

## SOCIOINTERCULTURAL EVALUATION FOR INVESTMENT PROJECTS IN INDIGENOUS COMMUNITIES *WIXARIKAS*

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### Abstract

This paper analyzes aspects of the problem that occurs in the social evaluation of investment projects for indigenous communities' *Wixarikas* (Huichols). A project in this context make particularly complex the evaluation. On the socio-economic perspective with which it is evaluated comes into play the incommensurability of social and intercultural issues that cannot be ignored. It is addressed the questions that have arisen in the development of this type of project and presents a theoretical framework for the methodological proposal of socio-cultural evaluation.

JEL Classification: A14, Z13

**Keywords:** Social evaluation of investment projects, socio-intercultural evaluation, indigenous communities, *Wixarikas*.

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### 1. Introduction

While developing investment projects for the implementation of alternative energy in communities *Wixarikas* (hichols) in Mexico in 2010, it was found that there were a number of issues to discuss in the theory of social evaluation of investment projects when they are applied in an indigenous context. These projects aim to improve the conditions of *Wixarikas* and other indigenous communities through

promoting basic infrastructure. This basic infrastructure also enables the generation of projects with their own principles and approaches in line with the cultures and economic logics of the involved ethnic groups, as well as their social and environmental rationality, especially how they relate with Mother Earth (Gómez González, Gómez Calderón and Gómez Calderón, 2008).

In *Wixarikas* communities, the fact of assessing the possibility of provide electric service through alternative energies presents in advance externalities which can be considered negative to their culture, as this service would involve greater use of television sets, radios and other media which open the possibility of extending an acculturating process that despite the benefits, negative effects could be even more undesirable. However, the installation of all services would result in improving their means of agricultural production through the use of machinery and equipment that cannot be used without electricity. But the simple fact of wanting to help *Wixarikas* as part of government policy may have racist implications to place the national mestizo culture above them.

This is not a simple matter; the sample is that despite the high interest in this culture, in recent decades, the government policy has not been able to contribute to significantly improve the economic and material well-being of this ethnic group (Wiegand and Fikes, 2004: 54).

Externalities are found in opposed directions and they should be valued them both from the perspectives of the indigenous communities and the non-indigenous society. Clearly, it is evident that the non-indigenous culture has a greater weight and that decisions will have a particular bias in this direction, but through a series of ethical issues in public policy, they could be taken into account qualifications of the indigenous world to try to balance their interests. For example, unlike the non-indigenous world, for Huichol peasants both production and religion are so closely linked with economic and social life which apparently show a lack of interest in the adoption and adaptation of technology (Torres Contreras, 2000: 162 - 163).

The Huichol Serrano uses his time not devoted to alternative working techniques in the performance of ritual acts jointly with his family and other families in the social and production environment production (Torres Contreras, 2000: 163).

This does not mean that *Wixarikas* are isolated from the mestizo society. The persistence of their culture and community can be explained through processes of identification to the world, but the specificity of their ethnicity is due in part to the

creative integration of what is not their culture (Florentine Beimbord and Peñaflo Romandíe, 2009: 13). The complex skein for the analysis of projects in these contexts begins with the consideration that in the social assessment, mentions Fontaine (1999), externalities allow to understand the feasibility of promoting a non-profit project and socio-intercultural context. Externalities are multi-way and should be analyzed in intra-social, the intra-cultural and inter-cultural (Guerra García, 2004).

This research refers to intra-societal aspects when what it is analyzed is not unique to one of the participating cultures involved and is not put into consideration in inter-cultural relationships. The intra-societal aspects are all those cross-cutting issues in society regardless of the cultures involved, such as poverty, technology and welfare that concern to all human beings. The inter-cultural affairs, on the other hand, are placed on the discussion of the interrelationships among cultures such as the use of resources, domination, language shifts and displacements, asymmetries, differences of understanding, among others. Intra-cultural refers to the differences within the ethnic and cultural groups and that does not give a clear and uniform idea of what a community or people want.

By introducing this methodological perspective of analysis that it has been called socio-intercultural (Guerra García, 2004) in the social assessment, it opens an area of research to generate models that describe the categories to consider in this type of environment.

To pay to the issue is necessary to take into account the fact that decision-makers and intended beneficiaries of the project are from different cultures necessarily involves a "poli-relativism", i.e., to consider all possible relative positions on the evaluation at the same time. That is, if relativity is understood as the application of criteria and calculations from a determined particular perspective accepting that there are certain other points of reference, then, implies not only the acceptance of the existence of other criteria, but the development of mechanisms to consider these other benchmarks and other ways of seeing the world in her assessment of a project.

This implies that the assessment must be also performed as 'multi-criteria', i.e. recognizing that treating complex problems such as those presented in ethno-regions will need to consider the social, cultural, intercultural and intra-cultural uncommensurabilities present in these situations. This incommensurability refers to the presence of multiple legitimate values in society and culture, diverse views and conflicting that result not only the in need to involve all the different actors and

agents in the decision making process, but understand the policies of the State implied to the effect (Vargas Isaza, 2005). The incommensurability is associated with the multidimensional nature of complexity and the use of different dimensions of socio-intercultural analysis.

Therefore, this paper is aimed to answer the following research questions: How to make a socio-intercultural assessment of an investment project in an indigenous community? Or more specifically, what are the categories to be considered in these assessments? These issues have been analyzed for the case mentioned and briefly described in this article.

## **2. Evaluation of investment projects**

It is understood as an investment project to be considered as the formulation of an intervention as a mean to study an existing problem and analyzing the feasibility of achieving a desired change at least in some parts of society. The investment project is one where is delineated with clarity and detail what is to be achieved and also how to do, allowing to justify the intervention from different points of view to give or not give solution to a problem (Andia Valencia, 2010: 28-29).

Before achieving any activity are assessed the possibilities and potential for the project or projects. In any case, even when the target is private, the assessment should be considered a form of social research.

...applied, systematic, planed and directed, on which is supported a judgment about the merit and value of different components of a program, in such a way that serve as a basis or guide for making rational and intelligent decisions between courses of action (Matos Bazó, 2005:23).

## **3. Evaluation of investment projects**

The objectives of any project evaluation, private or social, are always aimed at developing or improving living conditions. The development of the formulation comprises activities from the intention until the end and how it is to be put into operation the project. The project evaluation, although not mentioned in many methodologies, borrows from making public policy criteria already established or commonly accepted. The private evaluation of investment projects provides criteria that mostly come from public policies aligned with an individualistic perspective they put on a secondary level the involvement made to the community. The social assessment of investment

projects, however, departs from public policy underlining the common good as a priority.

It is to be considered that public policies can be placed in streams and approaches of economic thought. Classical economics often includes only the variables that are monetary and cash, but the latest trend precisely it includes all aspects of the social fabric that could not be strongly measured though can be qualified. Especially when considering the known effects as externalities previously thought to be indirect or of minor importance, but increasingly are taking on a greater significance. Without putting aside the economic and financial technicalities, the fact that many externalities are hardly difficult to quantify in general makes more difficult to evaluate.

Evaluation is one of the more difficult concepts to address in socio-inter-cultural environments because is generally not possible to implement a valid metric valid and accepted by all stakeholders. In addition, the aspects that commonly are considered to have universal validity are questioned in the presence of other ways of seeing and perceiving the world. Then for this case, to evaluate means to clarify any doubts that the operation of a project might have before it is applied from the poli-relativism and multi-criteria mentioned.

Such type of projects do not always represent a competition for the allocation of scarce resources, where the guiding principle of the allocation would be given by an indicator of profitability, but there are other equally valid criteria that deal with socio-inter-cultural issues where cultural relativism provides different views that may converge or diverge. The uncertainties that arise are due in large part because of problems involving socio-inter-cultural information and the difficulties for prescribing and determining the final outcome (Arroyave, 1994).

#### **4. The social economics approach**

The crisis of development models has allowed the visibility of some ancestral ways of understanding the economy and the emergence of innovations that have being called the third sector economy, solidarity economy, barter economy, popular economy or social economy (Bastidas Delgado and Richer, 2001: 1). In fact, any economy is social. However, when the focus is on private, all considerations are set aside of the other actors involved in the whole economy (Bastidas Delgado and Richer, 2001:2). The purpose is not to add a more endogenous variable but predominantly recognize the social dimensions of the economy (Izquierdo, 2009:5).

The aim of the social economy is not for profit, it is a welfare-oriented model of groups and communities (Pujol, 2003:36). So, an alternative energy project in these communities ensures sustainability, even if the investment cost is high and apparently did not have a positive financial result. The good life of the community and social synergies generation may be sufficient to justify a project of this type. From this perspective, the State would pursue the aim to improve conditions in communities. In addition, the social economy is diffused through a process of recognition of the poor circumstances in which there is an indigenous community and the debt for over 500 years of Mexican society has for this sector (Bastidas Delgado and Richer, 2001: 2).

In modern times, where it is increasingly clear responsibility for each of the people, where cooperation is becoming increasingly necessary and where it is not considered that the individual good necessarily leads to the common good, social approach is increasingly most needed, even in private projects. In this sense the social economy is an alternative approach consistent with the proposed socio-intercultural assessment. Precisely for the mentioned case, it is necessary to address an indigenous economy, understood as one form of social economy in Latin America, which starts from a vision of a plenty fulfillment life of human beings in their relationship with nature and its search for the good of all.

For example, for the case of *Wixarikas* is known that

...each family member contributes something to the party and also he has the right to be helped to open his land to plant, to help him clean the fields, to harvest and to help him hunt the deer (Torres, 2000: 162).

This gives a sample of a different economic dynamics of the mestizos. In itself the indigenous economy looks:

...to ensure to the indigenous peoples their well-being in all spheres of life, being this philosophical basis of welfare and lays the groundwork for the implementation of the indigenous economy (Consejo Indígena de Centroamérica, 2010).

The indigenous economy is composed of traditional practices to adapt to a particular environment which consist of the following features: a) the production that determines a given landscape according to the particular form of territory appropriation of each tribe worked with traditional techniques, b ) distribution, where different mechanisms operate to the intermediation as reciprocity and redistribution c) consumption, characterized by the forms of matching d) work organization

and e) the earth, seen from a different worldview of individual ownership (Lugo, 2007: 60).

However, it is necessary to clarify that the indigenous economy has particular characteristics according to the indigenous culture and has this relationship with other ethnic groups. The pre-Columbian elements, which consist of traditional practices to adapt to a particular environment, where there is no money to exchange, correspond to an economy that can be called traditional (Lugo, 2007: 60), but there are many elements that have been created from the relationship with the non-indigenous world, perhaps the oldest economic relationship of the latter has been trading.

Trying to generalize,

Indigenous economies are composed of a traditional economy with a segment of a market economy which may be in descending from larger to smaller magnitude, depending on the case in question. Generally, the segment of the market economy behaves inter-cultural adaptations as goods produced with techniques or traditional labor organizations to sell them to the market or whose incomes are applicable to reciprocity or traditional complementarities (Lugo, 2007: 60).

To Lugo (2007: 60-61) the traditional economy consists of the following elements: 1) the production of traditional practices that determine a landscape, a product of particular forms of land appropriation, 2) distribution, where different mechanisms operate other than the intermediary of money, which in their different languages have to do with reciprocity, mutual aid, barter, community collaboration, etc., 3) consumption, which is characterized by finding ways of matching, 4) social indigenous organization, which determines to a greater or lesser extent the allocation of work, use and the enjoyment of the resources and the use of goods and services production and 5) The land as a living being that belongs to itself, so that private property is always a matter of conflict in the legal framework in relation to non-indigenous population (Lugo, 2007: 60-61).

Barter for example, is one of the elements of the traditional economy that is not only currently used by many indigenous communities, but is re-emerging in different niches of society, for example in clubs and interest groups in local and international levels and has been questioned its inefficiency (Tocancipá Falla, 2008: 147). Based on the above, it can be understood why the idea that the indigenous people lack power to be used as leverage for their good living or to live together in a

more harmonious way in Mexican society, requires a broader view that the providing common assessment tools, both private and social.

For all the above to take place it is necessary the real and true recognition of the social organizations in this case the government, communities and indigenous peoples. This public policy is highly relevant for evaluation in such type of contexts (Huot and Bussi  res, 2006:124)

#### 4. Social evaluation

A social investment project seeks to meet social objectives through government targets or alternatives, used by support programs (Matos, 2005). Most important in this type of intervention is that the direct users and social beneficiaries must agree with the formulation posed, i.e., the project must be generated in a unidirectional way, in this case mestizo government to an indigenous community, but must be multidirectional.

However, regarding the social dimension, few evaluations go beyond indicators that describe the satisfaction of basic needs and are pending or without considering other socio-inter-cultural aspects such as inter-cultural equality, balance within and between generations, the level of social organization or the management capacity of a community or region, the formation of social networks, social and human capital, the response and societal organization facing market structures and their change processes (Mazabel-Dom  nguez, Romero-Jacuinde y Hurtado-Cardoso, 2010).

In the present case is noteworthy that the indigenous areas in Mexico have juxtapositions between uses and interests implying that the soil in the worldview of their people and economic activities are predominantly non-indigenous (Korsbaek, 2009). Recent examples have involved some ethnic struggles against the mining exploitation and use of certain private interests on the uses that indigenous peoples want to make on the soil (Saliba, 2011; La Jornada, 2011; Zapateando, 2012). So the difference from the other evaluations is that the benefits, costs and externalities should be observed from different perspectives simultaneously. That is, in inter-cultural projects is not sufficient to make the formulation and evaluation from one perspective, but it is necessary to put on the table all the criteria and viewpoints of the participating cultures involved.

This shows that the different etno-regions have conflicts and disputes regarding the agenda that economic actors that are not indigenous have for the use of what



they consider their land. Thus, in addition to private mining projects, indigenous aspirations confront other companies in connection with new sources of energy, innovative technologies and media, which have also presented breaks, joints and disagreements, subject to further study. The problem that arises is that on the social valuation there are other elements which are perceived and then visible as a community harm that are difficult to quantify or to generate a weighting in monetary units. Hence the development approach of such projects must be preferably a qualitative approach.

### 5. Externalities

Social research projects always involve a number of edges concerning the management of externalities not only unresolved, but are raised to the extent they are found in practice. Externalities occur when social or economic activities of a group of people have an impact on another or on the nature and the impact is not taken into account adequately by the first group (Jaime and Tinoco, 2006:105). Externalities occur when social or economic activities of a group of people have an impact on another or on the nature and the impact is not taken into account adequately by the first group (James and Tinoco, 2006:105). But this does not mean that their development is less valuable. Instead, discussions on the socio-inter-cultural perspective lead to generate new constructs that allow understanding that what happens in a concrete social reality.

Traditionally the evaluation of an investment project intend to build a starting point for determining the compensations that would probably be necessary to grant for counteracting the negative effects on the natural or social systems. However, this compensatory and corrective philosophy is not recommended for projects in which participate different cultures, because actions implying compensation and involving a party could be unacceptable to another.

In the treatment of externalities is important to mention that from the social approach is feasible to calculate the costs of the negative effect and then try to pay in corrective form is not precisely the optimal (Fontaine, 2008: 13), i.e. to internalize externalities is not the best philosophy in the social assessment, because when the groups are from different cultures there are inter-cultural situations that must be addressed proactively.

## 6. Economics and management of natural resources

The importance of this type of projects increases the finding that rural indigenous communities have been assigned the task of being providers of resources to urban areas and have been given the responsibility to preserve the environmental balance (Mozas Moral and Bernal Jurado, 2006: 127). Also an added feature with this type of alternative energy projects in indigenous communities is that at the same discusses issues of economics and management of natural resources. In this regard it should be noted that interest in the sources of new and renewable energy (SNRE) (Fuentes de Energía Nuevas y Renovables, FENR) was due to the energy crisis that increasingly is stress sing (Rodríguez Murcia, 2008: 88).

Within this discipline is the green economy, which unlike conventional economic theory, its objective is not the pursuit of efficiency, profitability and growth in purely monetary terms, but to try to support the sustainability of capital natural (Domínguez Torreiro, 2004:8). Therefore this type of project also is part of a natural resource economics that encompasses everything related to 1) the management and valuation of natural resources, 2) determining acceptable levels of negative externalities and 3) the calculation of positive externalities.

But despite that awareness of the global ecological crisis is an undeniable fact, the current economic systems difficult not only has the evaluation of these projects but also the incorporation of new methods of energy used to be more sustainable. What is clear is that the human dependence on ecosystems can be seen so clearly in subsistence economies linked to the natural environment, where human communities, including indigenous communities take directly from the ecosystems only what they need to live; of this, community's Wixarikas have great wisdom.

Recognition of this fact implies the assumption that the economic and social development will depend on the medium and long term, not only the proper maintenance of ecological systems that sustain and constitute the planet's natural capital but also the respect and attention given to the indigenous cultures from which there is too much to learn (Gómez and de Groot, 2007:5-6). Issues related to natural resources are analyzed both from an economic perspective and from the institutional framework with its rules, duties and obligations, formal and informal (Domínguez Torreiro, 2004: 6-7). Also should be considered certain forms of relationship that each culture has with nature.

### **7. Incorporating the environmental dimension in project analysis**

In this type of projects in rural indigenous communities is difficult to ignore the environmental impact assessment, which involves the identification, analysis and evaluation of project impacts on the environment, natural and social, from the poli-relativism and multi-criteria even when they are not necessarily expressed in monetary units. The addition of this category involves considering a number of additional activities not normally considered and whose execution is required today.

To evaluate the environmental impact of a project on the economic environment it is possible to note that from the time of its construction and after commissioning and implementing, it will influence the environment where it will be installed by the effects produced on the existing and future natural, human and economic activities, during its operation and to the final stage of abandonment. In particular, the environmental evaluation is to gauge the future effects through a process to identify, interpret, predict and disseminate the project's potential effects on the economic and socio-inter-cultural environment in which it will be located and operated that would be reflected in the actual and future environmental changes.

### **8. Development or good living**

Another element to consider in evaluating projects in indigenous communities is that in Latin America is running a renewal of the critique of conventional development under a process that offers several special features and it provides another approach to social assessment.

In this new situation points out that while many of the positions on the conventional development, and even many of the critical currents, they operate within their own knowledge of western modernity, the most recent Latin America alternatives are beyond those limits (Gudynas y Acosta, 2011: 72).

What is important here as it is in communities' Wixarikas assessment is that the positions of the 'good life' recover visions rooted in the knowledge of indigenous peoples' own knowledge. The positions of good living challenge to the development with its philosophy of progress and that in practice meant an adversarial relationship with nature.

Living well is not, then one more alternative development in a long list of options, but is presented as an alternative to all those positions (Gudynas y Acosta, 2011: 72).

The good life is a concept of public policy in construction, but generally recovers the idea of a good life, welfare in a broader sense and in the case of the social economy and social assessment as a general rule provides that a community lives well, without waiting for progress at the cost of the devastation of natural resources. As mentioned Kichwa leaders:

...is a holistic vision of what should be the goal or mission of every human effort, which consist of finding and creating the material and spiritual conditions for building and maintaining the good life, which is also defined as harmonious life that in languages such as *runa shimi* (*Quichua*) is defined as “*alli kausar*” or *sumac Kausai* (Hidalgo, 2011), 88).

From the above it is stressed that the evaluation of a project is different if it is part of any policy development or within the one presented to the approach of good living. Public policies are crucial in guiding the work of social evaluation.

## 9. *Wixarikas* indigenous communities

For the Huichol culture, also called *Wixarika*, be wise means knowing the nature (Iturrioz, cited by Juránková, 2007: 150). For this culture the mestizo world is an alter world coexisting with his mythical (Durín, 2005: 91).

Spirituality and religiosity influences the mode of being of the Huichol, in the way of seeing the world, in their view (Juránková, 2007: 151).

The word ‘Huichol’ derives from ‘hueitzolme’, a territorial area currently located in Nayarit, its language belongs to the dialect *totorame* from the family southern Uto-Aztecán (Wiegand and Fikes, 2004: 51-52). The *Wixarikas* inhabit the region Huicot comprising approximately two hundred and fifty thousand hectares shared by the states of Nayarit, Durango, Jalisco and Zacatecas. This area is located in the Sierra Madre Occidental in a broad band called the Big Nayar, but the weight that the desert located in San Luis Potosi has for them is crucial to their culture (Porrás Carrillo, 2006: 34).

In fact, the pilgrimage that according to the obligations imposed by the Huichol culture should make the huichol to the desert of San Luis Potosi is one of the key events in his life and one of the highlights and attractions of this indigenous people (Porrás Carrillo, 2006: 34)..

This type of migration on the *Wixarikas* allows in a greater perspective to understand the dynamics of their culture in their intensive interaction with 'the other' (Florentine Beimborn and Peñaflor Romandíe, 2009: 15). It is generally a poor region with unpaved roads and sidewalks, electricity is very scarce and low since the problems of access to this territory makes difficult the installation of services and communications (Barrera, 2002: 45).

The altitudes of variegated terrain of mountains, plateaus, cliffs and canyons are located from 400 to 3,000 meters above sea level, containing within it a variety of ecological niches, with a wealth biotic of untold wealth (Guízar Vazquez, 2009: 171).

In addition to the *Wixarikas* inhabit this region other ethnic groups besides mestizos: the *Coras*, the *Tepehuanos*, the *Tepecanos* and the *Mexicaneros* which congregate in total 56, 614 indigenous people (Guízar Vasquez, 2009: 171). The town *Wixarika* has settled agricultural activities from at least 900 years ago (Tetreault and Lucio Lopez, 2011: 170), traditionally are living in three communities, San Sebastián, Santa Catarina and San Andrés, who along with Tuxpan and Guadalupe de Ocotán are the five political territorial units were formed from the time of the Spanish Crown in the eighteenth century (Wiegand and Fikes, 2004: 51).

According to the latest Census of Population and Housing of the National Statistics, Geography and Informatics (Censo de Población y Vivienda del Instituto Nacional de Estadística, Geografía e Informática, INEGI), 44, 788 *Huichol* speakers live in these regions with an age greater than five years, of which 22, 129 are men and 22, 659 women (INEGI, 2010). According to INEGI (2011) the *Huichol* language is in place 22 speakers in number of speakers before the *Chontal* and after the *Chatino*, but it is one of the groups with a higher percentage of monolinguals in Mexico (Juránková, 2007: 149).

The productive organization of the groups in this ethno-region has focused on primary activities of the agricultural nature; the breeding of cattle, both *Wixarikas* as other ethnic groups is the most relevant activity. Rainfed agriculture and forestry have also gained importance in recent years (Guízar Vasquez, 2009: 177). However, the above are not the only economic activities. The migration process is also strongly linked to its economy. An interesting fact is that there are several types of migrations in addition to the religious: The seasonal, shelter and the handcraft.

The seasonal is when the Huichol go to work as laborers and employees outside of the mountains in the dry season. Many of them move from one job to another without having the opportunity to return regularly to the mountains. The second type of migration occurs because eventually have to flee the violence towards the coast where there are groups that have been definitively established, both indigenous peoples as mestizo's townships. Handcraft migration is the third type of migration has to do with the height that today are taking the craft markets across the country, a number of passes *Wixarikas* spent full seasons on trading tour and for some this is already a form of life (Florentine Beimborn and Peñaflor Romandie, 2009: 15-16).

For the specific case of land use in the Nayar, the *Wixarikas* have sustained fighting.

Among the *Wixarikas* there is a subtle and complex regional division of labor, based not only on specialized production as agricultural and manufactured goods, but also in a particular way to grow, produce and manufacture products for each group. This division of labor is wrapped itself in a class hierarchy and of a group, as well as relative territoriality, prompting constant disagreements and conflicts involving animosities between all groups involved, and even within each group: *Coras* against *Wixaritari*, *Tepehuanos* against *Coras*, etc. (Guízar Vasquez, 2009: 172).

Prolonged intra and inter-cultural conflict is cruder against colonization from the mestizo ranchers who have had the support of the state to advance the ethnophagic process resulting from the asymmetries among the indigenous and non-indigenous groups. The fact is that the territory *Wixarika* has been claimed more insistently every day since the colonial times and today. That claim is made in more sophisticated ways by the mestizo group, the current struggle is not only in the juxtaposition of mining regions with the sacred areas, but the mestizo group uses education, religion and technology, among others, to penetrate and change their world. These and other considerations socio-inter-cultural of the *Wixarikas* life cannot be neglected in the evaluation of an investment project.

## 10. Proposal for socio-inter-cultural evaluation

In this complexity described, the proposal for socio-inter-cultural evaluation lies in structuring the categories of analysis according to the macro-spheres and micro-spheres in the corresponding categories to specific cases a) intra-societal, b) intra-cultural issues and c) cross-cultural issues. Figure 1 shows a diagram referring to the above:

Figure 1. Schema for socio-intercultural analysis

DIMENSIONS	INTRA-SOCIAL	INTRA-CULTURAL	INTER-CULTURAL
MACRO-SPHERA Political, social, economics	SOCIO-INTER-CULTURAL		
MICRO-ESFERA Gender, class y ethnicity			

Source: Authors' construction

### A. Evaluation from the macrospheres

To evaluate a project as presented is necessary to take into account the political, social and economic macro-spheres. In the case of communities *Wixarikas* maximum criteria come from a) trends in public policy, whether the development or the good life, which in turn imply what the State wants to do with the poor and the marginalized, that in most cases converge to generate the necessary synergies on the most needy; b) worldwide and nationally environmental trends that encourage alternative technologies and avoid those that add to global warming c) inter-culturalism, which the State wishes to do with ethnic groups that make up the nation, that is, to what extent and how they are targeted efforts towards indigenous peoples.

Perhaps these trends in public policy are the most important consideration in evaluating any investment project.

### B. Evaluation from the micro-spheres

Since the talk is related to specific projects, the evaluation must consider the manifestations of the various stakeholders, local governments, and the *Wixarika* people here in this case and mestizo society that is located in the vicinity and possibly may also receive externalities of the projects. In this case it is important to consider other aspects of the specificity of the participating community, which can also guide the final decision, for example the demographic makeup in *Wixarika* is relevant.

### C. The evaluation from the intra-social

This category includes the analysis of costs, benefits and externalities that have more to do with the affairs of society regardless of cultures and ethnic groups involved. In this case, the sustainable uses of the technologies, policies to address poverty regardless of ethnic group you belong to the population in this State, among others, belong to the intra-social evaluation. The use of alternative energy in the com-

munities avoid using harmful energies, here the problem lies in evaluating the potential environmental cost or benefit. This is because the contamination is considered a negative externality generated by the processes of production and consumption, in this case of electrical energy (Reyes Gil, Galván Rico & Aguilar Serra, 2005: 436).

On the other hand, the inclusion of the interests of future generations brings to rural indigenous communities opportunities for certain incentives from global policies for mitigation and adaptation to climate change through the mechanisms of clean development of energy (Pinto Silbato, 2004: 123). If to this problem is added the Mexican government's responsibility to have entered the Kyoto Treaty, the evaluation becomes immeasurable and the result tends definitely to the installation of the best solar power plants, regardless of whether there are cash flows to recover the monetary investment.

That is, the financial investment is minimal compared to: a) the fight against the damaging effects of climate change, b) the opportunity for development of rural and indigenous communities and c) compensation to indigenous communities by the historical fact of the Spanish domain first mestizo domain later for more than five hundred years.

The presence of cutting sustainable projects is one of the intra-societal aspects that make complex this assessment, since the value of using alternative energy is more significant, regardless of the cultures involved. So that in the era we live projects of this type could have a differentiating feature from other social assessments.

#### **D. The evaluation from the intra-cultural**

In practice it results that the indigenous communities are not a uniform whole, for while some people refuse to have the benefits of alternative energy because they see certain dangers of acculturation, others prefer to apply in the household and production that would give them a better way of life. That is, not all *Wixarikas* manifested in consensus on intervention projects.

In the case of mestizos is, not everyone agrees with *Wixarika* help a community, especially if there are others - indigenous or not - which also require benefits. Therefore, the adoption of technology in the rural indigenous area is a challenge, defining the most suitable methodology in relation to user involvement requires more socio-intercultural research *Wixarikas*.



The technology used by farmers *Wixarikas* is normally integrated into its socio-cultural structure and dynamics and it is from their perception of the environment that they develop a culturally specific technical system, so that any technological innovation disrupts their life the way they see the world and they values (Berrueta Soriano, Limón Aguirre, Fernández Zayas & Soto Pinto, 2003: 95). This raises many questions that are ultimately linked to externalities. How does or could disrupt the use of alternative energy to cultural technical system of the *Wixarikas*? How this technology would change their lifestyle, their way of seeing the world and their values? Does this technology allow a strong presence of the inhabitants and their cultural values?

When the electric energy gets to the community, some people who thought they would emigrate and not do because satisfiers could possibly be enough for people to stay, possibly altering their migratory tradition. Another effect is that by the time of getting the electric power also they reach the mass media to disrupt cultural values. Preliminary assessment between costs and benefits is not easy to determine. The arrival of energy is also linked with the use of media and these processes of acculturation increases. How would these processes be? How much it is valued the displacement of a language in a culture and society? These are questions that cannot be solved simply.

#### **E. The evaluation from the inter-cultural**

The evaluation of inter-cultural projects must be understood in context by relating it to the contextualized political strategies. Inter-culturalism can't be thought from an instrumental logic, which favors the extension or universalization of a trans-cultural model with supposed good intentions. Neither can pass the same criteria used in different contexts. As mentioned by Diez (2004: 195):

The construction of a project refers to socio-historically situated processes and practices that shape and are configured in a field of dispute, in which there are correlations of variables between different forces of actors with different and frequently conflicting, interests.

In the evaluation processes are present, the formations, structures and resistances, relationships of social inequality and the struggle to transform them. Thus, in this form, public policy aimed at expanding rural indigenous energy is not always desirable because of the dynamic processes of acculturation that generally have the inter-cultural relations. But if it is accepted this policy as essential to survival and

good life of communities, at least it should be noted the adoption of renewable energy solutions, as well the potential benefits would not be outweighed by the negative externalities that would make the investment an unsustainable project from the global point of view (Pinto Silbato, 2004:123).

Here it is necessary to evaluate the externalities that exist between cultures when the project enhances inter-cultural relations. Acculturation effects must be analyzed, especially those of non-indigenous society over *Wixarikas*, loss of cultural values, such as language, customs and in general the influence on their worldview. But how to assess externalities when the criteria are incommensurable? For example, in evaluating any investment project, the evaluator has to observe the possibility of soil contamination.

The problem is that, for the culture *Wixarika* land is sacred and should not be disrupted. To calculate an optimal point, in this case means that the indigenous people give up their principles and have to yield to mestizo's criteria: To disrupt a little bit the earth to the "level of acceptance." In summary, the solution becomes impossible. Let others decide for them is neither fair nor just, so it is more precisely at a crossroads.

## 11. In conclusion

It is conclude here that it is necessary to open research in line with the socio-inter-cultural assessment in the indigenous context, to address in more depth each of the raised externalities. Socio-inter-cultural evaluation of investment projects is a research methodology that is part of the implementation of public policies, which extends beyond the application of quantitative techniques centered on financial interest in the private perspective.

In the way of transversal and cross analysis of macro and micro-spheres is proposed to study certain aspects of intra-societal, intra-cultural and inter-cultural characterized features of multicultural societies. As explained, the analysis of macro-spheres departs from precepts of the social economy and considers the specific aspects of the indigenous economy in which theories are contrasted with the development of the emerging proposals of living. In this methodology, it is clear that financial technical matters are reduced to the need for further qualitative analysis of externalities.

The complexity of the evaluation is increased when the projects in question are related to alternative energies that fall down and framed into ecological economics of natural resources, where the idea of sustainability in itself marks a significant difference in the ways of conduct evaluation in social investment projects.

In short, from the perspective of socio-inter-cultural economy, alternative energy projects in communities' *Wixarikas* could not be expected to pay monetary investment for a generation of mostly peasants, since their economic status would not allow it. However, the investment is justified because it would promote social and economic development of the community, but also if it is done through the use of renewable energy that would generate positive externalities to the world and the future of humanity. The latter value is fully justifying the project.

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