Constructing Public Policy in a Participatory Manner: From Local Carbon Sequestration Projects to Network Governance in Chiapas, Mexico

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Abstract The *Scolel Té* project is a long standing experiment in carbon (C) sequestration through agroforestry and forestry systems. Developed in Chiapas, México, this project has evolved since 1996 into a solid model to manage C stocks in indigenous small farmer (*campesino*) landholdings, to be sold in a voluntary C market and to use the C credits for financing conservation and restoration activities. The experience of *Scolel Té* has matured into a well structured system for C transactions, the Plan Vivo System, which is now being applied in other countries of Latin America and Africa. This model of C marketing has been so successful that decision makers and other stakeholders from the environmental policy arena in Chiapas have decided to adopt and modify it with the aim of transforming it into a state wide program of ecosystem services: the Chiapas Program for Ecosystem Services Compensation (PECSE). The final design and implementation of PECSE is done by a policy network called Group of Ecosystem Services for Chiapas (GESE) — a group of public and private stakeholders. The challenges for GESE will be to overcome the internal problems of coordination and to develop a political lobby that would implement the PECSE. This effort, however, is triggering an

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ongoing environmental governance process with implications at local, national, and international levels that could reconfigure existing strategies to tackle the problem of climate change.

Keywords Climate change • Carbon credits • Environmental governance • Policy networks

Introduction: Environmental Governance and Carbon Sequestration Projects

Climate change has been recognized as the main environmental problem today. Although numerous studies have been conducted on the processes of mitigation and adaptation, those addressing the issue of public policies and governance in carbon (C) projects are still scarce. Governance here refers to the alliance of public and private actors to build up public policies in an interactive way (Rhodes 1996; Koiman 2004). Novel arrangements for environmental governance have emerged in the form of policy networks. This means that environmental governance is increasingly the result of diverse interests, activities, and capacities of a variety of stakeholders, including governments, civil society organizations, academic institutions, and international organizations (Lemos and Agrawal 2006). Participatory and collaborative forms of governance are expected to lead to more effective improvements in environmental quality (Newig 2007).

Climate change is typically a matter of network governance. The multiplicity of stakeholders and interests involved in it call for solutions based on consensus rather than on market transactions exclusively. Perspectives on market as the main regulator for the delivery of natural resources and their commoditization have been modified as a result of the market limitations to conserve ecosystems (Hodgson 2008). A good example of this is the Payments for Environmental Services (PES) projects currently being implemented that consider social and ethical factors (Bracer et al. 2007; Jacka et al. 2008).

Here it is argued that a critical step in developing a successful PES strategy is its effective linkage with public policies in an integrated and multi-sectoral approach. This document shows how a successful, locally generated C sequestration project called *Scolel Té*, itself borne out of the alliance and interactions of different stakeholders (indigenous farmers, scientists, and nongovernmental organizations), stimulated the emergence of a regional network of civil society and government institutions focused on creating consistent guidelines for a state wide program of PES in Chiapas, México (Gibbs et al. 2002).

The chapter describes the *Scolel Té* project in terms of its current status, institutional structure, main achievements/impacts, and the key factors that work towards its permanence and stability. It also describes how the project's model of C transaction was used to develop a public policy program – the Program for Ecosystem Services Compensation for Chiapas (PECSE) – through an environmental governance process involving a policy network of private and public sectors called the Group of Ecosystem Services for Chiapas (GESE).

Scolel Té: A Project to Sell Carbon from Agroforestry Systems in Chiapas, Mexico

In the southern state of Chiapas, Mexico, a pilot project that uses forest and agroforestry (AF) systems to sequester C was initiated in 1996 through the collaboration of indigenous farmers' organizations, research institutions, and groups from the civil society. Its main objective was to improve the living standards of participating communities, using voluntary C credit payments to help conserve and restore forestry resources (Soto-Pinto et al. 2005). This effort was later turned into a permanent project called *Scolel Té*. Since 1997, the *Scolel Té* producers have been selling C sequestered in their AF plots to national and international organizations through the voluntary C market. Initially, the C sequestered was sold to FIA (Federation Internationale de l'Automovile), which agreed to buy 5,500 Mg C per year at US $12 per Mg. Since 2001, there has been a 45% increase in the amount of C sold. As of 2006, the project has sold a total of 98,754 Mg C to different buyers, such as Future Forest, Lloyd, Key Travel, The Nature Conservancy, Workers of The World Bank, and the UK Department for International Development (DFID). Ambio, a locally based cooperative in Chiapas, operates the project and deals with the administration of payments and its distribution to farmers. Ambio is also in charge of monitoring tasks, training local technicians, and fostering relations with participants in the project; its institutional structure is outlined in Fig. 1. To date, 62 communities (677 producers) have participated through a variety of forestry and AF systems. These involve up to 500 individual plots, consisting of 2,000 ha in C sequestration activities, 2,660 ha in avoided emissions activities, and more than 7,500 ha in conservation and restoration activities.[1]

The participants are smallholders, 50% of whom belong to five different Maya language groups (*Tzeltal, Tzotzil, Ch'ol, Tojolabal* and *Lacandon*). In spite of their cultural and ecological differences, the participating communities experience certain common socioeconomic problems related to land use such as strong pressures on land and other natural resources, high rates of deforestation, high levels of social marginalization, and the disruption of social and economic structures (for instance, through migration, loss of traditional knowledge, and lack of economic alternatives). While the majority of farmers participate in the project as individuals, using their own family managed landholdings for the C projects, some communities also participate on a collective basis, enrolling communally owned forest lands in the project. Individual plot sizes range from 1 to 10 ha.[2]

[1] Vargas-Guillen et al. (2009).

[2] Ambio (2006).

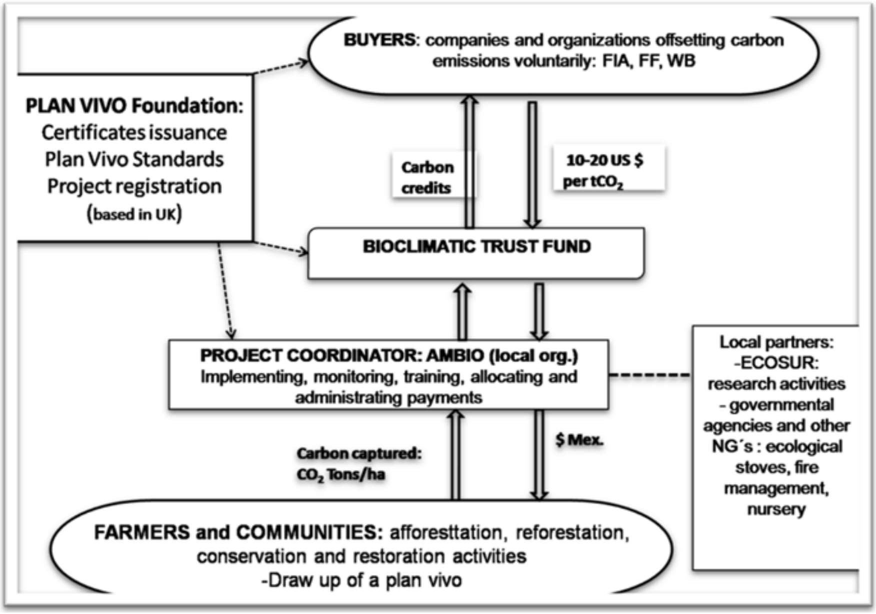

Fig. 1 Institutional structure of Scolel Té. *Solid arrows* show flows of carbon and money equivalent and *dotted arrows* show administrative procedures and knowledge exchange amongst the actors (Source: Adapted from Ambio's presentation of the project)

Farmers are involved with the project decision making process through their working groups. Each working group will be represented by a representative, who will attend all the six monthly meetings to bring suggestions to the Ambio headquarters and pass the information on to members of the working group. Since 2008, regional and community technicians' teams were formed in order to promote *Scolel Té* within new communities. Most of these technicians were previously producers themselves, which facilitates communication and gives a better insight to the new producers (for example, they can talk from a producer's point of view, which avoids mistrust, and also talk in the local language).

After more than 10 years of operation, the *Scolel Té* has become a well known and established project that has developed its own methodology and a set of standards, centered on the *Plan Vivo system.*[3] This system has been developed recently based on *Scolel Té* experience for setting up C sequestration projects under a registered C standard, the *Plan Vivo Standard*. The Plan Vivo System is governed by a Scottish charity, The *Plan Vivo* Foundation, which publicizes the projects to potential buyers and has also developed sister projects in other countries, including Uganda, Mozambique, Malawi, Tanzania and Nicaragua (http://www.planvivo.org, accessed October 2010).

[3] BDRT (2008).

Institutional Mechanisms of *Scolel Té*

Scolel Té organizers designed a bottom up approach for C transactions consistent with those initiatives that considered C as an added benefit and not as the main incentive behind the project. Therefore, *Scolel Té*'s main thrust was on identifying the best land use practices for communities in a participatory mode; and only afterward, the organizers considered how to derive a C product that could be sold in the voluntary market (Tipper 2003). The procedure that emerged from this included three main components: first, the planning process for establishing AF and forestry systems for C sequestration (see Schroth et al. 2011); second, the process of registering the potential C gains in order to sell them in a voluntary market; and third, selling the C and issuing the certificates of C credits to the owners.

Carbon Sequestration Through Forestry and Agroforestry Systems

The individual farmers or communities decide to participate in the project after attending an educational workshop on AF systems (AFS), climate change, and C sequestration services. The participants then start a planning and design process for AFS that includes an action plan called "*Plan Vivo*", which uses participatory maps, work schedules, estimation of costs, and other tools (Beniest 1994). This planning method helps the farmers to design AFS, make decisions, and identify the technical or social constraints (Soto-Pinto et al. 2008). It became a standard element of the project methodology as *Scolel Té* expanded its geographic scope over the years.

A standard *Plan Vivo* is developed in three steps: first, a simple map of the farmer's land, indicating the distribution of existing land uses (crops, fallow land, forests, rivers or streams, pastures, etc.) is drawn. Secondly, the areas for establishing AF and the choice of systems are decided, wherein the farmers specify the AF arrangements, species to be introduced, and in what densities, whether to include any associated crops, and the details on planting and maintenance activities. Finally, they estimate the costs of labor and the materials needed and also decide on a calendar of operations (i.e., when to carry out the activities; Fig. 2). A screening process for the potential participants is also built into the project, in that it helps farmers to opt out if they do not have sufficient land or other resources to preserve livelihood activities. This implies, however, that participation in the project is not feasible for farmers without a certain minimum level of resources (E. Corbera , N. Kosoy and M. Martínez-Tuna , 2006, personal communication). After drawing up the *Plan Vivo*, it is registered in a database held at the Ambio's headquarters, to serve as the baseline for monitoring tree plantings.

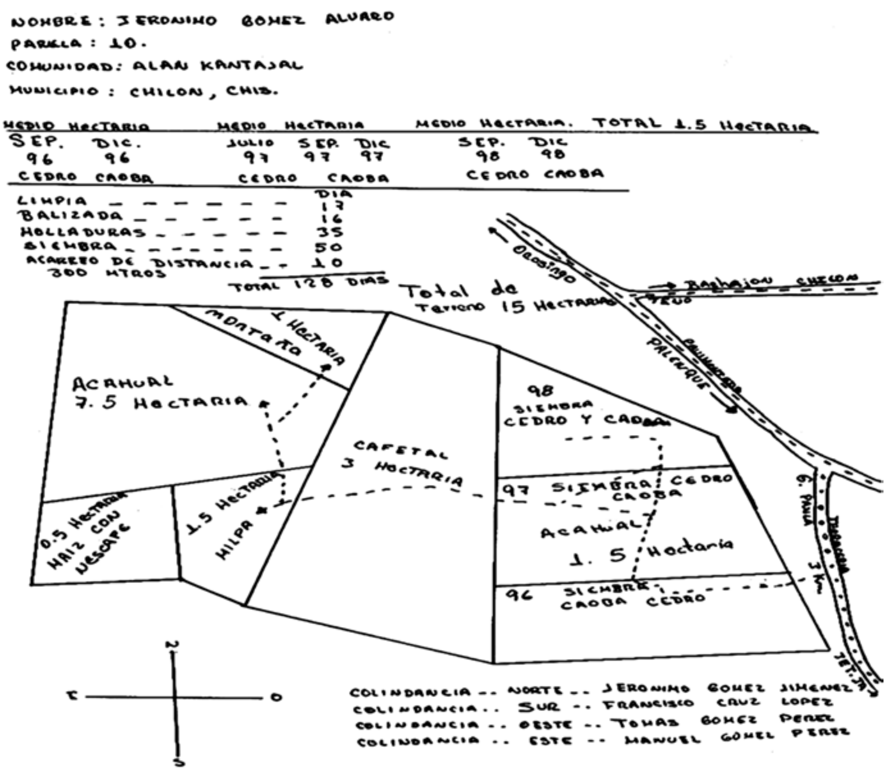

Fig. 2 Example of Plan Vivo drawn by farmers in Scolel Té (Source: Ambio's headquarters archives)

Monitoring C Sequestration and the System of Payments to the Farmers

Trees planted are the key to generate trust on the demand side (those who are going to buy the C captured by the trees planted). In order to achieve this, a fairly strict system of monitoring has been evolved by the project. A team of local technicians monitors 100% of the registered plots and between 10% and 20% of the project area is monitored by the Ambio's professional team that organizes, supervises, and supports the entire procedure. Monitoring consists of filling out a form annually with information on the performance of the plantations. It includes parameters such as: the degree to which *Plan Vivo* goals are achieved, tree mortality, growth measurements, tree species richness, health conditions, and the requirements of pruning, shade management, or clearing, with final remarks from the local technician. The monitoring system is reviewed by an independent, third party verifier, Smartwood (http://www.rainforest-alliance.org/forestry.cfm?id=smartwood_program; accessed March 2010), which guarantees transparency and refines the procedures (Fig. 2).

Under *Plan Vivo*, the farmers commit to maintain the AFS for a period of 15 years (to avoid land use changes that could result in C loss). They also receive a kind of "bankbook" for the C account, in which the total quantity of C to be sequestered is shown along with the equivalent amount of money (Tipper 2003). Ambio and their partners have standardized the estimates of C sequestered by each system over time. Carbon sequestered above a certain baseline forms the basis for payments received by the farmers (de Jong 2001; de Jong et al. 2000). The fee for C sequestered is paid to the farmer ex-ante (i.e., before the C is actually stored in the system), as described below, but the payments are withheld if targets are not reached. Moreover, only after the Ambio's technicians have verified that the trees are actually planted and that other associated tasks related to maintenance of the land have been accomplished, payments are released.

Since most of the labor and other investments take place during the establishment phase of the AFS, the main portion of the money equivalent to the C sold is distributed during the first few years itself. The payments are distributed in four installments of 18% each paid during the first three consecutive years and in the fifth year, and a final installment in the eighth year. A minimum 10% buffer is deducted from each sale agreement with a community or producer in order to raise a contingent fund to cover up the risks and uncertainties in the delivery of C credits, e.g., non-compliance by producers or any other risks that can threaten tree planting, such as natural disasters. Through this system of risk buffering, permanence is guaranteed (Sandie Fournier, Plan Vivo Foundation, June 2010, personal communication).

Carbon Credits and Their Sale in the Voluntary Market

The information gathered by technicians during the monitoring process are captured in the data base of *Plan Vivo* maps, which enables the Foundation to assess the progress of the project towards expected emission reductions. Once this assessment is done, *Plan Vivo* Foundation issues the C certificates, which the buyers will be able to acquire in the voluntary markets. These certificates have a unique serial number representing the C credits bought by a particular buyer, thus the project ensures that the same quantity of C is only sold once. The money from the C sales goes to a trust fund, called the *Fondo Bioclimático* that is managed by *Plan Vivo* Foundation who acts as an escrow agent. The payments received by farmers come from this trust fund. Because the payments are made upfront, risks of failure and overestimation of C benefits exist. If this happens, corrective actions can be instituted or compensation made from the buffer fund, referred to before.

Outcomes of the Project

The organizational structure of the project favours mainly ecological benefits. It also ensures that the payments are made to the farmers in accordance with their contributions. However, economical impacts and the farmer organizations' involvement in project decision making fall short of expectations. The following sections elucidate these issues in greater detail.

Environmental Impacts: The Ecological Benefits of Agroforestry Systems

By incorporating AFS, *Scolel Té* allowed substantial C sequestration benefits to be integrated into the regional production systems, along with other gains such as ecosystem restoration and conservation of natural resources. The implicit theme here is that rural landscapes actively managed or modified by humans are very important loci for environmental services (Harvey et al. 2006). For instance, organic shade grown coffee (*Coffea* spp.), improved fallows, and silvopastoral systems have demonstrated the value of providing environmental services, due to their complex structure and species diversity (Perfecto et al. 2003; Harvey et al. 2006). Moreover, AFS such as *taungya* (maize, *Zea mays* L., in association with trees) and improved fallows also have proven C additionality in aboveground biomass compared to traditional maize systems. Improved fallows and coffee systems are also good options for carbon conservation or sequestration, and for avoided deforestation projects (Soto-Pinto et al. 2010), since large areas were transformed from forest to secondary forest during the past few decades in Mexico (Masera et al. 1997).

To achieve the above mentioned benefits, participating farmers engage in a planning and design process (Raintree 1987), where they select the AF prototypes, species to be planted, and appropriate spatial and temporal arrangements for planting, as mentioned earlier. Shaded coffee with timber trees, *taungya*, improved fallows, pine plantations, and conservation and restoration are the most frequently selected designs (Soto-Pinto et al. 2010). Such designs usually reflect the biophysical, technical, economical, and social conditions and livelihood systems of the locality, as well as the personal interests of the farmers concerned (Vanclay et al. 2006).

Along with C sequestration, these systems are designed to help address other problems such as low productivity of swidden farming systems, inefficient land utilization, land scarcity and degradation, non-availability of forest products (timber and firewood), and low income levels (Nelson and de Jong 2003). For instance, the combination of commercial timber species with agricultural crops has contributed to the re-evaluation of the maize, coffee, and livestock farming systems. Aside from C sequestration, AFS have also shown great potential for increasing the products and services from limited space, intensifying land use while incorporating ecosystem conserving measures, and biodiversity conservation (Soto-Pinto et al. 2010). Table 1 summarizes the most frequently chosen AFS by *Scolel Té* participants and the relative amounts of C credit payments and C sequestration.

Social Impacts: Agroforestry to Avoid Conflicting Land Uses

Scolel Té's origin as a project designed to have a positive impact on the indigenous livelihoods and landscapes, with participation of farmer organizations, is particularly important in providing social benefits to the local community. The project experience during the past more than a decade shows that the focus on AFS has allowed farmers

Table 1 Agroforestry systems implemented in the Scolel Té project, Chiapas, Mexico according to carbon sequestration capacity, carbon payments by system, and farmer participation

Agroforestry systems	Area (ha)	Carbon sequestration (Mg C ha^{-1})	Number of producers/ communities per system	Unitary payment per ton of carbon per system (US$)
Taungya	107.5	99.0	134	8
Improved fallows in tropical area	398.0	96.0	304	8–13
Improved fallows in sub-tropical area	256.0	45.7	91	8
Coffee diversification with timber trees	163.1	39.0	75	8
Conservation in tropical area	6493.0	325.0	5 (communities)	4–6
Restoration in sub-tropical area	157.0	44.7	6 (communities)	8
Living fences and pastures in tropical area	256.8	43.0	182	8–10
Living fences and pastures in sub-tropical area	109.0	27.9	62	8–10

Source: Technical specifications of *Scolel Té* data base

to integrate trees into existing production systems without disrupting subsistence activities.[4] Participants strategically adopted and modified the systems chosen in order to find synergies and avoid negative impacts on labor, land, and livelihoods. For instance, many explicitly chose to plant trees in association with crops (e.g., *taungya*, coffee, fruit trees, pasture), in view of the spatial and temporal complementarities in resource use and the potential for diversified production (e.g., maize and trees). Additional synergies making the AF approach attractive to participants are that the C payments in many cases may help subsidize the production costs (e.g., labor, other inputs) of the co-planted crops too; i.e., the care and management of the trees indirectly benefit associated perennial crops such as coffee, especially during off years when prices are too low to warrant labor investments on them. Along with this, farmers anticipate non-economic benefits from the project such as learning of new skills, better familiarity with, and appreciation for the possibilities of silviculture, and leaving behind a legacy of tree planting.

Adverse Impacts of the Project: Economic Impact on Livelihoods, Future Uncertainties, and Carbon Complexities

In economic terms, however, the project has had little substantive impact on the participants' overall economic status. The data suggest that C payments could

[4]Paladino (2008).

range from 1% to 25% of overall household income.[4] However, the absolute numbers involved are small, with 2008 payments for 1 ha in a high carbon capture region of the state reaching only 20–25% of the net income that could be earned by putting that same hectare in maize.[4] These payments have not been sufficient to capitalize changes in livelihood strategies or techniques that could substantially boost the household income. Nevertheless, depending on individual circumstances and the AFS chosen, the C payments are typically more than sufficient to cover the costs incurred for establishing the trees.[4] Revenues from sales of the trees for timber, and ultimately the possibility of developing sustainably managed, smallholder-based, forestry practices could become a significant contribution to the rural economy, but this is yet to be realized and subject to many uncertainties. The realization of this potential may, in fact, surpass the lifetime of many of the older participants.

The relatively long timeline for realizing these economic benefits is a potential vulnerability of this approach to C sequestration, since farmers or their heirs could be tempted to convert the plots to other uses before the trees are saleable.

The low C sequestration prices, the uncertainty associated to obtaining timber benefits, and the technical and administrative complexities of C trading have been major disincentives of farmer participation.

The strategic involvement of farmer organizations in the project was high in the early years of the project but it got diminished due to internal political fights and economic backlashes, amongst other factors (Nelson and de Jong 2003). Implicit in this is that the greatest investment in strategic skill building and institutional capacity has been centered on Ambio itself. In recent years, however, there has been more emphasis on hiring and training participant representatives to work on technical and recruitment roles, as well as on addressing wider questions of farmer participation (Sotero Quechulpa, 2008, personal communication).

Key Determinants of the Stability of *Scolel Té* Model for Carbon Sequestration in Indigenous Communities

In spite of the obstacles encountered, *Scolel Té* strategy of conservation and restoration via C marketing keeps growing and evolving. After more than 10 years of existence, its consolidation and expansion would not have been possible without a continuing process of learning, based on self reflection, evaluation, and continuous adaptation to new challenges (Sotero Quechulpa, 2010, personal communication). Despite this ongoing evolution, the original objectives of the project have been preserved. Together with the ability to learn and evolve, these objectives have made this project one of the most trusted and prestigious C initiatives, recognized as an example of best practices in forestry (Chappel 2008).

A number of strategic factors that work towards the stabilization and permanence of the project have been identified. These factors grouped in four dimensions are

Table 2 Characterization of Scolel Té project Chiapas, Mexico according to factors promoting permanence

Dimensions and guiding principles	Key factors
Strategy of coordination and cohesion of actors and their coalitions	Successful articulation with actors from the International level (University of Edinburgh and Plan Vivo Foundation) Positive alliances and coalitions with governmental agencies and other NGO´s Strong interaction with local leaders in the communities Coordination with research institutions that generates new knowledge, contributes to the diffusion of the project and strengthen methodology to assess carbon stocks Faithfulness associated to interpersonal relations
Flexibility and simplicity of operating rules	Solid and well defined mechanisms of carbon transaction that generates confidence amongst buyers Strong monitoring system at the local level A system legitimated through international certification Training of local technicians "Plan Vivo" planning as a course of action for producers
Efficient and transparent use of resources	Self-sustaining project via carbon credits Divers sources of resources via other projects and alliances Human resources: volunteers, students, independent researchers
Discourse	Payments for environmental services are internationally promoted schemes for conservation and for climate change mitigation, specifically voluntary carbon markets have potential to trigger environmental and social benefits for the local communities involved (Chappel 2008)

Source: Authors' elaboration according to dimensions of a policy arrangement defined by Arts and Leroy (2006)

summarized in Table 2. It is worth noting that other PES strategies have also been launched in Chiapas and at the national level. Examples include the program designed and implemented by the National Forestry Commission (CONAFOR) and subsidized by The World Bank.[5] This program applies to highly biodiverse communal forest and is mainly focused on watershed and biodiversity conservation, and C fixation by forest and AF practices. A summary of the impacts of CONAFOR PES program can be found in Corbera et al. (2009).

[5]CONAFOR (2007).

Table 3 Salient attributes of the Group of Ecosystem Services for Chiapas (GESE)

Stakeholders	Origin	Objectives	Resources	Structure
Governmental agencies at federal and regional levels; national and international NGOs; research institutes and universities; and non-profit associations	Voluntary participation starting with a consultancy on PES, executed by Ambio in response to a call by the Chairman, State Commission of Sustainable Forestry	• To design and implement a state wide program of PES (PECSE) • To lobby for the inclusion of PES in the environmental agenda government • To generate and exchange knowledge on PES	Voluntarily granted by partners occasionally	Inter-institutional group with tripartite representation - elected amongst members Open memberships Five working commissions

PES Payments for Environmental Services; *PECSE* Program for Ecosystem Services Compensation

Scaling Up Scolel Té to a Public Policy Program: Steps Towards a Process of Network Governance

Given these characteristics, the *Scolel Té* experience has been seen as a model for an expanded PES program that could be developed with the participation of a broader set of stakeholders. In 2007, Ambio, the government agencies dealing with forest conservation and protected areas management, and other national and international NGOs have joined to form a policy network to lobby for the inclusion of the PES strategy in the environmental agenda of the state government. This network is called the Group for Ecosystem Services of Chiapas (GESE) and it foresees the possibility of conserving more natural resources and reaching out to more rural communities. The main objective of GESE is to design a Program for Ecosystem Services Compensation for Chiapas (PECSE) and to find ways to implement it as a networked strategy. This initiative triggered a process of strategic coordination among the stakeholder, but poses huge challenges in terms of task allocation, resource distribution, information management, articulation of competing interests, and the construction of a common view to which all parties must agree and commit (Table 3).

Despite such challenges, there are important advantages to implementing programs in a network fashion (Slaughter and Zaring 2006). These include the possibility of integrating a range of opinions and perspectives that, in turn, may enrich and grant legitimacy to the program; an exchange of information and its diffusion at all levels that eventually will strengthen links between the public and private sectors; and the coordination of policies in order to achieve a more efficient use of scarce resources and a better correspondence between the society's expectations and needs, and the government programs.

After 2 years of monthly meetings, the GESE network has achieved some of its goals in terms of putting the issue of PES into the government agenda in Chiapas. For example, the GESE network is in charge of the environmental services section for the future Action Plan of Climate Change for Chiapas, launched by the Ministry of Environment and Urbanism of the state government. In addition, a network of networks initiative is just emerging with the aim of developing a REDD pilot project in Chiapas, in cooperation with the Mexican Carbon Program (PMC). This initiative links national, state, and local efforts to develop a robust methodology for local level monitoring of the C stocks in forests under the REDD scheme (F. Paz, 2010, personal communication). It will require the involvement of local organizations at community level to conduct monitoring activities of land use changes. The role of GESE organizations, in coordinating the grass root organizations and building a network of local and community technicians that can generate data for national C stock accounting, will be critical to the success of this initiative. Ambio has been playing a central role in the above initiatives and in providing key information based on *Scolel Té* experience to implement the technical aspects of these strategies. Although the existing PECSE proposal adopts the technical and organizational facets of the *Scolel Té* C transactions model (Fig. 3), it falls behind in the establishment of institutional mechanisms that promote an integrated regional approach.

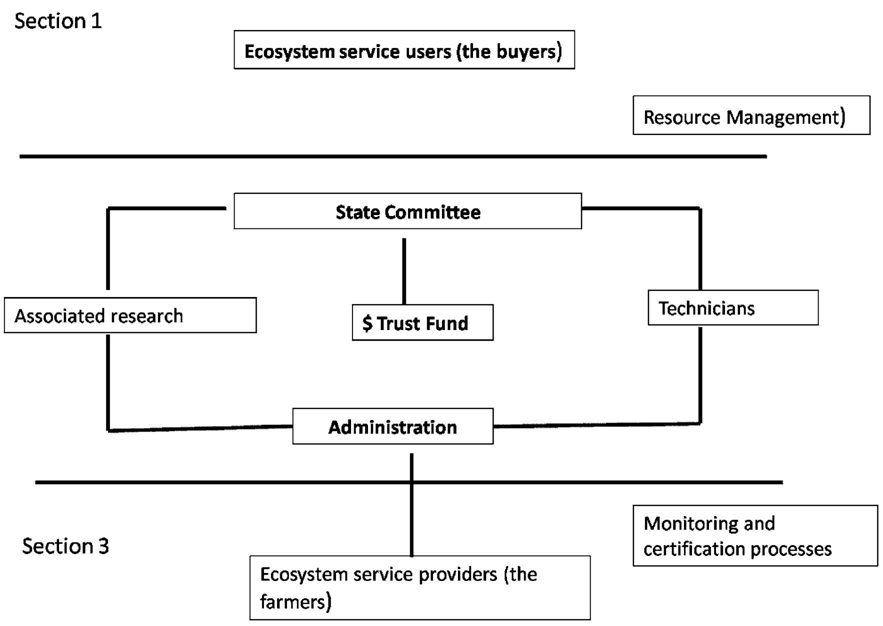

Fig. 3 Projected structure of PECSE program. Note the similarities with Scolel Té institutional architecture (Source: Vargas-Guillen et al. 2009)

Some Final Remarks

Some aspects of the model of PES created by *Scolel Té* have been adapted into a proposal for a public policy program, as a process of environmental governance. The strategy on PES, as it is being implemented in the *Scolel Té* project coincides to some degree with the perspectives promoted by the Chiapas state government. There are new developments in the state legislation in relation to PES strategy that provide a legal framework for PES implementation at the state level.[6] The Strategic Development Plan for Chiapas (Plan de Desarrollo Chiapas Solidario 2007–2012; www.chiapas.gob.mx/plan/; accessed March 2010), the vital document for planning state policies, also includes PES as one of the key strategies for conservation. This has resulted in the creation of specific departments to deal with ecosystem services in Chiapas.

This is not the place to expound on the characteristics of political dynamics in Chiapas and Mexico in the field of the environmental public policies. It should however be noted that, Mexico and Chiapas have emerged as world leaders through their innovative experiences in dealing with climate change. The past Conference of the Parties, COP16, of UNFCCC (the United Nations Framework Convention on

[6] Zorrilla-Ramos (2006).

Climate Change) was held in Cancún, and Mexico City will host the full meeting of UNFCCC in 2012, where the Kyoto Protocol will be renegotiated.

Should the GESE network and its efforts succeed, this would prove to be a worldwide example and a strong argument in favor of the final approval of REDD strategies in a post-Kyoto environment (F. Paz, 2010, personal communication). This has enormous implications for developing countries and emerging economies like Mexico in terms of obtaining funding to conserve forests and combat climate change. At the international level, the value of the GESE network rests upon these considerations. Networking around a PES political strategy at the regional level has proven to be neither easy nor quick, but it could open up democratic structures for managing natural resources, with a potentially win-win scenario for all stakeholders.

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