

# **Integral peasant land-use planning: A method for strengthening local institutions for community-based management of natural resources**

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## **Abstract:**

The Program for Peasant Management of Natural Resources and Agrofood Systems is carried out by the Group for Environmental Studies, the peasant organization SSS Sanzekan Tinemi and 19 communities which have jointly implemented a long-term intervention model for advancing towards the restoration and sustainable management of natural resources in one of Mexico's most marginated regions. One of the main objectives is facilitating community based integral land- use planning processes in each one of the communities involved. It is based on the strengthening of local natural and social resources, and includes basic research, peasant experimentation and exchange of experiences, land use planning at community, watershed and regional levels. A permanent effort that spans over 10 years, resulting in learning, training and building social and technological alternatives as a result of a constant dialogue between all involved: Indian and peasant communities, technicians, public servers, foundations, etc. The idea is that strengthening the capacities of regional organizations, community institutions and peasant families to plan increases their capacity for control and sustainable management of their land and natural resources. Cartography is used as the physical basis for planning. Water is the central axis for planning and micro-watershed delimitation allows to concentrate work until it is restored and then to move on to another. While there is a vision of what is desired in the long run, every year a new annual plan is drawn up. In this process, each community has a document with a short, medium and long term plan. In some cases, these documents are being used as a tool for negotiating with government representatives for funding to be allotted to these plans. In a country where communities are normally not consulted this can be an important asset.

**Key words:** *Mexico, dry tropics, community based planning, integral the nd use planning, micro-watershed.*

## **Introduction**

Throughout fourteen years of joined efforts, the Group for Environmental Studies (Grupo de Estudios Ambientales A.C. GEA), an independent civil society organization, and the Sanzekan Tinemi (Sanzekan), a regional peasant organization, have slowly embarked on a process for vinculation and interchange with some twenty

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communities of the Center and Mountain regions of the State of Guerrero, in the South of Mexico. This process has encompassed several strategies for group, community and regional action towards peasant sustainable management of natural resources and agrofood systems.

In this paper we wish to make a general presentation of the elements that we use for our alternative proposal for regional development, the basic principles our work is based on, as well as some thoughts on the local institutions for the management of common-pool resources, which are fundamental for our community work. We will also talk of the methods we have developed for community-based planning for watershed management, in what we understand as continual processes for land-use planning of peasant territory.

## **Context**

Over half of Mexican territory is legally recognized as social property: 29, 971 ejidos<sup>4</sup> and comunidades<sup>5</sup> own over 100 million hectares, which represent 51% of the national land coverage (INEGI, 1991), and include the greatest part of all temperate and tropical forests of the country, as well as the most important sheds for water supply (Boege, 2008). The legitimate owners of these resources are, for the most part, marginalized peasants, including the members of the 56 Indian groups who inhabit all Mexican ecosystems.

Current Mexican Laws, specifically the Constitution of 1917, even after the 1992 reforms regarding land tenure, under president Carlos Salinas, recognize collective property rights and a special legal personality for peasant and Indian communities. This sets the scene for the very peculiar characteristics of Mexico's rural areas, where a wide array of common property management experiences can be found, many of them with deep Pre-Hispanic origins and strong resilience strategies. These are present, though under constant tension in face of a number of interests that, throughout the years, have attempted to appropriate and/or privatize collective resources by legal and illegal means.

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<sup>4</sup> Ejido is a legal form of land tenure which originated after the Mexican Revolution, in the 1920's –1930's and was recognized by the Mexican Constitution of 1917. Land owned by the State was given to groups of peasants with the usufruct right to it; this land could not be sold or rented. The *ejido* was to provide land for each family in the form of agricultural field-plots as well as a common land for forest and pastures. The reforms in 1992, under President Carlos Salinas, as part of the neo-liberal policy measures of the Mexican State, allow ejido land to be privately owned by the peasant families and sold to anyone who wants to buy them.

<sup>5</sup> Comunidad. Indian community- land is also a legal form of land tenure. It stems from the recognition of ancient property titles that the Spanish Colony recognized as original Indian settlements and territories. After the Revolution, the Mexican State recognized the right of indigenous peoples to their traditional original lands. It is collectively owned land by the members of those Indian communities and cannot be sold to outsiders; the community can give settlement rights to outsiders, however, without giving them formal land titles. This must not be confused with concept of Indian reserves or Indian territories as in the USA, Canada or other Latin American countries.

Legal recognition of the collective property rights, that Indian and peasant communities have fought for and defended, has allowed the development of important experiences in community-based forestry and land-use planning, all based on local institutions and regulations strongly bound to local cultures. It also allows the proposal of new initiatives to promote processes for the holistic management of natural resources and the territory in highly marginalized regions, as is the case of the Center-Mountain zone of Guerrero we are presenting in this paper.

### **The regional Program for Peasant Management of Natural Resources and Sustainable Agrofood Systems**

The initial motivation for Sanzekan to approach GEA had to do with their growing concern over the increasing deterioration of natural resources in the region. For that reason the first projects launched had to do with reforestation, forest reserves and sustainable management of palms and agave. The Program for Peasant Management of Natural Resources was launched in 1995 to look for ways to implement and consolidate peasant strategies for survival, expressed in forms of land management. In this same context, the Program for Sustainable Agrofood Systems started to exist in 2001, to create a front to resist the very strong tendency towards the loss of agrofood self-sufficiency in the region.

Water was the natural resource that communities most often identified as top priority, specifically its increasing scarcity. After several years of looking for a way to get it started, the year 2002 saw the birth of the Shared Water for All project, with which a methodological proposal was built, in collaboration with the community Water Committees. This method allowed us to consolidate an integrated approach for community-based restoration and management of watersheds and its natural resources.

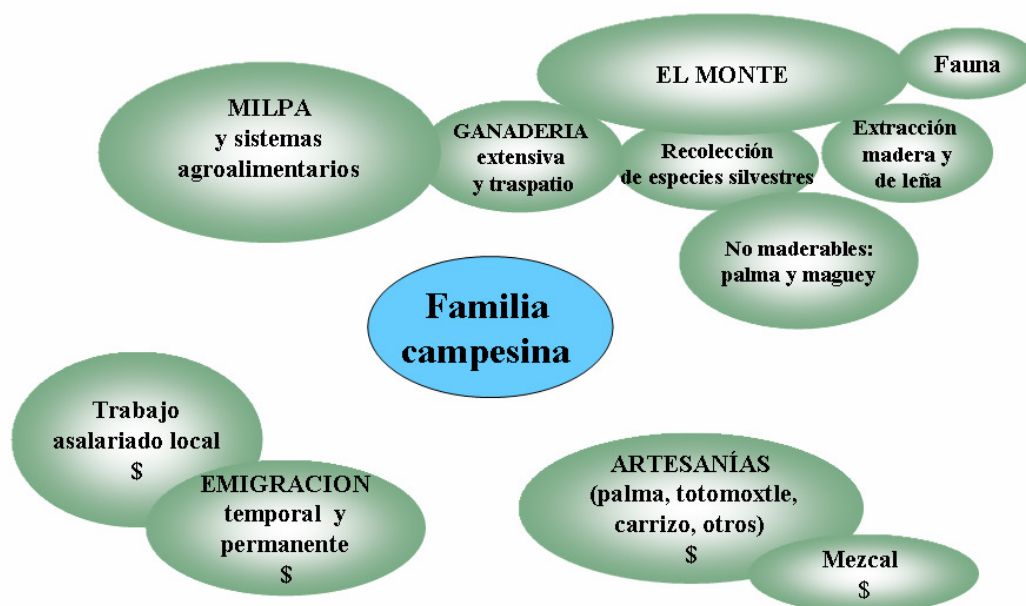
Presently, under the coordination of GEA and the Sanzekan, the following working lines are under way: soil and water conservation, sustainable agrofood systems, livestock raising, biodiversity, agave-mezcal (from the seed to commercialization), community norms and agreements –as a transversal line– and integral peasant land-use planning – as an all-encompassing, integrating line. In this way the efforts of the Assemblies and community authorities, peasant promoters, community committees, peasant families and technical groups from both organizations, join efforts in a continual process for learning, training and building of organizational, social and technologic alternatives for the region.



In order to understand and to tend the problems and challenges of ejido and communal lands in a holistic way, we have progressively constructed a series of methodological instruments for promoting dialogue and discussion with the Assemblies as well as in different settings for group, community and regional training and exchange workshops. One of our objectives is to constantly articulate the various projects of the different working lines, in order to work together toward common strategies for integral community land use planning.

A fundamental starting point for working in the region—that is implicit in the concept of peasant management—is the recognition of the diversified strategies of reproduction developed both by peasant families and communities. Peasant families base their reproduction on simultaneously managing a set of subsystems, including: an agricultural field-plot, family home-garden, domestic animals, forest products harvesting and hunting, hand-made crafts, the sale of products in local and regional markets, and the sale of labor locally and outside the region. Resources are not specialized, but rather administered in such a way as to carry out all of these activities in a coordinated manner, and thus insure the survival of these families and communities. That means that peasant families do not specialize but constitute integrated unities, polisytemic and multifunctional. Their strategy of diversifying activities reduces risks and offers certain guarantee for survival.

The Program considers that by strengthening local capacities of families, groups, communities and regional organizations and their institutions, their capacity for controlling and deciding over their territory will be reinforced, and with it the possibility of moving towards its sustainable management.



For this collaborative effort, communities have contributed their knowledge on the use and management of natural resources while GEA has brought its accumulated 30-year experience in participative methods and watershed management at community and regional levels. In this construction of direct democratic processes, all work is based on a permanent dialogue of different types of knowledge, participative diagnosis of present situations, joint proposal of alternatives and implementation. Monitoring and assessment are integral part of the learning and planning processes.

In addition, in recognition of the need to secure peasant livelihoods on the local level and food sovereignty on the national level, the Program promotes certain actions for strengthening the economic viability of families and communities, considering it a key factor for the viability of sustainable management of the land and the natural resources. Agave and mezcal are one example of this sort of implementation.

Another important principle for the Program is the recognition of the right of indigenous peoples and peasant communities to exercise control over their territories and natural resources, which implies respecting their systems for self-regulation through their own norms and institutions, knowledge and organizational forms, as the starting point from which to build alternatives in any of the working lines.

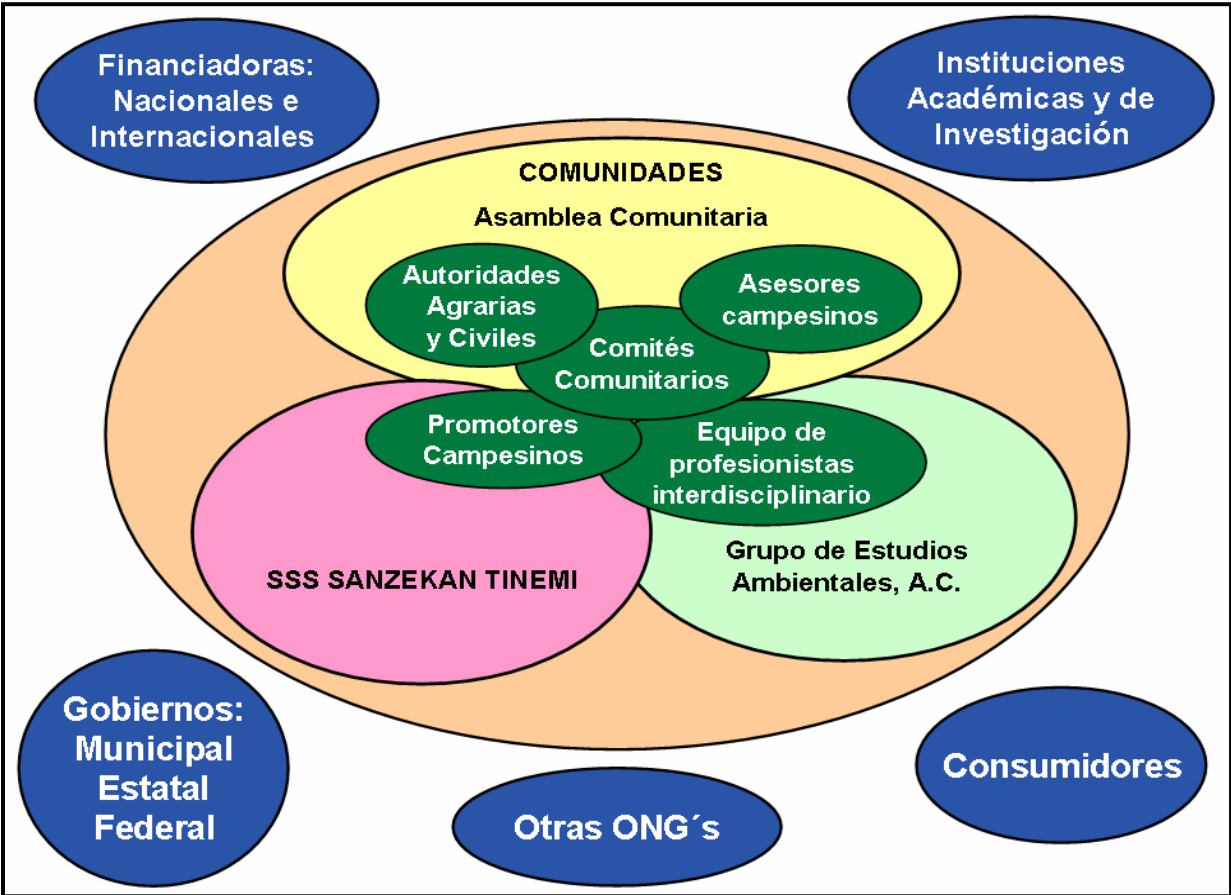
Our work in the region and the land-use planning processes in which we engage along with the communities, part from the understanding and strengthening of local institutions and their mechanisms for control. On this base, we carry out community and regional diagnosis and propose joint alternatives for facing the deep environmental deterioration processes, the migration, and the effects of market and

extreme poverty, the government inefficiency and lack of coordination of public policies, among other problems that affect and often overwhelm the communities and the region.

The actors in integral peasant land-use planning

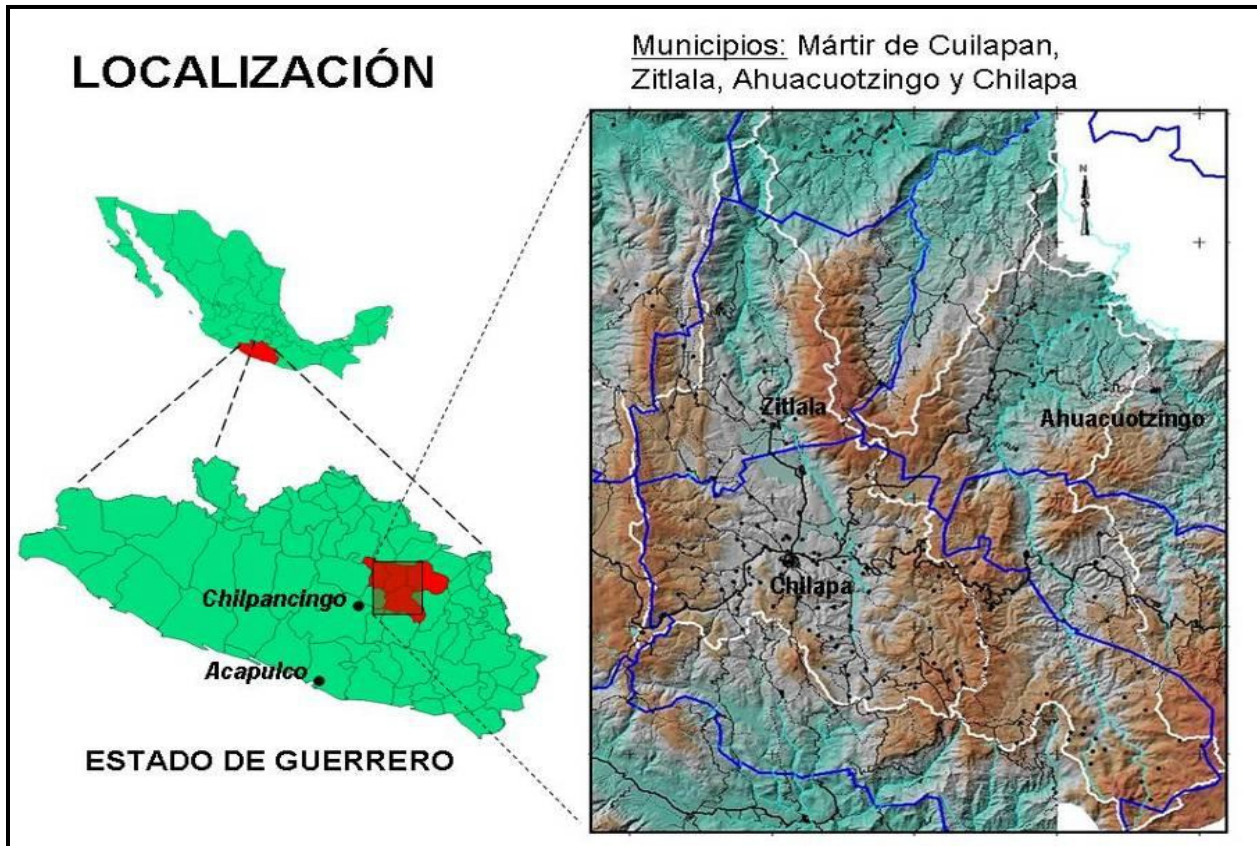
This process is socially and territorially articulated at different levels: family, group, community, micro-watershed, municipal, tributary watershed and regional. The corresponsable actors are diverse: the communities, Sanzekan, GEA, other civil sociaety organizations, some civil society organizations, some government agenciesatlocal, State and federal level and some national and international foundations.

To carry out the actions, the community is represented by its General Assembly and its civil and agrarian authorities and Committees, created *ad-hoc*, appointed by the Assembly to be responsible for each Project that comes out of the planning process, in close collaboration with the technical team, formed by peasant promoters, GEA and Sanzekan technicians and a group of peasant advisors, formed of elder, locally highly respected members of the different communities. The technical team is multidisciplinary, formed in participative methods, biology, agronomy, anthropology, civil engineering and architecture.



## Land tenure and community-based institutions

The inhabitants of the Center and Mountain regions of Guerrero, of Nahuatl origin,



live in highly precarious conditions with high rates of malnutrition, infant deaths, illiteracy and social marginalization. 35% of inhabitants are landless and 32.5% without remunerated employment. More than half of the inhabitants emigrate temporarily to other areas to work part of the year in order to supplement their income. Of those who do own land, most have less than one hectare.

The region faces serious social and environmental difficulties: decreasing labor force due to emigration; loss of traditional knowledge and technology as older inhabitants die and young people are absent; and increasing loss of plant cover, soil and water as a result of intense pressure on natural resources (erosion, deforestation, steep slopes, extensive livestock production); also poverty, public policies, community and inter-community conflicts, among other problems.

Land tenure patterns and the peculiar agrarian history create a complex mosaic in this region. While the land in some communities is private property, for the most part it is social property, mostly ejidos and only a few agrarian communities (Indian communities)<sup>6</sup>. Most of these communities organize around their agrarian and civil authorities. The agrarian authorities are represented by the *comisariado ejidal*, in the case of ejidos, or the *comisariado de bienes comunales* in agrarian communities. The

<sup>6</sup> We use the generic term *community* encompassing all forms of land tenure systems: private, ejido and agrarian or Indian communities, unless otherwise specified in the text.

civil authority and direct link to the municipal government is the *comisario municipal*. Both types of authorities call on General Assemblies for decision-making.

General Assemblies are the top authority for decision-making and are formed by all ejidatarios or comuneros who legally own the common the land. The *comisariado, ejidal or de bienes comunales* is responsible for insuring agreements are honored and has the faculty to make certain decisions regarding the access and use of natural resources. A Secretary and Treasurer help him carry out his job. The Assembly also names a Vigilance Council to watch over the compliance of the local regulations.

The Committees are groups of people, generally designated by the Assembly to carry out a specific task for general benefit, for example to negotiate and coordinate implementation of water distribution systems or reforestation, to support schools in their different needs as parents Committee, etc. These committees answer both to the Assembly and the *comisariado*. They can establish certain agreements but only after consulting their Assembly.

In this region –like in many others of Mexico– the authorities and the community committees are part of the *cargo* systems that form part of the structure of community life. They are part of the structure of local governments, which take different forms but generally establish a complex system, which include certain number of *cargos*, community social responsibilities, recognized and supported by the members of the community. *Cargos* are taken in turns among the adult members in a rotational way and are not paid as they are considered as social service that bring prestige and allow the person to move up the social scale towards becoming an authority. They include political, religious and civil posts, as well as those related to management of ejido or community resources. Some communities keep these *cargos* and social structures more alive and functional than others, according to each particular history. They represent fragments of what once were strong organizational traditions and complex governance systems, inherited down through generations.

When we talk of local institutions in this paper, we refer mainly to: the General Assemblies as collective instances for decision making; the cargo systems, for which citizens offer voluntary labor; the *tequio*, a form of collective work, that allows common benefit work to be carried out, even when no government resources are available; the *fiesta*, as a community institution by which the sense of ritual and belonging are recreated and wealth is re-distributed; and collective property of land, as a central element that unites communities.

### **Community regulations for the access and use of natural resources**

In order to maintain and care for their territory and their natural resources, Indian and peasant communities of the region have developed several regulating mechanisms, local institutions and forms of organizing and of dealing with conflict, which we would like to draw attention on as they represent the foundations for integral community-based land-use planning. Also because they offer important lessons to the debate regarding the commons and the private, a debate that in turn has particular relevance for a multicultural and pluriethnic country like Mexico, where forests and their biodiversity are mostly socially owned.



In 2001<sup>7</sup> GEA published the results and analysis of the results of a series of workshops and exchanges between communities on local regulations and institutions. This paper identified different regulating mechanisms of great importance to understand peasant management of natural resources in the region: practices, agreements and norms. Practices are undertaken in an empirical manner, at family level or a bit more widely, and are shared as beliefs and customs. Agreements and norms are conscious collective decisions taken to promote a certain behavior with a defined intention.

Practices, including management practices, are conscious or unconscious actions that every peasant or member of a family carries out in the process of using a natural resource. It may consist of knowledge that was handed down from another generation or that came from personal empiric experience. These practices can stay within the personal or family realm, or can include behaviors that are more widely shared as general beliefs. There are no sanctions for their compliance, but certain social pressure mechanisms keep them present. Beliefs are often shared stories that influence the collectivity and influence behavior, for example the recognition of sacred areas which should not be touched or the existence of mythical beings that punish excessive fishing.

An agreement, on the other hand, is an explicit decision over the access or utilization of a resource, taken among the members of a certain interest group, a *barrio* (neighborhood) or a community. There is no punishment in case of disobedience but there can be social pressure mechanisms such as criticism and looking down on a person who does not comply. An agreement becomes a norm when a punishment for lack of compliance is established.

Norms, like agreements, are established through a collective, conscious and explicit decision among members of a certain interest group, *barrio* or community and lack to comply is punished or sanctioned in an explicit way. Communal norms can regulate traditional or new issues, in response to present problems of different sorts.

Communities are constantly reviewing and updating their institutionality and their mechanisms for the establishment, vigilance, compliance and legitimization of their agreements and norms. Assemblies, committees, vigilance councils, communities among each other, and citizens in general are constantly reviewing and watching over their regulations.

Sanctions applied vary in degree according to the fault committed. Normally there is a fine or jail sentence. Often the sanction has to do with repairing the damage and managing and solving the conflicts involved. It should be said that communities, over the years, have developed a series of mechanisms to deal with conflicts between groups within the community, between neighboring communities and with the municipal head community, which are quite relevant for land-use planning.

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<sup>7</sup> Aguilar, J.; Illsley, C.; Gómez, T.; Acosta, J.; Quintanar, E.; Tlacotempa, A.; Flores, A.; Mancilla, S. 2001. Normas comunitarias indígenas and campesinas para el acceso and uso de los recursos naturales. Grupo de Estudios Ambientales-SSS Sanzekan Tinemi, Mexico.

In analyzing the regulations we came to the conclusion that despite their limitations and the existence of structural problems that are beyond their capacity to solve, the communities of this region are capable of regulating the access and utilization of their territory and natural resources and also of arriving at a sustainable way for doing it. This capacity depends on the existence of their regulating institutions and mechanisms, of their solidity and strength, of their multiple control mechanisms and their ability to manage conflicts.

### **The process for integral land-use planning**

When we speak of integral peasant land-use planning we refer to a continual, dynamic, short and long term process which crystallizes in form of community-based strategies to improve or modify local regulations related to the use and management of the land and the natural resources, in order to progressively solve some of the most immediate problems they face. Also, at times, to establish certain productive activities that may bring economic income. The overall objective is to advance towards sustainable forms of conservation and management of natural resources, based on participative diagnosis and planning through dialogue and conciliation of the various interests at place within the communities.

Sometimes the process leads simply to the updating and/or strengthening of agreements and norms- which can be formalized as ejido rules and community statutes. When useful for operating the decisions, land-use plans and other actions taken, cartographic language and instruments are used. These can be a simple hand drawing of the part of the territory to be worked on or what we have called photospacemaps (a combination of Landsat ETM satellite images and digital ortophotos).

Integral peasant land-use planning, as here presented, encompasses at least the following steps or interaction moments:

- 1.- Participative diagnosis: recognition and collective reflection on problems, opportunities and alternatives for use and management of natural resources and community life.
- 2.- Validation and prioritization of problems and alternatives to advance toward community action plans, in this case, seen as watershed plans.
- 3.- Construction of community strategies for consensed regulation or modification of the access and use of the land and natural resources, with cartographic representation.
- 4.- Continual instrumentation, monitoring and assessment of the work plans , proposal sans regulation adjustments.

In short, the objective is to implement participative and democratic processes for land-use planning, capable of integrating actions designed by the different working lines of the Program, that translate into better, consensed ways of using each part of the territory, and increased local capacities to negotiate the projects government agencies bring, so they will work in favor of the plans the community has already designed and not against them.

## **Watershed as the basic unit for community planning**

Starting with community and regional diagnosis, the communities identified water as the axis-resource due to the increasing scarcity this was prioritized as one of the basic problems that needed attention. On the other hand, water turned out to be the best resource to articulate all others in the process of planning using a watershed focus. Water is intimately linked to all other natural resources: soil, forest, cultivars, homegardens, cattle and wild fowl. On the other hand, watersheds, in all their different levels are natural units that facilitate planning processes in which impacts can clearly be detected and assessed. This way, the different types of actions and projects were articulated for facing the solution of the many and deep problems surrounding water in the region, according to the specific problems and possibilities of each community.

### **Generally the type of projects proposed consist of:**

In forested areas: reforestation, forest reserves, contour ditches, sustainable management plans for cattle, palm and agave.

On agricultural fields: terraces, live barriers, level curves and ditches; organic agricultura and agroecologic practices; ecologic restoration of soils, transition towards agroforestry systems.

In the ravines: stone or rubbish filtering dams, gavion dams, land protection with fences and reforestation.

For water storage: small dams, tanks, sinkholes.

For water springs: protection with fences and reforestation.

In the homes: enrichening and improving homegardens, firewood saving stoves, ecologic dry latrines, biodigestors for dirty water, filters for soapy water, rainwater catchment and filters for drinking water.

## **Water Committees and their role in the Program**

A community that wishes to be integrated in the Program must express this interest and name a water committee to represent it. If a Committee already exists it may be ratified. This Committee makes the commitment to take full part in the training and exchange activities of the program. It begins with carrying out a diagnosis of the situation of its territory and its natural resources.

**During a workshop carried out at the beginning of each year, each Water Committee identifies and outlines its micro-watersheds on the maps; they also characterize their environmental and social problems. Based on their own experience, which stems from traditional knowledge and new information gained through workshops and visits to other experiences, each committee formulates an integral annual work plan for at least one micro- watershed, prioritized for its specific characteristics and social importance. In this way, plans are made around a determined water spring, considering the different parts of its micro-watershed: the forests, the slopes, agricultural land, ravines, grazing and urban land, planning the best suited project for each part of the land. Plans consider social, organizational, cultural and technical aspects related to each project.**

Each plan is presented to the general assembly for discussion, further prioritization and approval. After that, plans are turned over to an assessment committee, formed jointly by peasants and technicians, who visit each site proposed in the plan for a specific project, suggest adjustments if necessary and approve it.

The next step is to sign a contract between the project and the group. The project offers part of the funding needed to carry out the plans; the committees are in charge of the logistics. When, because of watershed logic, it is necessary to work with communities upstream, the committees arrange the meetings for negotiating through their mutual authorities. This usually ends up with an invitation for the neighboring community to join the Program.

Throughout the year, the committees gather for visits and exchange of experiences, during which they analyze each other's projects, problems and possible solutions. At the end of the cycle, each committee makes a formal delivery of its work to its general assembly.



### Individual agricultural field-plots and watershed community plans

During the regional watershed workshop an array of agroecological alternatives for agricultural and restoration fields is also presented to the Committees and a group of peasant Agroecology promoters, the SAS animators, who are also invited. The viable alternatives suggested must at least:

- Be appropriate for the region, the watershed, the field-plot.
- Integrate well to the production conditions of the field-plot, the objectives of the watershed and mostly to the needs of the owner of the field.

- Contribute, through systematization of the experience, to the collective understanding of the survival strategies for families and communities.

The Water Committee and the SAS animator identify the plots which can be included in the watershed management plan, they locate them on the maps and describe their inherent problems in to the micro-watershed, like its degree of erosion, the agrochemicals that affect the water spring which will be in the center of the planning process, etc. They conclude with a list of people who own plots in that watershed who will be invited to carry out agroecological practices with emphasis on soil and water conservation and restoration.

In Assembly, as part of the general annual plan for the micro-watershed, the proposed set field-plots for restoration or improvement are presented, new proposals are received, with due respect to the prioritization and planning process under way. The definitive plots are selected and their owners are invited to project their plans in an Ecological Planning for Land Plots (*Planeación Parcelaria Ecológica—PPE*).

After the Assembly field verification is carried out to round out the diagnosis of each selected plot and precise the most convenient projects and work to carry out on. Each owner will design his own precise PPE with short, medium and long term goals, including monitoring and assessment.

### **Some lessons learned**

It has been very fruitful to combine the work of a civil society organization with that of a peasant organization of strong regional presence, the success has been based on each one recognizing its role and place without trying to represent or substitute the other. Innovative aspects of the Shared Water for All project include:

- Building from the bottom up, with the users of water in the communities at the center of the action.
- Respect for community institutions (norms and authorities), working with the committees that already existed and had worked together for years; respect for local forms of organization.
- Social participation in every phase, from the planning to the implementation of the projects.
- Local actors developing rules for participation in the project and indicators for monitoring and assessing it.
- Emphasis on training for building local capacities in technical, organizational, planning, learning and bookkeeping aspects.
- The photoimages used for planning, scale 1:4,000, were developed by mixing digital ortophotos with a color composition of a Landsat ETM + scene. This product, which rescues the spatial resolution of orthophotos (2 meters) and the color tonalities of the satellite image, has been very useful for developing the plans, as it allows direct and clear identification of land use areas by the peasants and local technicians.
- The water project is part of an integral program for management of natural resources and watersheds, including actions for soil restoration, reforestation, sustainable management of native species, dendroenergy production, and organic agriculture.

- Participation of multiple sectors is necessary (civil, private and government), at different levels: local, watershed, regional, state, national and international.

### **Other lessons:**

- It has been important to understand that watershed management plans and their implementation, if done together with the community groups, imply continual processes of learning, reflecting, planning, monitoring, assessing and planning again. For this reason the program must be conceived as a mid and long term process, with successive levels of approximation to the problems. Basic funding is necessary to allow stable conditions to be created for these processes.
- Identifying water scarcity as the main problem affecting most communities, has turned into an opportunity for water and watersheds to become the axis that articulates all land-use and natural resource planning processes.
- Each plan is different, as it responds to specific environmental, socioeconomic, land tenement and land use history as well as to different interests. There are no recipes; it is necessary to move case by case, step by step.
- Concrete actions are carried out with those communities which express interest and where basic necessary conditions exist, which are not necessarily the most ideal. Sometimes work on a watershed will have to begin downstream and gradually move up, inviting other communities to work through example, even though manuals say one must begin upstream and move down.
- Transparent bookkeeping and complete report rendering to general assemblies are basic for conflict prevention and solving. This is basic for building long-term confidence. For this reason a great deal of emphasis is put on training in this aspect. Jointly developing clear rules for participating in the project and implementing them, also help the groups bind and work together on long term basis.
- Concrete results motivate participation of new actors; therefore regional dissemination is very important. Visits, regional tours, exchange of experiences from peasant-to-peasant motivate and inspire new thoughts and initiatives. Creating specific manuals and didactic material, based on local conditions makes the training process more effective.
- Creating systems for transparent accountability and spending reports delivered to each general assembly creates conditions for building trust among the groups and from other citizens. It also helps to establish healthy relationships between all people involved in the project.
- The constant use of maps and watershed management plans increases the capacity of the local inhabitants to negotiate with the different official programs that come to the region, to suggest investments are directed in a more orderly fashion and in response to the needs previously identified and agreed upon by the general assembly. The normal situation is that official agencies impose projects that respond to their own political logic and do not consider the community and its opinions.
- It is important to establish synergies with several actors including local, municipal, state, federal governments. However, often the logic and the agendas of official agencies often make it difficult for them to integrate into community watershed management plans, and they tend to impose their own agendas. Communities which have plans they have designed, with the

adequate technical advice, which they understand and believe in, are more capable of negotiating and defending them in front of official programs.

### **Final thoughts**

Through this joint effort we have moved ahead in developing a regional visión for peasant management of natural resources and agrofood systems together with numerous communities in the región, which can be the base for an alternative proposal for sustainable regional rural development. Based on integral peasant land-use planning and strengthening of local institutions, replicable methodologies have been designed and applied. They have proven to be effective for advancing towards restoration and sustainable restoration, use and management of watersheds and their natural resources.

The process, in successive approximations, to a dynamic and flexible scheme for land use planning has allowed the articulation of different social, organizational and technical initiatives, built from the bottom-up, that is, from the problems and aspirations expressed by the participating communities which that year after year are proposing their plans to revert environmental deterioration, becoming a local example and representing hope for others even in an area of such high marginalization, affected by severe social and environmental erosion processes, where youth is expelled by migration, a strong tendency present in most rural areas of Mexico.