-eastern Biosphere Reserve, many local peasants were very angry about the new rules and restrictions of agricultural practices, nowadays many of them have accepted them. Some even see that there is a necessity to stop deforestation and to limit the continuous appropriation of land. The main reason is probably that several NGOs and small projects devote continuous efforts to promote environmental causes. They depart from the idea that environmental protection can only work if the local population understands the necessity of conservation and, at the same time, can find viable livelihood strategies. Many of those projects and NGOs are working more and more closely together with indigenous and afro descendant organizations. Especially during the mobilization against the Interoceanic Canal, the peasants started to seek for alliances as both groups were threatened to be displaced by the project. Although their perceptions of nature differ, acting together for a better future is possible.

5. Conclusion

When discussing my empirical results against other studies of the Political Ecology debate, some similarities and differences can be observed. These findings are very similar to those of Cremers and Rasch and to Turner and Goldman concerning the position of government officials and their discourse that agricultural and infrastructural projects can bring development and lift people out of poverty. Whoever resists these policies is presented as ‘anti-development’. Similar

to Cremers and Rasch's analysis, the relation to nature both of the government and the investor is based on perceiving nature primarily as a stock of 'natural resources' that holds the potential for 'growth' and 'development' through extraction.

Similar to the Guatemalan case, indigenous groups' emphasis on their right to decide over their territory is framed both in terms of historical violence and international agreements, which the national state has to respect. They claim that they have conserved and managed the forest they traditionally inhabit better than any other social group in the country. This resonates with international conservation efforts – and contributes to the already internationally established idea that they are 'green subjects' who should be involved in conservation programs.

What my analysis has shown more pointedly than the previous studies is that all the understandings of nature analyzed here also include a clear narrative about threats to the territory as well as to one's own ways of working – and, for some, also of living. Understandings of nature are expressed in relation to and distinction from other social groups and actors. There is a reciprocal de-legitimization and demarcation from the understandings of other groups.

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