

**BALANCES OF POWER AND COMPREHENSIVE APPROACH TO  
SUSTAINABLE DEVELOPMENT: the case of the biosphere reserves  
of Selva Lacandona, Chiapas, Mexico**

**EQUILÍBRIOS DE PODER E UMA ABORDAGEM  
COMPREENSIVA DO DESENVOLVIMENTO SUSTENTÁVEL: o  
caso das reservas de biosfera da Selva Lacandona, Chiapas, México**

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**Resumo**

As reservas da biosfera foram criadas, entre outros, com o objetivo de promover modelos de desenvolvimento sustentável e gestão ambiental. Este artigo é um estudo de caso das reservas de biosfera "Montes Azules" e "Lacantún" no território da Comunidade Lacandona, cuja população é composta de grupos étnicos de origem maia; onde, depois de mais de 30 anos de políticas ambientais e programas de conservação e desenvolvimento na região da Selva Lacandona (Chiapas), as realizações do desenvolvimento sustentável são extremamente limitadas. O objetivo é compreender as condições e a lógica dos diferentes atores que levaram a esta situação, para que possamos pensar em novas abordagens para a política ambiental no México. A principal questão é, então, por que não foi possível construir um desenvolvimento sustentável na Comunidade Lacandona, apesar dos muitos programas de governo ao longo das últimas três décadas? Para responder a esta pergunta, a hipótese de que a conservação e o desenvolvimento sustentável dependem, principalmente, das formas de interação e gestão estabelecidas no seio da população local e entre ela e as autoridades dos governos estadual e federal.

**Palavras-chave:** Comunidade Lacandona. Desenvolvimento sustentável. Gestão socioambiental. Política ambiental.

**Abstract**

The biosphere reserves were created with the purpose of generating models of sustainable development along with the use and management of the natural resources. In this paper we will undertake to analyze the case of the *Montes Azules* and *Lacantún* Biosphere Reserves, in the territory of Lacandon Community with population of *Mayan* Indians. In which, after thirty years of environmental politics and a range of development programs, the achievements in sustainable development and management systems are extremely limited. The intent of this paper is to understand the conditions and rationalities of the different social actors who have created this situation and in doing so imagine new approaches to environmental politics in Mexico. Our central question is, therefore, why has the generation of sustainable development not been possible in the Lacandon Community, despite the many programs and actions on the part of the government over the course of the last three decades? The hypotheses is that conservation and sustainable development fundamentally depend on the forms of interaction and management

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established inside local community and between such community and the state and federal government.

**Keywords:** Environmental politics. Lacandon Community. Socio-environmental management.

## **Introduction**

The biosphere reserves in Chiapas, Mexico were created with the purpose of generating models of development along with the use and management of the natural resources. Despite these transcendental intentions, the results of such environmental policies are frequently limited, both in Mexico and other regions of the world. We will undertake to analyze the case of the Montes Azules (REBIMA, by its acronym in Spanish) and Lacantún (REBILA, by its acronym in Spanish) Biosphere Reserves, in the Lacandon Community (LC, by its acronym in English) in which, after thirty years of environmental politics and a range of development programs, the achievements in sustainable development and management systems that allow shared responsibility in the construction of such developments to the local population are extremely limited and unsatisfactory. Within this context, the intent of this paper is to understand the conditions and rationalities of the different social actors who have created this situation and in doing so imagine new approaches to environmental politics in Mexico. Our central question is, therefore, why has the generation of sustainable development not been possible in the Lacandon Community, despite the many programs and actions on the part of the government over the course of the last three decades?

In order to analyze this environmental policy and its results, the coauthors of this investigation are collectively working on a project with several related hypotheses. The first of these hypotheses is that conservation and sustainable development fundamentally depend on the forms of interaction and management established inside local collectives and between such collectives and government environmental authorities. In the case that we will analyze in this paper, the local population is made up of *comuneros* and other settlers in the Lacandon Community, who are collective owners of the territory that comprises the majority of the REBIMA and the REBILA. We will also add to our hypotheses that if in the aforementioned interaction non-democratic power structures dominate, instead of sustainable development, exclusion, poverty and limited conservation of biodiversity will result. Another of our hypotheses is to consider that the inefficient management depends as much on non-democratic

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forms of exercising power on the part of the government as on the deficit of citizenship on the part of the local population.

In this paper we will look at several central questions which derive from these hypotheses: What forms of interaction have the settlers and owners of the Lacandon Community and the environmental bureaucrats constructed and established?, how do these forms of interaction influence the conservation and sustainable development of the rain forest?, what are the principal factors upon which the reproduction of the established system of interaction depends?, despite the fact that such a system generates counter-productive and unsatisfactory results for both sides?<sup>1</sup>

The following are some of our principal findings: 1) the established negotiation for the conservation of the rainforest in the areas that are under protection has been based on the social exclusion of the majority of the population of the Lacandon Community and to the detriment of the development of the capitals (human, social, financial/economic, and natural) of the majority; that is to say, affecting the principal conditions that allow for development and sustainable development 2) the legitimacy that the present systems enjoys assumes that development and conservation depend fundamentally on external political and material resources. Based on such an assumption, the established interaction between the local population and environmental bureaucrats has promoted a dependent and subordinate social identity within the local population, given that it strengthens and gives basis to the idea that such a local population lacks the resources and capacity to generate its own well being and that such well being must fundamentally depend upon external agents and resources.

In order to explain these and other results, we will begin by describing and analyzing the logic and sequence of interactions which have been established for thirty-five years, from 1977 until 2013, between environmental and state bureaucrats, consultants and *comuneros*, and the sons of *comuneros*. We will then delve into the counter-productive and undesirable socio-environmental consequences of the current forms of management for both sides. Lastly, we will present our conclusions and brief suggestions derived from this analysis.

**The present system of socio-environmental management in the LC**

Although the environmental politics of the Lacandon rain forest are backed by the interesting and ample experience of more than thirty years of environmental management and considerable financial and human contributions, efficient management systems which propel sustainable development in the region have not been successfully generated. This despite the fact that the objectives of sustainable development and societal agreement are proposed in a range of laws, multiple declarations and international agreements, environmental politics exercised on the national level and in the Lacandon rain forest have predominantly left these goals in the background. Beyond the legal declarations and legislations, Mexican environmental politics have been subject to an inevitable tension between a mainly conservationist perspective and proposals oriented towards sustainable development, in which the former has resulted as hegemonic (see LEGORRETA & MÁRQUEZ, 2012).

An important faction of environmental bureaucrats with influence in the Lacandon Community has been comprised of professionals from natural science disciplines (biology, zoology, ecology, forestry engineering). These agents have been present in the majority of the period that we are analyzing (1982-2013) in high-level positions in public administration, but they have exercised and given continuity to their influence on the Lacandon rain forest from within the government as well as academic institutions and non-governmental organizations. Because they don't always formally serve as civil servants, but rather sometimes as members of NGOs, we refer to this group as bureaucrats and environmental agents.

A trigger point for the intervention of these social actors is the high level of deforestation that was seen in the Lacandon rain forest in the period before the REBIMA decree and the application of environmental politics in the region. Based on this situation, the social actors have felt an enormous urgency to concentrate financial resources in order to guaranty the conservation of the endangered biodiversity, and that demands, or implies, excluding or postponing jobs oriented towards sustainable development. This is the meaning of declarations that are given in many interviews, for example: "Many resources have already been invested in sustainable development, now it is conservations turn" (bureaucrat from SEMARNAP, interviewed February 2010).

Over the course of the three decades of environmental politics in the Lacandon rain forest, the most influential environmental bureaucrats and agents have maintained the decision to concentrate their efforts fundamentally in the conservation of the biodiversity, without wanting to consider and confront the social context in which such ecosystems exist. For example, they have ignored the fact that they are working with a population that, although in possession of such natural wealth, in the majority of the cases lives in extreme poverty and intense social inequity and has been historically subject to the abuse of power. Nor have they taken into account that in the case of the Tzeltal population, and to a lesser extent the Chol population, a forestry culture appropriate for the management of rain forests is not a part of their knowledge-systems, for which reason their current natural resource management is not sustainable for the ecosystem and for them. They have also not consistently considered that this is a population with educational and capacity-development requirements to allow it to practice a management system appropriate to the ecosystem in which it lives. Supporting evidence for the lack of impact of the investments made in the Lacandon rain forest in the name of sustainable development can be found in the social delays and the under development of human capital in the LC.

This lack of attention on the part of the environmental bureaucrats and agents towards sustainable development in the region is even more noteworthy because alternative techniques and economics that could improve the conditions of poverty and permit the sustainable management of the natural resources do exist; for example, the production and commercialization by the local population of *xate* palm which had a good price in the national and international markets (see BUDA & TRENCH, 2007), and the adoption of silvopastoral systems for the production of cattle (SOTO PINTO *et al.*, 2008). Instead of accepting the challenge to cooperate in the construction of these sorts of alternatives, the environmental bureaucrats have concentrated most of their efforts on depriving and restricting the majority of the population's access and use of the natural resources, trying, at the same time, to compensate them with the smallest possible amount of public resources. These limited resources have been used as incentives with the function of committing the local community to renouncing both their right to use the natural resources and their right to demand a political system capable of constructing alternatives for sustainable development.

**Socio-environmental negotiation between environmental bureaucrats and locals agents of the Lacandon Community**

In order to understand the interaction that environmental bureaucrats have established with the LC we must know that said community is comprised of a population made up of three ethnic groups: Lacandons, Tzeltales, and Chols: we must also remember that the LC was an agrarian endowment initially bestowed upon the Lacandons, with the later inclusion of a part of the Tzeltal and Chol populations (see TRENCH, 2008). With this integration—in accordance with the attendance list of the assembly of *comuneros* from January 23, 2003—a total population of 1,714 has been recognized, of which 254 are Lacandon, 600 are Chol, and 860 are Tzeltal (ASCENCIO, 2008, p.162). Additionally, it is important to remember the exceptional power structure of the LC. In accordance with the Agrarian Law, the maximum bodies of authority over the commons properties are the General Assembly of *Comuneros* (*Asamblea General de Comuneros*, in Spanish), the Commissary of Common Properties, and the Vigilance Council, each one of them being made up of a president, a secretary and a treasurer; who have the responsibility of executing the agreements of the assembly. In the case of the LC, it was established in the convention of March 30, 1977 that the general assembly will be replaced with a Council representing the community, which is made up of three representatives, one from each indigenous group. But this group will be presided always by Lacandon representative with casting vote and veto rights, in such a way that no decision will be made without the affirmative vote of the Lacandon representative.<sup>2</sup>

Based on this internal organizing structure of the LC, as well as on the corporate model (CALLEROS-RODRÍGUEZ, 2014) which was previously established between the governors and the Lacandon representatives, the environmental bureaucrats and agents have again taken up the practice of establishing agreements that grant economic and political privileges to the Lacandon representatives and the elite amongst the Chol and Tzeltal representatives in exchange for their commitment to the environmental policies. In this way, by means of bestowing benefits in a system of privilege to these elite of representatives, the majority<sup>3</sup> of the LC has been forced, over the course of three decades, to resign the construction of options of development.

One of the first antecedents of this environmental policy is found in the 1977 convention<sup>4</sup>, during which the following agreements were established:

2° The Chol and Tzeltal groups which have been resettled in the towns of Corozal and Palestina, by disposition of the government of the Republic, are hereby recognized as *comuneros* of the Lacandon Community, for which reason the Secretary of Agrarian Reform (*Secretaría de Reforma Agraria*, in Spanish) will proceed in carrying out the works and in elaborating the Presidential Resolution project, in which, with the utmost precision based upon the technical norms determined by the Secretary of Agriculture and Hydraulic Resources (*Secretaría de Agricultura y Recursos Hidráulicos*, in Spanish), the areas designated for agriculture and livestock exclusive to each group must also be signaled. Forest resources will be made use of in a communal manner.

4°. The Lacandon, Chol and Tzeltal indigenous groups within the Lacandon Community, are vigilant that spontaneous immigration, which causes grave harm to the Lacandon rain forest, are no longer occurring.

7° By means of a presidential decree, the Lacandons are granted the exclusive right to hunt and fish, activities which constitute their traditional way of subsisting, and to this effect the Secretary of Agriculture and Hydraulic Resources (*Secretaría de Agricultura y Recursos Hidráulicos*, in Spanish) will delimit a zone of protection and propagation of the fauna and associated resources, and by means of the corresponding studies will determine the activities and norms for their conservation and use and will suggest the administration of the reserve, in which the Lacandons will participate.

Until this moment the environmental commitments made by the Chols and Tzeltals consisted of respecting the reserve that would be made for the Lacandon group, as well as watching out for new settlements. But, in this convention, the Tzeltal and Chol groups were permitted to define how they would organize their resource extraction:

8° [...]. In regards to the decisions that each group will make in the exclusive zone intended for the Lacandons, or for agricultural exploitation carried out by the Chols or Tzeltals, such decisions will be made according to the form of organizing that each group wishes to use.

This level of commitment changed with the REBIMA decree, in which even the urban area of Nueva Palestina formally became part of the central zone<sup>5</sup>. This decree leads to the amplification of environmental commitments. One of the most noteworthy was that established in article thirty-seven of the internal regulation of the LC, in which it is indicated that: "All the *comuneros* have the right to give possession of one ten hectare area each to two of their children, which, in addition to the fifty hectares that the father already has, makes a total of seventy hectares per family."

Given that the internal regulation of 1992 is from the entirety of the LC, this norm is applied to all three ethnicities, but it is worth mentioning that neither this prohibition from accessing the natural resources, nor the recognition as *comuneros*, have been applied to the sons<sup>6</sup> of the Lacandon *comuneros*. This explains why they are much less numerous

than the sons of the Tzeltal and Chol *comuneros*. At the same time, they have had more opportunities to consolidate eco-tourism activities as an alternative form of income. Contrastingly, this internal regulation of 1992 drastically affects the sons of the Tzeltal and Chol *comuneros* from Nueva Palestina and Frontera Corozal. Currently (2013) a good portion of the Tzeltal and Chol *comuneros* have four male children, many of them already adults with families of their own. With this norm, an important number of the male children of these Tzeltal and Chol families have no formal right to access the land. According to a document directed to the Secretary of Agrarian Reform (*Secretaría de Reforma Agraria*, in Spanish) by the sons of *comuneros* from Nueva Palestina and Frontera Corozal, those affected by these internal regulation add up, in 2013, to 2,283 sons of *comuneros*. The most important fact is that between 1972 and 2003 the Lacandon *comuneros* have gone from 66 to 254 (almost quadrupling their numbers in thirty years), while the Chols and Tzeltals went from 1452 in 1978 to 1460 in 2003 (ASCENCIO, 2008, p.129 and 162), maintaining practically the same number after twenty-five years.

On the other hand, it should be noted that the actual situation in terms of land distribution within the sub-communities does not correspond to the system laid out in the internal regulation of 1992. The rules indicate that each *comunero* can have fifty ha plus twenty ha to pass on to two of his sons. Regardless of this, there are a number of *comuneros*, belonging to the elite of the representatives, who have appropriated 200 or even 300 ha each. In contrast, the majority of the *comuneros* do not have the fifty ha stipulated and there are even some who only have five ha or less. Furthermore, only a handful of sons of *comuneros* have received their right to possess ten ha, as indicated in the measure. Instead of granting this possession, the majority of the *comuneros* lend a portion of their parcel to their male children who have their own families, so that they can plant their *milpa*<sup>7</sup>. There are a few sons of *comuneros* who have their own land because they bought it from another *comunero* (Interviews with sons of *comuneros* from Nueva Palestina and Frontera Corozal, October, 2008 and May, 2013). Additionally, in Nueva Palestina there are some 200 or 300 sons of *comuneros* who have no land at all and have to rent or borrow some in order to plant their *milpas*. The prohibition that is, in fact, applied, derived from the internal measure of 1992 and the agreements between the *comunero* representatives and the environmental bureaucrats, is that which denies the *comunero*'s sons right to title or recognition as *comuneros*.



The formal and actual limitations to access to land and recognition as *comuneros*, as well as the financing for alternative projects, which is generally given to agrarian rights title-holders, have been the cause of a growing and intense social conflict within the LC which has involved, at different times, the representatives, the *comuneros* and the majority of the sons of Tzeltal and Chol *comuneros*, as is expressed in the following testimony:

Preservation is a bit hard because we are, in the three communities, more than 1, 500 *comuneros*; but there are also the young. Here in Palestina, there are more than 1,500 youth. We call them “youth” because they don’t have the right. But they already have two or three children as well. They need land. And because the jobs just aren’t there, it is a bit hard. (Representative of *comuneros* from Nueva Palestina. Interviewed May, 2009).

The environmental politics of the Lacandon Community are based on denying and restricting the sons of *comuneros* access to the land and natural resources as well as impeding their access to compensation for alternative projects. What has been managed to be conserved of the rain forest depends on the political and economic commitments established between environmental and government bureaucrats on one side, and representatives and advisors from the LC on the other side, as well as the conditions of social exclusion that have been imposed on the majority (1,685 *comuneros* and 2,283 sons of *comuneros*) of the local population.

Some evidence showing such an effort to block access to and use of the reserves can be found in the fact that in 1995 the SEMARNAP (The National Ecology Institute, or *Instituto Nacional de Ecología*, in Spanish) executed a project to “delimit the Nueva Palestina production land within the Montes Azules Biosphere Reserve”. This project consisted in the establishment of sixty boundary markers (signaling, on the land, the limits of the communal property), made of steel tubes, to mark the limits around the terrains that are susceptible to some sort of extraction, and the no-access zone. A similar boundary-marking exercise was carried out in the Sierra Cojolita, where the area of Frontera Corozal to which the Chols are denied access was delimited. It is a question of establishing limits within the Lacandon Community, which is evidence that the principal commitment for the conservation of the rain forest is not, in fact, preventing the invasion of a population external to the LC, but rather prohibiting the sons of the Tzeltal and Chol *comuneros* from accessing the natural resources of the rain forest, as is shown in the following testimony: “The reserve truly is still being saved...we now have

limits. So, we do call it untouchable, because no, we don't go in there anymore” (representative of *comuneros*, member of the sub-commissary of communal property of Nueva Palestina, Interview in May, 2009).

### Renewal of the institutional presence

Adding to the commitments established in the internal measure of 1992, the environmental bureaucrats from the National Institute of Ecology (INE, *Instituto Nacional de Ecología* in Spanish), in strict coordination with the major contributors of Conservation International in Chiapas, intensified their outreach to representatives of the local population of the LC by means of a series of agreements, conventions, and projects in 1993 and 1994. One of the measures was the establishment of the civil association denominated, Lacandona A. C., with a mandate to harness financial resources from international organisms. Conservation International actively participated in the formation of this civil association, financing the costs of constitution, the set-up and equipping of offices, as well as the financing of projects (Interview with ex-advisor from the LC).

Everything seemed to indicate that a good understanding between the advisors and representatives of the *comuneros* and the environmental agents and bureaucrats would result, although during these years the most delicate point of the relationship was reiterated: the deprivation of agrarian and judicial rights and access to public financing for the sons of the majority of the *comuneros*. In 1994, both sides actualized the earlier commitments, in new terms. This actualization was established in the Convention on Agreements (*Convenio de Concertación*, in Spanish), signed by the INE (*Instituto Nacional de Ecología*, in Spanish) and the LC representatives (Secretary of Social Development, *Secretaría de Desarrollo Social*, in Spanish, 1994). In this convention, the representatives of the *comuneros* are legally obliged, for the first time, to adhere to that which was established in the REBIMA decree and in other legislations. In the second clause of the convention it is asserted that:

The conservation, control, administration and development of the reserve will be realized as is provided for in the decree by which the establishment of the protected natural area, as well as other regulations, is asserted. The fourth article of the aforementioned decree indicates that within the biosphere reserve, in its entirety, areas in which the only permitted activities will be tourism, scientific investigation, and controlled technological resource extraction, those activities which use the resources of the jungle without leading to its dismantling, will be established. Agricultural and farming uses will only be permitted in the areas that have already been dismantled or have

been grasslands for at least twenty years at the time of dispatch of this decree, or in areas which, after an adequate study which has been approved by the Secretary of Agricultural and Hydraulic Resources (*Secretaría de Agricultura y Recursos Hidráulicos*, in Spanish), are considered advisable for permanent agriculture or intensive farming.<sup>8</sup>

The aforementioned convention simultaneously creates an opportunity for the representatives of the LC to participate in the management of the reserve for the purposes of conservation established in the decree, as compensation for their commitment. For example, in the tenth clause it is indicated that:

The parties agree that independent of the participation which the community will have in the actions for conservation, control, administration, and development which are carried out jointly in conformity with the disposition of this legal measure, the Secretary of Social Development (*Secretaría de Desarrollo Social*, in Spanish), by means of the INE, commends the "LACANDON COMMUNITY" to carry out the development of two programs in "THE RESERVE" [...] for the completion of the projects referred to in the Tenth Clause, an anticipated contribution of N\$ 89, 800.00 (Eighty-nine thousand eight-hundred New Pesos).

The negotiations, agreements and understandings continued. According to information provided by a representative of the *comuneros*, in two meetings carried out in May, 1995 between environmental agents and bureaucrats on one side and representatives of the *comuneros* and advisors for the LC on the other:

Agreements of supreme importance for the community were made, proposing, among other things, the support for the program of inspection and vigilance, control of the forest poaching in the Lacandon rain forest region, the establishment of a trust funded with the 4 million dollars donated by the GEF<sup>9</sup>, the reorientation of the investment to generate the most social benefit, the participation of the community in decision-making related to the natural protected areas within their property and an answer to the complaints presented against the clandestine felling of trees and invasion of the communal territory, principally.

Other agreements included the creation of the Technical Advisor Council (*Consejo Técnico Asesor*, in Spanish), the Reserve Management (*Dirección de la Reserva*, in Spanish), the implementation of the GEF program and the push for the creation of the communal reserves.<sup>10</sup>

Despite how promising maintaining this joint management could have seemed, the reconciliations and attempts at coordination on both sides were very quickly submerged in a continuous, polarized, and on-going dispute for the resources and control of the management of the reserves. In all of these conflicts, the battle for the resources has been internally sponsored and directed by the advisors<sup>11</sup> of the LC who

have played a primordial role in the quest for control of the financial resources and decision-making in environmental and agrarian politics as well as negotiations with government agents.

In an early conflict, the representatives of the *comuneros* and the advisors complained that in the Annual Operating Program (*Programa Operativo Anual* or POA, in Spanish, AOP in English) of 1995, proposed by the Reserve Management, investments were projected for the same places in which Conservation International was already working, principally in the Chajul station. Despite arriving at agreements on this point, by the end of 1995 and the beginning of 1996 a new conflict based on the same topic—the distribution of the 8 million new pesos investment projected by the AOP for 1996—had re-emerged. At that point, the community expressed serious doubts about the double role of the director of the REBIMA, pointing out that he received a salary from National Institute of Ecology (*Instituto Nacional de Ecología*, in Spanish) for the position of director, and continued working for and being paid by Conservation International.

The advisors and representatives of the *comuneros*' principal intention in the majority of existing conflicts with the environmental bureaucrats and the government has been for the complete transferal to their hands of the totality of the resources as well as the responsibility for the management of the reserves. This has been openly and insistently demanded, as evidenced in an official notice dated November 9, 1993, directed to the general manager of Ecological Use of Natural Resources (*Aprovechamiento Ecológico de los Recursos Naturales*, in Spanish) signed by the representatives of Nueva Palestina and Frontera Corozal, in which they suggest that:

We have unofficial knowledge that the representatives of GEF have had working meetings with the Special Sub-committee of the Lacandon rain forest, to analyze the projects that will be considered in the investments for 1994. [...] Given that the bureaucratic framework against which one must struggle in order to gain access to the information on the official World Bank programs which are applied in the RIBMA, we request that, in respect to the GEF program, the possibility of operating the programs and resources directly through the NGO "LACANDONIA A.C", MAYAN LACANDON ASSOCIATION FOR CONSERVATION (*Asociación Maya Lacandona Para La Conservación*, in Spanish), to avoid to some extent the manipulation of projects, programs, etc., carried out by involved authorities by hiding information from the owners and usufructuaries of the resources. (Notice, November 9, 1993 to the General Manager of Ecological Natural Resource Extraction).

Seeing that they could not exercise the influence that they had hoped for, the advisors and representatives of *comuneros* changed the relationship, which had initially been established very positively, with the environmental agents and bureaucrats for a

relationship based on confrontation and political pressure. To that end, they have politically mobilized the *comuneros* and their sons on many occasions and have lodged complaints and claims before many national and international institutions and in mass media. An example of this is the legal notice dated September 2, 2000 and directed to Vicente Fox, then president of the Republic, in which the environmental agents and bureaucrats are accused of:

Robbing and cheating our people, because they come to hire us but pay miserable starvation wages, while they are earning high wages, travel subsidies, vehicles and they live in the city. They hired all of the *comuneros* to clean the reforested areas, paying a daily wage of \$29.00 pesos; and then, after we carried out the jobs they denied us pay. The directors of the reserves live in Tuxtla Gutiérrez, 500 km away from the jungle and they look after the environment of the region by telephone or radio, or spending large quantities of money on gasoline, vehicles, and travel subsidies.<sup>12</sup>

The environmental agents and bureaucrats, for their part, have roundly refused not only the transference of reserve management and other protected areas of the LC, in part or in full, but have even fought the representatives of the *comuneros* on other solutions, systems of environmental policy application or the negotiation of a real plan for development. From their perspective, it is inconceivable to question the system of scarce financial resources used as incentives or as a means of ensuring a commitment to their priorities of conservation and investigation of biodiversity. The model of looking for obedience to the environmental policies through incentives has been assumed to be indispensable and indisputable by the environmental agents. To justify the control of financial resources upon which the policy of incentives is based, these agents have taken as a pretext the ambitions and personal interests of the advisors and representatives of the *comuneros* to legitimize and anchor themselves to this form of management, as well as avoiding committing to the construction of new relationships. It appears that the preoccupation of these bureaucrats has not been that the action of the representatives involves non-democratic procedures, as they have not questioned the ambitions nor authoritarianism of such representatives when the same representatives exclude the rights of the majority of the local population to respond to the sorts of environmental policies propelled by the bureaucrats. The manifest personal ambitions of the advisors and representatives of the *comuneros* have, in this way, served to hide the limited rationality of some bureaucrats (of restricting themselves to the incitements as instruments of their policies and to conservation as priority). In this context, the

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pressures and demands from the LC for the control of the management of the biosphere reserves to be transferred to them, have served to consolidate and justify, within certain public spaces, the conviction on the part of the government bureaucrats and environmental agents that they must maintain the control and power over all possible resources, instead of contributing to a different model of interaction.

The accusations have been reciprocal, but the bureaucrats have been able to delegitimize their adversaries to a greater extent in public spaces and with national and international agents who intervene in the distribution of resources. They have also been able to legitimize themselves as individuals committed not only to conservation and investigation but also to sustainable development, in public opinion, in the mass media, and in spaces within the national and international environmental movements, in this way attaining a growing power concentration.

Disputes from over twenty years show that the central point of difference and conflict has not been the conservation of the rain forest and the use of the natural resources, but rather who will administer those resources and control the management of the biosphere reserves. What's more, as each side points out in their reciprocal accusations, to varying degrees, this contention is no stranger to the economic privileges and power that such resources confer to the bureaucrats on their part and the representatives and advisors of *comuneros* on theirs.

One of the most noteworthy reactions from the bureaucrats to the pressure from the community advisors and representatives has been to demonstrate that they have sufficient force and power to block any dispute of their decisions; in other words, they are the indisputable authority which must be obeyed in all environmental questions. In this sense, some of their responses have consisted of assuring their monopoly over decision-making, not only for resources. From this perspective, they have seen all the demands for management or co-management on the part of the local population as threats. From this standpoint, throughout this period, they have assumed that not only the priorities of investigation and conservation but also the means upon which they are based are correct and inscrutable. Such means include restrictive laws, incentives and the use of public force. This last function has been exercised principally by the Federal Attorney General of Environmental Protection (*Procuraduría Federal de Protección al Ambiente* or PROFEPA, in Spanish), in coordination with other state bureaucrats and

environmentalists, has shown significant displays of force to the local population of the entire region to give clear examples of the force they have and that they are prepared to use it and displace any group that invades the reserves. One of the cases in which PROFEPA and environmental bureaucrats and agents in coordination with the State Government of Chiapas sought to demonstrate a significant display of force to establish their unquestionable authority was the eviction, on October 17, 2013, in coordination with the Marine Secretary (*Secretaría Marina*, in Spanish) and the Special District Attorney for Service for Environmental Misdemeanors of the State Government of Chiapas (*Fiscalía Especializada para la Atención de Delitos Ambientales del Gobierno del Estado de Chiapas* or FEPADA, in Spanish). During this action, sons of *comuneros* from Nueva Palestina were evicted and some of them also charged with crimes of poaching and misuse of forest terrains of the Montes Azules Biosphere Reserve, with eight of them being jailed and later released.<sup>13</sup>

Observable through an analysis of the results of these conflicts is the establishment of a relationship of domination in which the environmental agents and bureaucrats have managed to impose their conditions for the conservation of the LC, thanks to the growing concentration of legitimacy and power that they have achieved. This power is owed, among other factors, to their capacity to legitimize their work in the eyes of government organizations and NGOs as well as private national and international organizations upon which laws, financing and political decisions on environmental issues depend. On the other side, the sons of the *comuneros*, the most politically weak sector, have been those who paid the highest cost for this form of conservation and environmental policy design.

Nonetheless, the permanence of order established by environmental policy does not, and cannot, rely only on the use of force, but rather must also depend on cooperation and consent on the part of the elite among the representatives of the Lacandon Community. Therefore, despite the difference in interests, the mutual accusations and the intense struggles for resources, the environmental bureaucrats and agents and the advisors and representatives of the *comuneros* have simultaneously established and maintained closed negotiations and agreements over the course of three decades. This is explained by the environmental bureaucrats and agents' need for the representatives to fulfill the crucial role of controlling the assembly so that it can operate and legitimize the privation of rights suffered by the sons of the majority of the *comuneros*.

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**Limited rationality of the representatives and advisors of the *comuneros*.**

As is revealed, starting in 1978 with the REBIMA decree and continuing with the Convention of Agreement of 1994, the Management Plan of 2000, our field observations, the interviews that we carried out, as well as a substantial part of the actions and investments, the concern and priority of the environmental bureaucrats has been the conservation of biodiversity and investigation activities in the Chajul biological station. In clear contrast, their interest for the present and future well being of the local population is practically nonexistent, and from it arises their concern for maintaining policies fundamentally based on prohibitions and incentives. But, why, and under what conditions have the representatives of the *comuneros* accepted the counterproductive terms of such policies, despite being unsatisfied and engaged in an un-ending struggle for resources and control of management; how do they justify, or legitimize, their cooperation with these policies and with the environmental agents and bureaucrats; how is it organized?

In accordance with the information gained through interviews, direct observations and primary sources (measures and minutes from meetings from 1993 to 2010), it seems that one of the reasons for the leaders of the LC to maintain this alliance with the government is their interest in the closure of the boundary breaches in the agrarian property of the LC. Given that the boundaries are not totally defined, the LC's territory has been vulnerable to invasion from other indigenous groups from neighboring communities. This constitutes the principal problem that they have to face, from the point of view of various representatives.

Indubitably, the uncertainty about the possession of the land has been used as a tool for exerting pressure by different government agents in order to restrain the LC to the environmental policy that they have established. But the most important reason for which the Lacandon, Tzeltal and Chol advisors and representatives of the LC have maintained their complicity with such politics, despite such politics being exclusive and violating the rights of the majority, have been the material and political privileges that have been provided by environmental agents and bureaucrats in a discretionary manner, taking advantage of the intermediary position of the advisors and representatives. This is strengthened with the expectation of further privileges, given the importance of the Lacandon rain forest in national and international conservation efforts.



The reasoning, shared among the representatives of the three ethnicities as well as the advisors, has been that, given the condition of scarce resources with which the government administers the environmental management, it is in their best interest to fulfill their commitment to excluding the sons from accessing the reserves and sources of financing for alternative projects, in order to not also be excluded themselves. They have, in this manner, assumed the inevitability of conditions of competition, and that, in consequence, the interests of the sons and their own are opposing and exclusive, in other words, that in order for them to gain something, the majority must lose something.

For their part, the environmental agents and bureaucrats have managed to convey their idea, that the sons of *comuneros* are a threat, to the representatives of the LC. This idea has even been accepted by the majority of the *comuneros*.

It is explained to the very same authorities, and they understand it very clearly, that this is a natural protected area, because we have been able to sit and negotiate with them and look at the problem of the 3,000 sons of *comuneros*. They understand that the sons are a grave threat to them as well, to all of the *comuneros*. (Environmental Bureaucrat, interviewed in May, 2009).

The commitment that the representatives of the *comuneros* have accepted is apparently limited to renouncing their son's right to access and use the resources of the active farming areas within the two biosphere reserves (REBIMA and REBILA), but in reality this loss of rights is much broader and causes serious social consequences. The possibility of fulfilling the commitments that this environmental policy demands and to control the so-called "grave threat that the 2,283 sons of majority of *comuneros* pose" has fundamentally depended on excluding them from recognition as *comuneros*, controlling to this end the assemblies and excluding the majority of the *comuneros* who could, within their rights, vote in any given moment to give title to their sons:

- Your recognition as *comuneros*, who does it depend on?  
- It depends on the assembly. Yes, if the assembly orders the commissary, the commissary mobilizes so that the government will also consider us. [But] It's the very same *comuneros* who didn't want that. You know, there are people who don't permit it. It's the minority, because they are the ones who talk, and the majority stays quiet. It's that minority that controls the assembly that talks more in the assembly. Well, the majority, because they don't know, they stay quiet. (Son of *comunero* from Nueva Palestina, interviewed in October, 2009).

As we have already mentioned, in article thirty-seven of the internal ruling of the LC, it is implied that not even the two sons who are formally granted the rights of use to ten has can be officially recognized as *comuneros*. This lack of title implies that they also will not be recognized as members with full legal rights to the agrarian and political

community to which they belong. This causes exclusion on a legal level and a citizenship level.

A principal argument for denying this status to them is that if they are recognized as *comuneros*, they will want land from the REBIMA:

Well, what's going on is that if the number of *comuneros* does increase, as the assembly says, then they will want their plot as well and there aren't any, there is almost no land... only from Montes Azules... and Montes Azules will be used up... (Ex-representative of Frontera Corozal, Interviewed in June, 2008).

As a consequence, in order to prevent them from gaining *comunero* status, they have been excluded from participation in the assemblies of each sub-community and all sorts of spaces of negotiation and decision making. "As sons of *comuneros*, one of our problems is that we have neither a voice nor vote in the assemblies, because we are not recognized at the level of common property." (Son of a *comunero* from Nueva Palestina. Interviewed in October 2009).

This has had the effect of increasing the deficit of citizenship of the majority of the LC, by generating an exclusion from politics. In this context, the organization of the sons of *comuneros* is regarded and treated as a threat, as is shown by the following testimony:

About three years ago, us sons of *comuneros* were going to meet [...] there were about 1,300 of us. Well, the assembly that happened was going to erupt into a political argument. The arguments came about because the only [permitted] majority is that of the *comuneros*. They blamed the commissary that was organizing the youth [and] the Lacandons began to attack him. They said that they don't agree with the youth meeting. [They asked:] Who is organizing them? The commissary is organizing them. I believe the ruckus made it all the way to Tuxtla or Mexico City; I don't know how far the rumors made it. The Lacandons were saying that the youth were going to organize and destroy the Lacandon rain forest. [That's why] about three or four years ago we would go [to the assembly], because the very same *comuneros* said that we didn't have a voice or a vote. After this, we have no right to participate in anything. (Son of a *comunero* from Nueva Palestina, interviewed in October 2009).

Another consequence, possibly the most crucial, in the area of environmental policy, is that this generation of youth and their families do not have access to the programs and services offered by different government dependencies, nor to the alternative sources of financing. The lack of acceptance as *comuneros* is used as a pretext for not granting them financing for alternative projects, which implies generating economic exclusion and an exacerbation of conditions of poverty.

Because we don't have title as *comuneros* we don't have the right to government aid. We want aid for projects. But on what basis can we? It is on the basis of documentation of *comunero* status, which they have, but we don't.

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It doesn't get us anything. (Son of a *comunero* from Frontera Corozal, interviewed in June, 2008).

Presenting a title as a *comunero* has been a requisite for accessing projects and aid in the majority of the agencies. There are very few government institutions that do not solicit this certificate. The National Commission on Natural Protected Areas (*Comisión Nacional de Áreas Naturales Protegidas* or CONANP, in Spanish), responsible for the management of the reserves, is the exception and does not ask for a *comunero* certificate, although with the rationality of fundamentally limiting their scope to the conservation that is maintained by the bureaucrats that make the decisions as well as the denial of other forms of management, they presume and argue that they cannot help the sons of the *comuneros*, given the limits of their budget.

Preventing the recognition of the sons of *comuneros* has become a requisite for the fulfillment of the two central conditions of the environmental policy: 1) privation of access to the land and natural resources; but, above all, 2) privation from public financing in order to avoid investing in alternative development options.

The problem is that the sons can't have projects, because they don't have certificates... We want to help, but the government won't accept that. We have argued with the assembly, give support to our sons, but the government won't accept it because they don't have certificates [of *comuneros*]. Even though we want to be with our sons, our sons also want to be with us, but it can't be done because they don't show up as title-holders. (Ex-representative of Frontera Corozal, interviewed in June, 2008).

Clearly, the justifiable compromise of not allowing the sons of *comuneros* enter into the reserves could be maintained; but alternative sources of income for the families that could no longer access the land could be financed and supported. Despite this, the government and environmental bureaucrats have evaded their responsibility and have, instead, strengthened the belief, amongst the *comuneros* and their representatives, that the recognition of the sons of *comuneros* is a threat to the rain forest. With this argument, they not only provoke agrarian exclusion, they also block them access to alternative sources of income or the ability to construct new sources of income.

Because of this, the environmental agents and bureaucrats, fully aware of the representatives and advisors possibilities of gaining control through the assembly, negotiate, direct, and hand-over in a discretionary manner the bulk of the public resources and other public privileges, in order to control the *comuneros* and their sons. Of course, given the existing hierarchies among the elite, the Lacandon representatives receive

more benefits and privileges than the Tzeltal and Chol representatives, being that they constitute the first and most important link in the chain of control of the government policy in the region.

Despite their discontent, the Chol and Tzeltal representatives have accepted the Lacandon's hierarchy, looking to receive their part of the stipends. Of course, some of the benefits that the bureaucrats have favored the representatives with have remained hidden, but it is clear that they have received more economic supports than the majority of the *comuneros*. The concentration of wealth and power that these representatives and the people who support them have is also clear. In this way, the exclusion of rights that the environmental politics demands has been converted into an opportunity for personal benefit by the representatives of the *comuneros*.

### Many types of exclusion

As is apparent, the agreements between the leaders of the *comuneros* and the environmental and government authorities imply not only agrarian exclusion, but also the legal, political, and financial exclusion of the majority of the local population. This has provoked grave restrictions to the possibilities for development for the new generations of the region. This type of interaction can be analyzed as a sort of environmental patronage system, if we consider that it consists of an exchange of favors and certain discretionary compensations in exchange for loyalty and commitment to exclusionary and anti-democratic environmental politics.

Another of the political effects of this form of management has been the discretionary manner in which political backing is given to the representatives of the *comuneros*, strengthening their role as authoritative intermediaries in exchange for them taking responsibility for organizing the exclusion and submission of the majority. This implies the strengthening of *caciquil*<sup>14</sup> practices. In other words, this has implied the strengthening and reproduction of previously existing local forms of domination. In this way, the bureaucrats, as well as the representatives and advisors, have weakened and blocked relationships of political control from the bottom up that have the potential to democratize the system of interaction.

By leaning on and strengthening *caciquil* practices which are authoritative and even violent, the very same government agents have contributed to the deterioration of

the social capital of the community. For example, in a newsletter from November, 2013, the sons place the responsibility for generating divisions on the environmental and government bureaucrats:

Our community was born in the decree of November 26, 1971. Since that day we have always been the object of impositions by different governments in turn, accepting a series of dispositions that restrict our daily activities, as well as a series of promises which ultimately only look to create division within our communities.

The bureaucrats legitimize and endorse the representatives in their function as *caciques*, without any signs of a will to change the frame of interpretation; feeling very impotent before a social complexity that they do not know how to manage in any other way. From this perspective, they consider it legitimate and necessary to strengthen the assembly and the agents that depend on the environmental policy within the terms that they have decided upon. It is from these perspectives that they justify the costs and paradoxes of their environmental policy: condemning today the younger generations who populate the rain forest to a very limited future, with a life oriented towards exclusion and illegality. We consider it necessary to draw attention to the absurdity, or paradox, at the core of the inefficiency of the actual management system: those who are in a disadvantaged position, the sons, the youth, the future generations referred to in the Brundtland Report (1987), are sacrificed in the here and now in the name of those who justify the conservation movement. Given this type of environmental policy, the youth of the LC today have a more restricted future. Environmentally, there are also inefficiencies as this is a form of management based on legal, political and financial exclusion, generating the conditions for the excluded son of *comuneros* to threaten the reserves with invasion. The conditions of ignorance and the limited capacities for the sustainable management of their resources or the creation of non-agricultural development alternatives have been aggravated by this exclusion, with the justification of conserving the biodiversity.

### **Counter-productive socio-environmental effects of the environmental management system in the Lacandon Community**

With the previous information, we have broached the question: What forms of interaction have the settlers and owners of the Lacandon Community and the environmental and government bureaucrats built?. We will now delve into the question:

How do such forms of interaction influence the conservation and sustainable development of the rain forest? According to the theory of strategic analysis, the two principal collective actors analyzed, the environment agents and bureaucrats on one side and the representatives and advisors of the *comuneros* on the other, have made decisions and acted seeking to satisfy their own short term objectives. From the perspective of each one of these actors, their objectives and decisions are rational and justifiable. But, as we will see, given their limited rationalities, the parts have lead to an irrational system as a whole; in other words, they have generated a combination of undesired and counter-productive environmental and social effects.

A first and very important consequence is that the objective of generating sustainable models of management and control of the natural resources has not been reached for the biosphere reserves. Contrary to their declarations, neither of the actors have seriously sought to create sustainable development. The environmental agents and bureaucrats have established, and maintained over the course of three decades, a political system based on incentives. Beyond their public declarations, the facts show that the lack of a broader vision, or limited rationality, upon which they have based their work up until now, has consisted in believing that conservation and development are mutually exclusive; that what is worth investing in is environmental protection and conservation; and on not envisioning the push for development as a result of the promotion of local capacities and institutions and the strengthening of capitals (human, economic, social). They have sought to suppress the anthropic pressures by means of prohibitions, which they have legalized. They have incited the representatives of the three ethnic groups of the LC to respect these prohibitions by means of material and political incentives. They have called upon the use of public force as a mechanism of disincentive with the goal of making the prohibitions respected and avoiding negotiations about the collective construction of alternative development options with the excluded population. From their perspective, the incentives and disincentives have been enough to achieve the minimum conservation goals that they have proposed.

Certain positive conservation results have come about as a result of this environmental policy in the region. The most significant that has been achieved is the halting of deforestation, which would have continued without the creation of the biosphere reserves, but without which the problems of poverty and inequity in the local

population would have been resolved. Thanks to this, 500 thousand has have been conserved (ORTIZ, 2011). But, aside from these results, these politics imply that the needs of the local population must be kept separate from the conservation project. This leads to a conflict between two different types of interests, in which each side tries to get the most out of the other. This has not ended in cooperative behaviors and co-responsibility but rather competition for public financing. The money, used as an incentive for control and force submission to the established policies, becomes a resource that all sides are fighting for. The local populations, as well as the environmental agents, have spent a good portion of their time, personal energy and effort in this controversy. Based on this struggle, the local advisors and representatives have used the rain forest and the sons of the majority of the *comuneros* as a means of exerting pressure to obtain more income. This is the behavior that continues in the better part of the subsequent generations. But, this attitude is, in fact, founded on the use of incentives to obtain obedience to a policy centered on prohibitions instead of promoting the construction of capacities, capitals, alternative forms of income and sustainable management systems for the natural resources, as well as their conservation.

Well-known theorists, Sen (1989 and 2000); Ackoff (2010); J. Weber (1996); Max-neff (1986); among others, point out that development requires the promotion of the qualitative growth of the local population; in other words, the development of their capacities (human capital) so that they can reach their potential capacity for the creation of financial and social capital. These conditions could eliminate the current social pressure on the natural capital. For that reason, before resorting to compensations, the negotiations should be built around a plan and a clear strategy for development, including the strengthening of local capacities, capitals and institutions. Instead, the policies limit and weaken those factors, causing biodiversity and sustainable development to be held hostages of the limited rationalities of both parties.

In the established management system, both sides loose, but society and the majority of the local population have lost more than the environmental agents. Any effort to change the resource management systems for other more sustainable systems inevitably implies costs. In the management system currently in place, the environmental bureaucrats and agents have sought to cut the costs associated with developing local capacities and the costs of committing to processes that strengthen

local institutions and efficient management. The conservation achievements that have been obtained have been based on the social exclusion of the majority of the population. Such population has been subjected to conditions of extreme poverty. These conditions, in turn, have led them to seek options for survival through illegal activities, which erode the state of rights in a region with fragile governability. Considering the established type of power relationship, it is evidently a relationship of domination in which the objective on the environmentalist side has been imposed upon the needs of the local population. Firstly, the imposition of this system of management has been possible, despite its high social costs, because it has become government policy and has been used in conjunction with the state's financial, legal, and armed force resources in order to impose itself. Secondly, this system has drawn from the collaboration and complicity of the local authorities and representatives and their advisors. These actors, despite having the opportunity to negotiate processes that set in motion authentic sustainable development that would benefit the LC, have decided to contribute to the establishment of this system of domination in order to satisfy their own immediate personal interests to the furthest possible extent.

The Lacandon Community controls the principal uncertainty of the environmental management system in the Lacandon Rain Forest, because they have the power to regulate the no-access to the land rule, for which protection is sought in the Montes Azules and Lacandon biosphere reserves. The local representatives and advisors clearly know that this is the source of their power in negotiation. But, because of the weakness of a narrow economic and political vision that leads them to maintain incapacities for the creation of human, social and economic capitals, and a relationship of dependence, they do not know how to use the advantages and opportunities that they have in negotiation. They continue exchanging more for less. Along with that, they collaborate in the reproduction of subjective material and social conditions that are inefficient for the environmental and sustainable development goals proposed.

Given the ignorance and consequent lack of value attributed to their potential capacities, instead of negotiating to strengthen those capacities, these actors have submitted themselves to seeking offered incomes and the struggle for such incomes as the environmental bureaucrats can and want to give them; and they have set this example for the rest of the population as well. Because of this lack of a broader vision,



and the confusion that it implies in regards to solutions, the representatives (and in a less direct way the local population as well) have together given their consent to this policy, entrapping themselves in a the struggle for scarce incentives, despite being unhappy and resentful because they perceive that they are the ones paying the costs of conservation without being justly compensated. Assuming that they are not sufficiently compensated economically, when the problem, according with our analysis, is that they are simply not adequately compensated, constitutes the confusion of their rationality. Given this, they have directed their efforts and inconformity towards a struggle for more incentives, which in turn weaken them by reinforcing a relationship of dependence.

In other words, the limited rationality with which the representatives have acted and defined their objectives is based on ignorance and a devaluing of the potential capitals and resources (above all the human and social capital upon which the increase of their economic capital and the improved conservation of their natural capital would depend) that could develop in the community. The sustainable and comprehensive benefits that they themselves would personally obtain from the growth of their confidence and the unity within the LC are also ignored. From our vantage point, it is this very perception and rationality on the part of the local population, which does not see nor value their own potential and manifest personal and community resources that generates transference of power to the environmental agents. The assumption that the power and resources depend on what is given to them from government agents is precisely what has permitted these bureaucrats to unilaterally define the objectives of the environmental policy and submit the local population to the current management system by means of incentives; even though such a system, in reality, impoverishes and erodes the conjunction of capitals of the majority of the local population. This transfer of power is the most powerful evidence of the high deficit of citizenship in the local population.

The fundamental assumptions, shared by the local population and the environmental agents, which create and reproduce such counter-productive results are these two complimentary and shared beliefs: 1) the bureaucrats believe that they need money in order to commit the local population to conservation, or that the local population's commitment to conservation depends on external monetary incentives; 2) the local population considers that, in order to reach better levels of wellbeing, it fundamentally depends on the money contributed by the external agents. This type of

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relationship, when prolonged, has effects in the social representations that the local population makes of itself, as well as the legitimization of a culture based on dependence and authoritarianism.

In short, the content and form of the exchange reproduce the dependence on external financial resources, create a feedback loop with deep-seated inferiority and incapacity complexes, strengthen internal relationships of domination and subordination (such as the *cacique* paradigm), which erode the social, human and financial capitals and give rise to the loss of a part of the natural capital that has remained at the disposition of the settlers. What are considered benefits received by the representatives of the *comuneros* in actuality boost the asymmetrical character of the collective and community relationships as well as with society at large and the state: this feeds into the conditions created by poverty, necessity and vulnerability.

Both actors suffer the effects of their limited rationalities and lack of inclusive vision. The bureaucrats strengthen an elite that then threatens them every chance it gets due to the discontent of feeling subjected to an unfair exchange. By refusing to negotiate with the youth, these environmental agents strengthen the control that the representatives have over the majority of the local population which has given them power to put pressure on the government. This system creates conditions of ignorance in those excluded who, in turn, call on them to exert pressure based on short term thinking, and causes them to be incapable of creating different sources of sustainable income. In turn, the representatives support a policy that in the long term weakens and impoverishes them as individuals and a community.

Each side resolves, but in a limited and unsatisfactory way, their individual short-term objectives because by basing such a process on limited rationalities, they do not create a dynamic of sustainable development nor a management situation that assures the permanence of ecosystems and biodiversity. On the contrary, the representatives and advisors have become accomplices to an exclusionary social objective and of partial or short term, conservation which is promoted by the environmental and government bureaucrats, while the bureaucrats have become accomplices to the individual interests of *caciquil* practices.

## Conclusions

As a product of our investigation, we have discovered that the results in conservation and sustainable development have fundamentally depended on the types of interaction, or management, established between the government environmental authorities and the Lacandon Community's population. We can confirm that the relationship that we establish with nature depends on the ways in which we organize ourselves as a society, to then in turn manage our relationship with the natural resources. In this sense, we establish that environmental problems are inherently socio-environmental and require an interdisciplinary understanding in order for a better solution.

The first factor that has defined the type of management has been the persistence on the part of the environmental agents and bureaucrats in forcing the prevailing priority objective of the conservation of biodiversity in a way which subordinates, or limits, sustainable development. The inability to reconcile conservation and social development, between environmental bureaucrats and the local population, is owed in great part to the fact that the environmentalists assume that their objective of rain forest conservation is superior and an urgent priority to be attended to, and that their perspective of how to solve these problems is unquestionable as they are the dominant actors in these interactions.

The environmentalists have used the power of the state and have concentrated power generally in order to impose their objectives and their perspective, despite those imposed upon being the owners of the land in which the reserves exist. Maintaining this perspective, as well as the policy of incentives that has derived from it, it has impeded them from reaching the proposed goal for the biosphere reserves: the development of sustainable forms of development and management. Although there are certain relevant achievements in conservation, the established environmental policy has caused the reserves to be breached and threatened by an impoverished population that desperately struggles to survive; and the biodiversity to be held hostage to private-income logic and individual interest. We do not imply a questioning of the legitimate interest in conserving the important natural capital of the Lacandon rain forest, but rather the social efficacy of a policy based on limited incentives. The imposition of an objective fundamentally centered on conservation has implied the exclusion and transfer of a large part of the costs to the least empowered social sectors of the LC, the sons of the majority of the *comuneros*. In

this way, in these thirty years, a relationship of dominance has been established in which the environmentalists have imposed their objectives and have made the majority of the population pay the costs. This is an undemocratic policy that contradicts the law and its most transcendental objective, sustainable development.

We have also confirmed the third hypothesis: that the lack of citizenship within the local population contributes to this system of management. The greatest expression of this deficit is the ignorance and lack of consideration, on the part of the representatives and the local population of the LC in general, of the potential resources and capitals that they have, resources and capitals which, if strengthened, would permit them to create and augment their own capitals (human, social, economic and natural by creating sustainable development). By not valuing their potential resources, the local population transfers its power to the environmental bureaucrats. They transfer their power because despite being in a position to negotiate environmental policy that would generate sustainable development, as established by the law, they give more value and legitimacy to incentives (generally monetary and in some cases political) and the expectation of living on environmental stipends funded with public resources and other subsidies (payments for environmental services, REDD+). Given this, they allow the bureaucrats to impose the conservation objective at the cost of the exclusion, poverty and insecurity of future generations.

Both, neither the environmental agents and bureaucrats, nor the representatives, advisors and *comuneros* want, or have the deliberate intention, of causing the counter-productive social effects that they have. Although each side considers their actions and decisions justifiable and legitimate, given the representation that is made of them under the circumstances; the sustainable development of the LC and the guaranty of the conservation of the rain forest are tangled in the limited rationalities of both sides. The limited rationality of the bureaucrats, which, as the facts demonstrate, has assumed up until the beginning of 2014 that conservation and development are mutually exclusive and the best option for management is based on incentives; the limited rationality of the representatives and advisors that accept economic and political privileges in exchange for organizing the exclusion of the majority instead of negotiating a serious management plan for their territory and for sustainable development for the community as a whole. Marin explains:

If the collective slips out of our sight, the collective in which we work and of course the society in which we live, we will immediately lose the sense of responsibility; although we may have level of professional responsibility towards our small task. (MORIN, 1997, p.7).

All of this brings us to the conclusion that in order to create sustainable development it is necessary to surpass limited rationalities and substitute incentive-based management focused fundamentally on the objective of conservation for an interaction that is committed to the process of development of capacities and capitals of the local population.

## Notes

<sup>1</sup> The dissatisfactions of both sides were previously observed and expressed both by environmental bureaucrats and the local population in interviews.

<sup>2</sup> “Convention on the rights of Chol and Tzeltal groups in the Lacandon zone” from the March 30, 1977; by means of which the Tzeltal and Chol populations of Nueva Palestina and Frontera Corrozal are admitted as comuneros subject to the agrarian rights of the Lacandon Community.

<sup>3</sup> The elite are composed approximately by 30 Lacandon, Chol and Tzeltal representatives. The majority is composed approximately by 1,685 *comuneros*, 2,283 sons of *comuneros* and their families; in total approximately 16,000 persons.

<sup>4</sup> Secretary of Agrarian Reform (*Secretaría de la Reforma Agraria*, in Spanish), “Convention on the rights of Chol and Tzeltal groups in the Lacandon zone.” March 30, 1977. Archive of representative from Nueva Palestina.

<sup>5</sup> The idea is for the central zones to be untouchable; there will not be any human settlements or any type of resource extraction within them.

<sup>6</sup> When we mention sons of comuneros, just as when we refer to heads of families, for the purpose of the charts, as well as this investigation generally, we are exclusively referring to males. No mention is made of women, daughters of comuneros, or matriarchs, because their involvement in issues of land and natural resource management is highly marginal.

<sup>7</sup> Milpa is a regional Mexican word for a traditional corn field. The corn is generally associated with other crops (beans, different species of cucurbits, peppers, and others).

<sup>8</sup> Diario Oficial de la Federación, 12/1/78. “Decree by which the establishment of the forest protection zone in the Tulijah river basin, as well as the Integral Reserve of the Montes Azules Biosphere are considered public interest in the entire area within the indicated limits”.

<sup>9</sup> The Global Environment Fund (GEF) is a fund created in 1990 and run by the World Bank. The United Nations Development Programme (PNUD) is responsible for technical consulting.

<sup>10</sup> Document named “Informative Card” which is part of the archive of one of the representatives of the comuneros in Nueva Palestina.

<sup>11</sup> The advisors of the LC are two lawyers, one engineer topographer. The advisors of the CL have tried in different moments to support the control of the relation with the government to be of benefit personally by means of the management of public resources.

<sup>12</sup> Legal notice provided by one of the representatives of Nueva Palestina.

<sup>13</sup> See [http://www.profepa.gob.mx/innovaportal/v/5486/1/mx.wap/desaloja\\_profepa\\_\\_a\\_ocupantes\\_ilegales\\_en\\_reserva\\_de\\_la\\_biosfera\\_%e2%80%9cmontes\\_azules%e2%80%9d.html](http://www.profepa.gob.mx/innovaportal/v/5486/1/mx.wap/desaloja_profepa__a_ocupantes_ilegales_en_reserva_de_la_biosfera_%e2%80%9cmontes_azules%e2%80%9d.html).

<sup>14</sup> Cacique, in Spanish (caciquil is an anglicized adjectival form, in this case), refers to an indigenous leader or chief, but can also mean despot or petty tyrant. In this case, both meanings apply. Because this nuance of meaning cannot be found in a single English word, cacique and its derivatives have been left un-translated throughout.

## References

ACKOFF, Russell. *Differences that make a difference*. Reino Unido: Triarchy Press. 2010.

ASCENCIO FRANCO, Gabriel. *Regularización de la propiedad en la Selva Lacandona: cuento de nunca acabar*. 1ª.Ed. Tuxtla Gutiérrez: UNICACH, Colección Selva Negra, 2008. 192 p.

BUDA ARANGO, Gabriela & TRENCH, Tim. Plan estratégico para el manejo sustentable de palma camedor (*Chamaedorea spp.*) en la Selva Lacandona. Informe Técnico. San Cristóbal de Las Casas, Chiapas: Universidad Autónoma Chapingo – SEMARNAT, 2007.

CALLEROS-RODRÍGUEZ, Héctor. Land conflict and political process: The case of the Lacandon Community, Chiapas, México (1972-2012). *The Journal of Peasant Studies*, vol. 41, núm. 1, p.127- 155. DOI: 10.1080/03066150.2013.873891. <<http://dx.doi.org/10.1080/03066150.2013.873891>>.

Diario Oficial de la Federación (DOF). 12/1/1978. “Decreto por el que se decreta de interés público el establecimiento de la zona de protección forestal de la cuenca del río Tulijah, así como de la Reserva Integral de la Biosfera Montes Azules, en el área comprendida dentro de los límites que se indican”. México.

Diario Oficial de la Federación (DOF). 07/06/2013. Ley General de Desarrollo Forestal Sustentable. Cámara de Diputados del H. Congreso de la Unión. Secretaría General de Servicios Parlamentarios. <<http://www.diputados.gob.mx/LeyesBiblio/pdf/259.pdf>> [Consultado el 15/11/2010].

Ley General de Equilibrio Ecológico y Protección del Ambiente (LGEEPA). 2014. <<http://www.diputados.gob.mx/LeyesBiblio/pdf/148.pdf>> [Consulta, 28, enero, 2014].

LEGORRETA DÍAZ, María del Carmen & CONRADO MÁRQUEZ ROSANO. Democracia, desigualdad y política ambiental en las reservas de la biosfera en México. Un enfoque interdisciplinario. In DURAND, Leticia; FIGUEROA, Fernanda and GUZMAN, M. (eds.). *La naturaleza en contexto: Hacia una ecología política mexicana*. México: CRIM/CEIICH-UNAM y El Colegio de San Luis, A.C., 2012. p.269-294.

MAX-NEEF, Manfred *et al.* 1986. *Desarrollo a escala humana, una opción para el futuro*. Santiago de Chile: CEPAUR, Fundación Dag Hammarskjöld.

MORIN, Edgar. 1997. “Réforme de pensée, transdisciplinarité, réforme de l’Université”. Ponencia presentada en el Congreso Internacional “Quelle Université pour demain? Vers une évolution transdisciplinaire de l’Université”. *Motivation*, núm. 24. Disponible en: <<http://ciret-transdisciplinarity.org/bulletin/b12c1.php>> [consulta 23 de mayo de 2008].

ORTIZ, Heriberto. 2011. "Dejó de decrecer la Lacandona". *Cuarto Poder*. Tuxtla Gutiérrez. 27 de julio de 2011.

PROFEPA. Desaloja PROFEPA a ocupantes ilegales en reserva de la biósfera "Montes Azules". México, D.F. a 18 de octubre de 2013. Disponible en [http://www.profepa.gob.mx/innovaportal/v/5486/1/mx.wap/desaloja\\_profepa\\_a\\_ocupantes\\_ilegales\\_en\\_reserva\\_de\\_la\\_biosfera\\_%e2%80%9cmontes\\_azules%e2%80%9d.html](http://www.profepa.gob.mx/innovaportal/v/5486/1/mx.wap/desaloja_profepa_a_ocupantes_ilegales_en_reserva_de_la_biosfera_%e2%80%9cmontes_azules%e2%80%9d.html). [Consulta 23 de enero de 2014].

SEN, Amartya. "Development as capability expansion". *Journal of Development Planning*, vol. 19: 41-58. 1989.

SEN, Amartya. *Desarrollo y libertad*. México: Planeta. 2000. 249 p.

SOTO PINTO, Lorena; JIMÉNEZ FERRER, Guillermo and LERNER MARTÍNEZ, Tina. Diseño de sistemas agroforestales para la producción y la conservación: experiencia y tradición en Chiapas. San Cristóbal de Las Casas, Chiapas: El Colegio de la Frontera Sur (ECOSUR), 2008.

TRENCH, Tim. From 'orphans of State' to the *Comunidad Conservacionista Institucional*: The case of the Lacandon Community, Chiapas. *Identities: Global Studies in Culture and Power*, vol. 15, núm. 5, p.607-634, 2008.

WEBER, Jacques. 1996. Conservation, développement et coordination: peut-on gérer biologiquement le social ? In: *Gestion Communautaire des Ressources Naturelles Renouvelables et Développement Durable*, 24-27 de junio, 1996, Harare (Zimbabwe). 18 p.

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