



Eco-Adapt

Deliverable 4.2

Procedure for social validation of Climate change Adaptation Plan for water security in three Model Forests in Latin America

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Work Package 4

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Resumen: Ese documento presenta las metodologías de validación social de los Planes de Adaptación al cambio climático y sus implementaciones en los tres bosques modelos del proyecto EcoAdapt. La primera parte del documento trata de los antecedentes y del método de trabajo. La segunda parte presenta los avances y resultados específicos a cada uno de los tres bosques modelos (BM) participando del proyecto EcoAdapt en cuanto a la estrategia de validación social de su plan de adaptación al cambio climático y proyectos pilotos “energizadores”. En la tercera parte está esbozado un análisis transversal permitiendo formular algunas conclusiones y recomendaciones para la validación social de las opciones de adaptación en el contexto de un proyecto de investigación-acción.

Abstract: This document is about the methodology of social validation of the Climate Change Adaptation Plans and its implementation in the three Model Forests (MFs) of the EcoAdapt project. The first part of the paper presents the background and the work method. The second part deals with the specific advances and results of each of the three model forests participating in the EcoAdapt project in regards to the strategy of social validation of their climate change adaptation plans and the pilot “energizing” projects. The third part offers a transversal analysis with some conclusions and recommendations for social validation of adaptation options in the context of an action research project.

Background

To improve community support and validation for exploratory outcomes and possible development pathways, the Ecoadapt project was designed to complement an explorative scenario planning approach with a much closer interaction of story & simulation (SS) panels using a larger population in the pilot communities.

This task was initially supposed to start with a “hybrid” (i.e. socio-technical) forum in each pilot community where local civil society organizations (CSOs) extend an open invitation to the area population to participate (Ecoadapt DoW, 2011). The storylines developed by the scenario panel in Work Package 3 (WP3) would have been debated publicly in order to obtain further information/involvement around controversies, values and indicators, driving forces, time horizons and uncertainties, thereby enriching or modifying the storylines. This phase was a first step for broader social acceptability and relevance (i.e. moving beyond the scenario panel) and was meant to help determine how much, in the face of uncertainties, the storylines developed were truly in-line with the vision and the will of the broader population.

Because partner CSOs in the three sites in Jujuy, Argentina, Chiquitano, Bolivia and Alto Malleco, Chile, felt that addressing concrete problems would engage key stakeholders more than “dreaming about the future”, the transformative scenario approach outlined in the DoW has been replaced by a value-based structured decision making (SDM) approach (see Deliverable 3.5). Unfortunately, such a model proved to be difficult to fully implement at the territorial scale. As a result, at the end of 2014 we have completed the decision sketching step (the first step of SDM) which has produced a basic Climate Change (CC) adaptation plan, as well as pilot implementation measures meant to boost people’s engagement in a larger planning exercise. This ultimately led us to re-evaluate the relevance of hybrid forums for public validation. This document presents the results of this assessment.

Introduction

This paper presents the advances regarding the methods and results from the initial implementation phase of the social validation for the climate change Adaptation Plan as well as Action and Communication Plan for in the three model forests of the project. The paper has three parts.

The first part deals with the background and working method. The second presents the advances and results of each of the three models forests (MFs) participating in the EcoAdapt project in terms of the strategy of social validation of their plan to adapt to climate change. In the third and final part, a cross-sectional analysis is presented which allows some conclusions and recommendations for the future.

To prepare this deliverable we did a literature review of the documents and reports produced by the three MFs, along with interviews and remote meetings among the authors. In October 2014, Eric Sabourin carried out a one-week trip to the Bosque Modelo Jujuy (BMJ) team to discuss this topic (Sabourin, 2014). That was supplemented by interviews and meetings with teams from Bosque Modelo Alto Malleco and Bosque Modelo Chiquitano (in that case there was also an in-person meeting in May 2014 during the G77 meeting in Santa Cruz). The process was completed with the co-authors of the deliverable through Skype meetings and interviews in the case of the Chiquitano MF and the BMAAM. In the case of the BMJ, there was also an opportunity for participant observation and member interviews from the EcoAdapt Forum.

1. Hybrid Forums and their application

1.2 Model Forest Forum, EcoAdapt Forum, Enlarged Forum

The word *forum* is polysemic, meaning that it must be accompanied by a qualifier or a complement in order to give it a contextual meaning (ex. justice forum, rural forum, participatory forum). In this sense, the notion of a hybrid forum that Ecodapt adopted in the project (Deliverable 4.1 - Coffman and Leclerc, 2013; Callon *et al.*, 2001) may also take on different meanings. It could refer to a forum composed of heterogeneous participants, or to a socio-technical forum, as described by Callon *et al.* (2001).

A hybrid forum according to Callon *et al.* (2001) comes from significantly questioning the relevance of a representative democracy when it comes to controversial issues. It refers to a debate between experts and non-experts (citizens) around a technical controversy over a specific technology (e.g. GMOs), a facility (e.g. a site for nuclear waste), a construction plan (e.g. a reservoir) or a project of public interest (e.g. a sanitation dump). Examples of these types of forum are outlined in Deliverable 4.1 and include the Arauco Case and the Tsunami mitigation park in Chile.

A forum may also be qualified as hybrid because it brings together participants from different sectors (particularly from the public and private sectors of civil society) and from a

heterogeneous background (Avritzer, 2009; Dagnino *et al.*, 2010). Assembling a hybrid forum necessitates mediating opposing views between actors who have no other space to confront their views (Dagnino *et al.*, 2010).

In the three model forests participating in the project, the word forum is already used with different qualifiers: the Model Forest Forum, the Water Forum (BMJ and BMCh), the EcoAdapt Forum (a forum that links the EcoAdapt project actors), as well as Enlarged Forums when new actors were involved who had not traditionally been members of the social and institutional bases of the MFs. In the case of the BMJ and BMAAM, a forum specific to the EcoAdapt project already existed that unfolded since 2012 in various workshops and meetings and is broader than just the Model Forest leadership (Sabourin, 2014).

Therefore, while each of the model forests have had experience with the forum methodology, the general consensus is that the strict concept of a hybrid forum as outlined by Callon *et al.* (2001) does not seem the most relevant or appropriate method for social validation of adaptation options. Additionally, few of the MF members had read or known of the existence of Deliverable 4.1 (in English) on the subject, though the concept was discussed in several planning meetings (November 2012, April and October 2013).

Consequently, for the context of this project, we refer to the hybrid forum (HF) in its broadest sense as a space of socialization and thematic discussion involving heterogeneous local actors from different sectors, origins or trajectories (Dagnino *et al.*, 2010; Sabourin *et al.*, 2008).

1.2 Alternative proposals

Hybrid forums will take different shapes in each model forest.

In the case of BMJ (Argentina) the hybrid forum is to be done as a popular consultation¹. In order to implement a public consultation, the tools used depend on the specific purpose and target audience to which it is addressed and the scale at which it is intended to function. Some care and consideration should be given to the issues to be discussed and the way of presenting the information, so as not to leave any gaps for the manipulation of the discussion. It

¹ Public (aka: popular) consultation is widely used to validate public works or projects (Duran, 1999). In Brazil, there were public hearings to validate the proposed ecological and economic zoning in the States of the Legal Amazon in 2009. These hearings ended up being a form of consultation with a very technical public debate on the issue of soil classification and vocation, particularly since the area was associated with powerful economic interests (soy, rice, livestock, forestry, mining, land reform, etc.) (MDA, 2005; Duarte & Sayago, 2006; Dagnino *et al.*, 2010; Avila *et al.*, 2009).

is important to avoid feeding tensions with the legitimate officers responsible for these issues or controversies. Three factors are important to consider for implementing public consultation in BMJ:

- Duration: It is important to anticipate the timing of the information to be disseminated, specifically, the contents of the technical proposal which should be shared in plain language.
- Scale and target audience: The target audience and geographic scale could encompass the whole community or only certain sectors of the community (tourists, tobacco industry, etc.) or certain institutions involved in the work of the EcoAdapt Forum.
- Purpose/objective of the consultation: Whether it is validation, modification of the planning proposal or the inclusion of new issues, the purpose of the consultation must be considered. For the BMJ, the priorities would be to promote, raise awareness, sensitize, and establish the topic of climate change and water security in the public debate, or initiate and nourish a discussion for the authorities to pay heed.
- Dissemination of information: Why is it necessary to define adaptation actions for CC? What can the public sector and the private sector do? The public consultation would be an act of political advocacy – one in which more information could be provided about the creation of the model forest and how adaptation to climate change has been worked, and in so doing, mobilize new resources for the Adaptation Plan and empower the BMJ.

In the Chiquitano Model Forest (Bolivia), the lack of possibility for establishing an expanded forum on the set of actions for adaptation to CC for the Zapocó Basin is partly due to the Concepción municipality's insufficient or fluctuating interest, as well as to the institutional instability that results from national and municipal elections which has been the case in the area since September 2014 and will continue until after the municipal elections in March 2015. Therefore, the social validation plan is programmed to work at the watershed management council level.

In the case of the Alto Malleco and Jujuy Model Forests (BAAM & BMJ), a method of public socialization was chosen that will eventually be supplemented by a public consultation (Sabourin, 2014). The process of prioritizing “energizing” actions (see Deliverable 3.5) in BMJ is based primarily on awareness-raising and information around water quality. In the Chiquitano BM the process is connected to the Water Forum which will be organized after the municipal elections (March 2015) and to the recent implementation of watershed management guidelines.

2. Results

2.1. Jujuy Model Forest: social validation for the Adaptation Plan for Climate Change from the BMJ Forum

At the request of the BMJ technical team, the trip of Eric Sabourin began with a brief training on public consultations and hybrid forums. Afterward, the different types of hybrid forums and the mechanisms for carrying them out were defined and the most appropriate type of forum was considered.

As stated in section 1.2 above, the Jujuy Model Forest deemed the concept of a hybrid forum as defined by Callon et al (2001) to be inappropriate for their social context due to a variety of reasons. Firstly, there is no technical controversy nor is there a decision to take because it is still unknown as to whether the actions of the adaptation plan will be prioritized and/or what will be possible to finance. There is currently only a proposal for actions or ideas rather than something very specific to validate, and what is urging is to inform and to debate about water security. The EcoAdapt project has not produced a vision of the future with potentially controversial scenarios to present and discuss for eventual validation. Secondly, BMJ has no legitimacy to propose validating a plan that has been prepared by a forum of various technical institutions, some of which have a public or official mandate for most of the adaptation plan actions. Finally, given that there is still no funding for the majority of the actions, BMJ cannot take the risk of raising expectations beyond their mission and their scope in the community. There is also a risk of creating false expectations that could not easily be fulfilled and/or of causing a rejection from public institutions responsible for Adaptation Plan issues, which would be counter-productive.

The initial purpose of the validation, as outlined by the BMJ team, is to: 1) present and eventually validate the Adaptation Plan to a larger audience than the current EcoAdapt Forum; 2) bring up the issue of adaptation to CC in public debate to gain feedback and perhaps incorporate new or complementing elements to the Adaptation Plan.

a) Using a SWOT analysis to determine social validation methodology

In order to understand better the type of social validation process that would best suited the Jujuy public, a rapid assessment was conducted via an analysis of Strengths, Weaknesses, Opportunities and Threats (SWOT) and it resulted in the following:

Strengths: The BMJ has a lot of information to share about water security.

Weaknesses: This information is not formulated for dissemination or public debate.

Opportunities: Finding new allies, interest in working on the issues, mobilizing activities, being heard.

Threats: Interpreting the information can lead to a critique of the process. There is a risk of tension or controversy.

As a result of the SWOT analysis, the BMJ team opted to start with a process of information sharing and public awareness-raising. The aim would be to provide information, generate discussion and interest, inform the public, find new allies, generate reactions and influence potential funders. All dissemination would be carried out via TV, radio, and print media. The to be disseminated would not be quite all of the plan, but rather an illustrative example about possible actions, for which the first steps can be financed and carried out with the BMJ and the EcoAdapt project (irrigation efficiency, awareness of water quality and pollution, water and dam management, etc.). All dissemination would need to be completed prior to June 2015. A public debate would eventually follow within an expanded EcoAdapt forum. This is described as follows.

b) A two-stage process for social validation

Stage 1: Public information

The public information stage has two objectives. The first objective is to bring to public debate the issues of natural resource, forest, and water management, in order to take the pulse of a wider audience and to extend the level of participation and socialization around the Adaptation Plan prepared by the EcoAdapt Forum. The second is to support or prepare a campaign for fundraising and/or integration of an adaptation standpoint for public services on their contribution to the Adaptation Plan's actions.

The public information stage would provide information on the adaptation plan, with examples of priority actions and illustrations of energizing actions already implemented by the BMJ and its partners. The information would be shared on TV, radio and in print, through interviews with those responsible for the BMJ and the Forum, and eventually shared through small video documentaries. Residents would be invited to comment and eventually suggest application elements specific to their community, neighborhood or professional association by phone, internet or answering questionnaires. Note that no mention would be made about the need for a popular approval of the Plan of Action or a call for validation. Reactions, comments, suggestions or specific requests will contribute to the principle of socializing, communicating and placing this plan before public debate. This process of public information will be an

opportunity to make known and to enhance the pilot or priority actions that are already being carried out by the BMJ such as the experimental demonstration of irrigation efficiency on the El Pongo Farm, or the environmental education program around water quality and water contamination in the dams.

Stage 2: Eventually create an expanded EcoAdapt Forum for public debate

If new stakeholders, institutions and funding sources appear after the public information stage, an expanded public forum, related to the EcoAdapt Forum, could be organized. This would only be in the event that new actors and/or feasible or potential resources (through projects) arise.

The aim would be to build an open space for discussion on Adaptation Plan elements, thereby mobilizing the new institutions. It would permit the project's advances and proposals (for 2015) to be communicated in a more technical fashion, with more technical elements and in particular with the economic evaluation of actions. The challenge will be to build on such a meeting of an expanded forum to seek funding and human resources, particularly financing from the actors themselves who will undergo or implement the CC adaptation plans.

2.2. Chiquitano Model Forest: social validation for the Climate Change Adaptation Plan for the Zapoco Watershed

The EcoAdapt project has been supporting the formulation of a set of strategies/objectives to be assessed and validated technically and socially as an input for a Management Plan for the Zapoco Watershed, to be executed by the Steering Group (aka *Grupo Impulsor*). However, several external factors are significantly complicating such a social validation.

Firstly, parallel to the EcoAdapt process, the Concepcion Municipal Government has been working to approve the Joint Mechanism for Mitigation and Adaptation to Climate Change, promoted by the National Government as an alternative to the REDD+ mechanism (partly due to public controversies around this mechanism). Contributions were made by the EcoAdapt Project to this *Plan de Adscripción* presented to the Joint Mechanism by the Concepción Municipal Government; however, the approach had already been delineated and left little room for strategic and technical inputs such as those made by EcoAdapt. Simultaneously, a call from DANIDA to carry out pilot projects within this framework places a strong emphasis on community forestry production and provides scarce funds for the creation of a national mechanism for adaptation to and mitigation of climate change. Additionally, while it is an open call, the requirements for participation are actually very restrictive.

Secondly, the national and municipal electoral season (general elections are in October 2015 and municipal in March 2015) practically prevents all public validation actions (and some implementation) by EcoAdapt because it is likely that the population will associate it directly with proselytizing, i.e. that could be used by political figures for either self-promotion or defeating opponents. Additionally, local authorities from opposing political camps will not attend such social validation events, and if they do attend, they could politicize the agenda.

In such a context, the question is raised of how it would be possible to empower the Steering Group over the short term to achieve water security in the Zapoco basin, and to do this through a social validation measure. Additionally, among the prioritized actions for the watershed, the design and future validation of other land management instruments such as the Management Plan for the Protected Zapocó Area is included. These can include training activities and/or strengthening community outreach on technical issues that have been identified as priorities. Given the current context of the elections, these issues can only be dealt with after the municipal elections in March 2015. Consequently it is ideal to reconsider implementing hybrid forums later in 2015.

According to the SDM, prioritized climate change adaptation strategies generate clear preferences for the following actions:

- Scaling up a management plan for the Zapocó Protected Area
- Improved water supply quality, quantity and continuity
- Environmental education and awareness-raising of the population
- Zoning for the Zapoco water basin to prioritize critical water areas
- Prevention and control of fires
- Strengthening and training CSOs

Therefore, a hybrid forum on the issue of water to be carried out in mid-2015 will be a space for the social validation of these items in front of a wider audience, and in so doing, an opportunity to redirect these efforts to promote learning through exchanges with management experiences in the Parapeti watershed. The presence of many interdependent actors presupposes a structuring with the development of a toolkit to support decision making in a multi-stakeholder context. In other words, information on strategies and actions to be implemented should be clear and simple enough for both local and technical authorities and urban and rural citizens.

The Foundation for the Conservation of the Chiquitano Forest's (FCBC) proposal is therefore to:

- Complete a Management Plan for the Steering Group and validate it with members of the larger group and the municipal government;

- Disseminate the plan and seek validation on the at the watershed level;
- Take advantage of the communication plan which is still underdeveloped, as well as remaining project resources for training and awareness-raising actions to launch this plan and to implement communication actions.

2.3. Alto Malleco Model Forest: social validation for the Adaptation to Climate Change Plan

a) Methodology: *The importance of an action research approach*

With an action research approach, the action can be prepared without waiting for the final results from the research. The action is generated during the research process and this in turn generates real impacts through the stakeholders who have been involved since the beginning of the process. These stakeholders have been participating in a series of actions and focusing on the energizing process for the selection and definition of a Pilot Plan for Adaptation to CC. In this process, the action incorporates community involvement, allowing the stakeholders, the EcoAdapt project and the institutions that implement it, to be further involved in the territory and solve problems and needs. In this sense, to participate is to be a part of, take part in, and have a part of the creation of a Global Strategy for Adaptation to Climate Change in the territory (BMAAM, 2014a).

There are two types of scenarios that may account for a broad analysis on this aspect. Firstly, the stakeholders who participated directly in the project are representatives from private public institutions, settler and indigenous communities, social organizations, and rural drinking water committees (APRs) among others. Throughout the different processes, these representatives have worked together to identify actions to be developed in the framework of an adaptation strategy, and consequently, have also selected the most relevant actions for the framework of the project. The SDM methodology has prevented any conflicts that might have risen; therefore prioritized actions have been validated by stakeholders and disseminated in the territory (BMAAM, 2014b).

Secondly, the types of actors who have participated indirectly in the project are residents from communities or sectors where the pilot project will be implemented, and in actuality refers to the population in the case of social organizations interested in the collective. In this sense, they are the recipients of a decision made at level one, i.e. at the stakeholder level, therefore, it could be said that this decision represents the territory. All of this refers back to the process of the energizing action which led to the prioritization of actions for the development of the Pilot

Plan, where participation in this second level of actors was delimited primarily to understand the importance of the project, support its implementation and ensure its maintenance over time (BMAAM, 2014b).

b) Presence of controversies

To date there do not appear to be any disputes or significant disagreements on the prioritization of pilot actions (although there was a public reaction about the site where it took place - see below). This is not due to a lack of a critical analysis of the process or towards the project itself, but rather, because the needs and shortcomings in the territory are so great that any project even moderately focused on solving a problem is welcome. In this sense, the issue of watershed protection for example, would fall under two roughly similar scenarios: in two indigenous communities in Lonquimay that have water problems and where the project will provide the resources and the ability to generate a replicable experience, and in a sector where, although the water is not a problem, it is a source of income through tourism. In such a case, the project is also well perceived by the public as it tries to care for or maintain a common resource. Controversies are explained only in terms of the feasibility of carrying out the pilot action. So far there have not been any controversies around the prioritized actions, for which, coincidentally, both communities have chosen as pilot actions "Watershed Protection" and then the "Design and implementation of a training program aimed at stakeholders and other actors"(BMAAM, 2014 c).

Some controversies arose when choosing the location for the action, as well as the planning of such action. For example, after watershed protection was chosen as the pilot action, controversies were generally kept to a minimum through the creation of a shared criterion for defining the location for the project's implementation. The actors involved in building the criterion assumed the responsibilities and reduced possible complexities. However, players who were not involved in the construction process, questioned the choices and decisions taken, but these participants are the same actors who clarify and improve the process by encouraging participation. For example, it was precisely a leader from Mallín del Treile (a territory that was not involved in the process of generating criteria for selecting the location), who was dismayed that Mallín del Treile had not been awarded one of the pilot projects. This situation caused some tension; however, other key players clarified the situation and Quinquén (one of the territories that was chosen in the initial processes, along with Pedregoso), stepped aside so that Mallín del Treile could use the available resources. Quinquén decided to wait for the contribution of complementary resources via a project to develop the process, given that EcoAdapt resources would not be sufficient for protecting the banks of a river network from

Con formato: Inglés (Estados Unidos)

several small watersheds². In short, these controversies arise among stakeholders and are solved among a stakeholder, which is an important point since the whole process is meant to leave lessons learned that deal with screening methodologies, building criteria and consensual decisions.

Con formato: Inglés (Estados Unidos)

Con formato: Inglés (Estados Unidos)

c) *The pilot actions have been motivating for new actors*

There is no plan to add more actors at the local level to continue with the planning of climate change adaptation. The team has repeatedly discussed this issue and always agrees that the focus should be to bolster the current actors. If more actors were to be invited into the process, it should be based on the direction the project is taking. Currently the intention of the Curacautín and Lonquimay communities is to develop special interest tourism; therefore the Model Forest and SEPADE must respond to this need in the area and also envision how EcoAdapt can strategically contribute to this process. Consequently, the actors who join should have a dual responsibility; first, meet project requirements and second, represent political and social fields focused on tourist development.

In the case of the Pedregoso sector, for example, the project intervention aims at protecting a watershed as the base for the creation of the first public park as well as a cemetery. Given that this is a community project and the area belongs to 80 people, the Territorial Sector Roundtable (which contains territorial representation from all the organizations present) will take on the challenge of coordinating and convening to define the project in the community. This is already in process and has not been easy because of the number of people involved and the problem of lack of land for productive development. If the process proves positive, it would not only be a win for the organization, but it would also involve an aspect in favor of territorial planning, providing an opportunity to begin organizing other public or collective aspects in the same community.

In the case of Mallín del Treile, those involved in the process belong to the Rural Drinking Water Committee which manages the potable water system for around 80 households, but which does not meet the needs of the entire sector. Currently, an enlargement is being proposed for the

² In effect the condition of Mallín del Treile is complex because from the place where the slope begins down to the place of the water capture, there are approximately 400 meters and the idea had been to close it all off to avoid animal waste contamination. Consequently, EcoAdapt resources are not enough for what is required to do and so a mechanism for a water transfer system is being considered that would transfer the water directly from where it is born to the system (BMAAM, 2014c).

project, which is close to fruition. In this regard, the watershed protection action may divert to another aspect.

Finally, with the Ñanco slope, the situation is less complex. It covers three properties and each owner is in agreement on closing it to make it suitable for tourism and as a demonstration and study center.

Of course, the EcoAdapt project is also linked to a set of actors outside the territory. In late 2014 BMAAM members attended a seminar in central Chile (and another one is upcoming in Temuco) where the project experience and relevance of key actors as subjects of transformation and development were discussed. Moreover, the BMAAM has participated in numerous meetings in different regions to contribute to the project or to contribute to the national reporting process on climate change³. At this time, the BMAAM is in an agreement with the Universidad Católica for the development of mini seminars in schools within the territory. In short, there have been different activities other than just at the local level, which have led to the strengthening of the project (BMAAM, 2014, b).

In each of these contexts, the actors have been involved in a process that is slow due to socio-cultural complexities in the territory. However, the EcoAdapt project is not imposing anything, but rather, generating debate, discussion, decision-making, and participation. This enriches the process and certainly generates sustainability (BMAAM, 2014 a, b, c).

In conclusion, the public debate in BMAAM takes the form of broad, local and inter-communal forums, whose modalities are defined according to the progress in adaptation planning and the implementation of the pilot projects.

³ It is noteworthy that a proposal is being developed for the FME in conjunction with DAS, the grouping of Forestry Engineers and Temuco social organizations.

3. Lessons learned

3.1. The contents of the plans for adaptation to climate change

It is noteworthy that the majority of the proposals in the three plans focus more on water management than on forests and more on water management linked to agricultural production (BMAAM and BMJ) or water consumption (BMJ and BMCh) than on a problem of ecological water management in interaction with the forest. For example: watershed protection and access to irrigation water in the BMAAM; management of irrigation efficiency and water quality in the BMJ, in collaboration with the Board of Irrigation, the dikes *Intendente*, the provincial government and the INTA (National Institute of Agricultural Technology); the work the Steering Group/ Basin Management Council in the case of the Zapocó Basin in BMCh.

These first steps reveal one of the successes of the participatory process involving the economic and professional sectors. It shows the successful integration of the model forest teams within the local society and local economy and its institutions. It might seem surprising that the proposals are not more directly tied to the forest given that it is the main focus of the MFs, but these are negotiated proposals for action and built in a participatory way. This shows that forest management in private property in context of economic activity depends more on productive stances than on only the forestry sector. On the other hand, it also shows that water management is a strong bond for people and a basic need of high priority ("water is life" is commonly heard in the territories). In turn, the need for forest conservation is a consequence of the relationship that each community maintain between their ecosystems and the water that they need.

3.2. Mechanisms for social validation

a) The limits to adapting a Hybrid Forum

The three MFs have expressed reasons for not applying the hybrid forum in the sense of Callon et al (2001) for the following reasons: 1) due to the consensus approach and attention being paid to immediate problems, there were no potentially controversial scenarios to validate; 2) the model forests do not have the authority to carry out most of the technical proposals for adaptation to CC; 3) the ideas did not provoke disputes from the civil society; 4) to avoid raising expectations in the population (e.g. large investment in infrastructure), which neither the MFs

nor the EcoAdapt project could take on; 5) the political-electoral environment in BMCh and BMJ is not adequate for such actions.

b) The preference for pre-existing or pre-recognized forums/spaces

There was also an emphasis placed on not multiplying efforts for the MFs by deploying additional forums. Each MF already has a forum for member institutions, and each MF has created a new expanded forum for new actors under the EcoAdapt project framework. If a broader social validation for the CC adaptation plan must take place, it should go through a pre-existing or already institutionalized forum, such as the EcoAdapt forums in the BMJ and the BMAAM, or the Steering Group in the BMCh (e.g. the water forum in the BMCh to be led by the Steering Group in 2015).

c) The need for socializing the adaptation plan

Given that there is no longer a need within the development of the EcoAdapt project for the social validation of scenarios, future visions or possible technological options subject to controversies, the use of hybrid forums are naturally and logically substituted in the three MFs for a first phase to socialize the Plan of Action and Adaptation to CC. The aim is firstly to present the proposals of the Plan to a wider public than the MF forum or the EcoAdapt project (which is part of the communication plan for advocacy), and secondly, to begin a discussion of the Plans, given that their effective implementation cannot depend on the MF or on the EcoAdapt project.

d) Taking care when using new methodological approaches

Of course EcoAdapt is a typical action research project, but with an emphasis on meeting the needs of the participating communities, which is why EcoAdapt has tried to offer methodological support for the MFs from the start. However, the methods that have been applied were not always the pre-determined ones, but rather others that were adapted or improvised by researchers from abroad, ensuing more work and effort by local teams. As a result, despite efforts at socialization and training, the local teams have often felt as merely suppliers of inputs for articles and research products.

EcoAdapt's proposal to help improve the participatory process in the design process through methods such as participatory observation or hybrid forums has not yielded the expected results. In the case of the participatory observation, it has mainly been due to poor follow-through by those responsible, which generated a lack of trust among the protagonists. Also the conservative nature of the adaptation plans – a result of a process that did not allow the exploration of new avenues that could lead to socio-technical controversies – meant that a Callon-style hybrid forum would not be needed. However, a step in the right direction was made

through the systematization of experiences within the MFs around observation and consultation processes, or, forums that go beyond a restricted "decision-maker" group.

4. Tentative conclusions

The conclusions and recommendations to be drawn based on this new phase of EcoAdapt's work are, of course, to respect, understand and support options for local teams. It is important to follow and accompany the local rhythms to the extent possible despite the limitations of time and the contradictions inherent in the rigor of implementation in an FP7 framework project such as EcoAdapt. It is difficult to anticipate or predict that elections could paralyze all activity or public decision-making for up to over a year. That being said, there is no point in pretending to ignore such elections and continue to demand the mechanical application of the steps of the project, only to comply with the terms of the contract with the European Commission.

In the end, it is a great opportunity that after a notable and productive methodological effort for diagnostic and participatory planning, the EcoAdapt Project still has one more year to support initiatives such as existing public or citizen forums. The decisions made on the adaptation projects to be developed will be subject to public validation according to the terms described above. In the case of remaining funding not used after the scheduled end of the project, it has been suggested that an extension of EcoAdapt's timeframe be negotiated in order to adapt to the social times in places where elections have disrupted the process of supporting collective or community implementation of adaptation strategies for water security. In case that this is not possible, priority should be placed on private and civil society initiatives.

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