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The assistive conservation approach for community-based lands: the case of La Ventanilla

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The assistive conservation approach includes strategies for conserving community-based lands based on a complex combination of traditional and modern scientific knowledge. It enjoys broad legitimacy and seems promising for conserving territories with autochthonous populations. However, as a novel strategy, it has been applied mostly to societies and environments that are fragile in conservationist terms. This paper critically analyses the evolution of environmental discourses on nature conservation, assesses their related strategies and methodologies, and shows how emerging discourses have been assimilated to produce a qualitative shift from 'top-down' to 'bottom-up' models of environmental management, but without eliminating considerable dependence. It reviews earlier critiques of the protected areas approach associated with this emerging concept. Finally, it revisits the evolution of an important early case of assistive conservation, La Ventanilla (Oaxaca, Mexico), to assess processes of dependence and this emergent strategy's potential to face challenges of environmental degradation. It concludes that, over time, this concept makes local ecologies more vulnerable to social and environmental degradation, especially as traditional management institutions once responsible for ecological integrity become obsolete.

KEY WORDs: community conserved areas, environmental discourses, Mexico, protected areas, environmental management, diachronic analysis

Introduction

he accelerating degradation of environments and biodiversity is a problem that has reached alarming proportions in modern societies (Alcamo et al. 2003, 73). Because it entails processes closely associated with social and physical variables, environmental management has emerged as a key strategy in the search for solutions (Groves et al. 2002). The most widely accepted means of promoting conservation is establishing protected areas (PAs). However, it is not clear how this regimen will deal with inhabited areas. Early approaches often disregarded the interests of local inhabitants and entailed displacement or other coercive measures. Escalating protests and the rejection of many projects by local people spurred policy changes and the emergence of new concepts: integrated conservation and development, people-centred conservation and development, eco-development, grassroots conservation, community-based natural resource manage-

ment, biocultural heritage sites, community-based management, community-based conservation, community conservation areas, and indigenous and community conservation areas. Though different, all these approaches recognise traditional knowledge to some degree, propose greater local participation in management, and allow certain economic activities. In practice, they involve a complex combination of traditional and modern scientific knowledge (Berkes 2009a, 2009b; Kothari et al. 2000). Considering the geographical advance of economic development, this change can be interpreted as a practical and discursive response for improve public image, to face local opposition to displacement, while potential influence of PA is expanded: 11% of all woodlands and jungles worldwide are in territories governed by community management schemes (Molnar et al. 2004). This argument is especially applicable to Mexico, where this percentage reaches 80% (DOF 2004) and social participation is – at least discursively a key component of conservation strategies.

However, recent transformations in tourism and socio-cultural macro tendencies have led to the 'responsible' incorporation of natural areas with autochthonous populations into that (Vargas-del-Río and Brenner 2013). Their various labels reflect different segments of emerging markets: ecological tourism, ethnotourism, ecotourism. community-based ecotourism, responsible tourism and sustainable tourism (Mowforth and Munt 2009). Similarly, all stress local, environmentally sustainable development and community participation as strategies for potentiating conservation (Borrini et al. 2004). As expected, this market has captured the interest of development planners and tourism businesses anxious to increase market share (Weaver and Lawton 2007). Thus, community-based lands have come to 'coincide' with tourism tendencies and perceived environmental problems.

In this coincidence of interests, community-based lands constitute a fragile element since their conservation depends on local agreements, sociopolitical frameworks and institutions. And these are a response and adaptation to local economic activities, environmental context and technologies (Harris 1997). This socioeconomic and socio-cultural setting makes these areas deserving of preservation, and this is precisely what new concepts of environmental management and responsible tourism strives to modify in the name of conservation. But its social and environmental impacts have not been assessed; managers simply assume it is positive. So, how do these new concepts differ from previous initiatives?

Brenner and Vargas-del-Río (2012) present a detailed critique of new concepts in tourism related to this study. This paper centres on new concepts of environmental management through two approaches. First, it presents a critical discursive review of how management concepts have evolved in the context of natural area conservation and evaluates associated strategies and methodologies. This model shows how emerging discourses are assimilated into earlier ones, generating a qualitative movement from 'top-down' to 'bottom-up' models of environmental management, though without diminishing dependence: that is, an assistive approach. A critical review of these management concepts grouped together as the 'assistive approach' is included (Kothari et al. 2000).

Second, these new concepts are tested at La Ventanilla, a community-managed territory on Mexico's southern Pacific coast deemed a hallmark case of community-based conservation. It gained national and international attention for its exemplary, responsible, community-based environmental management, earned the epithet 'model project' (Ávila Foucat 2000 2002; Becerril Morales 2001) and was deemed an example to follow for community-based tourism management that promotes social cohesion, equality and land conservation and management (Ávila Foucat 2002; Eugenio Martín and Ávila Foucat

2005); the factors that won fame in Mexico and abroad (Betz 2004; Semarnat 2003). Due to its success, La Ventanilla has become a flagship for community-based conservation and ecotourism on Mexico's coastlines. Assessments show how local spaces have been modified after 15 years of community-based conservation, and how this reflects power relations, while presenting qualitative and quantitative evidence on the 'winners and losers' in this socio-environmental transformation. Thus, this paper contrasts the assumptions of such new environmental management concepts with empirical evidence, in an effort to prevent environmental degradation caused by implementing policies based on erroneous assumptions, defective science or insufficient data.

Evolution and environmental discourses in PAs: from restrictive to assistive approaches

Over 20 years ago, participants in the United Nations' Conference on Environment and Development (UNCED) established 'sustainability' as the basis for resolving problems of environmental degradation (UNCED 1992), arguing that this threat could only be resolved through global, coordinated actions based on the best environmental management strategies available (Adger et al. 2001).

However, while the urgent need for solutions to deterioration is almost universally recognised, actors interested in accessing and exploiting natural resources (fishermen, farmers, governments, civil society, businesses, multilateral institutions) employ appraisal systems and discourses that favour their position (Martínez-Alier 2002). Problems became more complex as actors used discourses to justify environmental policies, measures and instruments that fostered their interests (Adger *et al.* 2001). One helpful approach to sorting this out is Martínez-Alier's three-cluster scheme of environmental concerns and activism (2002, 5–15), called 'currents of environmentalism':

• 'The wilderness cult': supported scientifically by conservation biology and the 'deep ecology' activist current, it supports conserving nature in its pristine state, considers nature sacred and places it above anthropocentrism. Its rhetoric appeals to use values and prioritises conservation above commercial uses. Its stance has an ethical tendency for many adherents (ecologists, conservation biologists, natural scientists) feel a moral imperative to protect biodiversity and a visceral disdain for environmental destruction induced by 'man' (Wilson 1988; Soule and Lease 1995). As its main political proposal is to keep PAs free from human interference, it goes hand-in-hand with a series of social and political implications and gives conservation projects priority over health, education and social assistance programs (Bryant 2001). It supports displacing local people from PAs to create what Luke (1997, 73) calls 'natural cemeteries'; that is, sites set aside in perpetuity so future generations can observe 'birds, orchids, swamps, forest, rivers and marshes . . . her many beautiful headstones'.

- 'The eco-efficiency gospel': based on the scientific concept of environmental economy, this current strives for technical efficiency, profit, and optimal cost-benefit ratios. Its rhetoric reflects positiviststyle scientific arguments that justify the goals of sustainable development (read: sustainable economic growth). It seeks 'win-win' solutions that allow 'economic gain with ecological gain' and 'ecological modernisation' through measures like eco-taxes, market permits for emissions and technological changes that save energy and conserve raw materials and advocates technological improvements and enhanced management techniques based on scientific criteria. 'Science' plays a central role in elaborating political truths and rationalities. One corollary is that scientists and specialists are deemed the agents best qualified to protect nature (Braun 2000; Escobar 1996; Sivaramakrishnan 2000; Zimmerer et al. 1998), so strategies are often defined 'from above' by state officials (perhaps aided by environmental nongovernmental organisations (ENGOs), scientists and universities) who seek to protect nature by reorienting local peoples. This current holds nature to be a set of natural resources externalised from local communities through 'a rhetorical manoeuvre that authorises certain "disinterested" voices – resource managers, ecologists, or nature's "defenders" - to speak as nature's "representative" ' (Braun 1997, 25).
- 'Environmentalism of the poor' and the 'environmental justice movement': this approach has scientific bases in agro-ecology, ethno-ecology, political ecology and, perhaps, urban ecology and ecological economics. It draws support from environmental sociologists in response to conflicts of ecological distribution caused by economic expansion. Though it may appeal to discourses on the sacredness of nature, it focuses on the environment as the source and condition of human survival, the sustainability of the management practices of indigenous and peasant groups, and issues concerning ancestral dominion over territory (Ghai and Vivian 1992; Lynch and Talbott 1995; Poffenberger 1999; Toledo 2001). It advocates local autonomy and exalts the concept of 'the good savage'; that is, the 'loser' in environmental conflicts who struggles to preserve traditions in the face of 'the West's' merciless advance.

Today, the 'wilderness cult' and 'eco-efficiency gospel' discourses predominate (Martínez-Alier

2002) through rhetoric that interweaves ecological conservation and management strategies with projects both moral and scientific (Ibarra and Kitsuse (1993) analyse rhetoric in contemporary environmental crises).

Another approach to environmental discourses is Adger et al.'s (2001) two-category model. Though similar to Martínez-Alier's (2002) model, it focuses on finding solutions to conceived environmental problems. The first discourse is 'global environmental management', which characteristically advocates planning-based global solutions with technological improvements and positivist analyses that consider economic markets. It stresses the role of the state and multilateral agencies as entities responsible for coordinating actions, while viewing local actors as – perhaps unwilling – destroyers of habitat; that is, victims forced by poverty to destroy natural resources. Environmental management is led by actors judged 'legitimate' (state environmental agencies, multilateral agencies, powerful ENGOs) that assess the functional participation of other actors, including local businesses and people, weaker ENGOs, etc. The goal is to align these entities in a preconceived management plan. This approach may be seen as synthesising two of Martínez-Alier's discourses: the 'wilderness cult' and the 'eco-efficiency gospel'.

The second approach rescues a 'populist' discourse that emphasises traditional knowledge and solutions focused on local management and highlights the negative impacts of international corporations, capitalism and colonial powers. It holds that attempts to conserve and manage natural resources only aggravate existing problems. Thus, it matches Martínez-Alier's 'environmentalism of the poor' approach, since both argue that as economic development advances, environmental conflicts intensify to produce empirical evidence. Significantly, this discourse demonstrates that conservation is by no means an apolitical activity. Thus, 'protecting natural resources and biodiversity' as promoted by global environmental management strategies (i.e. the 'eco-efficiency gospel') is just another 'regime of accumulation' that benefits political and economic elites eager to profit from natural resources and biodiversity by transforming them into commodities, creating new symbolic and material spaces for global capital expansion, and providing an avenue for corporations and politicians to make themselves 'green' (Brockington and Duffy 2010; Corson 2010).

Though these discourses can be separated for purposes of identification and definition, in practice they intertwine, have variants, and may be distorted or reformulated (Adger et al. 2001; Martínez-Alier 2002). Also, they change over time, as the debate on decreeing, implementing and managing PAs shows. Figure 1 presents an elaborated model of PAs based on Job et al. (2003). The founding of early PAs, like Yosemite (1864) and Yellowstone (1872), was inspired

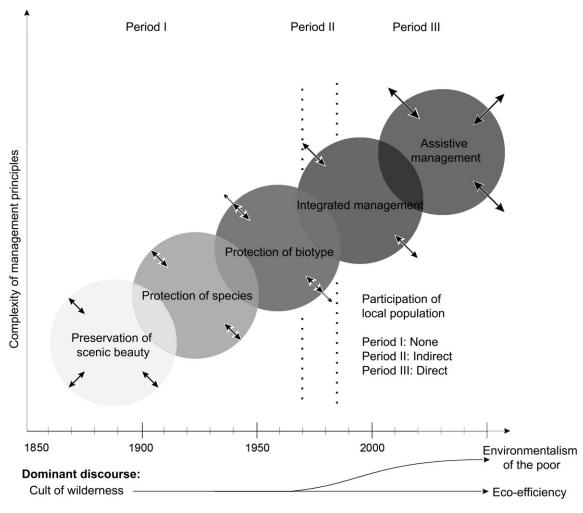


Figure 1 Qualitative development of protected areas *Source*: author, based on Job *et al.* (2003)

by the 'wilderness cult' discourse. Economic benefits from tourism were expected, but the goal was to preserve aesthetic and scenic beauty, so local people were expelled and controlled through surveillance, expropriations and firm state control; measures that characterised virtually every PA in period I.

Later, focus shifted to emphasise conserving certain attractive or emblematic species (tigers, rhinoceros, elephants, buffalos; Job and Weizenegger 2000), so conserving hunting grounds became key; though the main objective was species preservation (Job and Weizenegger 2000). Later, as conservation biologists drew attention to the interdependence of species, management strategies evolved towards protecting biotopes, biological communities or ecosystems (Primack and Ros 2002), but local peoples were not held to form part of 'biotopes'; they were still seen as

impediments to conservation. Thus, the most representative strategies of period I largely excluded the human factor (allowing only passive contemplation of landscapes and species, and scientific research) in a milieu dominated by the consecration of natural spaces; that is, the 'wilderness cult'.

By the 1970s, numerous projects had failed largely because locals refused to recognise the PAs and carried on their usual activities illegally, and because tourist sectors showed a growing interest in exploiting restricted areas. So the biosphere reserve concept emerged and immediately won broad approval (Mowforth and Munt 2009; Job and Weizenegger 2004), as evidenced by the 'Man and the Biosphere Program' (1970), recognition of the rights of local people by the International Union for Conservation of Nature (IUCN) and World Parks Congress, and the

declaration of the first biosphere reserve around the middle of the decade; crucial elements that changed the principles and practices of environmental protection and introduced period II (Job and Weizenegger 2004; Cholchester 2004). This change stressed implementing conservation practices. First, efforts were made to include some degree of local community participation in management, based on the belief that this concession would foster local acceptance. Second, locals were allowed to conduct some economic activities to compensate for environmental restrictions. Finally, more attention was paid to areas around PAs (Job and Weizenegger 2004).

As a result, debates on environmental conservation no longer advocated expelling locals from PAs and forged an approach that incorporated them into management processes (West and Brechin 1991). This change in policy can be interpreted as an advance by the emerging 'environmentalism of the poor' discourse. Parallel to this development, however, the eco-efficiency discourse also gained ground through a phenomenon that Jamal et al. (2003, 46) associates with 'the spread of neo-liberal ideology and practices that reduce objects, places and even experiences to commodities'. Conservation projects began to seek scientific support, arguing that scientists and environmental specialists are the only 'legitimate' managers. Environmental managers began to search for means to ensure 'economic and ecological gain'; 'social participation' and 'governance' became keywords in management projects. But 'social participation' was interpreted in varying ways: as manipulation; as consultations between specialists and local peoples; as allowing locals to share in economic returns as 'partners'; as the mobilisation of local peoples, etc. (Pimbert and Pretty 2000). One outcome was that managers accustomed to unilateral decisionmaking were forced to procure the backing of local people and ENGOs and to burnish their image. Also, the growing economic aperture led to interaction and negotiations with actors in the tourist sector. Hence, environmental management principles became more complex and hypocritical (Figure 1).

Today, decreeing PAs is the most widely accepted means of promoting conservation and the biosphere reserve is the predominant concept in conservation politics. Recently, however, the assistive conservation concept has advanced greatly under various labels that refer to management concepts or physical space: indigenous and community conserved areas (ICCAs), indigenous PAs, community conservation areas, community reserves, biocultural heritage sites, integrated conservation and development projects, people-centred conservation and development, eco-development, grassroots conservation, community-based natural resource management, community-based management, and community-

based conservation, etc. Each one stresses recognising traditional knowledge and social participation in management by local communities and accepts some degree of (sustainable) economic activities, especially tourism. In practice, they entail a complex blend of traditional and modern scientific knowledge (Berkes 2009a 2009b; Kothari 2006).

An indicator of assistive conservation concept growth is, for example, the establishment of ICCA in 25 countries, with Australia leading the way with 25% of the reserve systems in this category (ICCA 2012). Future trends may be inferred, for example, from the Aichi Biodiversity Target which aims to formally protect 17% of the Earth's terrestrial surface by the year 2020 (Convention on Biological Diversity 2011). As Woodley et al. explain, this increase will likely come from places that are already inhabited, implying 'new strategies, innovative programmes, and creative approaches to integrating people and protected areas in order to achieve the necessary social acceptability and political support needed for designation' (Woodley et al. 2012, 7; Job and Paesler 2013). Much of this increase implies an advance to the 11% of well preserved woodlands and jungles that are common lands; comparable to the extensions currently classified by governments as PAs. The Mexican case is exemplary as this index has reached 80% (DOF 2004) and, at least at the discursive level, social participation is now a central component of conservation strategies. Clearly there is a planet-wide tendency towards increasing this concept.

In terms of the evolutionary model in Figure 1, assistive conservation reflects the confluence of the 'environmentalism of the poor' and 'eco-efficiency' discourses: new PAs are recognised by conservation specialists, take into account regional markets, and are empowered by the state and multilateral agencies, but local actors are considered the principal decision-makers responsible for implementing environmental management strategies, and they accept that current high levels of biodiversity respond to their knowledge and management skills (Berkes 2009a).

In practice, this approach implies that local people will voluntarily discuss decrees and plans with environmental specialists and then adhere to them in the interests of protecting wildlife, ensuring continued access to, and exploitation of, natural resources. Or perhaps for maintaining local land tenure patterns, obtaining economic benefits and funding, and assuring participation in ecotourism development and other sustainable productive activities (Kothari 2006). So, scientific methodologies combine with local ecological knowledge and are expressed in a management plan. By adhering to the plan, both obtain legitimacy and support while positioning themselves as potential beneficiaries of future funding from diverse sources (Dowie 2006).

However, by doing so, local economic activities, agreements, socio-political frameworks and

institutions are modified. The comparative study of Brenner and Job (2012) for biosphere reserves or Vargas-del-Río (2010) for community-based lands, illustrate transitions from period III for Mexico. As worldwide, conservation of land involves actors from different geographical levels: governmental and supranational institutions, national and international ENGOs, local and regional businesses, local population/resource users, and tourists. Local 'environmentally concerned' groups receive substantial funding and logistical support for promoting or doing activities considered sustainable ones in exchange for leaving certain forms of non-sustainable ones. The conservation sector, state and businesses particularly those from the tourism sector – become involved in land management. As expected, conflicts of interest, forced conservation for 'irresponsible' local actors and, in general, a more complex management is the common result in both studies. Given the fragility of community-based lands, the poor results of previous attempts, and the discursive, economic, political and environmental context in which assistive conservation concept appears, its premises must be analysed carefully.

The assistive conservation approach: a critical view

As detailed above, the assistive conservation approach to community-based lands is a powerful, emerging concept applied in particularly fragile ecological contexts. But its medium and long-term effects have not been fully assessed, so it is important to reconsider earlier criticisms of the PA concept in relation to this approach. At least three broad critical currents exist.

The first concerns the controversy surrounding global management, popular management and the advance of the 'environmentalism of the poor' approach. It arose in cultural anthropology and argues that environmental management based on PA and designing ecological ordinances and management plans for a territory (as in the 'soft' mode of the assistive approach) is equivalent to rationalising the natural environment (Jamal et al. 2003; Nichols 1999). Modes of management suggested (or imposed) by the dominant culture – the West – are guided by ideals like 'a return to nature' and 'encounters with the other' (Hiernaux-Nicolás 2002; Mowforth and Munt 2009) that redefine the socio-environmental space to protect aesthetic values or foster biodiversity, scientific research or commercial exploitation. The result is what Escobar calls a conflict of cultural distribution: disputes that emerge when a dominant culture imposes its approach to nature on another, thus restricting certain uses by asserting cultural meanings; that is, power lies in meanings and meanings are the source of power (Escobar 1999). Hence, 'protecting' indigenous/local communities through voluntarily accepted environmental limitations in exchange for support or assistance can be seen as a form of environmental neocolonialism (Butcher 2007). Ultimately, this change in the language of evaluation favours uses pursued by certain actors (the tourism sector, scientists, the state, dynamic local factions) while restricting the use and access of many residents (Nichols 1999). Such conflicts generate two displacements: one 'direct', from certain spaces that the people voluntarily choose to conserve (Dowie 2006); the other 'indirect', caused by limitations on traditional means of subsistence; a reality recognised by the World Bank in its definition of 'involuntarily displacements' (Cernea and Schmidt-Soltau 2006). So, while assistive approaches stress concepts like 'voluntary adherence' and high 'social participation', they give external actors a role in local environmental management, often in representation of interests that do not coincide with local ones. Consequently, while 'social participation' and 'voluntarism' are subject to interpretation, subtle forms of cultural imposition, displacement, imposition and intervention can emerge.

The second line of criticism describes the deterioration of socio-environmental systems due to political intervention by external actors (McCay and Acheson 1987; Blaikie and Brookfield 1987); a concern linked to the advance of the 'environmentalism of the poor' approach since it stresses the role of official environmental managers and other external actors as agents who reorganise local milieus and, as mentioned above, tend to intervene in local spaces to satisfy global market demands (The Ecologist 1993). These actors modify traditional value systems and impose new languages of valorisation that privilege the exchange value of natural resources above use values (Martínez-Alier 2002), together with new land-use patterns and political agents well integrated in regional and global economic contexts (tourism, payment for environmental services). Traditional uses are decontextualised and gradually displaced (Bryant and Bailey 1997). In response, locals may form joint societies with external actors, perhaps swaying the pendulum in favour of commercial resource exploitation (The Ecologist). Here, global dilemmas of economic development versus environmental conservation are shifted to local spaces, leaving the environment even more vulnerable to degradation (Nichols 1999; Vargas-del-Río 2010).

The third critique centres on transforming PAs into spaces open to tourism (Boyd 2006; Weizenegger 2006). Even where National Parks or Biosphere Reserves are well advanced, community based and protected land approaches focus on nostalgic sentiments for lifestyles associated with landscapes – real or imagined – and growing environmental awareness in response to changes in the values of modern western society (Urry 1990). Therefore, environmental restrictions are often compensated by

offering tourism and endowing spaces with attractions, installations and other services (Mowforth and Munt 2009). But as tourism products they are subject to new dynamics, impacts and transformations propitiated by this commercial sector and, therefore, to frequent, sweeping criticisms (Duffy and Moore 2010) due to competition between local actors and powerful tourism agents, both conventional and emergent. Targets include the harmful dynamics of accumulation in tourism resorts, tourists' exaltation of consumption and behaviour patterns that may be adopted by local people, and the commoditisation of nature and culture (examined in detail in Brenner and Vargas-del-Río 2012). For these reasons, fomenting tourism in PA increases vulnerability to social and ecological degradation. This complex phenomenon is extremely difficult to regulate, but one thing is clear: responsibility currently falls on the shoulders of local populations (Mowforth and Munt 2009). Finally, the tendency of tourism spaces to generate circular, cumulative relations necessarily collides with the concept of sustainable development and the objective of assistive approaches designed to maximise the preservation of spaces over time (e.g. Butler 2006; Mowforth and Munt 2009).

The assistive conservation approach: empirical results, a case study in La Ventanilla

Having established objections to, or scientific concerns over, the assistive approach focus, we proceeded to evaluate the consequences in La Ventanilla, a hallmark case of community-based conservation. As elsewhere, assistive approach concepts formally began to gain momentum in Mexico early in the twenty-first century, well after the launch of the La Ventanilla project in 1995. Empirical evidence thus allows us to assess socio-environmental dynamics and processes that emerge over time, but in a way that does not endanger healthy ecologies as we seek to demonstrate the validity – or lack thereof – of this concept.

Intervention by the conservation sector in this community-based area began in the mid 1990s, and voluntary projects supported by conservation biology soon appeared: a land management plan negotiated by ENGOs, government institutions and local actors, National Benchmark Test (NBT) projects based on alliances with regional tourism markets, and economic and technical support fulfil these objectives, accompanied by environmental restrictions on activities considered 'disruptive'; that is, hunting, selling local species, harvesting turtle eggs, and felling mangrove trees.

Since the advance of the 'environmentalism of the poor' discourse requires solutions and proposals, La Ventanilla became an example of community conservation in Mexico and abroad; a flagship for

fomenting community-based conservation and ecotourism along Mexico's coasts. But, as will be shown, this 'success story' shows only one side of the project.

Fieldwork was conducted in January, September, October and November 2007, and November-December 2009. We first identified the social actors linked to tourism uses and conservation activities using the snowball sampling technique. Once identified, interviews were conducted, taped and then transcribed to analyse the topics of power relations, alliance configurations, and how interaction is reflected in the appropriation of the local environment. We interviewed representatives of four formal, locally established groups (two nature-based tourism cooperatives, a municipal official, and an actor from a regional cooperative network) and four local people unaffiliated with organisations, but recognised as leaders. We spoke with four locals and 12 regional representatives or actors (two from ENGOs, five government officials, an agrarian authority, four tourism operators). Surveys were applied in households to probe environmental conflicts and relate them to socioeconomic and socio-demographic variables. Participant observation at assemblies and regional conservation forums was a valuable source of data that allowed us to study the promotion, implementation and negotiations of conservation activities and nature-based tourism.

The following section presents the historical and regional context and discusses some social dynamics that emerged as the project proceeded. After that, spatial and quantitative results are presented, followed by an assessment of the project in light of the theory presented above.

La Ventanilla: historical overview and the regional and local context

The approximately 100 inhabitants of the indigenous community of La Ventanilla (INEGI 2009) live on the communal lands of Santa María Tonameca, in Mexico's southern Pacific, a territory that encompasses the coastal lagoon formed at the mouth of the Tonameca River with typical mangrove flora and fauna, a beach zone with abundant sea turtle nests, and flood-free areas around the lagoon and on the hillsides bordering the nearby town of Mazunte, where deciduous forests and agricultural fields dominate the landscape. The first inhabitants who settled there in the late 1960s lived by traditional fishing, hunting and agriculture for household consumption, and participated in illegal activities like hunting marine turtles, selling their eggs and crocodile hides, and commercialising exotic species.

Since the inhabitants were indigenous who pertained politically to the community of Santa María Tonameca, negotiations on territorial management

followed the model of 'uses and customs', with a local assembly established to allow residents to define their needs and capacities and take key decisions. People with usufruct rights to fields (comuneros) interacted with others who were only recognised by the assembly (avecindados), while simultaneously forging linkages in the region with the Assembly of the Agrarian Community of Tonameca (the community's maximum authority), the Commissariat of Communal Properties (responsible for legal issues), and the municipal council of Santa María Tonameca (representative of the federal government). This local political block had support from the federal government and the Department of Agrarian Reform. Though residents practiced illegal activities, their efforts to preserve nature after conservationism took root bears witness to healthy socio-environmental relations. As Toledo (2001) reports, there is a direct relation between cultural and biological diversity in this region, an issue associated with shared land management (e.g. McCay and Acheson 1987; Ostrom 1990). In fact, nature and biodiversity were the factors that originally attracted visitors and the support of ENGOs to La Ventanilla.

Since 1970, this region has gradually become more involved in tourist-related activities. The process began at Zipolite, which has attracted streams of backpackers since March 1970 when a clearly visible solar eclipse coincided with the heyday of the hippie movement (Brenner and Fricke 2007). Later, the small town of Mazunte emerged as a backpack-oriented 'ecological' tourist destination supported by a national ENGO (Vargas-del-Río 2010) after a turtle trail closed there in 1992. Also influential was the construction of two sun-and-sand tourist resorts promoted by the federal government at Puerto Escondido, 30 km to the west, and Huatulco, 50 km to the east (Figure 2). Returning to La Ventanilla, tourism began in 1992, influenced by Mazunte. Residents' first involvement was taking visitors on informal outings through the lagoon to observe the flora and fauna in the mangroves close up. Those short trips became increasingly popular because the mangroves reach heights over 100 ft and tourists could watch species like the American crocodile in the wild (*Crocodylus Acutus*) (Ávila-Foucat 2002). At that point, an ENGO involved in conservation appeared and proposed replacing activities judged harmful for the environment with a more ecologically responsible form of NBT. It offered workshops on environmental education and conservation, oriented locals to systematise their activities, and helped organise an ecotourism cooperative, which was founded formally in 1995 and emerged as a local actor well integrated into the economic and political context and global stereotypes, with regional allies -mainly ENGOs - that ideal-'community' and exalted environmental responsibility:

They said it was a community cooperative, but it wasn't true. Just like the assembly, it separates the cooperative from the community: on that side is the cooperative, the community is over there.

Comunero (1 November 2007)

The cooperative soon won praise for its environmental responsibility and received more funds from the government to conduct volunteer conservation projects, including reforestation in the mangroves, a deer reserve, a turtle egg nursery, and areas for iguanas, among other initiatives. Hence, it continued to receive financial and moral power which it exercised over the rest of the population, while promoting conservation and tourism over traditional uses.

We faced serious problems because we impeded people from entering . . . some still don't agree with conservation because of the way of life they led before.

Cooperative member (26 October 2007)

The ensuing environmental conflicts over voluntary conservation projects and NBT is reflected in the socio-environmental milieu, where the social institutions responsible for nature conservation were weakened (*The Ecologist* 1993). In relation to this development, Figure 3 presents results from the quantitative and spatial analysis conducted.

La Ventanilla 20 years later

Figure 3 shows the functional mapping of La Ventanilla elaborated as the basis for the aforementioned socioeconomic and socio-demographic survey, and for analysing the dynamics of actors in the region. A total of 28 households with 101 residents were surveyed. We included general socioeconomic and demographic variables and more specific aspects, including membership of organised groups, seasonal mobility, migration, and economic support received. Also, we visually assessed material lifestyles. Survey results were contrasted and triangulated with interviews to describe the current context and link ecological distribution conflicts with socioeconomic and demographic variables. Results of these analyses were superimposed on the map to show how they are reflected spatially, among other things.

Unlike rhetorical claims surrounding the La Ventanilla project, we found a marked tendency towards spatial segregation, social fragmentation, inequality and speculation; phenomena that have emerged as a direct result of the 'conservation' initiative with its nature-based tourism activities and imposed environmental restrictions.

Figure 3 shows three sub-zones. Sub-zone 1 is the old village centre. It reflects the social inequality detonated by the inadequate distribution of funding and the concentration of productive activities in the La Ventanilla Ecotourism Services Cooperative (CSELV),

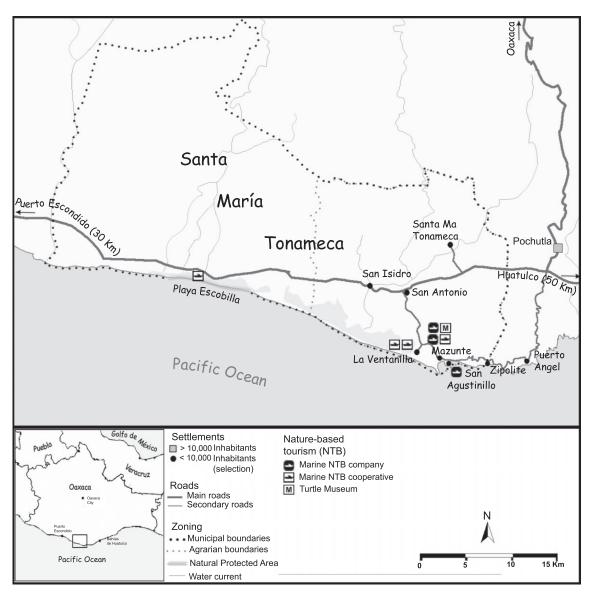


Figure 2 Regional setting of La Ventanilla *Source*: Vargas-del-Río (2010)

which is controlled by six local leaders who own the lands where the cooperative's main assets are located, handle all accounts, and elaborate support and funding applications. They are the 'environmentally concerned' and hold every key position in the group and appropriate all funds, thus converting the other members into simple wage earners.

Sub-zone 1 also shows a community-based society in transition. It has common spaces and the dwellings of some of the earliest inhabitants. The quality of homes contrasts greatly: three (belonging to the

leaders) were built with funds destined for the cooperative. They are made of cement-reinforced adobe, have thatched roofs, and are pleasing to the eye. There are three very high-quality second homes, located beside the highway on broad spaces with gardens and a swimming pool. The other 10 houses were built by residents with cement blocks and locally available materials. Several show signs of deep poverty: reed walls, palm-leaf roofs and dirt floors. Segregation in the town centre is a result of inequality triggered by the project.

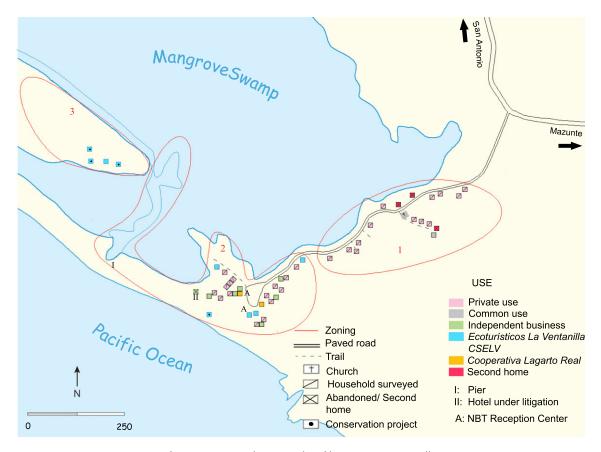


Figure 3 Functional cartography of homes in La Ventanilla Source: Vargas-del-Río (2010)

The houses of the other residents are in sub-zone 2. Though architectural quality and design show similar contrasts, tourism activity and conflicts arising from competition and changes in land use have produced dynamics distinct from those in sub-zone 1. Sub-zone 2 best reflects the disputes and factions that have emerged here since the project began. Originally, there was only one cooperative, which administered conservation and 'ecotourism' projects. It generated economic income, but enforced restrictions on access to, and exploitation of, natural resources. Unfortunately, restrictions were imposed on all residents but the accrued benefits were privatised, so 'irresponsible' local actors excluded from the project soon objected to the fact that they could no longer collect sea turtle eggs, exploit timber for construction, or hunt or trap animals in the lagoon:

They never took us into account [when] resources were used ... The idea is that everyone's supposed to collaborate, but they didn't; so that really upset us.

Member, Cooperativa Lagarto Real (3 November 2007)

Refusing to passively accept oppression and inequity, those on the losing side of this environmental conflict reacted against their oppressors overtly and covertly: they founded another cooperative, disregarded the management plan designed by the ENGO and the CSELV, sabotaged some conservation and ecotourism initiatives undertaken in this sub-zone, and set up restaurants, shops and camping sites of their own that lacked the 'green' image that others were marketing.

As one would expect, the highest quality businesses are run by the CSELV, including two areas with log cabins (co-financed by Berlin University and the Department of Tourism for tourists and ecological volunteers), a reception centre, and an organic restaurant built with support from the cooperatives network to which CSELV belongs. Complicating this conflictive setting is the *Lagarto Real* Cooperative, founded in 2004 by nine ex-members of the CSELV in response to internal inequity. It is housed in a makeshift, charmless thatched-roof hut that falls far short of the stereotypes associated with such ventures and lacks 'benefactors', for it has no links with

Table 1 Occupations of residents of La Ventanilla

	Principal		Secondary	
Occupation	% of the total	% over 18 years	% of the total	% over 18 years
Traditional (agriculture, fishing)	7.0	13.0	3.0	5.6
Tourism (guide, employee, business owner, rents locale, sells artisanal products)	34.7	59.3	14.0	24.2
Not productive (homemaker, student, none)	50.5	13.0	80.9	66.6
Other (commerce, driver, construction worker, mechanic)	8.0	14.9	2.0	3.7

Source: Vargas-del-Río (2010)

universities or ENGOs that could offer technical assistance or promote its activities. However, tourism businesses in the region stand to gain from this increased competition and improved negotiating conditions.

This sub-zone includes the mangrove channel where both cooperatives conduct tours for observing flora and fauna, and where guides compete to optimise the tourists' experience:

Now the guides hold fish in their hands . . . A few days ago [they] lifted a crocodile into the boat, its snout fell right there.

Tourism operator (6 November 2007)

Sub-zone 2 shows greater evidence of speculation than sub-zone 1 because the beach improves commercial opportunities. One example is the hotel (II, now closed) that was built on communal property sold illegally because the assembly had earlier imposed a prohibition on such transactions. Paradoxically, the man who sold the land was a leader of the CSELV: an 'environmentally concerned' actor. In sum, this sub-zone reflects a lack of social cohesion and efforts to subvert the project: the main infrastructures of the original project coexist with others that are completely unrelated; thus deteriorating the image of conservation and responsible tourism that some are striving to sell:

We came to blows . . . but fighting – especially in front of tourists – is really bad. Yeah, no tourist wants to see that, it makes them not want to come back.

Member, Cooperativa Lagarto Real (3 November 2007)

Sub-zone 3 is marked by segregated spaces, changes in productive activities and an unequal distribution of conservation funds. It is separate from the other sub-zones because it is an island completely controlled by the CSELV. Originally, its fields were devoted to agriculture, but today it is part of the NBT area with a restaurant, museum and three conservation projects: a deer reserve, a crocodile

Table 2 Principal sources of income in La Ventanilla by household

Activity	Principal (%)	Secondary (%)
Traditional (agriculture, fishing)	10.7	10.7
Tourism (guide, employee, business owner, rents locale, sells artisanal products)	67.9	67.9
Remittances or government assistance	0.0	7.1
Other (commerce, driver, mechanic)	21.4	3.6

Source: Vargas-del-Río (2010)

pond, and a mangrove nursery. It is a symbol of the CSELV's power and illustrates the conflict over cultural distribution described by Escobar (1999), who shows how traditional activities lost importance as spaces opened up to tourism and 'voluntary' conservation.

This process of transforming traditional activities is seen in Tables 1 and 2. Agriculture and fishing are now practiced by just 7% of inhabitants and represent an important source of income for only 10.7% of households. In contrast, tourism-related activities occupy 34.7% of the people, represent 70.1% of the economically active population, and are the main source of income for 67.9% of households.

However, as shown above, technical and economic support favours formally organised local groups capable of forging alliances with conservation actors. In this respect, only 37% of the over-18 population is formally organised (Table 3): 9.3% belong to the less favoured cooperative, while 27.7% are 'members' of CSELV. But one must recall that 60% of CSELV 'members' are really workers who earn wages that are insufficient to maintain their families, usually US\$72–90/week (Zamora 2009). Although this wage is slightly

% of % of the Number Organised groups population over-18 population of boats Cooperativa de Servicios Ecoturísticos, La Ventanilla 14.9 27.7 10 Cooperativa Lagarto Real 5.0 9.3 3 Total organised groups 19.9 37.0 13 None 80.2 63.0 0

Table 3 Organised groups in La Ventanilla

Source: Vargas-del-Río (2010)

higher than pay for similar work in the area, the environmental restrictions and prohibition of other subsistence activities contest claims of economic 'improvement'. Key to this assessment is that only 14.9% of locals – CSELV members – are committed to the conservation project, so the other 86.1% operate outside the proposed model; worse still, conservation is actually founded upon local social inequality.

One final point: the risks entailed by changes in land use have increased markedly since the purchase/sale of lots was introduced, and continue to grow. Since 2000, at least 12 important properties have been sold (personal communication, Municipal Agent, La Ventanilla, 3 November 2009). Considering that land values in La Ventanilla have risen (now US\$60–150/m² depending on location) and that 53.6% of households claim to have properties aside from their main dwelling, there is a real risk that land purchases and sales will increase in the short and medium terms.

Discussion and conclusions

Upon analysing environmental and socio-political processes in La Ventanilla it became clear that the 'success' reported is based on shallow, reductionist analyses and assessments that fail to take into account slow, gradual changes. As this article shows, since the conservation project began, management became more complex as more actors participated in decisionmaking, it became more difficult to reconcile interests, and social power became increasingly unbalanced (Brenner and Job 2006). This propitiates socio-political vulnerability and a higher risk of land degradation in social and environmental terms as the local society fragments, inequality increases, more actors (external and local) strive to profit from the territory, and regulation becomes more difficult. As a result, local space is more segregated.

Considering the empirical evidence of this case in light of the theory presented earlier, we affirm that the scepticism surrounding the assistive conservation approach is justified. Both the case study and the concept analysed are distortions of the 'environmentalism of the poor' discourse, which advocates greater decisionmaking capacity at the

local level, but actually generates the opposite. In this case, a local elite allied with the conservation/tourism sector simultaneously utilised the power of the 'environmentalism of the poor' discourse and the ideals of a return to nature and the 'good savage' to idealise the community as a homogeneous entity in order to commoditise and concentrate the environmental benefits originally intended for the collectivity. It is important to note that this articulation of actors coincides with other cases using the same methodology studied in Mexico (Vargas-del-Río 2010).

On the surface, the rhetoric of the assistive conservation approach seems more participative and inclusive. This is true compared with other cases where the developed world has imposed its will on community-based lands through expropriations, legal privatisation strategies, forced displacements and overexploitation of resources to supply markets, etc. (*The Ecologist* 1993), but considering the initial situation, the fact is that assistive approaches modify ways of approaching nature, restrict traditional uses in favour of tourism, weaken local management institutions and degrade environmental and social relations.

Thus, one could argue that this approach undermines the cultural, economic and local environment while creating new spaces for consumption (Duffy and Moore 2010). Ultimately, it promotes new uses for natural resources that require participation by external actors, leaves local ecologies more vulnerable, and weakens local institutions responsible for environmental management by supplanting their activities (Harris 1997). Therefore, when gradual and cumulative processes are included in assessments, the assistive approach ceases to represent a real solution to the problem of accelerated degradation of environments and biodiversity.

Considering that science has not generated solutions that adequately address the increasing degradation of environments and societies that results from accelerated progress in the developed world, it is understandable that ecologists exalt the assistive approach, which seems less destructive than other strategies. However, this concept can easily be used as rhetoric to provide access to stakeholders interested

only in profiting from the territory, including the state, ENGOs, tourism, real estate companies, and urbanites in search of new lifestyles, etc. But perhaps the greatest danger is that this concept will generate a kind of balanced or pragmatic common sense concerning the reality of especially fragile ecological spaces that, while deactivating antagonisms, might preclude true solutions.

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