Considering Alternatives:
Local Solutions for Environmental Justice
Analytical Framework Report
D.8.1

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1. Introduction: Environmental Justice

Most macroeconomic and macrosocial approaches to environmental justice focus on the problems of income distribution and the generation of large-scale programs for creating new opportunities to readjust the possibilities of participation in programs contributing to social justice. In spite of repeated attempts to integrate themselves into this dynamic, many communities – especially peasant and indigenous communities – have found themselves increasingly isolated in the broader processes of national and international economic integration. This marginalization has extended far beyond the problems of a heightening polarization in income distribution, as the global processes progressively devalue not only their labor power and the productive activities in which they engage, but also their ability to administer their resources and the unique skills and knowledge systems that are part of their underlying strength in maintaining the social, political and cultural cohesiveness among their members.

In the face of these very unfavorable tendencies, an increasing number of social groups are not only trying to defend their own geographic spaces, but are also organizing to reassert their ability to administer their resources; they are forging alternative mechanisms for developing social and productive systems that allow them to improve their quality of life and protect the environments in which they live and on which they depend. In trying to understand these processes, it is clear that the communities are operating in ways that are not easily explained by reference to the dominant notions for stimulating development or promoting social welfare. The key components of the strategies adopted by the communities are intimately dependent on different kinds of institutions that operate on the basis of principles of participation and validation that are quite different than those prevailing in the dominant institutions of the nations of which they are a part. These communities have suffered in their confrontations with the State which often uses its capacity to mobilize legal and paralegal sources of police and military power to repress them. More recently, however, alternative forms of interaction have become more common, with developments of negotiated "understandings" that allow for the emplacement of local (regional) alternatives for governance of social, productive and natural systems. This part of the "Environmental Governance in Latin America" project will focus on these alternative understandings and arrangements as institutions for developing new strategies for constructing sustainability for those peoples willing and able to separate themselves from the dominant institutions and processes in their countries.

The starting point for these alternative institutional organizations must be clearly understood as the cultural and geographic foundations of which the participating peoples are a part. As such, we assume that the project takes as its point of departure a responsibility to develop an understanding of the way in which local cosmologies and understandings of larger political processes shape institutions and

socio-political practices that produce the different productive and environmental responses that are widely observed in these communities. To do this, we understand that our first task is to collaborate with those communities interested in and able to join us in identifying people who can systematize their own personal experiences in providing leadership in the communities and in mobilizing other community members to participate in implementing the strategies that proved to be contributions in their efforts to consolidate alternative development strategies. The first key task of this research program, then, is to identify communities that are proposing the construction of alternative strategies and then encouraging individuals to join us in the effort to understand the ways in which decision making is attempting to integrate local knowledge and organizations into concerted efforts to produce mechanisms incorporating people into a consensual process for advancement.

2. Going beyond the state of the art: A methodological discussion

In academic terms, the collaboration involves an understanding of the ways in which the "*diálogo de saberes*" (dialogue of knowledge systems) adopted by people searching for their own ways out of their marginalization contributes in practical terms to the goals set forth in the literature on the applications of "post-normal science" and "transdisciplinarity" as means for mainstream science to interact with alternative knowledge and philosophical frameworks; from our exchanges with people in the communities that have embarked upon this path, it is clear that they are actively and continually engaged in a process of acquiring knowledge from outside and critically searching for ways to incorporate new proposals into their societies in such a way as to strengthen community without threatening its foundations. Wolf (1982) identified the centrality of innovation as an integral part of the process of reinforcing tradition in his examination of the long sweep of the history of the meeting (clash?) of civilizations. But this complex process of selective integration also involves a great responsibility on the part of outside collaborators to modify their own understandings of the way in which science works and the way in which cross-fertilization proceeds, if the knowledge systems are to contribute to the social and material development of the participants.

This research program, then, proposes that the search for sustainable and equitable strategies of environmental management is one of the most pressing needs for achieving social and economic progress in the present period. An in-depth review of existing literatures of such strategies highlights the need for new directions for research that take into account the experiences of these communities. This experience suggests that there are a number of common principles involved in community activities; we have identified five fundamental tenets in this approach: **autonomy, solidarity, self-sufficiency, productive diversification,** and **sustainable ecosystem management**. Each encapsulates a conception of collective action and a series of

activities; as a whole they offer a framework for evaluating the proposals and the advances of societies in their search for a better quality of life.

We begin by incorporating the concepts of "*diálogo de saberes*", "post-normal science", and "transdisciplinarity" into a formal discussion of knowledge systems. Following on this discussion, we examine the question of the design by autonomous communities of alternative strategies to promote their own development by using strategies that differ from those advocated within the principal international development and financial institutions. Finally, the document refers to some of the specific case studies with which we seek to engage in an effort to understand the most important differences between the options offered by the dominant theory and the proposals being implemented in the communities.

In response to the inability of national government policies to provide realistic alternatives for improving the quality of life and their environments, many communities are moving to strengthen their collective capacities to govern themselves and manage their ecosystems and natural resources; in the process they are revaluing the contributions of their traditional activities, their inherited knowledge, and their ecosystems to their well-being, while also exploring ways to forge new strategies for their own advancement and the protection of their ecosystems. This was particularly evident during the sessions of the "World People's Conference on Climate Change and the Rights of Mother Earth," convened in the Andean setting of Tiquipaya, Cochabamba, Bolivia in April 2010, where an action program was offered for protecting the planet that directly challenged the one agreed upon at the COP16 in the beach resort of Cancun, some four months before (http://www.cumbrescambioclimatico.org). In designing these strategies the participants are focusing on inherited knowledge and productive systems as sources of productive potential, wealth and a means to consolidate their cohesiveness as societies, while critically (and selectively) incorporating the latest technological and scientific advances, becoming able innovators and managers, creating new governance capacities consistent with the demands for negotiating with regional, national and international institutions.

The inclusion of the concept of the "good life" (*buen vivir*, in Spanish; *Sumak Kawsay* in Quichua) in the new constitutions of both Bolivia and Ecuador reflects a growing commitment to implement alternative development strategies, embodying a variety of cosmologies throughout the Americas; similar expressions of the "good life" are a central part of the philosophical heritage of other indigenous groups (Dussel, *et al*., 2010: Part 1, 15-50; Schroyer 2009) and are influencing non-indigenous traditional communities. Their proposals for creating viable strategies require local control of geographic and political space, involving alliances among peoples searching for new responses to the global forces of exclusion. The turmoil and upheavals in national

politics in Argentina, Bolivia, Brazil, Cuba, Ecuador, Uruguay, and Venezuela are not very distant from the somewhat more localized movements in these same countries and others like Mexico, but are often mistaken for chaos and opportunism in the West (Postero and Zamosc, 2004; Warren and Jackson, 2003). These processes of conflict and accommodation are inspiring new waves of political experimentation and innovation.

The difficult process of integrating present-day epistemologies into traditional organizations and knowledge systems is generating innovative forms of collaboration and production, of political consolidation and alliances. The experiences that will be explored in this "work package" offer an attempt to explain why it is necessary to expand beyond the improvement of individual capabilities to focus on the primacy of collective determinations of the worth of their activities and on collective entitlements, assuring the viability of community processes for individual participation, if societies are to liberate themselves from the globalized straitjackets imposed by international economic integration.

Today, many communities are attempting to develop in direct consonance with their environments and the natural pressures emanating from the ecosystems on which they depend. It seems remarkable that myriad communities developed belief systems and ways of life that enabled them to thrive in harmony with their surroundings, as has been described in innumerable accounts of the interactions between societies and their ecosystems (*e.g.*, Brown and Mitchell 2000; Loyaza and Rist 2000; Rist *et al.*, 2003; Salomon, 1985; Sarmiento, *et al.*, 1993); Wolf (1982) stressed the importance of adaptive behavior in 'traditional' societies that modified some of their customs in response to changing external conditions while reinforcing those that they considered of greatest significance for their identity and continued existence

Today, many scientists acknowledge the significance of the accumulation of knowledge of the workings of the natural world through the centuries in many communities; a considerable scientific literature has emerged to document and comment on their interest in and ability to develop remarkable and innovative solutions to complex problems and changing social and environmental pressures (Bebbington 1998; Byers and Sainju 2004; Llambi, *et al.*, 2005; Mathews 2003; Rist 2000; Tapia 2000; Wheeler and Hoces 1997). The importance of this accumulating knowledge is appreciated by local communities worldwide and codified into religious and lay traditions that continue to be passed on in sacred texts, by story tellers, keepers of 'the word' or, more recently, by students from these communities (Hernández Xolocotzi 1985). Recently, a new academic practice humbly acknowledges our inherited debt to these numerous traditions, producing different understandings of the functioning of the world; this new tradition spawned a literature on "post-

normal" science, promoted by the European Commission (Funtowicz and Ravetz 1993; and Ravetz and Funtowicz 1999), and was further enriched by the explorations of the "Dialogue of Knowledge Systems" (*Diálogo de Saberes*) (Barkin and Fuente 2011; Cerón Villaquirán 2011; Freire 2011; Leff 2010; Tortosa 2010; Villoro 2004). These analyses are now documented in numerous volumes of case studies (*e.g.*, Berkes and Davidson-Hunt 2007; Frey 2000; Hornborg, *et al.*, 2007; Toledo and Barrera Bassols 2008).

3. Community experience and commitment

In Mexico, many communities actively involved in efforts to escape from the dynamics of social and economic marginality were systematically impoverished during the process of international economic integration (Barkin 2000). The "civilization project", or capitalist modernization, that attempted to impose a new rationality on these peoples, was unable to create generalized well-being in communities by stimulating economic growth through the commercialization of "nature, ecological behaviors, and cultural values" (Rist, 2008; Leff 2004:197). Orthodox science, and the power structures that it supported, underestimated the "collateral damage" inflicted by their vision and their policies (Bergh 2007; Gunderson and Folke 2011; Holling 2001). The heightening of social inequalities and the reduction of ecological resiliency are particularly evident in the current period as open pit mining operations are emplaced throughout Mesoamerica and Andes (Boyce, *et al.*, 2006; Bury 2002; Garibay and Balzaretti 2009); this intensification of natural resource exploitation has become so widespread and devastating, that social scientists introduced a new concept – "accumulation by dispossession" (Harvey 2003)– to describe the sacrifice of any ethical notion of distributive justice and the wholesale devastation of mountain regions worldwide, even as the same governments declare their commitment to promoting sustainability.

In response to the onslaught of "civilization", many communities and social groups are exploring ways to construct new paths towards alternative projects that reinforce their own concepts of progress. They are reclaiming parts of their history and inviting others to join them in integrating the best of state-of-the-art practice as part of an effort to strengthen their societies, to join them in forging new structures that will promote meaningful forms of sustainability, assuring enduring patterns of equality and an informed process of ecosystem management for rehabilitation and conservation (Nepal 2002). In this research project we propose to evaluate the feasibility of these alternatives in collaboration with people directly involved. This experience is based upon the idea that people codify their knowledge systems in such a way as to attempt to manage their environments and produce the goods they need for their own well-being and for improving their conditions (Villoro 2004); Barkin (1998; 2000) and Toledo

(2000) describe the logic underlying these alternative community organizations that integrate social and environmental objectives into unified ecosystem management systems. Our interaction with these communities is guided by a process best summarized as innovation to strengthen tradition, informed by the insights of Eric Wolf (1982) whose work demonstrated that adaptive behavior is characteristic of the most successful 'traditional' communities (Barkin and Lemus 2011).

One important line of exploration in this project will focus on rural communities searching for ways in which they can better control their own resources to promote improvements in local well-being. Many peasant groups with strong cultural traditions that have endured through the centuries are confronting the institutions shaped by the development project that currently dominates the international economic scene. They are choosing to revalue and transform their own institutions as part of their strategies to create alternatives to the generalized processes of proletarianization and socio-economic exclusion that present themselves as the only viable path for individual and collective welfare. The case of community forestry in some regions of Mexico is an example of this constant struggle.[1] In this regard, Mexico offers an exemplary experience in this area (Bray *et al*., 2007). About 80% of the national forest area (about 55.3 million hectares) is located in 8,500 agrarian communities organized as *ejidos* (communal tenancy arrangements), with an estimated population of more than 12 million people (Conafor, 2008). Furthermore, in the Mexican forest regions there is a strong relationship between cultural and biological diversity: at least 28 million of these hectares are in indigenous communities characterized not only by their ethnic diversity but also by their natural biodiversity, both natural and some managed, as well as by the biotic resources associated with their agro-ecosystems (as illustrated by the extraordinary variety of native varieties of native maize – landraces) (Boege, 2008).

Although they gained legal access to the land as a result of the agrarian reform, the government arrogated the right to grant the exploitation of the forests to outside groups or to place them off limits for exploitation. As a result, these lands and their resources became a source of a continuing dispute between the communities and the Mexican State. At the heart of the quarrel is the nature of the development model that the national political leadership has tried to impose on these communities, and the nation as a whole, in the face of dissenting peasant views on the direction that development should take. This involves a long history of struggle and is likely to continue well into the future as a result of the exclusionary characteristics of

[1] Some of the communities that gained control over these resources will be participants in the WP8 of the ENGOV project; in general, the Mexican experience over the control and exploitation of forest resources is particularly notable with regard to the sustainable management of common property resources. There is an ample literature about the implications and dimensions of community forestry management; among some of the more notable sources are the contributions of David Bray (1995; 2003; 2007) and Daniel Klooster (2000), as well as others by Camille Antinori, Leticia Merino, Andrew Mathews, Karen O'Brien, and Francisco Chapela.

international economic integration. In this project we deal with a specific historical process: social responses to the granting of concessions to private interests (domestic and international) for the exploitation of what they consider to be "their" natural resources –forest lands, mining rights, and water.[2]

This background offers a context in which we explore the attempts to design local solutions to international economic integration, driven by neoliberal policies. A similar dynamic is emerging in other spheres of collective action involving the search for organizational, productive, and technological innovations that can contribute to improve the quality of life by facilitating work without generating environmental disequilibria. In addition to the forestry resources referred to above, the project envisages an analysis of efforts to develop strategies in the face of governmental projects to construct large-scale infrastructures, often involving efforts to develop new products that can generate employment opportunities and contribute to local well-being. Another line of research involves the efforts of workers to take control of work places being closed because of the vicissitudes of the local and international economies; the Argentine experience is of particular interest that we expect will offer lessons to better understand how to organize local initiatives for the production of manufactures and services.

4. Communality

"Communality" is a central concept that guides the formulation of this analytical framework; although most of the work to develop the concept and apply it to concrete experiences has emerged from experiences in indigenous regions of Oaxaca, it is evident that this concept can help us to understand a broader dynamic of social construction in many spheres of activity, and regions, both rural as well as urban. As will become obvious in the rest of this section, there is a great deal of similarity between the underlying principles of "Buen Vivir", under intensive discussion in South America, and the philosophical orientation emerging from the development of the concept of "communality" in Oaxaca.

"Communality" encapsulates important elements of the heritage of Mesoamerican culture – elements that many also consider to be common to other cultures in Latin America – involving a constant renovation of their communitarian practices and now have spread to other groups as they organize to forge new alternatives for themselves. The local solutions we propose to analyze emerge from the practice of defining and implementing this concept of "communality". Today's

[2] These conflicts are proliferating and intensifying in Mexico and other countries in the ENGOV area as a result of the expansion of mining with the dramatic increase in mineral prices in recent years. Canadian corporations have been particularly aggressive in obtaining these concessions.

practice emerges strengthened by the communities' long experience since the early colonial period that forced them to develop intercultural skills that continue to serve them well in the modern period (Chance y Taylor, 1987; Lockhart, 1985; Taylor, 1972). New leaders emerged with solid philosophical and political training that facilitated their efforts to strengthen collective efforts to reinforce community governance, integrating this new concept to encompass a complex political and cultural process that they set into motion (Martínez Luna, 2010; Díaz, 2007). This concept of communality is an epistemological contribution that explicitly integrates social and cultural traditions with those involving the appropriation of nature in a manner significantly different from that implemented by the "western" project of society (figure 1)

The modern concept of communality emerged during the 1980s as a proposal by various intellectuals with indigenous roots in the Sierra Juárez de Oaxaca. These members had the opportunity to participate in the university community in a wide variety of disciplines, such as anthropology, linguistics, law, and education. As part of the regional struggle to recuperate control of their forest resources, they also participated in broader social movements, demanding autonomy and community control, while also consolidating projects for ethnic solidarity, implemented through municipal governments, local agencies and regional government projects (CDI, 2007:19). One of these leaders, Juan Regino, explains that communality involves the "construction of a desirable future" (CDI, 2007:83). This new group of regional intellectuals considered that the category reflects a diverse and complex experience, a daily practice enjoyed by all people living in the region; the concept is being renewed continually through community assemblies which exercise a new form of authority, of collective work, and of identification with their ecosystems. Floriberto Diaz (2007) offers his own interpretation of the concept, evolving from community itself. He distinguished the "western" notion of community from the indigenous, identifying the latter with the relationship between work and nature focusing on the community as a social manifestation of what he considers the essence of communality. To clarify the dialectical relationship, he offers the following explanation:

> The indigenous community is geometrical, compared to the western concept. This is not an abstract definition, but in order to explain it, he identified the fundamental elements that permit the construction of a specific community. Any indigenous community consists of the following elements:
>
> - A territory, clearly identified and defined by its title
> - A common history, that is communicated mouth to mouth and from one generation to another
> - A specific dialect that identifies a common language

- An organization that defines the political, cultural, social, civil, economic, and religious spheres.
- A community system for the definition and administration of justice

That is, an indigenous community cannot be understood simply as an agglomeration of houses with people in them, but rather as a group of people with a history, a past, present, and future, that not only identify themselves quite concretely, physically, but also spiritually, in relation to nature itself.

> A first definition of the community is the space in which people realize acts of recreation and transformation of nature, while their principal relationship is that of people with their land, through their work (Díaz, 2007:38-9).

Once the community has been defined in this way, then its difference with communality becomes clearer:

> Communality defines the very essence of community, the intangible qualities that help specify the nature of the indigenous reality, the elements that contribute to its usefulness as a category, including:
>
> - The land, as mother and as territory
> - Consensus, as expressed in the communal assembly for decision making
> - Voluntary service for community leaders
> - Community service for all members, as part of the obligations of all members
> - The rituals and ceremonies, as an expression of the communal (Díaz, 2007:39-40).

To enrich this category, Martínez emphasizes the role of territory and of the authority of the community assembly, but also highlights and specifies the importance of local culture in contrast to others[3]. Communality

> is a body of thought and action of community life. It is the result of the social appropriation of the land and of the codes of conduct established by the community's democratic processes … Communality as such is the substantive body of thought emerging from regional and extra-regional education, common agreements that dominate in the area. It is the body of values that predominates within and guides relations with others; it integrates individuality, but is something more than the sum of individualities. Communality is authority, but is something more than the exercise of power as a consensus. It confronts the external forces of the State in different areas: in education, in technology, in religion, and in fiestas. It is an integrative concept of various levels of power, encompassing urban areas as well as the rural

[3] This conceptual formulation is derived from a proposal for local cultural control developed around the same time (Bonfil 1982; 1987).

> community… Communalization is the daily exercise of communality (Martínez, 2003:51)

There are other aspects of daily life that are also part of the conception of the relations involved in the shaping of communality. One of the most notable is the set of organization and cultural measures that limit the individual accumulation of wealth at the expense of community work. Of particular importance in this regard is the channeling of resources from this work to infrastructure and communal services, as well as for the regular cycles of ritual celebrations and for community sanctioned forms of conspicuous consumption.

A complex system of checks and balances also is operative that attempts to stem the unsanctioned accumulation of political power within the communities, with its inevitable concentration of wealth.

> In principle, nobody who accedes to a position of authority in the community has any excuse to enrich himself, since they are not paid a salary that would allow this. For the community there is no reasonable explanation that would legitimize the purchase of a new vehicle or a home in Oaxaca City. The community ethos is not based on the accumulation of wealth, but rather on the accumulation of prestige that comes from the exercise of power (Garibay, 2005:133)

Communality, then, is the gathering of a set of communitarian and institutional attributes, such as:

- **Direct or participatory democracy**, strengthened by the everyday practice as reflected in the community assembly and the oversight processes. That is, many of these communities operate forms of direct democracy (continual use of the assembly to inform of and make decisions and to report on outcomes) as well as representative democracy. In Oaxaca, this led to electoral reforms permitted the incorporation of customary practices in the election of municipal authorities ("usos y costumbres") (Hernández Díaz, 2007). In this regard, it is particularly noteworthy to highlight the relationship between participative democracy and steps taken to ensure environmental balance (Mitchell, 2008);
- **The organization of community work**, which is undertaken without monetary compensation, but rather tied to the development of other systems of values based on local prestige or commitments imposed by the community as a condition for membership. This is evident in the variety of activities that are encompassed in this process: participation in general assemblies; participation in administrative and leadership positions, work brigades for construction, repair and maintenance of infrastructure, and contributions for ritual and community ceremonies (Martínez Luna, 2003);

- **Community land holdings**. Land is not only a factor of social cohesion, defined culturally and historically (as is the case of communal land holdings), but it is also a factor for the conservation of the space for production and reproduction of the society, its culture, and its ecosystems. With the territory as the basis for specific knowledge of biological and productive processes, involving the use and management of natural resources , the communal lands are also the material base for the exercise of political and productive autonomy;

- **The cosmology**. This concept comprises the full range of expressions of cultural perceptions of nature. It is central in our understanding of the way in which the community takes advantage of and manipulates nature for its benefit and for its conservation.

Communality is not simply the joint representation of individual over collective interests, as is the case of the "social contract" of Hobbes or Locke. It cannot be understood as

> an agreement where each party to the contract can safeguard his or her individual interest; if the contract, the political organization, does not protect it, then the individual has the full right to act against the collectivity because the agreement was approved upon in reference to one's private interest; if it does not protect this interest, then the individual has the right to refuse to continue to participate (Villoro, 2003: 48-9).

In the case of the peasant or indigenous practice, it can be understood as a contract in which:

> I accept the contract as part of the search for the welfare of the group; by accepting the will of the group, although it contravenes my individual interests, I will remain loyal to the contract…Democracy is, in this form of contract, a political association that is, necessarily, ethical – because it is a way of protecting the public group that guarantees the freedom of all – and, as a result, a guarantor of autonomy (Villoro, 2003: 49).

These characteristics are unquestionable and fundamental if the community is to successfully enter into negotiations with commercial and political bodies.

5. The epistemological roots: Conceptual contributions

Since 1994, the pressures against rural communities' resources and their autonomy have multiplied many-fold as international markets and the domestic policy environment have changed. A similar process began earlier with the dramatic changes in economic policy that impacted industrial and service sectors, reflecting an important

shift in the constellation of political forces that spread rapidly throughout the leading western nations as well as in Latin America. Among the many elements generating this dramatic shift in the social and political environment confronting workers and the communities were: a) the structural adjustment measures applied by the Mexican State, following the guidelines of international financial institutions and the "Washington Consensus" to promote the (neo)liberalization of markets and the deregulation of international investment flows; b) reduction of protection and real wages for working people in response to pressures from the transnational investment community; c) the increase in the value of the forests as a result of the introduction of programs for the payment for environmental services (that many communities are rejecting because they lead to a loss of local control over their utilization); d) the growing demand for forest products and non-petroleum mineral resources required for industry (especially, military, electronics, automobile, and health) in the North spurred a race among international capitalists to 'lock up' mining concessions in the South, intensifying efforts to facilitate foreign investment as a new source of economic growth; e) the high concentration of the new mining reserves in the territories of indigenous communities with great biocultural significance; and, f) the granting of these mining and forestry concessions is proceeding without regard to national and international regulations about environmental or cultural impacts.

The experience of the mining and forestry industries illustrates the epistemological importance of the cultural and political meaning of sustainability in the current setting.[4] In fact, this is probably one of the key paradigmatic areas of debate in Latin America today, as social forces raise the question of the changing character of society in the context of demands for justice, equality, democracy, and sustainability. The disputes over forestry or mining concessions and the privatization of water management clearly reflect the confrontation between opposing perspectives about the very meaning of development, of progress, and, especially, of sustainability.

The orthodox approach to development emerged from the premises of economic theory that assigns responsibility for achieving equilibrium to the "invisible hand" operating through the market, in which each individual acts in his or her own self-interest. It supposes a commensurability of natural processes with economic (social) forces. Environmental economics and industrial ecology both have met the challenge of justifying public policies for natural resources exploitation on the basis of their market evaluations of impacts. This symbiosis between economic analysis and public policy intensified with the renewed dominance of neoliberal politics that redefined the development model in many Latin American countries, affecting especially the communities and small-scale producers.

[4] The International Institute for the Environment and Development undertook an ambitious study of the possibility of the "sustainable" management of mining, incorporating more than 200 consultant's reports in 16 countries, with the conclusion that there were many insurmountable problems (2002).

These theoretical and political perspectives offer a well-defined bias that explains the processes provoking confrontations among peoples globally. This bias centers on the lack of inclusion of any ethical dimensions of sustainability in their impact evaluations. As a result, around the world struggles are arising that not only raise questions about the impact of this exploitation on the integrity and reproducibility of ecosystems but also about the distribution of the benefits among social groups affected by the production processes. To provide a counterbalance to the extreme reliance on the market, other analysts are proposing more complex criteria for valuation, based on a varied set of criteria that take into account a multiplicity of social, economic, and environmental dimensions. These alternatives facilitate the inclusion of complex cultural considerations that have emerged as primordial in many of the local struggles against resource depredation that have come to be known as the "environmentalism of the poor", reflecting values like those prevalent in the Mesoamerican cultures, but also an integral part of cultures in other parts of the world and increasingly being incorporated into urban working-class cultures.[5]

Many analysts consider that this strong commitment to sustainability is firmly rooted in the high degree of biodiversity that still remains in their territories. Even in the instances where these groups have been uprooted from ancestral lands by colonial expansion, scholars find that many of these groups have learned or relearned to develop productive systems that are in consonance with the conservation of much of the regions' biodiversity, creating an invaluable biocultural heritage that is increasingly appreciated as it erodes or is destroyed in other regions occupied by communities regulated by Western cultural traditions and globalization (Boege, 2008).

This synergy between conservation and cultural diversity is a product of the renewed significance of their cosmologies and the continued importance of indigenous people's institutions within the framework of the new idea of communality that has emerged as the conflicts with international development programs has intensified. In this context, the emergence of the paradigm of "buen vivir" also takes on added meaning (Acosta 2010), as communities discover new elements of communality among themselves, promoting a sense of cohesiveness within each of them but also among them, enriching the intercultural dialogues about their varying ideas of progress and of sustainability in the construction of the concept of "nation."

The struggles around the national project center on three major players: the State, international capital, and the social groups that inherited strong alternative ideas of culture and social organization, along with others who are coming to appreciate the value of these cosmologies for improving their quality of life and conserving planetary ecosystems. Each of these groups interacts with the others on the basis of its conception of society and, with it, the process of building a sustainable

[5] A concept introduced by Ramachandra Guha (1997) and popularized by Joan Martínez Alier (2002).

society. The first two share a similar vision of the "nation", based on the competitive incorporation of the process of international economic integration, from which the idea of sustainable development is directly tied to the need for sustained economic growth, for which natural resource exploitation is essential.

The dispute is not simply about differing visions among social actors, but also part of the discourse in which public policy (economic, environmental, social, educational) is defined. The dominant approach privileges cost-benefit evaluations of the relative merits of differing (conflicting) approaches, stressing the key role of technological advance as a strategy for addressing environmental problems, measured by the value of the natural environments ("natural capital") degraded by productive processes and the cost of replacing them with artifacts produced by society. This process inevitably prejudges the outcomes, emerging from the foundations of economic theory that identifies the market as the regulatory and equilibrating mechanism for society.

In contrast, the approach adopted in this Work Package insists on a revaluation of sustainability itself, using other perspectives that favor a greater social and environmental responsibility. The issues of alternative, more complex languages of valuation of nature and cultural ideas, of distributive conflicts (environmental and economic), and of interculturality are all ethical matters that move the debate to a more unified plane than that proposed by today's policy makers. In the communities with which we will collaborate in this project, the problem of environmental justice acquires special significance, with elements that our team will seek to include into the discussion of the "national project".

By incorporating these elements into the analysis, this research proposal places the concept of communality at the center. The inhabitants of the several communities with which we will collaborate do not share a homogeneous idea of the national development project proposed by the State and by the corporations it invites to implement the project. Their views incorporate differing cultural appreciations of the orthodox proposal for progress: first, and foremost, is the matter of water (quantity and quality) and then matters of a cultural dimension (landscape, sacred). A sociocultural aspect that seems omnipresent is the strong link between territory and communality; territory reveals and embodies the base for cultural identity and sustenance, while communality is a political-cultural instrument for intercultural dialogue.

The lessons will be extracted from the individual community struggles and strategies that will be examined in multiple dimensions. From an epistemological perspective, the category of communality becomes crucial for defining and using alternative systems of valuation of nature than those employed by global economic forces and institutions. On a political plane, the analysis will examine the way in which

the State intervenes in an authoritarian way, generating social conflict and disempowering the communities by “blaming the victim.” Ironically, in the process, its actions may galvanize the community into action, catalyzing an organized response (through the development of communality) that accurately identifies its social exclusion, their absence from the “national project” of which they have learned to feel that they deserve to be a part.

The analysis is designed to reveal how this peasant “praxis” – set in motion by the implementation of a program of communality – is not static. It requires a constant renovation, a reassertion of the idea of autonomy and of spaces in which to exercise this autonomy; this is a delicate process that requires constant challenges to the economic institutions of the global (and local) market, to the prevailing system of economic rationality, and to the State itself. This concept, with the community organizations that support it, also involves a continuing interaction with groups within the community who see the imposition of a collective weal as an attack on their individual benefits; this struggle for the distribution of benefits, then, is not simply a global demand for justice, but also a local battle for the very structure community.

The research proposes a method to define the content of the demands by the several contending voices attempting to define the way in which new socio-environmental scenarios are impacting on matters of environmental justice in the definition of the national project. These are the “diálogo de saberes” (Leff, 2004, 2006) or the intercultural dialogue (Zemelman and Quintanar, 2007), processes demanded by the communities and validated from the academe. In the face of a unitary conception of modernity, or post-modernity, offered and imposed by economic globalization, the collaboration attempts to document not only the possibility of but also the advances towards a trans-modernity or interculturality (Dussel, 2006), an alternative modernity (Toledo, 2000).

The “local solutions” proposed by the pluriculturality of the societies participating in this program involve the reconsideration of the meaning of sustainability. It is not simply of ethical importance but also involves important political and epistemological considerations of great theoretical and methodological importance for the construction of more inclusive, democratic, and equitable societies; all inherent features of sustainability itself. Thus, the contribution of the communities – their ‘praxis’ – in this project is designed to offer a contribution to the emerging fields of ecological economics and political ecology where the revaluing of nature and of culture are important points of departure.

6. The case studies

The specific circumstances that led the peoples from highland Oaxaca to offer intellectual leadership for the development of an alternative vision of the possibilities for self-development are being reproduced throughout Mesoamerica, as foreign investment and neo-liberal economic policies are forcing more and more indigenous communities to question their ability to progress within the folds of the capitalist system. The most dramatic of these “realizations” in Mexico was the Zapatista uprising in 1994 that came on the eve of the entrance into force of the North American Free Trade Agreement (NAFTA), one of a large number of such pacts that Mexico has since signed with trading partners throughout Latin America and around the world; they continue to be defended as channels to promote an increase in commerce. The Zapatistas warned that the NAFTA would decimate small-scale producers who would not be able to compete with the cheaper imports of mass produced consumer goods that would flood the domestic market, most especially food products that would compromise the health and welfare of millions of peasants in Mexico’s predominantly rain-fed small-scale farmer maize growing regions (Baronnet, et al., 2011).

The case studies proposed in our research agenda involve social groups that are engaged in diverse kinds of conflicts to defend their patrimony or in programs to implement new approaches to improving their welfare. These examples offer insights into a broader effort to design new strategies for their advance, based on different cosmologies that are being defined and strengthened as part of the same process. The academic participants in the Project will accompany the community participants in explaining the ideas of the communities in adopting these alternatives as well as promoting a discussion among the communities that will enable all of us to clarify the similarities and differences among them.

For the implementation of the project, we anticipate incorporating wherever possible qualified participants from the communities or social groups who have had positions of responsibility or are recognized as authoritative spokespeople; they would transmit the ideas of the community with respect to the projects being implemented and the longer term vision of the direction in which the community would like to move. As “barefoot researchers” they would assure a grassroots input into the research process, facilitating an understanding of the local explanations of the directions that the community has taken or is proposing to advance. This mechanism will be continually reexamined to ensure that the project is receiving adequate information about local perceptions of progress as well as the variety of visions that emerge in community discussions; to validate this information, we would expect to present the findings derived from these discussions at meetings with other members of the communities on a regular basis. In order to support this process for systematizing information, we are recruiting students from these same communities to

accompany the senior participants, assisting them in systematizing the information and preparing the required reports.

To complement the work of people from each of the communities, we will convene workshops in which people from many of the communities in each collaborating region are expected to participate; we also envision a number of meetings in which people from the different regions will also participate. These exchanges are particularly important for the overall goal of the project which is to transcend the individual experiences to understand the broader strategies that are being implemented, even when they are not explicitly articulated by the participants, as well as the possibility that the local proposals have elements of communality that can allow us to identify broader strategies being implemented across regions.

On the basis of our early work and consultations among collaborating institutions, we have identified different types of approaches being adopted by the various social groups whose experiences will be examined in this research effort. Our early explorations suggest that the local solutions involve the participating groups in approaches involving different measures of autonomy from the prevailing development models in their societies; the extreme posture of local autonomy adopted by some of the indigenous communities in Oaxaca or Chiapas, contrasts with different approaches involving the co-management of resources being attempted by Brazilian communities, the farming communities in Michoacan, or the workers' engaged in managing failed enterprises in Argentina. Finally, we have the cases of groups attempting to implement technological innovations to improve their welfare without modifying the forms of social and political integration with the societies of which they are a part.

At this point we have identified the following groups as likely participants in the process:

1) A group of communities from the Sierra Juárez of Oaxaca in which people who held positions of responsibility have agreed to help us understand the complexity of the decision making process for implementing community projects and the on-going mechanisms for evaluating a re-evaluating these decisions. Among the activities in which these communities are involved are forestry, wood processing, furniture manufacture, mining, water management and bottling, vegetable and flower cultivation, and food production, in addition to diverse commercial ventures such as gasoline stations and eco-tourism (travel and hotels). This group of communities is engaging in a complex process of learning to assure the profitability of commercial enterprises, while trying to avoid letting the profit motive dominate by attempting to condition their operations to the norms imposed by collective management and ownership with the subtleties involved in ensuring an appropriate participation for women, professional training, and adequate

protection for workers, even as community members. Diverse outside pressures to limit the success of these projects and internal conflicts generated by people seeking private profit as well as overt government policies to wrest control of valuable natural resources from the communities make this region an excellent showcase for testing the hypothesis of "communality" proposed by Díaz and Martínez, analyzed above.

2) Another important area that has accumulated important experiences in developing alternative strategies for social and productive development is located in the Sierra Norte de Puebla, with a long history of cooperative organization to assure local needs and the production for 'export' to fair trade markets. Their diversified organization structure has allowed them to prosper in an adverse economic setting and produce a variety of products. Of particular interest is the experience garnered by individuals within the group that has encouraged a multiplicity of activities that has proved of great value in the consolidation of the broader project and prepared them well for the dramatic changes in local policies that might have otherwise undermined the group.
3) A third region incorporates a group of communities in the inhospitable hot country of Michoacan. A group of specialists is examining strategies for generating sustainable livelihoods based on a specialized knowledge of local resource management. The interesting quality of this phase of the project is the participant of marginal social groups that have responded with interest. In spite of a long history of strong individualistic behavior, there are indications of interest in proposals that involve collective processes of ecosystem management that would promote community and social integration.
4) Another direction for collaboration involves regional members of the global coalition of "Vía Campesina" (Martínez Torres y Rosset, 2010). An interesting element of the participation of this group in the project is its willingness to collaborate to understand and document experiences in the construction of alternatives to promote local autonomy and the definition of local objectives to meet the social and productive objectives. Among the important technologies and approaches emphasized by this group is the development and application of the principles of agroecology in the context of a commitment to food self-sufficiency and environmental rehabilitation as part of a strategy to overcome the various crises afflicting their members (Nigh, 2002; Rosset, *et al.*, 2011).
5) In an effort to examine a less extreme form of the search for autonomy, a group of university collaborators are working to strengthen local communities with new technologies that facilitate the fuller utilization in a sustainable manner of local resources. This group of activities involves the identification of available resources and skills that might be mobilized to introduce new lines of production and create new opportunities for people who might then play a significant role in community governance. Two specific projects, implemented in a collaboration between local

communities and the university, include: 1) the production of low-fat pork, modifying animal diets to include local waste avocados that transform high-density into low-density cholesterol in the pigs, thus resulting in a healthier meat, produced in more environmentally sound conditions; and 2) The production of eggs enriched with Omega-3 in peasant communities by including purslane grown in the communities in the hens' diet. Other examples of activities along these lines, include water management projects for improving agricultural productivity and facilitating agroindustrial production of valuable products like mezcal and the planting of mulberry trees on degraded forest lands to provide the basis for the reintroductions of silk production in peasant communities, accelerating the possibility of adoption by encouraging an exchange of experiences with communities already producing silk. This set of activities is guided by our conviction that many communities are actively looking for new products and new opportunities for work and income that will reduce their dependence on labor markets and improve their possibilities for trade in local and regional markets (Barkin, 2010).

6) A different type of proposal is that coming from the coalitions of communities organizing to oppose development proposals throughout the country. Some of these groups have a single sector focus, as the network against mining concessions or the one focusing on dam projects. However, even these are expanding beyond their original purpose to become active participants in an umbrella group of environmentally affected communities. While the initial impetus for these organizations was generally a protest against specific actions or projects, more recently they have begun to participate in a new dynamic to propose alternative strategies for local and regional development on the basis of popular participation for the mobilization of community resources (Delgado, 2010; Garibay and Balzaretti, 2009).

   A detailed case study of the Xikrin people in Northwest Brazil in our collaborative relationship with the Center for Sustainable Development in Brasilia is expected to highlight the ways in which an indigenous community tries to negotiate greater living space as a hydroelectric project threatens to erode many of the resources they require for continued existence as an autonomous tribe (Cohn, 2010; Gordon, 2006).

7) A study of the evolution of cooperative mechanisms being employed by some fisher people's associations in the Lower Amazonian floodplain by our collaborator from the Centre for Latin American Research and Documentation (Amsterdam) will test an hypothesis about the effectiveness of different management processes to guarantee the ability of the participating groups to assure the conservation of their ecosystems and the viability of the fish populations in the area. This case study is of particular interest because it involves collaboration between local groups and state agencies in Brazil, a distinct contrast with the proposals being implemented by our

other collaborating groups where the local communities often find themselves at odds with regional and national authorities (Castro, 2011).

8) Another contribution is expected from a critical interaction with some of the organizations associated with the workers' movement in the recuperated workplaces in Argentina. This project, to be conducted in a collaborative effort with the Gino Germani Institute, will specifically examine the possibilities of a group of former industrial workers to extend beyond the traditional confines of their work centers to develop a more inclusive strategy that takes into account their linkages with other productive and service sectors and relationships with their ecosystems. We will explore the degree to which the consciousness of the cooperatives' members will lead them to explore the possibilities for expanding their influence beyond their immediate circles of action.

7. Conclusions

The search for local solutions for environmental justice is as challenging as the tasks facing communities themselves in trying to implement their own proposals for participating in and/or building a different society. In this regard, the theory we are using goes beyond a critique of development theory to produce an alternative (e.g., Gudynas 2011; Barkin and Lemus, 2011). Although some of the case studies that will be undertaken involve extreme proposals of local autonomy, many of the remaining case studies involve varying degrees of collaboration and cooperation within the market economy. The research collaboration offers a vehicle for testing the possibilities of these differing degrees of separation from dominant social institutions.

The proposals being considered by the communities searching for their own alternatives to the western model of economic integration offer insights into the way in which their cosmologies are guiding them to forge their own strategies. The project attempts to explain how communality can lead to construct new approaches, consistent with the double challenge of improving the well being of their members while also conserving or rehabilitating the ecosystems on which they depend. In this sense, then, the Mesoamerican communities which are the focus of this work are involved in tasks similar to those of their South American brethren, attempting to integrate the concept of "buen vivir" (*Sumak Kawsay*) into a meaningful program of sustainability.

To the extent that we are successful in promoting interchanges among the participating communities that will help them codify their own cosmologies and their own proposals for moving forward, the project will also contribute to a broader understanding and content of the alternatives presently under consideration. It is clear that the choices offered by the dominant model of international integration cannot

respond to even the minimal needs of these communities. The challenge facing them today, then, is to identify the possibilities of forging manageable alternatives that can deliver meaningful improvements in well being and satisfactory models of ecosystem management that will permit the social metabolism to thrive.

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