

## APPENDICES

Appendix A  
Conceptual Framework

Interview Framework by Seidman (1998)	Conceptual Framework by the WCPA Management Effectiveness tool	Focus of Evaluation: <ul style="list-style-type: none"> <li>Assessed criteria</li> </ul>	Methodological Framework Assessed criteria, sample questions, focus areas
Focusing life history adapted from Seidman (1998)			
<u>Focusing life history</u>			Personal and professional background
			How long working with PA's
			How long working with PA's in Mexico and in what capacity
			Where do they work now, and before
Description of Facts adapted from Seidman (1998)			
<u>Description of Facts:</u>  Experts perception of the facts  Are there regional differences?	1. Context: Where are we now?	Status:	What is the status of the federal PA's of Mexico
		<ul style="list-style-type: none"> <li>Significance</li> </ul>	Tell me about the history  How did it came to be  Mission  Significance of the PAs for the population, academia, political arena, internationally
		<ul style="list-style-type: none"> <li>threats</li> </ul>	What are the main threats?  Where do they come from?
		<ul style="list-style-type: none"> <li>vulnerability</li> </ul>	How prepared are the PA management to deal with these threats  How strong are they
		<ul style="list-style-type: none"> <li>National context</li> </ul>	Does the PA's work as individual entities  as regions,  as a whole system  What do you think are the differences?
		<ul style="list-style-type: none"> <li>Capacity</li> </ul>	
		<ul style="list-style-type: none"> <li>Willingness</li> </ul>	
		<ul style="list-style-type: none"> <li>Resourcing</li> </ul>	
		<ul style="list-style-type: none"> <li>Land ownership</li> </ul>	
	<ul style="list-style-type: none"> <li>Protection patterns and categories</li> </ul>		
	1. Planning: Where do we	Appropriateness:	

	want to be?	<ul style="list-style-type: none"> <li>Protected Area legislation and policy</li> </ul>	<p>What are the relevant legislations and policies that rule the system?</p> <p>How are the policy and legislation affecting the PA management?</p> <p>What role does the policy have in the management of the PA's?</p>
		<ul style="list-style-type: none"> <li>PA system design</li> </ul>	<p>Do you think the system is designed to work as a whole?</p> <p>What is the system designed to work as?</p>
		<ul style="list-style-type: none"> <li>Reserve design</li> </ul>	<p>How and by whom, are the reserves designed?</p> <p>What are key elements that made these areas important to be included in the system</p>
		<ul style="list-style-type: none"> <li>Management planning</li> </ul>	<p>What are the objectives of the management plans?</p> <p>What is the status of the management in each PA?</p> <p>What systems are in place to forward the mission and objectives of the management plan?</p>
	2. Input: What do we need?	Resources:	
		<ul style="list-style-type: none"> <li>Resourcing of agency (CONANP)</li> </ul>	<p>What is the funding for CONANP coming from</p> <p>How stable is it?</p> <p>Are there other sources of financing for the PA's?</p> <p>For CONANP?</p>
		<ul style="list-style-type: none"> <li>Resourcing of site</li> </ul>	How is it distributed along the sites
	3. Process: How do we go about it?	Efficiency and appropriateness:	
		<ul style="list-style-type: none"> <li>Suitability of management processes</li> </ul>	Each area has its own management plan, is this revised to improve or fix aspects that are not working very well?
	4. Output: What are the results?	Effectiveness:	
		<ul style="list-style-type: none"> <li>Results of management actions</li> </ul>	<p>What systems are in place for evaluating the results coming from the management actions?</p> <p>What monitoring systems are in place?</p>
		<ul style="list-style-type: none"> <li>services</li> </ul>	<p>What services are provided to the community from the PA?</p> <p>What do the visitors/users/stakeholders get from the PA? (Legal or illegal)</p>
		<ul style="list-style-type: none"> <li>products</li> </ul>	
	5. Outcome: What did we achieve?	Effectiveness and appropriateness:	
		<ul style="list-style-type: none"> <li>Impacts: effects of management in relation to objectives</li> </ul>	<p>What is the monitoring system revealing about the effects or results of the management actions?</p> <p>Is there a system in place to change objectives or actions according to new needs that revealed by the monitoring and evaluation?</p>

Reflection of the meaning adapted from Seidman (1998)

<p><u>Reflection of the meaning:</u></p> <p>What is the profile of a successful park?</p> <p>What is measure, how and by whom?</p> <p>(This should be the largest section from the interviewees)</p>	1. Context: Where are we now?	Status:	
		• Significance	Why do you think this is the significance of the PA's in Mexico? (population, academia, political arena, internationally)
		• threats	Why are these, the threats? Where are they coming from?
		• vulnerability	Why are the PAs in this position of vulnerability?
		• National context	Why are the PAs not working together as a system?  Why are the regions so distinct and isolated from each other? (State, region, kind of PA?)
		• Capacity	
		• Willingness	
		• Resourcing	
		• Land ownership	
	• Protection patterns and categories		
	2. Planning: Where do we want to be?	Appropriateness:	
		• Protected Area legislation and policy	How are the policy and legislation affecting the PA management?  What role does the policy have in the management of the PA's? Why and How?
		• PA system design	Why was the system designed as it is?  What should be different?
		• Reserve design	Why are the reserves designed as they are?  How does this affect the appropriateness of the conservation strategies?
		• Management planning	
	3. Input: What do we need?	Resources:	
		• Resourcing of agency	Why is it \$ distributed as it is?
		• Resourcing of site	How does this affect the performance of the management strategies?
		• partners	Why are the partners involved or not involved in the financing of the federal PA's?  How does this affect it?
	4. Process: How do we go about it?	Efficiency and appropriateness:	
• Suitability of management processes		What is it that makes it work, or not? Why is it working as it is?  What creates conflict?  How does the PA management deal with conflicts?  Who determines the success of the PA's, and how?	
5. Output: What	Effectiveness:		

	are the results?	<ul style="list-style-type: none"> <li>• Results of management actions</li> </ul>	How efficient have you been in evaluating the actions from the management?
		<ul style="list-style-type: none"> <li>• services</li> </ul>	<p>How have the communities/visitors/users/stakeholders responded to the management?</p> <p>What are the main differences that have come from managing the PA's?</p>
		<ul style="list-style-type: none"> <li>• products</li> </ul>	How have the products been represented?
	6. Outcome: What did we achieve?	Effectiveness and appropriateness:	
	<ul style="list-style-type: none"> <li>• Impacts: effects of management in relation to objectives</li> </ul>	<p>How successful have you been in achieving the management goals?</p> <p>How would you define success to be?</p> <p>What are the next steps?</p> <p>Why has the success of the PA's relied on ...who ever it relies on?</p> <p>What should be improved?</p> <p>How have Federal PAs in Mexico dealt with the constraints or challenges related to achieve the objectives?</p> <p>What lessons can you think of, could be provided to other areas with similar context around the world?</p> <p>What do you think about the connectivity between the Systems of North America? What is the relationship with Canada and US specifically?</p> <p>What does Mexico has to offer the Global community in terms of effectiveness of Management of PAs?</p>	

## Appendix B

### Raw Data

Interview Framework by Seidman (1998)	Conceptual Framework based on WCPA	Focus of Evaluation:	Assessed criteria	Methodological Framework: Assessed criteria, sample questions, focus areas	Interview #	Contents
<u>Focusing life history</u>				Where do they work now, and before	1 - 049	It is an NGO, established legally in 2007. The objectives are related to human health and education from a sustainable development framework.
<u>Focusing life history</u>				What is their perspective along the conservation line that BB and I developed?	1 - 049	Picture shows that he half in the interdisciplinary area and half in the eco-biological area. Due to most of the associates are biologists, they definitely want to grow as an NGO in order to achieve this interdisciplinary work, with the inclusion of other professionals from different areas. (Administrator, lawyer, economist, anthropologist, sociologist)
<u>Focusing life history</u>				Are they very people, or very conservation??? What are their values,	1 - 049	He is a biologist and his tendency is to go towards the environmental values, never the less, he understands that there is a need to include the social and economical aspects. Due to the need of conservation of these ecosystems that interest him so much. He would like to be in the middle of the Interdisciplinary are.
<u>Focusing life history</u>				and the values of the organization they work for?	1 - 049	The definition of sustainable development comes from the XXX Report, which because of political reasons it is not clear if what it is meant to keep sustainable the economical growth rate aspect, or if the idea is to keep the development growth rate but without compromising the capacities for the next generations. We as NGO do not support the rate of economical growth as it has been increasing, we actually think that with the amount of richness that is already in the world, there is enough for everybody to live in conditions above the poverty level, but there is not an adequate distribution of the resources. For our NGO, sustainable development puts in balance environmental, social, and economical aspects, and our projects look to keep active the 3 components of environmental, social and economical aspects. Sometimes it is very hard to keep them all in balance, and mainly to raise the economical aspect of a project.
<u>Focusing life history</u>				And the values of the organization they work for?	1 - 049	Picture of the organization is intended to show that it is right in the middle between both areas, interdisciplinary. But the work is done mostly by biologists.
<u>Description of Facts:</u> Are there regional differences?	1. Context: Where are we now?	Status:	<input type="checkbox"/> Significance	Significance of the PAs for the population, academia, political arena, internationally	1 - 049	This wetland is a whole ecosystem, exquisite, rare, diversity.
<u>Description of Facts:</u> Are there regional differences?	1. Context: Where are we now?	Status:	<input type="checkbox"/> Significance	What is the role of PAs in water supply and air/pollution mitigations?	1 - 049	The coastal, karstic areas are the ones that filter the water and is the only source of water for human consumption.

<u>Description of Facts:</u> Are there regional differences?	1. Context: Where are we now?	Status:	<input type="checkbox"/> threats	What are the main threats	1 - 049	vulnerable to pollution due to its porosity
<u>Description of Facts:</u> Are there regional differences?	1. Context: Where are we now?	Status:	<input type="checkbox"/> threats	Where do they come from	1 - 049	Demand of water for development and pollution.
<u>Description of Facts:</u> Are there regional differences?	1. Context: Where are we now?	Status:	<input type="checkbox"/> threats	What do you mean by internal or external threats? Which are they?	1 - 049	Pollution to the CBM
<u>Description of Facts:</u> Are there regional differences?	1. Context: Where are we now?	Status:	<input type="checkbox"/> vulnerability	How prepared are the PA management to deal with these threats	1 - 049	Needs to be zero pollution to subterranean water. The economical activities, don't want to invest in these very expensive plants of tertiary treatment plant, such as hotels. There is a very short term vision of economical development based on tourism in the Caribbean. The tourism exploits the natural wonders, but this product is not been protected by the same industry that is endangering it. They are not paying for these environmental services, or avoiding their impact. Their economy is not sustainable because they are killing their economical resources.
<u>Description of Facts:</u> Are there regional differences?	1. Context: Where are we now?	Status:	<input type="checkbox"/> vulnerability	How strong are they	1 - 049	Barceló, Star, very strong international corps that are very powerful and they deplete their resource and then move to another place that is still well.
<u>Description of Facts:</u> Are there regional differences?	1. Context: Where are we now?	Status:	<input type="checkbox"/> National context	Does the PA's work as individual entities	1 - 049	Regulations are very little, and have to start regionally
<u>Description of Facts:</u> Are there regional differences?	1. Context: Where are we now?	Status:	<input type="checkbox"/> National context	What do you think are the differences?	1 - 049	The specificity of this wetland and also, the connections with the CBM reef that is a huge tourism spot.
<u>Description of Facts:</u> Are there regional differences?	2. Planning: Where do we want to be?	Appropriateness:	<input type="checkbox"/> Protected Area legislation and policy	What are the relevant legislations and policies that rule the system?	1 - 049	The legislations are already in place as IUCN categories, and as part of the CBM, never the less, the regulations for the Hotels are not even close to come out. The hotels are not interested in investing on expensive water treatment plants to save the resource in the long term.
<u>Description of Facts:</u> Are there regional differences?	2. Planning: Where do we want to be?	Appropriateness:	<input type="checkbox"/> Protected Area legislation and policy	How are the policy and legislation affecting the PA management?	1 - 049	There needs to be legislation for the threats that come from out of the PAs.
<u>Description of Facts:</u> Are there regional differences?	2. Planning: Where do we want to be?	Appropriateness:	<input type="checkbox"/> Protected Area legislation and policy	What role does the policy have in the management of the PA's?	1 - 049	There is a policy of sustainable development that looks to balance the environmental, social, and economical aspects of the development of activities in the PAs, in this case the Sian Kaan and the Chinchorro Reserves of the Biosphere.

<u>Description of Facts:</u> Are there regional differences?	2. Planning: Where do we want to be?	Appropriateness:	<input type="checkbox"/> Reserve design	What are key elements that made these areas important to be included in the system	1 - 049	Richness in reef systems as part of the CBM, and also the coastal karstic wetlands.
<u>Description of Facts:</u> Are there regional differences?	3. Input: What do we need?	Resources:	<input type="checkbox"/> Resourcing of agency (CONANP)	How stable is it?	1 - 049	They need to make these projects able to be self financing for the sake of the fishermen.
<u>Description of Facts:</u> Are there regional differences?	3. Input: What do we need?	Resources:	<input type="checkbox"/> Resourcing of agency (CONANP)	Are there other sources of financing for the PA's?	1 - 049	These projects are funded by the FMCN, CONANP, CONABIO, and the World Bank (through the FMCN), for research and implementation of projects for sustainable development of the communities inside the Reserves of the Biosphere.
<u>Description of Facts:</u> Are there regional differences?	3. Input: What do we need?	Resources:	<input type="checkbox"/> partners	What are the partners that work along with the management of the PA's	1 - 049	CONANP, CONABIO, FMCN, Razonatura
<u>Description of Facts:</u> Are there regional differences?	3. Input: What do we need?	Resources:	<input type="checkbox"/> partners	What are the partners that work along with CONANP	1 - 049	FMCN, CONABIO, other NGOs
<u>Description of Facts:</u> Are there regional differences?	4. Process: How do we go about it?	Resources:	<input type="checkbox"/> Suitability of management processes	Each area has its own management plan, is this revised to improve or fix aspects that are not working very well?	1 - 049	The lobster plan was developed with the help of the fishermen; they developed some policies that help them have good practices of lobster fishing.
<u>Description of Facts:</u> Are there regional differences?	5. Output: What are the results?	Effectiveness:	<input type="checkbox"/> Results of management actions	What systems are in place for evaluating the results coming from the management actions?	1 - 049	These good practices were included in the management plan and are respected by the local fishermen.
<u>Description of Facts:</u> Are there regional differences?	5. Output: What are the results?	Effectiveness:	<input type="checkbox"/> Results of management actions	What monitoring systems are in place?	1 - 049	There are monitoring systems for the populations of lobster .
<u>Description of Facts:</u> Are there regional differences?	5. Output: What are the results?	Effectiveness:	<input type="checkbox"/> services	What services are provided to the community from the PA?	1 - 049	Tourism related to coastal and reef activities. The coastal karstic wetlands are the source of fresh water for human consumption.
<u>Description of Facts:</u> Are there regional differences?	5. Output: What are the results?	Effectiveness:	<input type="checkbox"/> services	What do the visitors/users/stakeholders get from the PA? (Legal or illegal)	1 - 049	Fish, lobster, other products coming from the sea.

<u>Description of Facts:</u> Are there regional differences?	5. Output: What are the results?	Effectiveness:	<input type="checkbox"/> services	What are the relationships with the communities and other stakeholders?	1 - 049	There is a huge competition between the big distributors of lobster, that are sabotaging the intentions of the local fishermen that are providing products with green practices and denomination of origin, among other things. So, not very supportive when it comes to economical conflicts.
<u>Description of Facts:</u> Are there regional differences?	6. Outcome: What did we achieve?	Effectiveness:	<input type="checkbox"/> Impacts: effects of management in relation to objectives	What is the monitoring system revealing about the effects or results of the management actions?	1 - 049	It showed that the populations declined greatly with the use of diving equipment from the local fishermen, but after dropping the use of this equipment and fishing only through apnea dives, then the populations of lobster have remained stable. The theory is that this practice restricts the areas or extraction allowing the deeper areas to be source of population restoration.
<u>Reflection of the meaning:</u>	1. Context: Where are we now?	Status:	<input type="checkbox"/> Significance	Why do you think this is the significance of the PA's in Mexico? (population, academia, political arena, internationally)	1 - 049	There is a great value of the land, in terms not only of economical value, but in terms of biological and attachment to the land for the local communities. Very rich
<u>Reflection of the meaning:</u>	1. Context: Where are we now?	Status:	<input type="checkbox"/> threats	Why are these, the threats? Where are they coming from?	1 - 049	The big corporations that have economical power to give a considerable amount of money to the local people and buy their lands for just a fraction of the real value. Golf courts and massive tourism.
<u>Reflection of the meaning:</u>	1. Context: Where are we now?	Status:	<input type="checkbox"/> National context	Why are the PAs not working together as a system?	1 - 049	The challenge is with the management as a whole of the wetlands, or the Cuenca.
<u>Reflection of the meaning:</u>	1. Context: Where are we now?	Status:	<input type="checkbox"/> National context	Why are the PAs not working together as a system?	1 - 049	He starts dividing the country by the differences in the environmental or Ecoregional characteristics. Dry or wet, also these means that socio-culturally there are differences related to these conditions. North and South.
<u>Reflection of the meaning:</u>	1. Context: Where are we now?	Status:	<input type="checkbox"/> National context	Why are the PAs not working together as a system?	1 - 049	Little water, 20% of population but produces 80% of richness in \$, less populations indigenous, NAFTA, their influence is great, there is a lack of soberaniry in terms of Mexico, the US is a great influence to what to do in there. There is a submission of Mexico, in historical terms, as a component social, the indigenous in the North are closer to the US indigenous, but not the South which is more like Mesoamerica, closer culturally as South America. The Bolivarian dream of a united America. So there is a division of political differences are mainly from the North, and the economical powers are from the North, corporative, economical power is in the North. Even if the DF is down South.
<u>Reflection of the meaning:</u>	1. Context: Where are we now?	Status:	<input type="checkbox"/> National context	Why are the PAs not working together as a system?	1 - 049	IN Canada, there is no population, so there are great successes of the population restorations and that is the case of Mexico in the North.
<u>Reflection of the meaning:</u>	1. Context: Where are we now?	Status:	<input type="checkbox"/> National context	Why are the PAs not working together as a system?	1 - 049	Nuevo Leon, Monterrey is the biggest city in Mexico, the strongest economical power. This area is agricultural and cattle but technologies, much like the US practices
<u>Reflection of the meaning:</u>	1. Context: Where are we now?	Status:	<input type="checkbox"/> National context	Why are the PAs not working together as a system?	1 - 049	I feel that the indigenous populations are very submissive due to the lack of organization, Ejercito Zapatista de Liberacion national, looking for the self determination, what we want to do, where we live, not independence but with the lack of support from the government, there is a need of empowering of the indigenous.

<u>Reflection of the meaning:</u>	1. Context: Where are we now?	Status:	<input type="checkbox"/> National context	Why are the PAs not working together as a system?	1 - 049	In the South there are lots of water,
<u>Reflection of the meaning:</u>	1. Context: Where are we now?	Status:	<input type="checkbox"/> National context	Why are the PAs not working together as a system?	1 - 049	80% of population, more or less, mainly indigenous populations, Many natural resources, with much pressure to be exploited, but you have communities using and living these, so in Chiapas, there are problems of effectiveness of management, because of the lack of collaboration and relationship between the management and the local stakeholders, and other economical interests that make the areas vulnerable.
<u>Reflection of the meaning:</u>	1. Context: Where are we now?	Status:	<input type="checkbox"/> National context	Why are the PAs not working together as a system?	1 - 049	Chiapas is the poorest state of Mexico, and the forests and the petroleum is comparable to the Amazonas, pharmaceutical companies, are also interested.
<u>Reflection of the meaning:</u>	1. Context: Where are we now?	Status:	<input type="checkbox"/> National context	Why are the PAs not working together as a system?	1 - 049	In the South, there are many international efforts supporting these areas, through products such as organic coffee, honey, lobster, mescal, chocolate, and the lobster's project in Sian Kaan and Banco Chinchorro as part of the interest for CONABIO and CBM as (productos biológicos colectivos) Collective Biological Products Program.
<u>Reflection of the meaning:</u>	1. Context: Where are we now?	Status:	<input type="checkbox"/> National context	Why are the PAs not working together as a system?	1 - 049	Include community management, not only federal, and the communities trying to balance the 3 elements of environmental, social, and economical aspects of development.
<u>Reflection of the meaning:</u>	1. Context: Where are we now?	Status:	<input type="checkbox"/> National context	Why are the PAs not working together as a system?	1 - 049	Efectividad de las areas
<u>Reflection of the meaning:</u>	1. Context: Where are we now?	Status:	<input type="checkbox"/> National context	Why are the PAs not working together as a system?	1 - 049	traditional agricultural practices happen mainly in the South
<u>Reflection of the meaning:</u>	1. Context: Where are we now?	Status:	<input type="checkbox"/> National context	Why are the PAs not working together as a system?	1 - 049	In the South, the army isolated the indigenous communities and they are not organized as he feels and what he has heard. There are some examples of small communities, but in general the presence is very minimal.
<u>Reflection of the meaning:</u>	1. Context: Where are we now?	Status:	<input type="checkbox"/> National context	Why are the PAs not working together as a system?	1 - 049	The resource gathering, community leader's development that look for sustainable development.
<u>Reflection of the meaning:</u>	1. Context: Where are we now?	Status:	<input type="checkbox"/> National context	Why are the regions so distinct and isolated from each other? (state, region, kind of PA?)	1 - 049	The lands are not suitable for agriculture, so there are a restricted variety of economical activities that could diminish the pressure towards touristic activities. The Environmental services payments are a great solution but -
<u>Reflection of the meaning:</u>	2. Planning: Where do we want to be?	Appropriateness:	<input type="checkbox"/> PA system design	What should be different?	1 - 049	The tourism industries in massive scales need to invest in diminishing their impact in the natural areas surrounding the PAs and inside the PAs through their practices and through their facilities.
<u>Focusing life history</u>				Personal and professional background	2 - 050	Forestry Engineer, worked as part of this NGO
<u>Focusing life history</u>				Where do they work now, and before	2 - 050	Forest development, climate change, Volunteering with enterprises and corporations, culture- and diffusion of information, Institutional development, and knowledge management.

				Are they very people, or very conservation??? What are their values,	2 - 050	The organization's philosophy is the same as mine, because the development of the persons that we work in it has gone along with the growth of the organization. When the NGO started in 2002, they were focused on conservation and restoration projects, exclusively biological values. They then realized that the biological richness potential was in the hands of the communities, you can't see them as separated entities. SO their vision shifted to a conservation philosophy of conservation of also culture, society and community in a framework of the communitarian development. The idea is to have sustainable forest management. If we get the fusion of this interdisciplinary area with our projects, then we can convince people to understand that they can get an adequate quality of life, not as global standards of quality of life, but as each community thinks is quality of life; through the benefits of the Sustainable Forest Management. We visualize the conservation with a conscience of the communities. In Mexico, the rural and urban populations are seen as opposite worlds, but we think that the urban people need to be also educated and conscientize them, they are actually the ones that will have more chances of making decisions that will affect conservation later. And in the rural side, you need to give them the vision that they are the ones that have the 80% of the wild lands in their hands and are responsible for its health.
				and the values of the organization they work for?	2 - 050	Communities need capacity building, the chances of getting benefits, to improve their conditions and giving them the vision of how important they are as stewards of the land. Also the urban communities should be conscientious about the Green market, the importance of green products, as consumers and supporters. If the community is not convinced that there will be jobs for them, it is very hard to get their support. Mostly working in the Southern areas.
					2 - 050	They look for exchanges from all over the Americas.
<u>Description of Facts:</u> Are there regional differences?	1. Context: Where are we now?	Status:	<input type="checkbox"/> National context	Does the PA's work as individual entities	2 - 050	Eje Neovolcanico y el Sudeste. LA organization has this kind of way of dividing the country and they work depending on the challenges and opportunities of each one. There is a great difference between the environmental characteristics and cultural characteristics.
<u>Description of Facts:</u> Are there regional differences?	3. Input: What do we need?	Resources:	<input type="checkbox"/> Resourcing of agency (CONANP)	Are there other sources of financing for the PA's?	2 - 050	The NGO is supported by the industry and corporations, by the local, national and international stakeholders, in funds and knowledge support.
<u>Reflection of the meaning:</u>	1. Context: Where are we now?	Status:	<input type="checkbox"/> threats	Why are these, the threats? Where are they coming from?	2 - 050	The strongest pressures to the PAs are not inside the PAs but the areas surrounding the PA, the buffer zones, and strategies for buffer zone management is needed greatly.
<u>Reflection of the meaning:</u>	1. Context: Where are we now?	Status:	<input type="checkbox"/> vulnerability	Why are the PAs in this position of vulnerability?	2 - 050	Mexico has the great policy of cattle and agricultural exploitation, never the less they have the chance of change and there are successful examples in communities that are the ones that set up the example for the rest of the country. IN the North and in the South.
<u>Reflection of the meaning:</u>	1. Context: Where are we now?	Status:	<input type="checkbox"/> National context	Why are the PAs not working together as a system?	2 - 050	Ejidales and communities are their main target for work. The Ejido is inheritable; they have a title but are between several people. Some of these are federal areas, and these already have strategies for conservation.

<u>Reflection of the meaning:</u>	1. Context: Where are we now?	Status:	<input type="checkbox"/> National context	Why are the regions so distinct and isolated from each other? (state, region, kind of PA?)	2 - 050	The proprietors of the areas need the capacity and knowledge for conservation independently of the support from the government. Never the less, there is a great need for policy development. Organizationally the work done is very differently at a governmental level, and their job is to support community or grassroots projects. but the most important examples of success are the ones in which the communities take ownership of the lands for conservation and sustainable dev. and for the governments to support this coming strategies and adapt their policies to the coming movement.
<u>Reflection of the meaning:</u>	5. Output: What are the results?	Effectiveness:	<input type="checkbox"/> Results of management actions	How has the relationship between stakeholders and other communities changed due to management actions? Has it improved, remained constant, deteriorated...? And Why?	2 - 050	At the un-developed world level, the main resource lacking is the capacities of education. Many young people desert the rural communities and schools, so the traditional practices get lost and part of the culture gets lost. They saw a chance of capacity building through the young people and show them their responsibility of making the community growth and they are the tools, missionaries of developing projects related to conservation and the sustainable development for the communities.
<u>Reflection of the meaning:</u>	6. Outcome: What did we achieve?	Effectiveness and appropriateness:	<input type="checkbox"/> Impacts: effects of management in relation to objectives	How have Federal PAs in Mexico dealt with the constraints or challenges related to achieve the objectives?	2 - 050	Mexico has the great policy of cattle and agricultural exploitation, never the less they have the chance of change and there are successful examples in communities that are the ones that set up the example for the rest of the country. IN the North and in the South.
<u>Reflection of the meaning:</u>	6. Outcome: What did we achieve?	Effectiveness and appropriateness:	<input type="checkbox"/> Impacts: effects of management in relation to objectives	What does Mexico has to offer the Global community in terms of effectiveness of Management of PAs?	2 - 050	Gestion de conocimiento: They develop methodologies, and the development of good practices that they have found useful as strategy political, communitarian, and so, the way is systematization of their successes, even if each process is very specific, at least appears to be as an example for other places that could be challenged similarly.
<u>Focusing life history</u>				Personal and professional background	3 - 051	Veterinarian, he owns a parcel that he developed for conservation and restoration of populations' farm of Tepezcuintles (coatis) and other native spp of mammals. 22 years of being a veterinarian.
<u>Focusing life history</u>				How long working with PA's	3 - 051	around 15 years
<u>Focusing life history</u>				Are they very people, or very conservation??? What are their values,	3 - 051	As a person he is right in the middle of the continuum. He has a philosophy of conservation involving the community that surrounds PAs. Precisely he sees the polarization that exists in this sense.
<u>Focusing life history</u>				and the values of the organization they work for?	3 - 051	As a professional consultant and veterinary services provider, his philosophy is totally Eco-biological, because that is the way that his clients need him to be the private sector.
<u>Reflection of the meaning:</u>	1. Context: Where are we now?	Status:	<input type="checkbox"/> National context	Why are the regions so distinct and isolated from each other? (state, region, kind of PA?)	3 - 051	Big institutions are in the North, and they are the ones that made the decisions for the rest of the country. What they think is what will be done everywhere. They tell the government how to develop the policy. They are very much into Synergetic PAs. Wild life reserve. So the owner declares it as synergetic, so they set a management plan so they set up a quota for harvesting (hunt). Whenever there is an excess of populations, according to the area, then the person has a special permit to harvest these spp. So they have to get an inventory and then monitor populations over time.

						Species such as butterflies used for weddings, orchids, other mammals. These regions commonly are the arid areas in the North; in the South since it is Tropical, then it is different approach.
<u>Reflection of the meaning:</u>	1. Context: Where are we now?	Status:	<input type="checkbox"/>		3 - 051	The size of the states is very different from South to North. IN all the governmental levels, state, national, and local levels. So the management from the North is more
<u>Reflection of the meaning:</u>	2. Planning: Where do we want to be?	Appropriateness:	<input type="checkbox"/> Protected Area legislation and policy	How are the policy and legislation affecting the PA management?	3 - 051	Wild lands management is divided into intensive and extensive. They made the laws of CONAFOR to finance extensive areas more than intensive. So the ones smaller than 3000 Ha don't have access to financing. In the North, it is easier to have large extension for wild life production, but in the South, the possibility of having larger areas is much reduced. From 2000 to 2003, the people interested tried to get into this program to finance their wild life production for restoration of population, and after they passed this law, they lost all kinds of resources from the government. Now, in 2010 the law will be open again for areas smaller than 3000 Ha. In Yucatan, the law prohibits to have an extension of land larger than 3000 Ha. The lands are either Ejidales, or are very expensive because of this tourism explosion. So, the Ejidos allow other people to buy land, so they allow the usufruct of the land, not the ownership of the land.
<u>Reflection of the meaning:</u>	6. Outcome: What did we achieve?	Effectiveness and appropriateness:	<input type="checkbox"/> Impacts: effects of management in relation to objectives	What lessons can you think of, could be provided to other areas with similar context around the world?	3 - 051	The best thing is for you to become friends of the people in the rural areas. As an outsider from the city, you are not accepted as one of them. In the rural areas, the people that own the properties for cattle ranching and so are very wealthy and they are separated from the common people that work for them. So, his story is that this very special owner of a farm that was very appreciated by the community bought him this land for management and gave it to him as a way of showing appreciation for his work. So once he was a farmer, he started to learn and to get involved with the community as one of them. Every weekend he went to the land to spend time there and the people help taught him. There is a community irrigation system, and they have to set up schedules for all the farmers to get water fairly. So, he started to be one of them. They have 6 months of water and 6 months of no precipitation. They have a public well, and then he has done well in his land. This land is a calcarean layer, the soil is rock. That is why there is a community well, because there are not any other wells, very hard to get. So his land was abandoned for a very long period. The land was naturally restored to the kind of jungle of the area, and he keeps just a little area for oranges, so he can keep this relationship of acceptance from the community. His land is next to this huge land that is wild, so his land is connected naturally to this huge extension of land that is protected. They have solar energy for illumination, no more electricity. He keeps the animals in small areas, because they like to be in small nests, dark. He feeds them the whole corn cubs and they cover the nests with this maize. They eat fresh food everyday.
<u>Reflection of the meaning:</u>	6. Outcome: What did we achieve?	Effectiveness and appropriateness:	<input type="checkbox"/> Impacts: effects of management in relation to objectives		3 - 051	In the management plan there is a quota of minimum 400 younger than 16 years old kids, as his social-environmental goal. They have these Visits from schools, word of mouth provided him with this and eve 2010 visits are already full. As requisite for the declaration, he has a good inventory of spp in the area, so these are the attractions for the kids and other environmental education richness. So, they declared it as extensive instead as intensive. He is so well accepted by the community, that he gets all these produce that are exceeding of the people's productions. They leave all the produce in the entrance of the land, and so it attracts many different spp of animals that are interesting for the

						education. They have 2 different kinds of wild pigs, raccoon, agoutis, pizotes, and other rodents.
<u>Reflection of the meaning:</u>	6. Outcome: What did we achieve?	Effectiveness and appropriateness:	<input type="checkbox"/> Impacts: effects of management in relation to objectives	What do you think about the connectivity between the Systems of North America? What is the relationship with Canada and US specifically?	3 - 051	In a larger scale, as international scale. His contacts are related to Canada, in the French area, he travels frequently because of his job. The French area, have these amazing conservation programs, Montreal, Quebec, Manitoba, and their way of thinking is more in terms of large conservation areas. They have very low population densities. on the English side, the way of thinking is very much like the US way of thinking. A small place, they make it a sublime area, and every area counts, no matter how small it is. The North of Mexico's philosophy is very much like the US. They sell an idea of Alaska as the last remnant and best example as conservation. But the reality is that it has been preserved just because they colonized later and slower. Example of Ax Men, and all these Discovery TV shows of the contradictions for conservation. The problem with taking the perspective of the US for conservation, the Mexican peoples are ignoring the tradition of conservation that they have that is much older than the US's one. The population of Mexican indigenous groups is still populating Mexico generally; the most of the people is indigenous. There is disrespect for the indigenous cultures and traditions of conservation because taking the US ones.
<u>Focusing life history</u>				Personal and professional background	4 - 052	With the secretary of Ecology and Secretary of Development and Environment. He started working since the statement of the PAs in Yucatan.
<u>Focusing life history</u>				How long working with PA's	4 - 052	16 years
<u>Focusing life history</u>				Where do they work now, and before	4 - 052	Experience from the areas, he is the first face that the government gave to the communities. Anything that happens, a tree cut or something, even if he doesn't realize it, or the park rangers either, he is so respected by the community that they tell him directly.
<u>Focusing life history</u>				Are they very people, or very conservation???. What are their values,	4 - 052	He is pretty much getting people involved and providing the ANP services to the community.
<u>Focusing life history</u>				and the values of the organization they work for?	4 - 052	Yucatan, from the beginning they took into accounts all the populations for the management plans. They focus on getting them involved, the population has been the ones taking care of the areas. They focus on being friends with them. AS a government, they tell approach them
<u>Description of Facts:</u> Are there regional differences?	1. Context: Where are we now?	Status:	<input type="checkbox"/> Significance	Tell me about the history	4 - 052	2000 CONANP, they have localized very important areas in Mexico, but they still lack financing. Sometimes they have paper parks, they are established but they don't have any infra-structure. The CONANP is trying to get private people with land to get to be voluntary ANPs for conservation, to get financing through international organizations with the support of CONANP, financial, technical and legal support. SO ANPs are also being managed through private owners with the support of CONANP.

<u>Description of Facts:</u> Are there regional differences?	1. Context: Where are we now?	Status:	<input type="checkbox"/> National context	Does the PA's work as individual entities	4 - 052	CONANP has been working to strengthen the system as a national system, throughout these years starting around 2000.
<u>Description of Facts:</u> Are there regional differences?	1. Context: Where are we now?	Status:	<input type="checkbox"/> National context	as regions,	4 - 052	They used to manage only their ANPs, no they take into account the states and the management they have of the state areas.
<u>Reflection of the meaning:</u>	6. Outcome: What did we achieve?	Effectiveness and appropriateness:	<input type="checkbox"/> Impacts: effects of management in relation to objectives	How successful have you been in achieving the management goals?	4 - 052	In the government of the state, it is very hard to establish monitoring systems, we have very limited funds, so our monitoring systems have to be towards very specific resources, for example in one of the areas, we monitor water abundance in the Cenote of the National Park with the support of the CNA- National Commission for the Water. But for our organization is impossible to really have a monitoring system emplaced. We certainly do vigilance trips and we take records, but not exactly as a monitoring System. In the case of Tzibichaltun, it is a National Park but the management rights were given to the State government. So this person goes as a Park Ranger and develops the management plan, but the State government changes and the publication and it has been 15 years of waiting for each government to publish it. So now, they did was that they give the information to the CONANP, and they are the ones that will publish the management plan. This way it won't depend on the bureaucracy of the state government.
<u>Reflection of the meaning:</u>	6. Outcome: What did we achieve?	Effectiveness and appropriateness:	<input type="checkbox"/> Impacts: effects of management in relation to objectives	How have Federal PAs in Mexico dealt with the constraints or challenges related to achieve the objectives?	4 - 052	CONANP have been very intensively training the people in their organization internationally for their Organization to grow. -I can tell you about what happens in the South East but In the other regions I can't really tell you because it is not what I have witnessed personally, about CONANP. Only what I have heard, so I really don't know how it works there - .There is no direct communication between the management of other states, we don't have contact with them, we don't know what is going on. The idea is to work regionally as ANPs, but right now, we don't have direct communication. I talk to them we exchange ideas and experiences, but we are not the decision makers, so we can't really do anything about working together. What is lacking is a way of working together as a region.
<u>Reflection of the meaning:</u>	6. Outcome: What did we achieve?	Effectiveness and appropriateness:	<input type="checkbox"/> Impacts: effects of management in relation to objectives	What lessons can you think of, could be provided to other areas with similar context around the world?	4 - 052	CONANP is about to upload to its website the National system of ANPs so they are including state areas, federal areas and other.
<u>Reflection of the meaning:</u>	6. Outcome: What did we achieve?	Effectiveness and appropriateness:	<input type="checkbox"/> Impacts: effects of management in relation to objectives	What do you think about the connectivity between the Systems of North America? What is the relationship with Canada and US specifically?	4 - 052	Comparing Mexico in terms of International systems, The US started with the idea of National Parks and they have a lot of advantage compared to us, in terms of knowledge and experience managing PAs and of course an economical advantage. I had the chance to work with some people from South Africa and other countries, and each organization has their own ways of working. In the US the areas were established and the people were forced to be relocated with compensation for the cost of their lands, and also completely excluded from the further management of the areas. There is a global tendency of all the organizations to change in terms of these management philosophy, to include the society as part of the management policies and changing the scheme of making people stewards of the land and as well the ANPs. There should be an international

						collaboration also among the different governmental institutions, with resources, and technical support.
<u>Focusing life history</u>				Are they very people, or very conservation??? What are their values,	5 - 053	As a person: She is in the middle but recognizes that she needs to learn a lot more about conservation and what the NGO pursues. This person was very interested in expanding the map into 4 areas instead of only 2. There are also Health and Development components. In the NGO they can't go over these areas, but I personally believe health, and Education and Development should be also included there. So you can choose between 4 and not only 2. Most of the NGOs have only the idea of the upper level of the map including Eco-biological and Socio-economical but she thinks that in the lower level of the map should be placed the areas of Health and Development with Education as part of this development.
<u>Focusing life history</u>				and the values of the organization they work for?	5 - 053	The Organization is Amigos de Sian Kaan. They are divided in 3 different components of work: Fresh water, Marine water, and Terrestrial Conservation. In the Terrestrial Component the focus is on establishing new PAs. In these past 23years, 8 new PAs have been established, more than 1 million HA. The actual projects include several reefs. The ONG develops the Justification Project for Establishing the new ANP, the federal government declares it ANP, and the NGO develops the management and conservation plan. After that, the state ANPs are controlled or managed by the Commission of Environment and Urban development of the State, and the Federal ones by the CONANP. The governmental entities can't be financed by external entities, so NGOs such as this one uses these external available funds and develops projects to support the work done by these governmental entities in charge of the ANPs. Projects such as fire management, there is a great incidence of fire by anthropogenic (due to hunting practices) and natural causes (due to high temperatures and dry season characteristics). Other projects are related to monitoring of reef system health and further restoration of the system. They have the whole monitoring system for the Mexican reefs of the CBM.
<u>Focusing life history</u>					5 - 053	In the NGO, they make a daily effort to stay in the middle of the continuum, in the interdisciplinary area. The NGO is a non-confrontational organization and it is not against the development and tourism industries, because they are the ones that support financially their NGO especially in the state of Quintana Roo. Quintana roo is one of the main tourism industries in the whole country of Mexico. In an area of the Organization there is a focus mainly on the biological area of the projects, mainly in terms of research, but based on scientific research they work with a philosophy in the middle of the continuum.
<u>Reflection of the meaning:</u>	2. Planning: Where do we want to be?	Appropriateness:	<input type="checkbox"/> Protected Area legislation and policy	How are the policy and legislation affecting the PA management?	5 - 053	The policies in the hotels exist, but it doesn't mean that it is done in the reality. The managers from the upper levels are convinced, so it is the start, then in the practice they have to convince the people on the ground to do it. This muriatic acid will pollute thousands of liters of water in the underground rivers. So if they take the acids out for the people not to use them, means that the ladies will have to work way harder to clean the

						baths, so they buy the acids with their own money because it means less effort for them. Part of the capacity building the NGO does is with these people to be consciences about these policies and their importance in terms of environment.
<u>Reflection of the meaning:</u>	2. Planning: Where do we want to be?	Appropriateness:	<input type="checkbox"/> PA system design	Why was the system designed as it is?	5 - 053	Land possession: Some ANPs need the private owners to be involved because some ANPs land is privately owned. There is an environmental development plan (plan de ordenamiento ecologico) that can be part of the management plan. Sian Kaan is the second biggest ANP in Mexico and their management plan includes a (plan de ordenamiento ecologico). SO this area provides development possibilities for the private owners, but with the regulations of the plan de ordenamiento ecologico.
<u>Reflection of the meaning:</u>	6. Outcome: What did we achieve?	Effectiveness and appropriateness:	<input type="checkbox"/> Impacts: effects of management in relation to objectives	Why has the success of the PA's relied on ...who ever it relies on?	5 - 053	The NGO's goal is to conserve the biological corridors and conserve the tropical forests in them. They promoted the initiative of the Mesoamerican Reef Corridor, they were behind the establishment.
<u>Reflection of the meaning:</u>	6. Outcome: What did we achieve?	Effectiveness and appropriateness:	<input type="checkbox"/> Impacts: effects of management in relation to objectives	What should be improved?	5 - 053	In terms of Geographical differences, Mexico is very fortunate because there a little bit of everything. The Caribbean sea, Baja California, deserts, the only thing Mexico is lacking in her opinion is that the policy makers understands that not all laws should be the same for every region of the country. With such diversity, there should also be diverse policies that work with specific characteristics. She would divide it by ecosystems. In the map she mentions the Mesoamerican area, as the further south, then the Central East and Central West, North and North West that includes the coasts of Baja California and the Peninsula. IN terms of environmental law and policies, she would divide them in these areas, not only for ANPs but Environmental laws, protection of water, reefs ...
<u>Reflection of the meaning:</u>	6. Outcome: What did we achieve?	Effectiveness and appropriateness:	<input type="checkbox"/> Impacts: effects of management in relation to objectives	What does Mexico has to offer the Global community in terms of effectiveness of Management of PAs?	5 - 053	They work with capacity building on good practices in the hotels and in general tourist industry. They are also working in a guide for location and good practices of hotels in Yucatan.
<u>Description of Facts:</u> Are there regional differences?	1. Context: Where are we now?	Status:	<input type="checkbox"/> Significance	Tell me about the history	6 - 054	The first areas were established without considering any peoples in the areas, or any services that the areas will or could provide for the peoples. Now there is a shift in the paradigm that is starting to include the peoples not only for the services they get but as stewards for the management of the ANPs since the beginning of the establishment of the ANP and getting people happy about what is going on. Interdisciplinary should not only mean people from different academic areas such as biological and social schools of thought, but also include the basic non-academic stakeholders such as the peoples in the areas. So, when you are designing the reserves, you are also designing the projects related to community development. Because once you have the ANP established people are expecting to see the ANP generating money for them. There is a misunderstanding for the communities that because they have an ANP there will be profits for the people, and also because they community projects, they will have profits at a very short term, like a month or so. When the ANP is established the peoples usually have economical problems, but the services from the forest were part of their livelihoods, or they would cut the forest to increase

						the lands for agriculture. Once the ANP is established these sources of supplies for their livelihood disappear, so with the establishment of the ANPs there is a need to provide for the communities.
<u>Description of Facts:</u> Are there regional differences?	3. Input: What do we need?	Resources:	<input type="checkbox"/> Resourcing of agency (CONANP)	What is the funding for CONANP coming from	6 - 054	There are many academic organizations that support not with funds but with technical and scientific knowledge and ...
<u>Reflection of the meaning:</u>	2. Planning: Where do we want to be?	Appropriateness:	<input type="checkbox"/> Protected Area legislation and policy	How are the policy and legislation affecting the PA management?	6 - 054	The Northern area is a completely different culture of use of the land and exploitation of the environment. They have a completely different way of thinking towards the environment and its relationships with the people. IN the South there are lots of Ejidos with good forest cover, in the North that forests are pine and they are able to harvest them sustainable. In the South to make it sustainable it has way less income due to diversity. In the buffer zone there are these kinds of activities, but not in the core zone.
<u>Reflection of the meaning:</u>	5. Output: What are the results?	Effectiveness:	<input type="checkbox"/> services	How have the communities/visitors/users/stakeholders responded to the management?	6 - 054	Recreation is contemplated within the management plan as communication to society. So anything related to society such as tourism. No it is in the management plan but doesn't mean that it works as well in the ground.
<u>Reflection of the meaning:</u>	6. Outcome: What did we achieve?	Effectiveness and appropriateness:	<input type="checkbox"/> Impacts: effects of management in relation to objectives	How successful have you been in achieving the management goals?	6 - 054	90% of the ANPs have the management plans, but doesn't mean that they are been properly emplaced. This ANP he is using as an example is 325000HA, and counts with 15 staff members including the director, the secretary, the park rangers and... etc... This means that the vigilance is minimal. The idea is very good, but some ANPs are just paper parks. When a new ANP is declared there are a certain amount funds that are directed towards this one.
<u>Reflection of the meaning:</u>	6. Outcome: What did we achieve?	Effectiveness and appropriateness:	<input type="checkbox"/> Impacts: effects of management in relation to objectives	How have Federal PAs in Mexico dealt with the constraints or challenges related to achieve the objectives?	6 - 054	In general decision makers in Mexico are in good contact with the Academia, and the people working in the ground, the problem is that sometimes there are economical interests and pressures coming from the corporations, that bias the decisions towards their advantage and not what the academia suggests.
Focusing life history				E-mail:	7 - 055	Pollution and Environmental Impact
<u>Focusing life history</u>				How long working with PA's	7 - 055	30 years
<u>Focusing life history</u>				Are they very people, or very conservation??? What are their values,	7 - 055	As a person he is In the middle of the socio-economical line in between the interdisciplinary and the extreme, / As a person she is in the socio-economical side but tending strongly towards the interdisciplinary side.

<u>Focusing life history</u>				and the values of the organization they work for?	7 - 055	As part of his NGO he is right in the middle of the interdisciplinary area and as part of the University he works for him is in the middle of the line between the extreme Eco-biological side and the interdisciplinary. I understand these postures as not been extreme but definitely tendencies related to those areas. /// As part of her NGO she is right in the middle of the interdisciplinary area.
<u>Reflection of the meaning:</u>	1. Context: Where are we now?	Status:	<input type="checkbox"/> National context	Why are the PAs not working together as a system?	7 - 055	His opinions will come from the stand of the university and the information that has come from there. Official federal conservation is located everywhere in the country, but there are differences such as in the North areas tend to be larger in size and from private initiatives. These areas have low diversity, in the other hand, in the South there is high diversity but with population's very marginalized and high poverty levels. Mexico is probably the only country in Meso-America that can invest in Conservation. The important northern ecosystems are generally protected, but in the south there are great challenges related to poverty and peoples. In Veracruz there are many social conflicts that interfere with conservation strategies. In the North it is easier to buy very large extensions of land and conserve them and get the image of the green corporations. In the North marine conservation is very important such as whales and the vaquita marina. The main threat is the fishing activities that are easier to go through with international agreements and good practices. In the Golfo de Mexico there is little of a marine conservation and the reef zones of Quintana Roo and there are pressures related to tourism. Dividing the country in the middle right above the DF city. The ecosystems in the North are more resilient and there is a low pressure of population and the economical income is very high so reliefs pressures on the ANPs. The activities involve extensive cattle ranching and mainly vegetables. The main problem in the North is the availability of water. There is a huge industry of (hortalizas) which are exported to the US without considering the cost of water. They are giving water for free to the US through vegetables such as tomatoes. In the South Excluding Quintana Roo, the South is tropical forests, high levels of populations and very high levels of poverty. Extensive cattle ranching, very high levels of deforestation. The land is very cheap and so they have extensive cattle ranching which lower costs of production. The forest is seen as "an obstacle in the middle of the way for development" Even though the scale of land availability is lower than in the North, deforesting with the purpose of using the land for agriculture gives the producer a sense of ownership, master of the land, opposed to having forested land which is felt as a waste of land.
<u>Reflection of the meaning:</u>	6. Outcome: What did we achieve?	Effectiveness and appropriateness:	<input type="checkbox"/> Impacts: effects of management in relation to objectives	What are the next steps?	7 - 055	There is a very romantic idea of the pre-Hispanic cultures as stewards of the land. He doesn't buy this anymore; they are farmers that need cattle as insurance for their wealth. Agriculture is very unstable and they need something more stable such as cattle. Meat is always profitable. All farmers want cows. They keep many of their traditions related to religious practices and beliefs, traditional natural medicine, but they also want cattle and wealth in their terms. Such as the conservationists in the city have a car and air conditioning, I have my 6V car, I don't ride a car, and they want to have their stuff. If the conservationists don't lower the consumption levels, why would they ask the farmers to lower their consumption attitudes?

<p><u>Reflection of the meaning:</u></p>	<p>6. Outcome: What did we achieve?</p>	<p>Effectiveness and appropriateness:</p>	<p><input type="checkbox"/> Impacts: effects of management in relation to objectives</p>	<p>Why has the success of the PA's relied on ...who ever it relies on?</p>	<p>7 - 055</p> <p>When he suggests that the solutions should come from the ground, from the farmers, he is not trying to say that they have the perfect recipe for an appropriate living. What he is trying to say is that these are the people that we need to convince. The levels of education and culture are totally different; the campaigns coming from the TV or radio are ineffective because the people have different visions of nature. For them what is valuable is the land, not the forest. If you come to the rural areas with these sensibilization programs showing the gorgeous forests and then cleared deforested land, who is been sensibilized is the people from the cities. The farmers take the forest for granted, their vision of these is one of lands that are waste, are not valuable in terms of agricultural use and profitable for the banks as assets. On the other hand deforested area means for them something pretty, ready for agricultural use, an asset. You have to come to the community and look for what is meaningful for them, for their moral values. This way you can make them understand in their way of thinking, philosophical language why conservation is important, they are very sensitive, they can perfectly understand the main reason for conservation and get really involved in conservation.</p>
<p><u>Reflection of the meaning:</u></p>	<p>6. Outcome: What did we achieve?</p>	<p>Effectiveness and appropriateness:</p>	<p><input type="checkbox"/> Impacts: effects of management in relation to objectives</p>	<p>How have Federal PAs in Mexico dealt with the constraints or challenges related to achieve the objectives?</p>	<p>7 - 055</p> <p>Is there an evaluation system emplaced on effectiveness of ANPs? No, first many of the ANPs don't even have a management plan. Many of the ANPs were declared mostly in the 90's with this Secretary of Environment, Julia Carabias, but it took more than 10 years for them to start having management plans, then many years passed by after them having a director, forest rangers and some managerial structure and offices. So, the evaluation of these management plans and the effectiveness of the areas are inexistent. They can tell if the areas have been invaded by cattle or so, but besides that there is no way of evaluation of effectiveness. They allow Universities to do research in their areas as a way of these universities to do what should be their job, and that is why the civil associations have grown so much. They can get private funds that the ANPs can not get. The problem with these is that some NGOs start to own the ANPs and they develop politics that are very particular of their interests and they could be influenced openly by the economical interests of the corporations that finance them. There is no best example as this conference WILD 9, this conference is been funded and conducted by the big corporations of Mexico, and they are providing the money for all these activities. These corporations are highly polluting in their practices, they are owned by the bourgeoisie, they are the ones that own huge latifunds (extensions of land) and they want to get their green label by supporting conservation and getting their picture taken with Jane Goodal. Governmental agencies that have very limited funds, they have no choice than embracing them their support. This doesn't mean that there are not legitimate intentions in their support for conservation, never the less they are very strong economical interests. They become elite, they won't go to Guatemala to interact with the peoples, and they provide from the comforts of this conference that has the air conditioning to its maximum, it is elite of corporation - supporters, photographers, conservationists... The problem is that from here is that the policies are dictating but are not grounded to the farming populations in Guatemala, for example. It is the labor of others to go and ground their policies on the field. This is the main reason why he is biased towards the people in his philosophy of work as an NGO. We are the ones that go get in touch with the poverty of the peoples surrounding the PAs. If we get a Million Dollars and we</p>

						work from above and looking down, we would be lost. Conservation should happen from the low levels, on the ground, towards the upper levels such as policy makers from the comfort of the air conditioning.
<u>Reflection of the meaning:</u>	6. Outcome: What did we achieve?	Effectiveness and appropriateness:	<input type="checkbox"/> Impacts: effects of management in relation to objectives	What do you think about the connectivity between the Systems of North America? What is the relationship with Canada and US specifically?	7 - 055	<p>In terms of Mexico's relationship with its neighbors. The US has a larger population but also has more financial richness and a greater tradition of PAs, Canada is very relaxed because their populations are very concentrated in these areas. They can take the huge extensions of land for conservation. The new main threat is the oil exploitation that is threatening these areas for exploitation instead of conservation. Mexico on the other hand doesn't have the resources but in 20 years they haven't been able to develop a management structure that will work as PAs management. First there was an office of deforestation for use of land for agriculture, then other offices that manage lands such as the secretary of fish and wildlife. Still now, the kind of support the government and the policies lack of coherence makes governmental agencies to provide \$1 Mexican pesos for conservation while \$2000 Mexican pesos for agriculture and cattle ranching development. Anywhere in Mexico the PAs are islands encroached and isolated by agricultural development, and they are losing land as we speak. Only ANPs that really have a management plan can hopefully resist these threats. Now days there are institutions such as: CONABIO, CONANP, and INE (Instituto Nacional de Ecología) that are at the same level of Entities such as the Secretaries of Agricultural Reform and so, but these last are the ones that have the financial support from the (Hacienda). The directors of Hacienda are the most powerful persons in the country because they dictate where the money goes and in what area will be development. There should be a work between the policies and all the agencies in which there can be determined if when allocating money for agriculture there will be a conflict with where the other agencies of conservation. So, depending on the interests of Hacienda, like the development of new roads, without considering the influence or impact in the environment. The political positions tend to be pressed by other economical interests. Julia Carabias, was the Secretary of Environment with the Cedillo's government, (the Fox and then Felipe Calderon) she as a biologist graduated from UNAM transformed everything related to protection of the environment. She took a great generation of the 68 related to conservation and she started the development of these governmental policies, but lacks of financial support from the rest of the government, in general terms. The US have the financial resources and the political will and in better terms Canada has not only the financial resources and the political will, but an amazing availability of lands that can be declared for conservation.</p>
<u>Reflection of the meaning:</u>	6. Outcome: What did we achieve?	Effectiveness and appropriateness:	<input type="checkbox"/> Impacts: effects of management in relation to objectives		7 - 055	Canada has had the chance the of protecting these lands while conserving autochthonous cultures, giving these groups the possibility of just continuing with their lives as usual.

<u>Reflection of the meaning:</u>	6. Outcome: What did we achieve?	Effectiveness and appropriateness:	<input type="checkbox"/> Impacts: effects of management in relation to objectives	7 - 055	In terms of Mexico's relationship with its neighbors of the South: Central American has been devastated by the political conflicts in the 70's, and rural and poor populations that survive with (tumba y roza) practices and cattle ranching and they have things even harder than Mexico. Mexico has a very limited relationship with the countries of Central America. There are commissions that look for relationships between Mexico and Guatemala, but it is always more important the relationships between Mexico and the US. The conservation and research programs are in Mexico more than in Guatemala or the rest of Central America. Mexico already depleted the forests in their side and is already invading Guatemala. Guatemala hasn't depleted their forest resources because of their lack of road and transportation infrastructure. It is very clear in the satellite images where the frontier is because of the difference in the vegetation. The Mexicans are already invading the forests of Guatemala through illegal timber commercial practices. They are all PAs and they are being depleted by the illegal Mexican timber exploitation industry. On the Mexican side, there is a great colonization of new lands for agriculture; people are displaced by the guerrillas from Guatemala and from Chiapas for example. These displaced populations become squatters, illegally and legally areas are taken and at the end the government has to give in to the pressures and they start developing roads, and other services such as electricity, health providers, and wells. It is very hard that a politician really stops this from happening, and then there are sometimes the army gets involved but eventually will give in. The state governments are only for 3 years and so it is very hard to avoid this. The alternation of federal political parties gives the chance of different governmental entities to ignore the issues and say that they are other entities responsibility and at the end no one takes care of the issues. So legally narco-traffic is a federal issue, as well conservation and so the local governments don't get involved.	
<u>Reflection of the meaning:</u>	6. Outcome: What did we achieve?	Effectiveness and appropriateness:	<input type="checkbox"/> Impacts: effects of management in relation to objectives	7 - 055	The illegal timber coming from Guatemala is not certain where the final market is. IF it is being exported to the US or stays in Mexico...	
<u>Focusing life history</u>				How long working with PA's in Mexico and in what capacity	8 - 056	International Project on Coral Reefs, including social, economical and environmental components. Defining scenes of the coral reefs and the different relationships between the components.
<u>Focusing life history</u>				Where do they work now, and before	8 - 056	Relationships between the people and the environment, taking in consideration the people not as a separate entity. HE is going to determine the areas with most diversity in the reefs. Including more stable areas and identify some threatened areas that are or are not conserved, and get to conserve them. The areas with more diversity provide more services such as food and tourism attractiveness. They are also more resilient.
<u>Focusing life history</u>				What is their perspective along the conservation line that BB and I developed?	8 - 056	The Organization CINVESTAV (governmental agency) provides the scientific reports for the CONANP, and they use the knowledge for management of the areas and decision making.
<u>Focusing life history</u>				Are they very people, or very conservation???	8 - 056	As a professional, he is in the interdisciplinary area but in the edge towards the eco-biological area. Not totally in the eco-biological area because he works with social activities related to fishermen and so. Personally I have worked with projects funded by the WWF in which the

						fishermen are the ones researching and developing policies for the sustainability of the fish resources they harvest, totally participative research.
<u>Focusing life history</u>				and the values of the organization they work for?	8 - 056	The Organization that he works for is right in the middle of the Eco-biological area, between the extreme and the interdisciplinary areas. There is no contact with the user; it is a completely academic work. The information is used to develop by CONANP or CONABIO and they are the ones that provide projects with the communities, this is the long term how the users could benefit from the information generated from this Center.
<u>Reflection of the meaning:</u>	1. Context: Where are we now?	Status:	<input type="checkbox"/> Significance	Why do you think this is the significance of the PA's in Mexico? (population, academia, political arena, internationally)	8 - 056	Geographically: In practical terms (on the ground), conservation is very complicated. The ANPs goal is conservation, but there are areas that are more localized. The Golfo de California, the South East such as Chiapas and the Yucatan Peninsula are the ones that are most known or popular in terms of what you hear that is going on. In the state of Mexico, the Monarch butterfly project is also a much known initiative. The money support indicates conservation. Financial support.
<u>Reflection of the meaning:</u>	3. Input: What do we need?	Appropriateness:	Resources:		8 - 056	Resources mean also provision of scientific support for good practices and improvement of the areas conservation initiatives.
<u>Reflection of the meaning:</u>	4. Process: How do we go about it?	Efficiency and appropriateness:	Efficiency and appropriateness:		8 - 056	Do you feel that this information provided from the scientific community is used? Not all of it, but it is starting to be used for the development of different new projects and good practices. They can do better conservation using these information.
<u>Reflection of the meaning:</u>	5. Output: What are the results?	Effectiveness:	<input type="checkbox"/> Results of management actions	How efficient have you been in evaluating the actions from the management?	8 - 056	Some of the reef areas have very good monitoring systems which include water quality and other factors of ecosystem health. There are many variables that are trying to include but the financial resources are very limited and they can't include them all. Networking has been very important, because there are other researchers that can monitor these other variables but through other sources of funds. The crisis in the US hit them also as funds decreased.
<u>Reflection of the meaning:</u>	5. Output: What are the results?	Effectiveness:	<input type="checkbox"/> Results of management actions	How has the relationship between stakeholders and other communities changed due to management actions? Has it improved, remained constant, deteriorated...? And Why?	8 - 056	In terms of effectiveness of the management geographically: Involving the social aspects of management and conservation are very recently considered. Before the management was very difficult because the users were not involved at all. Now, the management will be more successful because the users (stakeholders) will have some participation in the management and evaluation of the projects and management. The researcher comes to the area, gets the data and leaves, the users are there every day, live it daily. Getting them to own the conservation objectives as theirs is what gives meaning to successful management. That is why they are extremely important for the management and conservation. They live it daily, so getting them involved makes management successful. When people think of things as them and as important, then they take care of it.
<u>Reflection of the meaning:</u>	6. Outcome: What did we achieve?	Effectiveness and appropriateness:	<input type="checkbox"/> Impacts: effects of management in relation to objectives	What should be improved?	8 - 056	Some decision makers need to be conscious of how things really work in the ground, and that sometimes the things that come from the higher levels don't really apply to the reality on the ground.

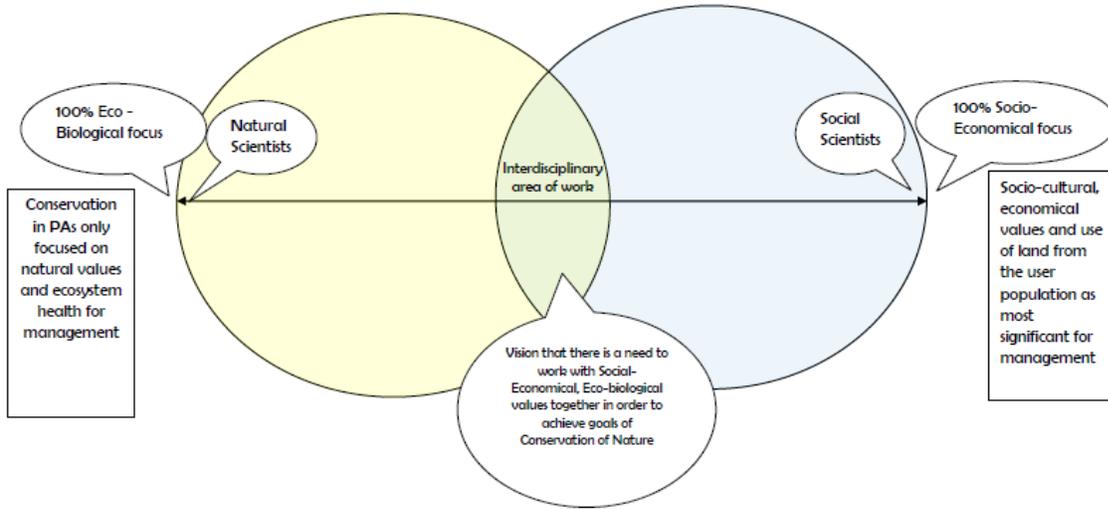
<u>Reflection of the meaning:</u>	6. Outcome: What did we achieve?	Effectiveness and appropriateness:	<input type="checkbox"/> Impacts: effects of management in relation to objectives	How have Federal PAs in Mexico dealt with the constraints or challenges related to achieve the objectives?	8 - 056	The marine and terrestrial areas are managed by the same institutions. Actually there are some ANPs that have terrestrial zones as well as marine. Their management is more complex and they have to be separated into both components. They also have a lot of interaction with the NGOs that support the ANPs and provide them with knowledge too.
<u>Reflection of the meaning:</u>	6. Outcome: What did we achieve?	Effectiveness and appropriateness:	<input type="checkbox"/> Impacts: effects of management in relation to objectives	What do you think about the connectivity between the Systems of North America? What is the relationship with Canada and US specifically?	8 - 056	Relationship with the neighbors: Mexico receives many plans, they have many ANPs and this is important for any country. Never the less they are very far from getting to the level of, for example the US, in terms of legislation and policies. In relation with the rest of Latin America, Mexico is an example of conservation. They are trying to do it the best way, but they are lacking the attitude of involving all the stakeholders in the conservation initiatives. Getting people involved is key in management success. For example, if the people participate in realizing that the resource is endangered, not that it is an outsider telling them that the resource is endangered. They get to their own conclusions of threats. This way it is easier also for them to feel the need of coming out with solutions to protect this resource that means their livelihood, as a result of their own solutions they are going to follow them, because they are truly conscientious of their importance from the beginning.
<u>Reflection of the meaning:</u>	6. Outcome: What did we achieve?	Effectiveness and appropriateness:	<input type="checkbox"/> Impacts: effects of management in relation to objectives		8 - 056	So in terms of Latin America is way better but far from getting to be at the same level of the US.
<u>Reflection of the meaning:</u>	6. Outcome: What did we achieve?	Effectiveness and appropriateness:	<input type="checkbox"/> Impacts: effects of management in relation to objectives	What does Mexico has to offer the Global community in terms of effectiveness of Management of PAs?	8 - 056	What lessons: there are some things that could be replicated in other areas, but the strategies should be adapted by experts in the matter, for the specific characteristics of the area where is going to be emplaced.

Appendix C

Value Maps

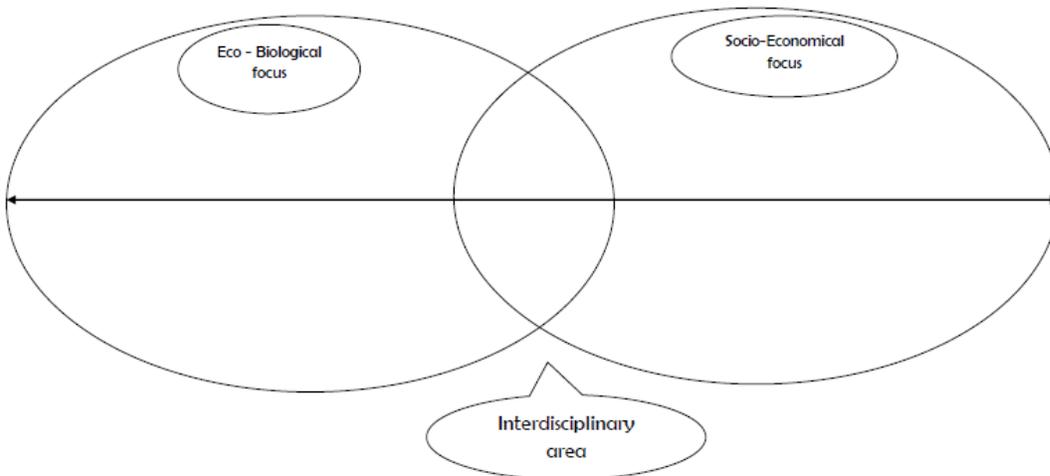
### Map of perception of the philosophy of conservation and PAs, personal and organizational

They are extremes of the same continuum; they are the same but in a different grade.



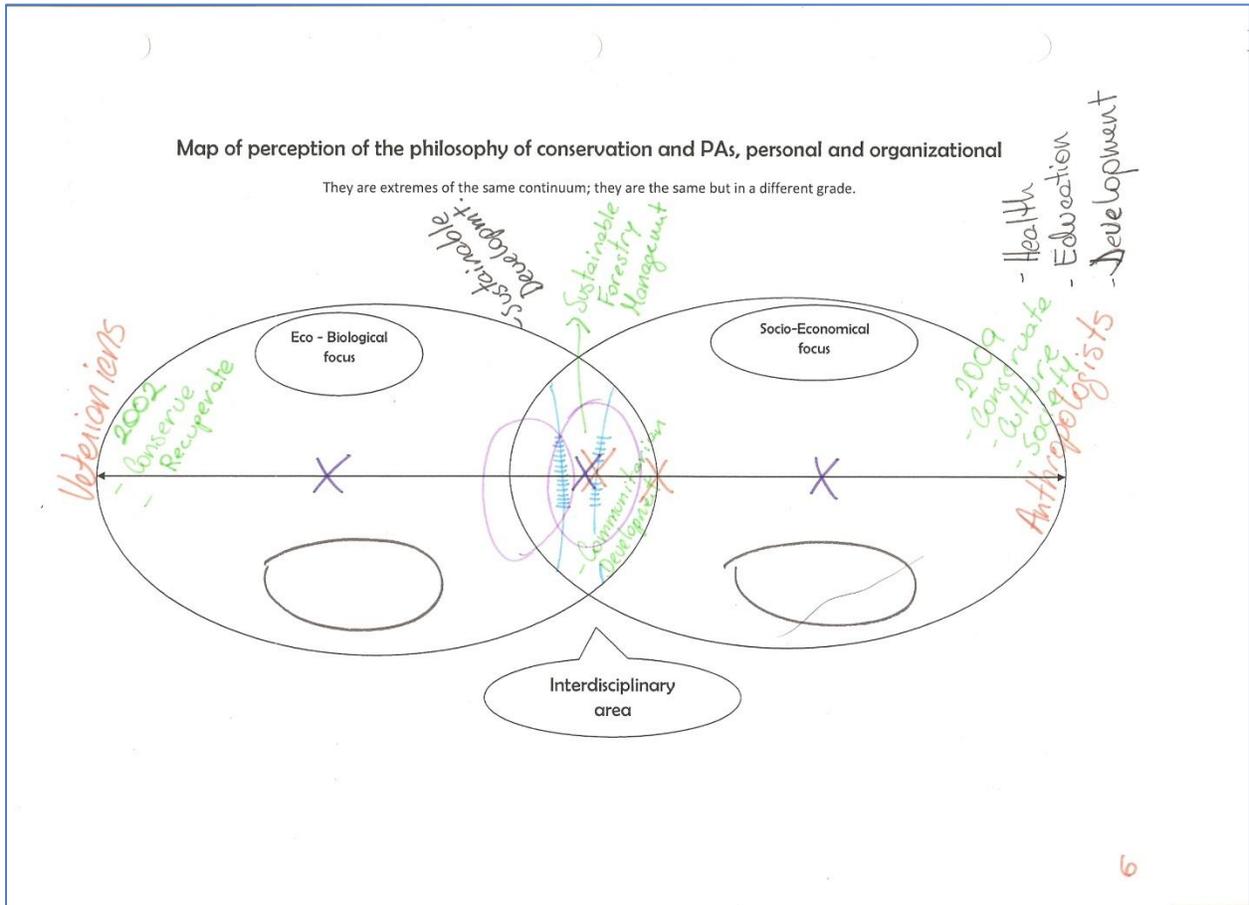
### Map of perception of the philosophy of conservation and PAs, personal and organizational

They are extremes of the same continuum; they are the same but in a different grade.



# Appendix D

## Value Map Raw Data



## Appendix E

### Abbreviations

CATIE - (Centro Agronómico Tropical de Investigación y Enseñanza)

CCAD – Comisión Centroamericana de Ambiente y Desarrollo (Central American Commission for Environment and Development)

CONANP – Comisión Nacional de Áreas Naturales Protegidas (México) (National Commission on Natural Protected Areas)

GTZ - (Gesellschaft für Technische Zusammenarbeit) (German Agency for Technical Cooperation)

IUCN - International Union for Conservation of Nature

NOAA - National Oceanographic and Atmospheric Administration

PROARCA - *Programa Ambiental Regional para Centroamérica* (USAID's Central American Regional Environment Program)

PROARCA/APM - Programa Ambiental Regional para Centroamérica, Componente de Áreas Protegidas y Mercadeo Ambiental (Protected areas and environmentally sound products components of the USAID's regional environmental program for Central America)

SAM - Sistema del Arrecife Mesoamericano

TNC - The Nature Conservancy

USAID - US Agency for International Development

WWF -World Wildlife Fund

WCPA - World Commission on Protected Areas