

## A New Way to Protect Natural Areas through the Human Rights. The Case of Ethnic Minorities in Mexico.

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**Abstract.** The best-preserved natural areas belonging to ethnic minorities. However, these communities suffer high social marginalization and economic backwardness. So that alleviate poverty, substantially improve the quality of life of these indigenous groups requires the use of their natural resources, threatening the ecological integrity of their territory. This is the great paradox of ecological conservation in this century. On the other hand, authorities and powerful groups recurrently violate the human and social rights of these ethnic communities, such as self-government and dispose of use of their natural resources. In addition, although the constitution protects their rights, there is no way to enforce the law when there are economic interests created around. Thus, access to water, forests and environmental services is limited for them without receiving compensation or better municipal services by these limitations, for instance. The international commission of human rights becomes a powerful weapon against social and environmental injustice, allowing indigenous peoples to use their resources wisely and supporting them with better technology for that their economic development be sustainable and improve their quality of life. Under this approach, the ecological conservation of protected natural areas may be more effective than conventional laws and instruments of environmental law.

**Keywords:** sustainable development, social rights, indigenous people, biological conservation.

### 1. Introduction

Mexico is a country that excels in worldwide for two things, 1) its richness and cultural diversity. And, 2) because it considered one of the five countries with mega biodiversity. However, the Mexicans of today have done nothing to deserve this privileged position and to be proud of our country (culture and biodiversity) must take care and use responsibly [1]. Our responsibility is then double and very serious: to overcome the poverty of ethnic communities and preserve our biological heritage [2]. The multidimensional poverty, reached 50% of the Mexican population [3]. In this percentage, the human development indices of the most vulnerable groups lie in the native communities of this land [4]. In particular, deficiencies in food, education and health are the most pressing for lack of financial resources and / or stable employment that generates wealth. This situation is aggravated because education is so low and the daily moments of such large leisure, which have increased rates of intra-traditional family, alcoholism, violence, and more recently in the young population, drug abuse [5].

The community of Xajay belongs to Hñahñu ethnicity. Community is located in the heart of the Sierra Otomín central Mexico. Xajay natural resources in are located on 545 hectares of pine and oak forest in good condition, which were considered as part of a reserve for special protection since 1941 by federal authorities. The former objective of protecting this Sierra is to recover the cleared forest to build the railway sleepers for the Mexico-Queretaro route, constructed at the beginning of the Mexican revolution in 1910 [6]. At present, the main objective of preserving the pine-oak forests of the region is to conserve watersheds in Central México because their rivers and tributaries flowing to the Necaxa Dam, one of the most important

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electricity generation dam in México [7]. However, from reforestation occurred in the early 50's to date, natural resources are irrationally exploited by ethnic communities for subsistence without projection for near future via systematic renewal and products diversification [2].

Notwithstanding the misuse that Xajay dwellers make over their resources, the Sierra remains in good ecological status, because the exploitation is marginal. However, the authorities and some rich landowner's with political power have taken away their access to water resources. The purpose is that all watershed courses serve to irrigate the fields of the surrounding farms. This situation increases the levels of public anger and decreases quality of life and options for generating wealth. The result is a breakdown in relations between the state and the ethnic community.

The hypothesis of this paper is that if the public administration will present a range of concrete proposals to develop economic activities in Xajay. And if at the same time, the authority will take care of educating and empowering people living in situations like this, then, the indigenous people of Mexico could participate in the development of environmental public policy and a better distribution of natural assets would be realized, achieving intra-generational equity that is needed to achieve sustainability through sustainable development.

## 2. Methodology

### 2.1. Study area

The study area is part of the lordship of Otomí ethnic group, "Xaltocan", whose settlements date from the years 1120-1398 a.C. [8]. Xajay has a population of 488 people, of which 250 are female and 238 are male [9]. Of the economically active population, only 70% are currently working (115 people: 26 women and 89 men). Jobs and salaries are not stable and often do not reach the minimum wage stipulated by national law, so that approximately 60% of this population is in multidimensional poverty thresholds. This critical situation of the community, plus the historic social and economic backwardness of the region make that is designated in national statistics as highly marginalized [10]. Xajay (moist soil in native language) is a kind of communal land located in the southwestern state of Querétaro in central Mexico since 1938 [11]. The community centre coordinates are 99°35'73" WL and 20°07'11" NL, is 2,410masl (Fig. 1).

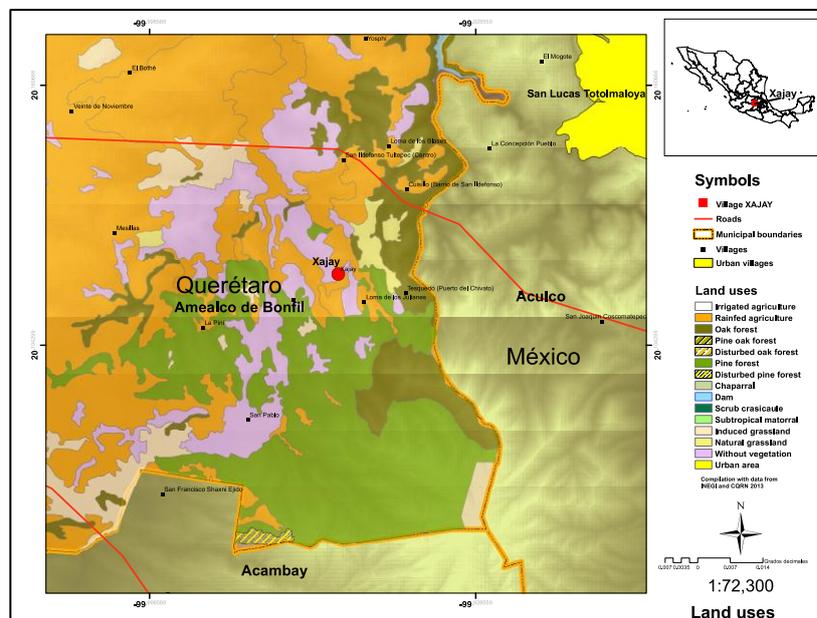


Fig. 1: Localization of the study area, showing the main land uses by indigenous people.

### 2.2. Fieldwork

The study was divided into three phases. The first make an approximation of us with the ethnic community, under which these communities have a hard time relating to strangers. To which were conducted

community visits, interviews, workshops, meetings with local authorities and community leaders, and finally, tours of the area guided by the same tenants.

The second phase was to develop a diagnostic landscape heritage. This diagnosis was made by collections of botanical specimens, observational studies of erosion, soil loss, soil types, slopes, runoff, springs, etc., And most representative of the fauna of the area, such as birds (dove wild, hawks, vultures and owls), mammals (deer, foxes, raccoons, ringtails, coyotes). We reviewed the large trees to estimate their health, parasites and most important types of pests).

The third phase was the integration of the information gathered with a detailed mapping of the site to estimate the effective surface tree, and then calculate the value of the forest to propose a scheme of payments for environmental services to the community authorities.

### **3. Results**

Xajay village occupies a natural region in good ecological conservation. In its territory they use to combine different land uses for centuries: the cropland, forest land, small spaces for housing, the ground water storage, communal spaces, land for cattle ranching and to keep livestock, for instance. However, it is paradoxical that their high natural capital will become their cultural and economic doom. With the excuse that it should conserve the best environments in the country for next generations, a foreign government to the Otomí people, tells them how to use their resources and to what they must be dedicated, on pain of losing their land altogether. This argument was the cornerstone to declare NPA to their mountainous region. And it is the key by which the people have become criminals. When cutting a tree, although the tree is sick, or attacked by insect pests; or when using water from their springs, they become environmental criminals and punishments are severe. The primary function of this declaration is to preserve ecological processes related to withdrawal of water. The filtered water aquitards is destined for human consumption in other nearby towns, while the runoff water is used to irrigate the fields in other regions. Forest management of the region has been acceptable since the area is a NPA, because presents an integrated handling resources by successive reforestations. However, this situation far from helping the community has adversely affected, because it limits the use of natural resources, including forest environmental services.

Humans we get many utilitarian benefits of the structure and function of natural ecosystems in the form of natural resources and environmental services, respectively. This is often the primary argument to support the conservation of biodiversity. Following the above argument, when an indigenous community inhabiting an area that has exploited for centuries, and suddenly a government (municipality or state), oblivious to what the community recognizes as an authority, forbids them to continue their traditional uses of the forest, community is impoverished, gradually falls into the social marginalization and substantially decreases its quality and standard of living. This disastrous chain of events culminating in the total deterioration of the structure of the community. Youth and adults that can migrate leave the community to seek employment elsewhere. Women are labouring in unprofitable activities that take them time before they had to carry out their activities according to their culture: childcare, livestock farming and backyard. The community gradually lost identity. Stop talking their language, dress according to their custom - well suited to their climate and natural region -. People of the ethnic group compared it self to people from outside and feel poor. And every time they want to look more like people of the big cities. Thus, traditions become warped and acquire new vices, such as drug addiction. If people in the community want to increase their income, to improve their standard of living, they should do at the expense of exploiting more intensively their natural environment. Nevertheless, as is now a NPA uses are restricted, and they cannot have access to natural resources that once utilised freely. To avoid this situation, which is already a fact, government should take urgent measures to ensure the community a minimum income to live well. Public administration will must provide to the people of Xajay urban services and train them in new productive activities, in harmony with its natural and cultural environment. In addition, a new system of payments for environmental services (PES) should be implemented.

Having reached this point, we must remember that the PES represented since few years a new and more direct way to encourage biological conservation. But at the same time, PES theory explicitly recognizes the need to address difficult trade-offs by linking the interests of landowners and external players through

economic compensations to locals. One of the questions is: who should pay for environmental services? Benefiting citizens or the government? And the other question is: how much should be pay for each environmental service? The answers are not clear and will not be, but what should be clear is that indigenous forest caregivers must have access to environmental justice. And this is defined as an equitable distribution of natural resources. If they care water forests should receive fair payment for it also must have an equitable allocation and water that supplies its forest to other locations by being well managed. It is clear that simply declaring an NPA does not ensure their conservation. Not because of technical problems with biological conservation, but by the social and economic problems that entails. This situation leads to the generation of social conflicts that lead to a serious political problem and difficult to resolve. If the indigenous people of Xajay have not known social justice, how can they expect access to environmental justice? It is possible that through human rights. Indigenous peoples in Mexico have special recognition in the constitution: Rights of Indigenous Peoples. These rights recognized by international law must be ensured with national laws and international treaties signed by Mexico.

A national commission performs the defence of human rights in Mexico. This commission is divided into six Visitor ships, and one of them is responsible for the affairs of discrimination against indigenous. The commission is autonomous, with its own budget, and their suggestions are strict compliance to sanctioned authorities. When preserving the natural heritage of a people is not a priority; when preserve the culture of a person is not important for the authority; when basic human rights are violated, such as access to a safe and adequate environment to develop yourself; when peasants not have access to justice, because the authority believes that the priority is to keep quiet to impoverished people with bread and circuses. And thus pleasing the oligarchy in power. When that happens, we have the international court of human rights. Thus, through human rights we can preserve our landscape heritage.

#### **4. Discussion**

For a long time believed that conservation biology would be the answer to the challenge to grow economically without damaging the environment that provides us with the raw material and the services we require for our routine life. And even for our excesses of pleasure. The result is that the long-awaited sustainable development has utterly failed. But because there is no another paradigm to achieve regional and global sustainability, we must try to adapt to nationalist policies developed within a small class that holds the economic power of the world. This form of sustainable development is not lasting, therefore, is not sustainable. Its main weakness is that the development is not equitable neither among persons nor States. Attempts to make equitable the practice of biological conservation have been numerous, but only one has lasted more than others, the PES [12]. The problem is that there is no direct relationship between equity and efficiency in PES programs. Some authors emphasize the relationship on the role of the institutional structure, social perceptions about environmental justice, uncertainty and interactions between agents, including power relations [13]. The proposal made in this article is based the idea that both buyers (external agents to the site of an environmental service is generated) and sellers (tenants who engage in caring for natural resources) should benefit from the PSA. We do not forget, either, the belief that the players who represent the most dangerous threats to the environment are sometimes receiving more benefits from it than those already living in harmony with natural landscapes [14].

The PSA is an instrument that should be complemented with other tools of environmental law. One proposal is, without a doubt, improve the social public policy of countries. This social public policy must be present in the economic policy of the state [15]. Socially marginalized communities that occupy the best preserved regions (landscapes) of the earth, can enforce their rights through the international court of human rights when states do violence their rights to dignified housing, a healthy environment and well-paid work, for instance. This office has more power than any national or international environmental apparatus. Therefore, their weight and suggestions are followed by the administrative agencies that broke those rights.

#### **5. Conclusion**

It is urgent rethink-from the perspective of the rural population, particularly of indigenous peoples-orientation of state policies, programs and priorities of care, considering their needs, priorities and

particularly in areas where resources are abundant natural because without them is unthinkable development of the nation, so these should be strategic to the survival of the Mexican population.

## 6. Acknowledgements

We thank the authorities of the Municipality of Amealco and to the delegates of Xajay and, its people for the facilities that we got to do fieldwork. This project was sponsored by the National Polytechnic Institute (Mexico) under projects SIP-20121781 and SIP-20131377. A. Ortega was PIFI fellow.

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