



Reflexive Monitoring in Action for Climate Change adaptation initiatives in Developing Countries

MSc Thesis

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**REFLEXIVE MONITORING IN ACTION
FOR CLIMATE CHANGE ADAPTATION
INITIATIVES IN DEVELOPING COUNTRIES**

MSc Thesis

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EXECUTIVE SUMMARY

The purpose of this study is to investigate the extent to which Reflexive Monitoring in Action (RMA) can contribute to the achievement of climate change adaptation initiatives in developing countries particularly in a context of decentralisation. In Senegal, one of the poorest countries in the world, 75% of the population rely on fisheries and agriculture. These two sectors are predicted to be directly and indirectly affected by climate change. Several studies comment that climate change is one of the most serious threats that the developing world will ever face because of their lack of resources to socially, technologically and financially adapt. Because of its complexity, climate change is by nature difficult to predict and therefore to effectively tackle.

Since the Decentralisation Act in 1996, Regions in Senegal have the autonomy to undertake their own development initiatives. By means of innovative collaboration and self-organisation, the Ferlo regions located in the North East of Senegal, managed to design a sustainable development project that, with the involvement of the United Nations Development Program, became a pilot project of the Territorial Approach to Climate Change approach. Known as the Senegal TACC project, this ambitious project aims to empower regions to better address climate change and to be able to benefit from the new adaptation funds mechanisms. Despite this ambitious goal, the start of the Senegal TACC project was difficult. An assessment of the design process of the Senegal TACC project which was conducted as part of this study/research revealed diverging interests and expectations among the project actors, which led to an ineffective involvement of key stakeholders in the project's management and decision making. Based on the issues identified during the assessment, a monitoring and evaluation (M&E) plan built on ideas of RMA was outlined.

Because of the complex and unpredictable character of climate change exacerbated by the variety of actors involved, the proposed RMA-based M&E plan for the Senegal TACC project aims to be iterative and flexible in order to regularly integrate new issues that emerge. The fact that the RMA plan derives from issues identified in the early stage of the Senegal TACC project increases the relevance of such M&E plan.

The study revealed that to achieve climate change adaptation, the contribution of innovation brokers is required as well as a monitoring approach which encourages the reflexivity of the project by stimulating and sustaining reflection and fundamental learning amongst and between the actors involved.

Despite the fact that RMA has not yet been applied to the Senegal TACC project, the potentials of RMA to improve the implementation of the Senegal TACC project by facilitating reflection, learning and new forms of collaboration between various stakeholders through the use of specific RMA tools, are evident.

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ABBREVIATIONS

AECID	Agencia Espanola de Cooperacion Internacional para el Desarrollo
ARD	Agence Regionale de Developpement / Regional Development Agency
CAP	Cellule d'Appui aux Projets / Project Management and Support Unit
CNP	Comite National de Pilotage / National Steering Committee
COMNACC	Comite National sur les Changements Climatiques
CR	Conseil Regional / Regional Council
DEEC	Directorate of Environment
DEFC	Directorate of Waters and Forests
DirCoD	Directorate of Decentralised Cooperation
FAO	United Nations Food and Agriculture Organisation
FEM	Fonds pour l'Environnement Mondial / Global Environment Facility
FOGAR	Forum Of Global Associations of Regions
HIP	Hub for Innovative parternships
INTAC	Integration de l'Adaptation au Changement Climatique dans le Développement Durable au Sénégal
ITCP	Integrated Terrotorial Climate Plan
M&E	Monitoring and Evaluation
MDG	Millenium Development Goals
NAPA	National Adaptation Plan of Action
UNDP	United Nations Development Program
UNEP	United Nations Environmental Program
MEF	Ministere de l'Economie et des Finances / Ministry of Finances
NEX	National Execution
NRG4SD	Network of Regional Governments for Sustainable Development
PGIES	Programme de Gestion des Ecosystemes forestiers
PMU	Project Management Unit
PPP	Public-Private Partnership
PROGERT	Programme de Gestion et de Restauration des Terres degradees
RAF	Responsible Administratif et Financier
RMA	Reflexive Monitoring in Action
TACC	Territorial Approach to Climate Change
UN REDD	The United Nations Collaborative Programme on Reducing Emissions from Deforestation and Forest Degradation in Developing Countries
UNFPA	United Nations Population Fund

1.- INTRODUCTION

The research is introduced in this chapter. A short presentation of the Senegal TACC project introduces the goals of the research. It is followed by the central research questions toward which this research aims to provide an answer. It presents subsequently the sub-research questions that will each contribute to the final answer of the central research questions. The research approach is presented before an overview of the different chapters.

1.1.- Purpose of this research

The impacts of climate change are predicted to be exacerbated in developing countries by the fact that such countries lack resources to socially, technologically and financially adapt. According to the United Nations Environmental Program, the impacts of climate change will disproportionately affect the world's poorest populations, who are least prepared to deal with its consequences (2008). Climate change issues symbolise for developing countries an unprecedented threat that might jeopardize their development efforts and the attainment of the Millennium Development Goals (MDG) (UNDP, 2008).

With about 12 million inhabitants in 2009 (FAOSTAT, 2008), the Republic of Senegal which occupies the westernmost position in West Africa facing the Atlantic Ocean is one of the poorest countries in the world (US\$ 1031 GDP per capita in 2009) and relies heavily on donor assistance. The country's key export earnings derive from commercial fishing and tourism since the phosphate mining and fertilizer production fell through in the earlier 2000. Seventy five per cent (75%) of the Senegalese population relies on agriculture and fisheries (Dème and Kébé, 2000; FAO, 1995). These two important sectors for cash income at the micro level and export at the macro level are experiencing over the two past decades, major difficulties mainly caused by anthropogenic factors and increasing climate variability.

The decentralisation process initiated in Senegal since 1996 through the Decentralisation act (Law No. 96.06, adopted on March 22nd 1996) is supposed to provide political and financial autonomy to regions, municipalities and rural communities recognised as local collectives. In addition to their mission to design, program and implement local development actions and initiatives, the new regional entities have also the responsibility to undertake development initiatives. Therefore, decentralised cooperation appears to be crucial for the implementation of decentralisation processes and strengthening democracy. Since 2007, a few regional initiatives are being implemented by some regions to improve the livelihood of communities living in areas affected by natural adversities. However the success of such initiatives requires the combination of efforts at all levels because local

governments lack capacity and expertise to successfully address climate hazards related adaptation (Agrawal, 2008).

As in many developing countries, climate change adaptation is prominently put on the agenda in Senegal and strategic adaptation options are identified and included in the country National Adaptation Plan of Action (NAPA). Local initiatives such as the “Ferlo initiative” (which will be later on discussed in more details in this study) show that climate change issues are not only at stake at national level but also local governments try to effectively address them through the design and the implementation of ambitious climate adaptation initiatives.

Beyond efforts for success, sustaining the outcomes of such initiatives is crucial not only for climate change but also for development purposes since development is considered as probably one of the best adaptation strategies (Fulco *et al.* 2007). The achievement of climate adaptation initiatives will then secure the development objectives that might jeopardise the progress towards Millennium Development Goals. In order to take into account the complexity and the long-term perspective necessary for climate change adaptation, a monitoring approach different to what have been used so far in development support context is fundamental.

Climate change adaptation and the building of adaptive capacity are promoted as essential for future sustainable and equitable development, particularly for places and livelihoods that are sensitive to climate variability and climate change (Osbahr *et al.* 2010). Because climate change is an on-going and unpredictable complex process, it is important to establish mechanism that can assess the effectiveness of actions that have to be undertaken. Monitoring the success and failures of different adaptation initiatives will provide opportunity for learning and the improvement of adaptation approaches (Preston *et al.* 2010). Since Adger and Kelly consider climate change adaptation fundamentally as a social learning process (1999; Adger 2003), a monitoring approach that supports learning such Reflexive Monitoring in Action (RMA) could enhance the achievement of climate adaptation initiatives through the improvement of their design and implementation processes but also particularly in the way they are monitored.

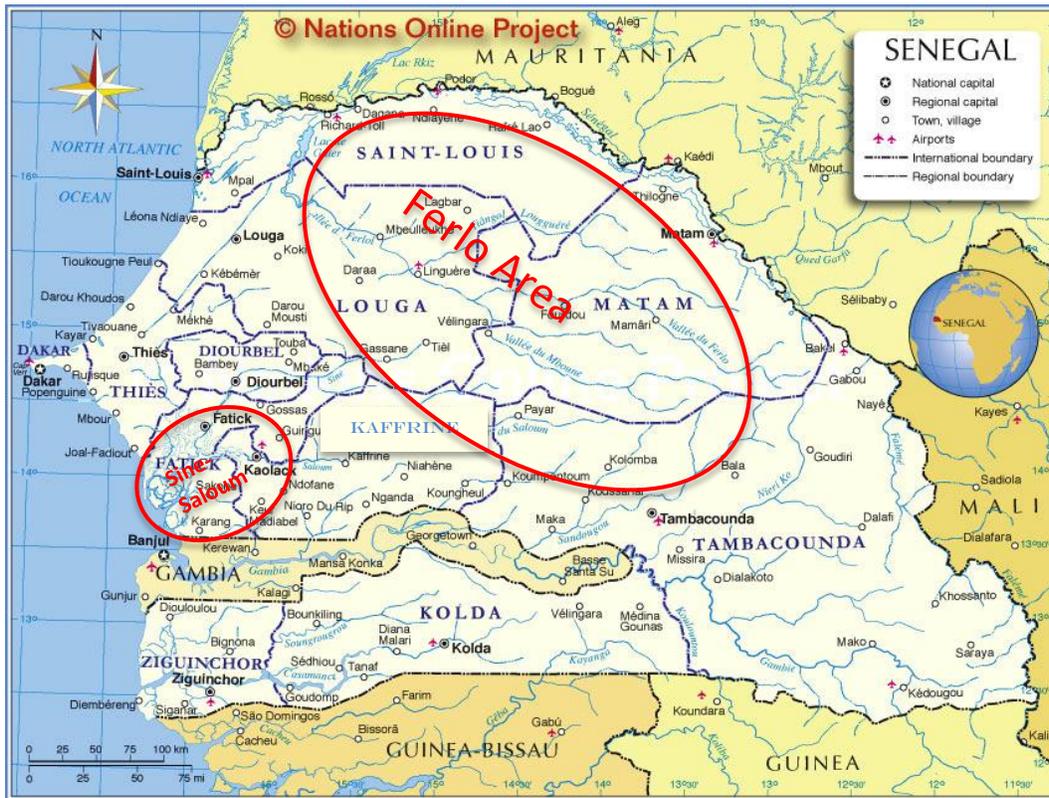
1.1.1.- The Senegal TACC project

In 2008, the United Nations Development Programme (UNDP) and the United Nations Environmental Programme (UNEP) have chosen Senegal and six other countries to implement a Territorial Approach to Climate Change (TACC) Project. The TACC programme focuses on strengthening the ability of countries, particularly developing countries, to integrate climate change responses into national development processes (UNEP).

The Senegal Territorial Approach to Climate Change project (Senegal TACC project) aims to empower regional authorities of the Ferlo regions and Fatick (**Figure 1**) to be able to identify risks and opportunities related to climate change at the sub-national level and to design integrated climate change policies and plans within national plans, based on sound knowledge and science.

Its overall objective is to increase resilience to climate change impacts and reduce the carbon footprint in Senegal through awareness raising and development of integrated territorial climate plans.

Figure 1: Regions involved in the Senegal TACC project and implementation areas



1.2.- Research objective

The research objective of this study is to investigate the extent to which Reflexive Monitoring in Action can contribute to the achievement of climate change adaptation projects or initiatives in developing countries particularly in a context of decentralisation.

The specific objective of this paper is to design an RMA-based monitoring and evaluation plan for the Senegal TACC project and to explore its relevance for climate adaptation projects. Since the Senegal TACC project is not being implemented yet, I will evaluate its design process in order to understand (1) how important actors and networks were involved, (2) what were their expectations and commitment towards the

issue to address, (3) how did their power and interest to achieve their expectations evolve throughout the design process of the project, (and 4) to which extent the involved actors were innovation brokers.

Despite the promptness with which the “Ferlo initiative” was conceptualised into a concrete project, the competing interests of its initiators about the project's institutional and managerial arrangements have made difficult the starting of the Senegal TACC project. In order to draw a path to overcome such conflicting situation I will investigate how project managers and important stakeholders frame the main issues that according to them should be addressed by the project and how should the project be managed.

This evaluation will provide the necessary insights to reshape, if necessary, the planned activities and to reformulate the goals of the Senegal TACC project.

Furthermore, I will design an RMA-based M&E plan that will help the project management and participants to continually reflect on ways to secure the matching of the project's activities and goals to stakeholders' expectations. One of the aims on the longer-term is to measure the contribution of RMA in such project by comparing the Senegal TACC project with climate adaptation projects elsewhere.

Sub-objectives

1. To assess the effectiveness of stakeholders involvement in the design process;
2. To describe the project actors' expectations towards the issue to address through an analysis of the evolution of their interest and power over the design process;
3. To describe and analyse stakeholders issues frames;
4. To identify innovation brokers amongst project actors and to describe their role;
5. To reformulate if necessary the project's activities and goals;
6. To provide through RMA guidance to overcome innovation barriers and take advantage of opportunities offered by the decentralisation policy process;
7. To design an RMA-based M&E plan for the Senegal TACC project.

1.3.- Central research questions

In order to investigate the extent to which Reflexive Monitoring in Action can contribute to the achievement of climate change adaptation projects or initiatives in developing countries particularly in a context of decentralisation, the following two central research questions are formulated:

RQ 1: How was the design process of the Senegal TACC project managed?

RQ 2: How should the RMA-based M&E plan for the TACC project be designed?

1.4.- Sub-research questions

In order to answer the two central research questions, the contribution of each of the following sub research question is essential. These are the research questions which have been developed in the context of my theoretical framework which will be described in the next chapter.

RQ 1: How was the design process of the Senegal TACC project managed?

1. How were actors and networks involved?
2. How were the interactions amongst actors and between networks managed?
3. To which extent were these actors innovation brokers?
4. What was the process in which actors and networks went through?
5. What were the actors' expectations and commitment towards the issues to address?
6. How do project managers and important participants frame the main issues that according to them should be addressed by the project and how should the project be managed?

RQ 2: How should the RMA-based M&E plan for the TACC project be designed?

1. What are the project managers and important participants' monitoring and evaluation expectations with regards to the main challenges of the study?
2. How to enhance actors' interaction/learning and innovation?
3. How to stimulate reflection on the project's activities and the institutional context?

1.5.- Research methodology

This study was carried out in Senegal between February and April 2011. The Senegal TACC project was targeted because the aim of the study is to investigate the potential contribution of Reflexive Monitoring in Action (RMA) on a climate adaptation project. The research questions I was investigating were answered by means of semi-structured interviews with various stakeholders of the Senegal TACC project: the project manager, the representatives of the Ferlo regions and the representatives of the region of Fatick, the representatives of the regions' partners in Europe, the UNDP, interested donors (Wallonia and Spanish cooperation), the representatives of the national government (CAP, DirCoD), the representatives of technical departments (DEEC and DEFC) and the managers of projects addressing climate changes issues (INTAC) or implemented under the NEX modality (PROGERT, PGIES). The interviews were complemented with the analysis of important documents (project document) and minutes of meetings concerning the project and the Ferlo regions. External documents such as articles from newspapers, official documents (decree see **appendix 4**) were also were analysed in order to complete and triangulate the different sources of information and to increase the relevance of the information gathered. A more detailed description of the research design will be provided in chapter 3.

1.6.- Chapters' overview

In chapter 2, the theories that serve as the basis of this study are described and reference made to the research questions. The research design and the way data were collected and analysed in order to answer the research questions are described in chapter 3. Chapter 4 provides an introduction to the Senegal TACC project and to its important stakeholders. In chapter 5 the evaluation design process of the Senegal TACC project is described and discussed. The way the project's stakeholders frame the issue and the brokering role some of the project's actors played is presented. The second specific research question is answered in chapter 6 with the design of the RMA-based monitoring and evaluation plan for the Senegal TACC project. Chapter 7 concludes this study by summarising the answers to the research questions. It ends with final reflection and directions for further research.

2.- THEORETICAL FRAMEWORK

In this chapter the theoretical framework I used to answer my research questions is discussed. Findings from relevant research related to stakeholders, expectation, framing theory, innovation brokers and Reflexive monitoring in Action are described in order to help comprehend the perspective used to conduct this study.

Climate adaptation projects like the Senegal TACC project are complex by nature because of the variety of stakeholders they include. The Senegal TACC project can be legitimately considered as the outcome of the engagement of different stakeholders willing to tackle climate change issues. It is a "joint action" to which stakeholders (may) contribute from different reason and/or goals. The difficulties the project is experiencing from its start trigger questions about what happened during its design phase or what makes the alignment of actors involved in this "joint action" difficult. In project management terms, the design phase refers to the phase where the stakeholders are identified and involved in the design of the main deliverables of the project.

2.1.- Expectations

Stakeholders can be defined as any group or individual who can affect or is affected by the objectives of an organisation (Freeman, 1984). The PMBOK Guide (1996) defines stakeholders as "... individuals and organizations who are actively involved in the project, or whose interests may be positively or negatively affected as a result of project execution or successful project completion." In project management successful stakeholder management, among others, is considered essential for project achievement (Montgomery, 1974; Brinkerhoff, 1997). Since the beginning of 90', stakeholders' involvement has been increasingly documented as a cornerstone in the achievement of sustainable development projects (...). The reason underlying this increasing interest in stakeholders' role in development projects is their ability to enhance the achievement of valuable and sustainable outcomes, which is crucial for the attainment of development purposes. Out of the control of the project manager stakeholders often have competing interests that may lead to diverging priorities and conflicts (Karlsen, 2002). From that perspective, project stakeholders can be defined as groups or individuals who have a stake in, or expectation of, the project's performance and include beneficiaries, project managers, funding bodies, farmers, governmental bodies and the community at large (Newcombe, 2003). In this study, "stakeholders" and "important actors" will be considered as a single entity despite the subtle difference between stakeholders and actors.

A universally accepted definition of expectation is not available (Bialosky *et al.*, 2010). In consumers' studies, expectation is defined as consumers' desires or wants, their feelings about what a service provide should offer rather would offer (Parasuraman *et al.* 1988).

Transposed to project management, expectations can be considered as the desired or preferred outcomes the stakeholders expect from an intervention. This can be understood as what Thompson and Sunol (1995) called *ideal expectations* or what the individual wants to occur regarding an intervention. As previously discussed, stakeholder involvement is an important factor of project success and especially for climate adaption projects pursuing a far-reaching goal in a complex setting with many uncertainties. However project success does not always mean the same for everybody.

Expectations motivate stakeholders to engage in favour of a project and can be framed as predictions of what they expect to receive (Poister *et al.*, 2011). Engagement can also be seen a combination of processes and practices in which different stakeholders work together to achieve shared goals (Measham *et al.* 2009). By attracting the interests and resources of a large array of actors, expectations (van Lente *et al.*, 1998) have contributed to the emergence of institutional arrangements among regions and new approach for climate change adaptation in Senegal. Thereby, expectations perform as coordination devices among actors within the networks and contribute to create sheltered spaces (rooms) for learning and to channel efforts into certain direction (Konrad, 2006).

Projects are in general attempts or responses to settle a personal or collective pressing issue. The Senegal TACC project was designed with the purpose to provide effective solution to climate change issues faced by regions in the Ferlo and Sine Saloum areas (see map). Initiatives aiming to contribute to enhance the adaptive capacities of a system (e.g communities, households, groups, regions and countries) require the active involvement of a wide range of stakeholders at different hierarchy level with different, yet often inter-related point of views and interests. The definition of what their role would be with regard to adaption is essential for the success of climate change initiatives (Smit *et al.*, 2006; 2001). The stakeholders' motivation to participate in a designated intervention is related to their expectations about the intervention. Shared expectations play a central role in the coordination of heterogeneous actors (Brown, 2003, Konrad, 2006).

In this study I will consider the design phase of a project successful (promising) if the stakeholders expect that the conceptualised project (final plan) will lead or contribute to desired outcomes (Mallak *et al.* 1991). Given the key role stakeholders play in project management and how their involvement in the formulation phase can lead or contribute to desired outcomes, we will address for the Senegal TACC project the following questions:

- *Were all relevant stakeholders involved in the formulation phase?*
- *Were their stakes responded or taken into account in the project plan?*
- *Were their expectations taken into in the design of the project's activities and goals?*

2.2.- Framing

In the review of the book of Lewicki *et al.* (2003), Shmueli D.F. describes framing as the process through which individuals and groups construct, represent, and interpret information to themselves and to others, in order to transform complex phenomena into coherent, understandable categories. Dewulf *et al.* (2005) explain framing as the way stakeholders involved in environmental issues interpret what is at stake and what should be done. Chong *et al.* (2007: 104) define framing as "a process by which people develop a particular conceptualization of an issue or reorient their thinking about an issue". Frames are also defined as "collections of perceptions and thoughts that people use to define a situation, organize information, and determine what is important and what is not" (Lewicki *et al.* 1999).

Dewulf *et al.* (2009) consider frames mainly as knowledge structures (frames as cognitive representations) which can also be defined through the way parties negotiate meaning in interactions (framing as interactional co-constructions). According to Gamson and Modigliani (1987), a frame should be seen as an organizing idea that provides meaning. Issue framing is a powerful political tool essential for getting the favour of opinion. It is considered as a strategy that requires minimal expense with the potential to provide valuable profits (Schon *et al.*, 1994). Framing effects occur when different representations of an issue generate different reactions among those who are exposed to that issue (Tacoby, 2000).

There is lots of framing going on in the domain of climate change because of the complexity and the scientific uncertainties that characterizes the issue at stake. The variety of stakeholders involved increases the complexity of climate changes issues by including issue frame and often identity and power frames. Scientific framings consider climate change as an outcome of human impacts on the global climate system. Society is represented as one box that both drives the process and experiences the consequences (O'brian *et al.*, 2007). Through this framing, nature and society are often considered as inseparable aspects of the same context (see Castree, 2001; Forsyth, 2003). Questions concerning climate change and the kind of knowledge to generate are closely shaped through these frames.

The frames used by regions to make sense of the Ferlo area issues are both a reaction to their conception of the issue and an anticipation to its possible solution (Dewulf *et al.*, 2005).

The difficulties and delay during the start of the TACC project are mainly due to the diverging viewpoints amongst the project stakeholders' concerning the institutional and managerial arrangements of the project. In fact these arrangements triggered different perceptions and generated opposing reactions between the project managers and important stakeholders. These varying perceptions of the stakeholders on the final

managerial arrangements and on the project's institutional anchorage are a clear example of "issue ownership" (Petrocik, 1996).

According to Dewulf *et al.* (2005) a great part of negotiating comprises outlining a frame within which an agreement can be reached. In order to help regions, regions' financial partners and governmental bodies to find an agreement about the Senegal TACC project's institutional and financial arrangements through reframing, it is essential to identify beforehand, how each of these important actors frame such issue. Therefore, I will address the following question:

- *How do project managers and important stakeholders frame the main issues that according to them should be addressed by the project and how should the project be managed?*

2.3.- Innovation brokers

Regions in Senegal are known in the context of decentralization policy to lack technical and financial means to undertake themselves their development efforts. In order to enhance their effectiveness in public service delivery, regions need to get connected to each other with external partners that can help them to overcome the limitations of the decentralisation policy. Establishing connection between regions and potential knowledge provider or financial donor is then crucial and can be met through networking (Klerkx *et al.* 2009). Improving such connections requires the intervention of intermediaries that contribute to bridge the demand side (regions; regional authorities) and the supply side (donors, international development organisations) (Klerkx *et al.* 2009). This can be done through the recourse of boundary actors that can provide information, knowledge, advice, funding, or act as a mediator (Howells, 2006). These boundary actors also called innovation brokers or systemic intermediaries act as agent or broker on any aspect of the innovation process between two or more parties. According to Howells (2006:720) they help by providing "information about potential collaborators, brokering transactions between two or more parties; acting as mediator, or go-between, bodies or organisation that are already collaborating; and helping find advice, funding and support for the innovation outcomes of such collaborations". Another important function innovation brokers can play is to create rooms that foster knowledge sharing and learning and in which conflicts among members can be anticipated and solved (Battering *et al.* 2010).

In Senegal as in many countries, the government through the Directorate of Decentralised Cooperation plays this intermediaries' role in order to strengthen the regions but also to keep improving the decentralisation policy process (Van Lente *et al.*, 2003; Winch and Courtney, 2007; Kolodny *et al.*, 2001; Klerkx and Leeuwis, 2009). However the studied regions are reluctant towards this governmental interventionism they consider as an intrusion or an attempt to take back some of their privileges already

consecrated by the decentralisation policy. Innovation brokers can emerge from regions and perform a bridging role as in the case of the Senegal TACC project. The purpose of this study is not to identify conditions under which innovation brokers performed better (Winch and Courtney, 2007) but rather to describe the role they played in the design process of the Senegal TACC project. Therefore I will investigate the following question:

- *Which actors involved in the design of the Senegal TACC project were innovation brokers and what were their contributions in the design process?*

2.4.- Reflexive Monitoring in Action

Reflexive Monitoring in Action (RMA) is a monitoring and evaluation tool for system innovation projects that aims to contribute to the sustainable development of a sector or region (RMA guide, 2010). Its purpose is to enhance the reflexivity of projects that aim to realise sustainable development through system innovation (RMA guide, 2010).

Result-based monitoring and evaluation is a top-down approach that is used for accountability and steering. It assumes a linear relation between the activities and the outcomes. Quantitative and objective indicators are pre-set and used to measure the outcomes in order to report to donors what has been achieved. However the results of this approach are hardly used. The impacts of results-based management projects are also scarcely sustainable (van Mierlo *et al.*, 2010b).

Constructivist monitoring and evaluation approach is an action-oriented approach that assumes that reality is constructed by interaction and negotiation. Without predefined outcomes, this participative evaluation approach in which stakeholders are co-evaluators, focuses on understanding processes. However, it does not involve mechanisms to challenge participants to question their patterns of thinking and doing. Similarly, few efforts are dedicated to institutional change (van Mierlo, 2009).

More normative than the constructivist monitoring and evaluation perspective from which it proceeds, RMA is still different to the earlier approaches of monitoring and evaluation. The precedent M&E approaches have not been designed for projects or programmes dealing with a lot of uncertainties. They were typically focusing on short-term goals and "achievable" outcomes and results. The goal of Reflexive Monitoring in Action is to bring project participants to conduct reflection on process conditions and the relation between project activities and the environment in which the intervention is taking place. In other words, its goal is about learning how to contribute to system innovation. It focuses on a type of learning that "allows system innovation project to contribute to the structural changes that are needed for sustainable development" (RMA guide, 2010, p12).

According to many scholars, system innovation is essential for the emergence of sustainable development (Whitelegg and Omer-Rieder, 2005; Smith, 2006; van Mierlo *et al.* 2010). This assumes the change of the entire system of production and consumption, including social relationships, division of roles, formal rules and values, and the technical artifacts and infrastructure that have coevolved with earlier, "unsustainable" production and consumption practices (Geels, 2004; Grin & van Staveren, 2007; Rip & Kemp, 1998). Applied in some agricultural projects in the Netherlands, RMA has contributed to trigger to some extent fundamental learning, new practices and institutional change (van Mierlo *et al.* 2010). Through this network of projects of the Dutch agricultural sector, RMA has showed its ability to improve the capacity of project participants to proceed towards system innovation by setting them free from their aspirations' hindrances for more sustainable practices (Loeber *et al.* 2007).

RMA has been used neither in climate change adaptation context nor in developing countries. As argued by some scholars, sustainable development has shifted to climate change adaptation; the complexity and the long-time perspective that characterise the issues they are each addressing requires a new M&E approach that take into account the inherent uncertainties of climate change. Because science doesn't provide yet definite answers about climate change uncertainties (Webster *et al.* 2003), adaptation efforts and measures need to be flexible enough to be able to constantly include new parameters and unexpected developments. With the ability to contribute to changes through a system innovation perspective, RMA can therefore enhance the success of climate change adaptation initiatives. The diversity of stakeholders involved and the necessity of new institutional arrangements advocate for the adoption of an approach that can ensure change. RMA might then be essential for climate changes adaptation projects such as the Senegal TACC project that can with regard to its objectives, be envisioned to achieve system innovation. One of the challenges of this study is to design a monitoring and evaluation plan for the Senegal TACC project that will accompany or guide the project throughout its implementation in order to ensure or guarantee that all the projects' activities contribute or tend towards system innovation. This M&E plan will be based on the outcomes of the evaluation of the formulation phase of the Senegal TACC project. The literature read so far describes the use of RMA mainly on projects that have been already implemented. So this study will provide a new angle on how RMA can contribute to improve the implementation of a climate adaptation project.

After more than three decades of implementation of programmes and projects funded by bilateral and multilateral donors to achieve overall development in Senegal, the expected qualitative change and economic land off remain insignificant. The scarcity of sustainable impacts had led over the past years to a serious questioning of the relevance or effectiveness of development assistance. The way development assistance projects were designed, implemented and evaluated has shown its limits.

Not because of the non-relevance of the issues addressed or of the activities identified but rather in the way their indicators for success were set and the measures to sustain their outcomes taken. Financial means to support interventions are important but less so than the capacity of the beneficiaries to own the process and to learn how to keep it running for the long-term. This can be done through an effective involvement of all relevant stakeholders having an explicit willingness to interact with each other around a shared and common ambition to achieve change. RMA can help to achieve this by improving network formation and fostering learning and reflection among stakeholders. Therefore I will investigate the following questions:

- *What are the project managers and important participants' monitoring and evaluation expectations?*
- *How to enhance interaction/learning and innovation among actors?*
- *How to stimulate reflection on the project's activities and the institutional context?*

3.- RESEARCH DESIGN

This chapter provides information about the methods used in this research for answering the research questions. The first part explains why and how interviews, observations and qualitative surveys were used in this study. The second part focuses on the methodology that guided the selection of the interviewees and the last part describes the way the data were analysed.

3.1.- Interviews, observation of important meeting, surveys

In order to evaluate the formulation process of the Senegal TACC project, the study investigated the project's important actors issue frames, their expectations about the issue to address and regarding the project's management and monitoring and evaluation.

The semi-structured interviews were carried out using a guide with open-ended questions too encourage the respondents to communicate more details and to pursue on themes they were considering relevant about people's role in the project formulation process, the way the stakeholders perceived the issue (issue frame) and how according to them it should be addressed, their expectation regarding the project management and monitoring and evaluation (**Appendix 3**).

The purpose of the interviews was to seek the role they have played in the formulation phase of the Senegal TACC project and how they perceived their contribution towards the final outcome. The interviews started with details about the interviewee's position, the organisation he works for, the region, his views about the TACC project, its origin, the conceptualisation process and the role performed by each actor including himself. In order to get more insight about the way UNDP's projects are managed and its potential future implications in implementation the Senegal TACC project, I had informal discussions with the coordinators of two UNDP projects (PGIES and PROGERT) implemented under the *nex modality*. In order to have an overview of climate change projects in Senegal I discussed also with the coordinator of the INTAC (another climate adaptation project) and the representative of the Spanish international development agency (AECID) who asked to meet me because of their interest on the RMA approach.

Interviews were lasting about one hour more or less depending on the interviewees' knowledge about the process and their willingness to exchange about the subject. The interviews were recorded when it allowed by the interviewee. Otherwise, the important points were written down and used as the basis of the interview report. Interviews were

most of the time conducted in French and often in Wolof (the main local language). The classification of the interviews recordings according to the most salient information discussed was made in order to facilitate their analysis.

During the planning workshop, a series of informal interviews or meetings were carried out with the projects' stakeholders attending the workshop in order to deepen the information gathered beforehand (facilitated by the character informal of the exchange) and to diversify the information sources. Therefore the discussions with the staff members of the CAP were centred on their role in the project life cycle, their real "power" in projects implemented under the national execution modality (*nex modality*), how they got involved in the Senegal TACC project and their expectations about the project management. The discussions with the regions' representatives (regional councils and ARD) focused on the conceptualisation phase, their expectations and what they were intending to do for the achievement of the project. With the DirCoD, the talks were related to the means to better involve the regions. However it was out of question for the Director to give up any kind of power decision to the regions he was kind of at the limit, scorning. These discussions were not recorded because I didn't want to interrupt the openness which was characterising these informal discussions.

The planning workshop also enabled me to closely interact with the all range of project stakeholders during 5 days. This aided me to familiarise myself with all of them and to "naturally" get very useful and often sensitive information. This planning workshop was an unexpected opportunity to visualise stakeholders' interactions especially during normative issues. I was able to perceive the level of commitment of each other on the basis of what they were saying to me during our conversation and how they were behaving in the planning meeting. This also provided basis for the credibility of the informants.

The description of the stakeholders' expectations concerning M&E is not the outcome of a specific enquiry or survey conducted during this study. It is mainly guided and supported by their role as expressed in the project document complemented by the information I gathered during interviews and the views expressed by actors during discussions about M&E activities at the planning workshop.

In order to describe and analyse stakeholders' expectations about the project institutional and managerial arrangement, I designed a short survey consisting of six (6) open questions in which I invited the respondents to ride down their position about the project managerial arrangement for example (**Appendix 3**). All the participants of the planning workshop received the survey but some (like the president of the Ferlo regions) did not want to answer pretexting that we had already discussed it.

Interviews were lasting about one hour more or less depending on the interviewees' knowledge about the process and their willingness to exchange about the subject. The

interviews were systematically recorded when it was allowed by the interviewee. Otherwise, the important points were written down and used as the basis of the interview report. Interviews were most of the time conducted in French (sometimes in the local language during informal conversation), I did not have enough provision to translate and transcript them in English. The classification of the interviews recordings according to the most salient information discussed was made in order to facilitate their analysis.

3.2.- Selection of interviewees

The key representatives of the different stakeholder groups were selected through purposive sampling (according to their position within their organisation and the assumption about the role they have played in the process). The others interviewees were selected were identified and selected by using snowball sampling. As shown in the list of interviewees in **Appendix 1**, the thirty-nine (39) interviewees are classified as follows: 6 local elected officials, 8 members of regional development agencies, 8 governmental agencies' officials, 4 representatives of the regions' partners in Europe, 2 members of an international development agency, 1 university lecturer, 2 environment activists, 4 project coordinators and 4 staff members of the TACC.

All actors and organisations related to the Senegal TACC project were targeted for the interviews. The study was facilitated by the project's stakeholders and partners detailed contact list with their address, email and telephone number provided by the coordinator of the Senegal TACC project. I used this list to send e-mail to each of them in which I introduced myself and explained the broader purpose of my research. All the stakeholders involved (the regions, the national agencies, the DEEC and the DEFC, the INTAC, the UNDP, regions partners in Europe, Wallonia) in the Senegal TACC project and in climate change related domain accepted my request for an interview by confirming by mail or by phone. All of them spontaneously accepted to be interviewed except the President of the "Ferlo Entente" who was at the beginning of my research reluctant to be interviewed. I also didn't get an answer from the French embassy and the Belgian Technical Cooperation office in Senegal despite three more emails. I actually cannot explain the reason of their silence. It took also a while before I could meet the staff member of the UNDP in charge of the coordination of the Senegal TACC project.

3.3.- Analysis of minutes of meetings and documents

A qualitative analysis of 2 official papers, 6 minutes of meetings, 4 working papers, 3 presentations and different articles related to the Ferlo initiative and the Senegal TACC project published in governmental and private newspapers was conducted to investigate the extent to which the information gathered through the interviews and

the informal exchanges with the projects stakeholders were consistent or not. Because of the difficulties to access to this kind of resources, I tried to collect as much documents as I could. Another reason was to see how were officially the Ferlo issue and the TACC conceptualisation process perceived.

Because of the irregular way the documents were collected, I did not go through the whole process of conventional content analysis. The different documents were analysed by making notes of the keys thoughts, concepts and words. The knowledge generated from the content analysis was finally compared and contrasted with the interviewees' statements.

4.- INTRODUCTION TO THE “SENEGAL TACC PROJECT” AND TO STAKEHOLDERS

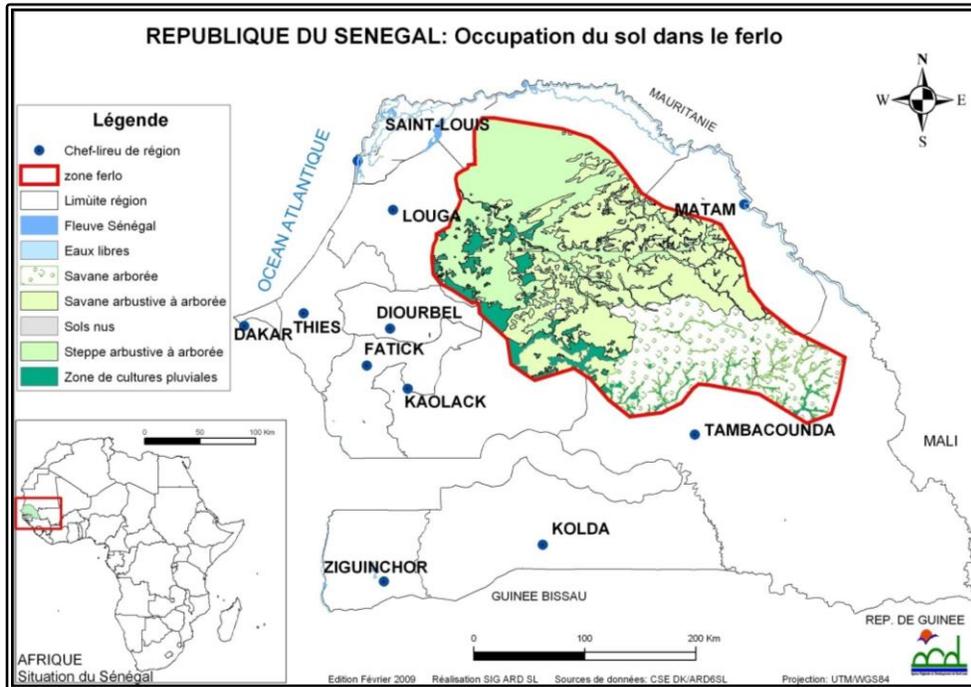
In this chapter, the creation of the Senegal TACC project is described and analysed. In the second part, the Senegal TACC project is widely described in term of aims, institutional and managerial arrangements. The chapter ends with a description and an analysis of the project’s stakeholders of the Senegal TACC.

4.1.- Genesis

The Senegal TACC project is originated from the decision taken during the first World Summit of the Regions on Climate Change (held in St. Malo, France on 29-30 October 2008), to choose Senegal as one of the pilot countries to experiment the Territorial Approach to Climate Change (TACC). This approach is the outcome of a joint initiative between international development agencies (UNDP, UNEP), international non-governmental organisations (nrg4SD), and regions' associations ((Forum of Global Associations of Regions), FOGAR) to work collaboratively on climate change adaptation and mitigation initiatives (TACC summary, 2009). This decision was motivated by the fact that the Senegalese regions through their initiative to carry out local development projects with the support of regions in Europe were already fulfilling one of the main pre-requisite of the TACC approach.

The TACC project was preceded by the “Ferlo initiative” which is a joint action of the five regions (Saint-Louis, Matam, Tambacounda, Louga and Kaffrine) bordering the Ferlo area to develop collective actions to stop the increasing degradation of the Ferlo (**Figure 2**). Exposed to recurrent climate variability, the Ferlo area which had not far ago, huge potentials in waters, livestock, agriculture and forestry resources, is undergoing the impacts of climate changes. Besides livestock and agriculture, the Ferlo was also important for gum arabic production. As allowed by the decentralisation policy context, the regions were collaborating with regions in Europe to get financial and technical support that enabled them to identify and implement local development projects. Entrusted with responsibilities in both policy-making and the implementation of investment projects, regions are crucial for the implementation of climate adaptation and mitigation policies (Thomas, 2011). Located in the Sine-Saloum area, a river delta formed by the confluence of Sine and the Saloum rivers (see fig 1), the region of Fatick is also experiencing increasing degradation of its environment mainly caused by climate variations. In order to improve communities' livelihood in this region considered as one where poverty is persistent, Fatick developed fruitful cooperation with partners in Europe (Poitou-Charentes and Catalonia regions). Through decentralised cooperation, the Ferlo regions and Fatick managed to implement regional development initiatives that contribute to improve their communities' livelihood.

Figure 2: The Ferlo area and its bordering regions



The Senegal TACC project is the outcome of a project formulation mission which was carried out in the Ferlo and the Sine Saloum areas by the UNDP and involving the regions and the representatives of their partners in Europe: Rhone-Alpes and Nord-Pas-de-Calais for the Ferlo and Poitou-Charentes and Catalogne for the Sine-Saloum.

The Senegal TACC project builds on the experiences with the earlier Ferlo initiative and the Fatick sustainable development project.

4.2.- Aims¹ of the Senegal TACC project

The Senegal Territorial Approach to Climate Change (TACC) project aims to enhance regions' capacity to integrate climate change and carbon footprint constraints in the long-term development planning. Its overall objective is to contribute to increase resilience to climate change impacts and reduce carbon footprint in Senegal (project document, 2008).

The Senegal TACC project's long-term objective is to promote sustainable livelihood and local development by developing an effective and appropriate strategy by regional actors which takes into account the risks and opportunities of climate changes.

¹ Most of the informations presented are inspired from the TACC project document.

The Senegal TACC project aims to:

1. Establish a multi-stakeholder decision making platform that ensures coordination between the different level of decision, sectors and actors within a multi-level governance framework;
2. Empower the representatives of the regions (Regional Government Authorities) to identify the risks and opportunities related to climate changes;
3. Design for each region or territory an regional integrated territorial climate plan (ITCP) from a well-defined mitigation and adaptation strategy;
4. Implement a portfolio of investment ready projects through capacity building of regional actors to access new financial mechanisms (adaptation funds, UN REDD, PPP, FEM...).

In order to achieve these objectives, the Senegal TACC project plan to assist the Ferlo regions and Fatick to develop their Integrated Territorial Climate Plan (ITCP), in which climate change adaptation and mitigation strategies are integrate into their regional development planning. The development and implementation of the ITCP is expected to support regions to address the issues they have formerly identified in the framework of the Ferlo initiative.

Moreover, the Senegal TACC project plans to assist regions to design a policy and investment plan that includes the appropriate regulatory and financial instruments for the implementation of the actions that have been selected by the ITCP. Furthermore, the project aims to assist the regions to access financial resources needed to implement their ITCP.

A participatory process is expected to be guaranteed throughout the implementation of the Senegal TACC project to strengthen both local and national governance framework and to strengthen the multi-actors partnership.

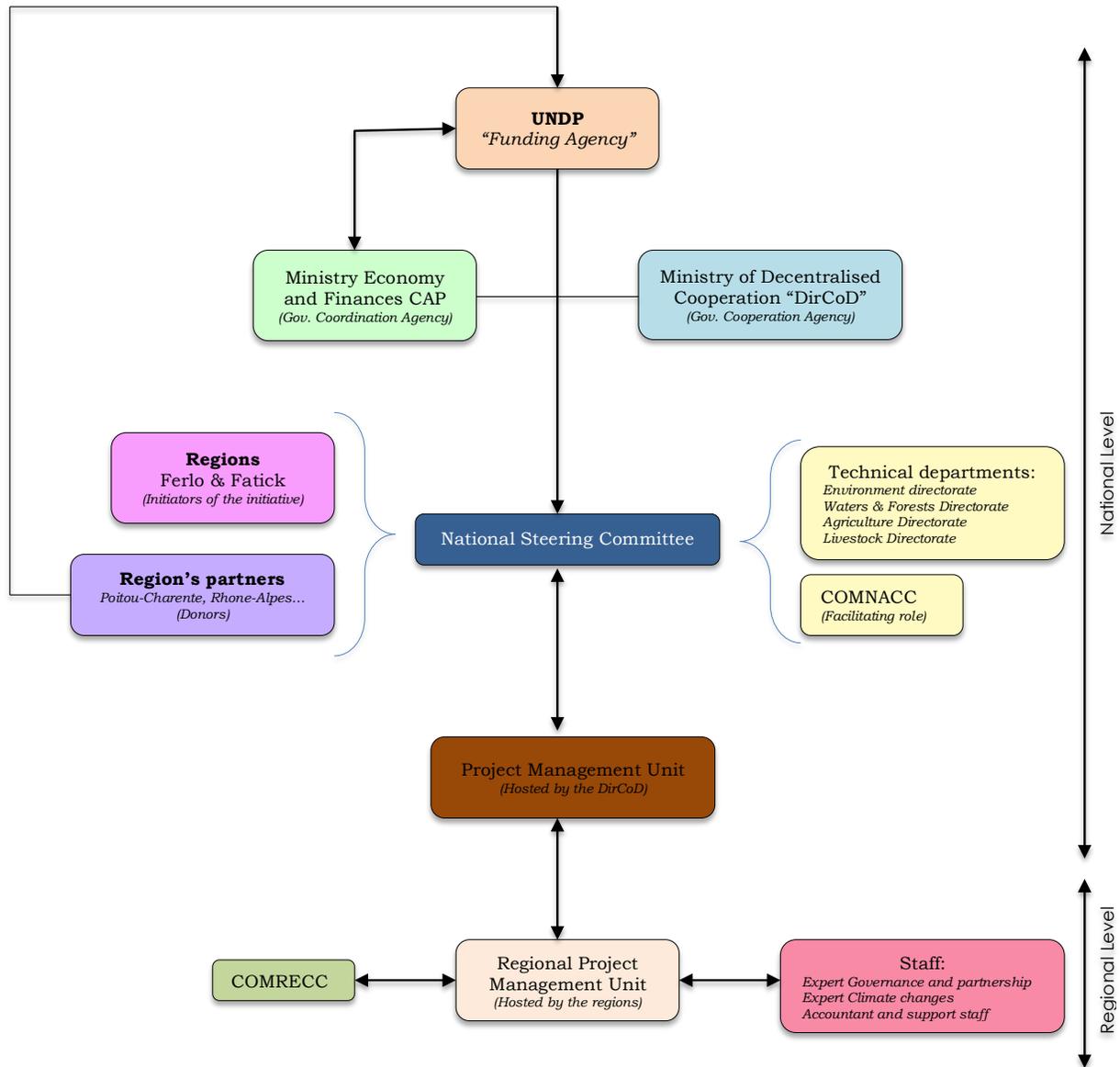
4.3.- Institutional and managerial arrangements of the Senegal TACC project

The institutional and managerial arrangements are the structures, policies and processes carried out to plan and manage the activities of the project and the coordination mechanisms among the project's stakeholders (UNDP, 2008). They are meant to ensure accountability and technical soundness for the delivery of activities, project reporting and financial management.

Implemented under the "national execution" (NEX) modality, the Senegal TACC project is financially coordinated at the national level by the Ministry of Economy and Finances through the Projects and Programs Implementation's Support Unit (CAP). The main role of the CAP is to support the implementation of the project: opening of an

account for the project, transfer the funds from the UNDP to the project account and check the regularity of the expenses etc. The CAP also steers and supervises the establishment of the work plan of the Senegal TACC project.

Figure 3: The institutional framework of the Senegal TACC project



Source author

As shown in **Figure 3**, the Senegal TACC project is under the tutelage of the Ministry of decentralised cooperation through its Decentralised Cooperation Directorate (DirCoD). The Ministry of Environment and Nature Protection is not part of the governmental agencies that have to manage the Senegal TACC project which is surprising since the Senegal TACC project aims to address one of the most challenging environmental

issues. The project is steered and implemented at the national level by a National Steering Committee (CNP) chaired by the Ministry of Decentralised Cooperation and involving representatives from the Ministry of Economy and Finances, the Ministry of Environment and Nature Protection, The Ministry of Decentralisation, the National Climate Changes Committee (COMNACC), the regions' presidents, the representatives of the regions' partners in Europe and other international cooperation partners. According to the project document, the National Steering Committee is expected to:

- Define the political and strategic directions of the project;
- Approve the project's annual work plan and the related budget;
- Approve the project progress reports;
- Ensure overall the supervision of the project;
- Ensure a regular monitoring and evaluation of the project;
- Trigger dialogue and cooperation between the project's stakeholders.

“The DirCoD houses the Project Management Unit (PMU) that effectively runs the project. The PMU is made up at the national level of a Coordinator assisted by an administrative and financial officer (RAF) and project support staff. At regional level two experts (governance & partnership, climate change), an administrative and financial assistant and local project support staff are involved. The recruitment of the project's staff is ensured by a joint-committee UNDP/Government “(TACC project document, p.74-77). It is worth noting that in this institutional organisation, the regions do not play any decision making role (interview with Mr WAR). The only role they play is as member of the National Steering Committee and as host for the regional PMU.

The budget of the Senegal TACC project is made up of various funds provided by the regions partners in Europe. The UNDP centralises the funds but is not really the main funder of the Senegal TACC project. The funds received from the UNDP are disbursed on the basis of trimestral work-plans. Beforehand the funds request has to be approved and transmitted to the UNDP by the CAP which has the responsibility to set up local accounts for receiving funds (project account). The CAP also has to regularly verify the regularity of the expenses of project.

The funds disbursed by the UNDP were formerly mobilised and secured by the regions in the framework of their partnership with regions in Europe. These regions partners in Europe are in fact the main donors of the Senegal TACC project via the UNDP. The funds are disbursed to the UNDP in accordance with the cost sharing arrangements formerly agreed with the beneficiary regions: one third (1/3) of the projects' budget is allocated to the Senegal TACC project while the rest is used for the implementation of regions' projects. The UNDP contributes US \$90.000 each year for the 3 years duration of the project.

As stated in the project document, the part of the budget of the Senegal TACC project provided by European donors is as follows:

- Rhône-Alpes: 300.000 euros (Ferlo);
- Poitou-Charentes: 108.300 euros (Fatick);
- Catalogne: 135.000 euros (Fatick);
- Belgium: 500.000 euros (Fatick) *promise*
- Wallonia: 110.000 euro (Fatick and Ferlo) *promise*

The contributions of Belgium and Wallonia are conditioned to the effective starting of the Senegal TACC project. In fact, according to the representative of Wallonia I interviewed, Wallonia is fully committed to support this challenging project. However, given the difficulties noticed to find an agreement between the project's stakeholders about the project's institutional and managerial arrangements, Wallonia wants to be sure that the conflict among the project's actors is settled before it financially contributes. The design of such institutional and managerial arrangements regardless the regions' expectations added vexing issues for the implementation the Senegal TACC project. The contribution of the UNDP compared to their promise at the beginning of the process to top-up the budget the regions will succeed to secure 40 times is simply disappointing. The way the financial resources are organised is one of the major sources of disagreement between the regions and the Directorate of the Decentralised Cooperation.

4.4.- The Senegal TACC project's Stakeholders

Climate change issues are at high stake in Senegal and require the involvement of several players at multiple levels. The stakeholders involved in the Senegal TACC project are various and spurred on by a large range of different interests regarding climate changes adaptation.

The following stakeholders are considered to be the main players in the Senegal TACC project:

- Regions (Saint-Louis, Tambacounda, Matam, Louga, Kaffrine and Fatick);
- Regions' partners (Poitou-Charentes, Rhone Alpes, Catalonia, Wallonia);
- The Project and Programs Implementation's Support Unit (CAP);
- The Decentralised Cooperation Directorate (DirCoD);
- The Environment Directorate (DEEC);
- The National Steering Committee (CNP);
- The Waters and Forests Directorate (DEFD);
- The United Nations Development Program UNDP (Senegal and Geneva);
- The Project Management Team (the coordinator);
- The National Climate Change Committee (COMNACC).

The regions: Granted with political and economical autonomy by the “decentralisation act” (*loi sur la decentralisation*) of 1996, regions are subnational entities established for the purpose to improve the effectiveness of administration. The regions Kaffrine, Louga, Matam, Tambacounda, Saint-Louis and Fatick are the initiators of the Senegal TACC project through their local climate adaptations initiatives (Ferlo initiative and Fatick's sustainable development project).

The regions partners in Europe: Regions in Europe (France, Spain, Italy and Belgium) such as Poitou-Charentes, Rhone Alpes, Catalonia, and Wallonia have been supporting the development efforts of regions in Senegal for more than a decade within the framework of decentralised cooperation. The technical and financial support they have provided to regions in Senegal enhances regions efforts to carry out their own responsibilities.

The Projects and Programs Implementation's Support Unit (CAP): The CAP is a support unit of the Ministry of Economy and Finances that has been established jointly by the Senegal State, the UNFPA and the UNDP since 2006. Its main purpose is to provide advise and support to development projects and programs that are executed under the National Execution (NEX) modality in order to improve and make more effective their implementation (CAP website, 2011).

The Decentralised Cooperation Directorate (DirCoD): The DirCoD is part of the Ministry of Decentralised Cooperation that is the governmental cooperation agency within the framework of the Senegal TACC project. Established in 2003, the DirCoD is in charge of the design and the implementation of the national policy concerning decentralised cooperation (DirCoD website 2011).

The Environment Directorate (DEEC): Under the tutelage of the Ministry of Environment and Nature Protection, the Environment Directorate (DEEC) steered the formulation of the country National Adaptation Plan of Action (NAPA) and is at the national level the responsible body for all activities related to climate adaptation, clean development mechanisms and the assessment of the potential environmental impact of new policies or legislative initiatives (DEEC website, 2011).

The Waters and Forests Directorate: Established since 1932 under the colonial regime, the Waters and Forests Directorate is in charge of the design and the implementation of the country national forestry policy with regards to soil conservation and wildlife conservation.

The United Nations Development Program UNDP (Senegal Country Office²): The UNDP is the UN's global development network, advocating for change and connecting countries to knowledge, experience and resources to help people build a better life. In

² Information gathered from the UNDP.

Senegal the UNDP intervention is based on the so-called “country programme” which focuses on strengthening national capacities for the achievement of the MDGs through the access to development resources (UNDP Country office website, 2011).

The United Nations Development Program UNDP (Hub of innovative initiatives Geneva):

Established in 2005, the Hub for Innovative Partnerships of the UNDP's Liaison Office in Geneva aims at recognize the role of regional and local communities and support them in facing development challenges. Its main purposes are to support national governments to achieve their decentralization policy processes by assisting regional and provincial governments in identifying and implementing their own development strategies and through facilitating innovative partnerships with all stakeholders (UNDP website, 2011).

The Project Management Unit (the PMU): The PMU is responsible for the effective implementation of the project mainly concerning planning, supervision and correct execution of the activities (TACC project document, 2008).

The National Climate Change Committee (COMNACC): Created in 1992 and legally established in 2003, the National Climate Change Committee (COMNACC) aims to facilitate the design, the funding, the implementation, the approval and the monitoring of national, sub-regional and regional projects related to, *inter alia*, climate change, capacity building, biodiversity preservation, carbon sequestration, wetlands management etc. (DEEC website, 2011)

Additional information on the stakeholders can be found in **Appendix 6**.

4.5.- Discussion

The initiative of the regions of Saint-Louis, Louga, Matam, Tambacounda and Kaffrine about the integrated sustainable development of the Ferlo area has been improved and designed for a more challenging purpose. On their partners' recommendations, the regions integrated climate change and sustainable development issues within the Ferlo initiative. This new focus combined with the regions commitment to collaborate for finding solution to their common concerns explained the choice of the UNDP to apply the TACC approach in Senegal. Recognizing the key role sub-national territories can play in climate adaptation and mitigation initiatives, and given their initiatives, the Ferlo regions and Fatick were chosen for the implementation of the Senegal TACC project. Steered from governmental level, the new entity, the Senegal TACC project still aims to assist regions to successfully address climate changes but the advantages of financial means and steering capacity that often accompany the implementation of development project beyond the project's outcomes were lost for the regions. The regions' partners that provide the funds to the Senegal TACC project and the regions are not involved in the project's decision-making and neither responsible for the

project's implementation. The regions' expectations towards the financial and prestigious advantages to manage such project while having initiated the Ferlo initiative are not met. In order to understand how this situation has evolved itself in other directions than expected by the regions, the analysis of the design process of Senegal TACC is needed.

5.- EVALUATION OF THE CONCEPTUALISATION PHASE

In this chapter, the design process of the Senegal TACC project is described through a chronological analysis of the important events that have had a significant impact in the process itself or in the project later on. The stakeholders' issue frames and expectations concerning the issue at stake and the way it should be addressed are also described and analysed in this chapter. The projects' actors that have played an innovation intermediaries (brokers) role are identified and their brokering role analysed.

5.1.- Process description

Phase 1: The mobilisation of the problem owners and partners.

This phase describes the process through which the different actors got involved in the Ferlo initiative. The mobilisation skills deployed by the region of Saint-Louis for the Ferlo purpose showed its high commitment and interest on the issue at stake.

According to the Head of the Regional Development Agency (ARD) of Saint-Louis, Mr War, the process started with an idea about the sustainable management of the Ferlo expressed by the Minister of Livestock in 2006 to the regional council of Saint-Louis. Being a native of the Ferlo area and emotionally involved and concerned in its increasing degradation, his governmental position in a ministry aiming to develop a sector which is the main vocation of the Ferlo area, was crucial for triggering action. Conscious of the fact that the Ferlo issue concerns all the regions bordering the Ferlo area, the region of Saint-Louis started to raise their awareness about the necessity to initiate local development initiatives. The regions bordering the Ferlo regions were very receptive about restoring the Ferlo in its former conditions. As the initiator of the Ferlo initiative, the region of Saint-Louis established coordination mechanisms to improve regions' interactions.

The regions' technical and financial partners got involved because the regions could not afford the researches' costs about the Ferlo issue. Already engaged with Saint-Louis in different partnerships since 1998, the French's region of Rhone-Alpes was thereafter requested to support the field studies on the Ferlo issue. More than interested by such request, Rhone-Alpes offered also to look for potential partners within its network that could support such initiatives and mobilise them for the Ferlo initiative. According to Mr War, it was during a job interview for a climate change position in the UNDP office in Geneva that the vice-president of the Rhone-Alpes region presented the project-concept to the UNDP³. The latter showed high interest in this regional initiative and recommended to broaden the scope of the initiative to sustainable development and climate change adaptation. According to several interviewees from the ARD of Saint-Louis and Tambacounda and from the Regional

³  First key event in the Timeline

Council (CR) of Kaffrine, the UNDP then offered to provide technical support but also to financially contribute by increasing 40 times the total amount of funds the regions would be able to collect and secure.

At this early stage of the project, the regions were the only actors aware and interested in the Ferlo issue with more or less vague ideas about how it should be addressed. Once involved, regions' partners showed high interest toward the Ferlo initiative but more in term of providing support through a new cooperation approach than through the usual cooperation scheme. The UNDP's first reaction has shown high interest and provided relevant advices to redirect regions focus on climate changes issues. One can consider UNDP's advise as a kind of willingness or expectation about how the issue should be addressed but I would rather consider it as an idea for a different approach to better tackle the Ferlo issue. The propositions of the regions' partners and the UNDP increased the regions' interest and as the result they started to list for each region the issues related to the Ferlo area and which could be addressed through the Ferlo initiative into to groups: sustainable development initiatives and climate adaptation initiatives.

Phase 2: The project's financing and management arrangement

The starting point of this phase was the acceptance by Rhone-Alpes to fund the researches of the Ferlo initiative. Once the financial gap for the researches was filled, regions started, under the lead of Saint-Louis, to work on identifying for each of them the main issues related to the degradation of the Ferlo area. Under the supervision of an expert also member of the regional council, regions' representatives involved all the technical departments (environment, waters and forests, soil conservation, agriculture...) that could provide information and/or technical support about the issues and their interrelations. In order to ensure that the new initiatives would fall within the framework of the on going environmental and sustainable development actions of the regions, these technical departments were also closely involved in the design of the potential solutions and interventions. As stated by Mr Kane, the former head of the planning and partnership department at the ARD of Saint-Louis, it took about a year to each of the Ferlo regions to list the main environmental, social and economical issues related to the Ferlo area with their possible solutions. After becoming aware of the regions' initiative about the Ferlo area, the UNDP advised them to include in their focus "sustainable development" and "climate change adaptation". The regions then started a second round of "negotiation" with the technical departments to include sustainable development and climate change adaptation aspects. During all these processes, the Directorate of Environment (DEEC) and the Directorate of Waters ad Forests (DEFC) which services cover almost the scope of the research had played a key role in identifying issues and potential solutions because of their natural interest in such issue. Mrs SARR, the head of the Environmental Impacts Assessment Department and program manager at the Study Department of the Environmental Directorate (DEEC), confirmed the effective involvement of their departments and the appreciation of their contribution. The

outcome of the regions' collaboration with the technical departments was a portfolio of projects available by 2008.

Beforehand, an important deputation which was composed of the representatives of eleven (11) Senegalese regions was invited to attend the Saint-Malo conference in France. During the interview with the head of the DirCoD, Mr Diaw confirmed that one of the outcomes of this important conference was the selection of Senegal as one of the eight (8) pilot-countries worldwide at that time, to experiment the Territorial Approach to Climate Change which is an approach that considers regions as the cornerstone for any climate adaptation initiatives aiming to be successful. Regions that were more sensitive and exposed to climate variation like the Ferlo regions and the region Fatick were chosen for the implementation of this new approach. However, the choice made during the Saint-Malo's conference brought the regional initiative to a higher decision-making level where the main player is the State and its governmental bodies. Indeed, such decision required a governmental engagement and therefore the involvement of (a) governmental body (ies) in an initiative which was initially designed and supposed to be run by regions. Somehow aware of this, the Minister of Environment and Nature Protection representing the Government and the UNDP representative committed during the official launch of the TACC programme to build the new project into the outcomes of the regions' initiatives. This engagement had led again to a new design process of the Senegal TACC project. A project formulation mission led by the UNDP, the Directorate of Decentralised Cooperation and including the Directorate of Forests and Waters and the Directorate of Environment met with the regions in a couple of meetings to discuss the ways to integrate the regions' projects within the new project (interview with Mr Fall from UNDP). Considered by all interviewees (from the government as well as from the regions and their partners in Europe) as truly participatory this process driven by a multidisciplinary team produced the final Senegal TACC project document.

The regions' interest during the whole process has remained high. However, despite the fact that the project formulation mission managed to meet their expectations by taking into account the regions' projects previously formulated in 2008, their power decreased subsequently due to the government involvement in the design process. The engagement to include or to build the Senegal TACC project into the regions' projects framework stands more as an attempt to satisfy key stakeholders than a power of the latter to influence the process.

Phase 3: The conflict over the institutional and the managerial arrangements of the Senegal TACC project

After the project document had been approved and signed by the State Minister of Finance⁴ and the UNDP representative in Senegal (see timeline), the regions realised while reading it that its content was different to what they were expecting (Interview

⁴  Second key event in the Timeline.

with Mr Ndour of Fatick and Mrs Bel representative of Poitou-Charentes) with regards to the role they were intended to play during the Senegal TACC project implementation.

The use of the regions' projects' portfolio as the basis for the design process of the Senegal TACC project was understood by the regions as the willingness of the project formulation team to design a national programme including several local projects specific to regions and which would have to be implemented by the regions themselves. Because regions had to play a key role in the new approach, the Senegal TACC project was supposed to be designed in a way it extends and includes the region's project into the TACC approach. Consequently during the entire formulation phase it was constantly repeated that the regions' projects had to be the foundation for the design of the Senegal TACC project. Despite the fulfilment of this requirement, the regions were still reluctant to approve the Senegal TACC project. One of the reasons according to the President of the "Ferlo Entente"⁵ is that they were reduced to the position of simple beneficiaries in a project they have been working on for years. Another reason was that the budget of the Senegal TACC project was formerly mobilised and secured by regions within the framework of the Ferlo initiative and the UNDP did not follow up its early financial promise. Moreover the emergence of new players (CAP and DirCoD) had considerably weakened the regions' position. These two actors mandated by the State had the power to decide when, how and with whom the project has to be implemented. These divergences have led to the repeating postponements of planning workshops (in august 2010, February and April 2011) and therefore to the start of the Senegal TACC project.

With the approval and signature of the project document by only the representatives of the government and the UNDP, it became clear to the regions (excluded *de facto* in this key moment of the process) that they were not considered as really significant in the Senegal TACC project. Aware of the fact that they were losing the control of their initiative, the regions rejected the Senegal TACC project by communicating their concerns to their partners in Europe and with the Government. They claimed a revision and profound reforms in the project document especially concerning the institutional and the managerial arrangements of the Senegal TACC project were needed. With regard to the institutional anchorage of the project, they referred to the decree of recognition of the Ferlo Entente (**Appendix 4**) to determine the project anchorage (Lequotidien.sn, 2010, policosn.com, 2010). Unfortunately, this request was analysed through a political perspective and did not receive enough attention. The second issue at stake was related to the project managerial arrangements and more specifically its financial arrangements or who will be in charge of the execution of the project. In fact projects are for regions with limited financial resources very often a great opportunity to get additional financial resources that can be used for rewards or

⁵ The "Ferlo entente" or "interregional partnership" is the official recognition of the Ferlo regions' partnership in 2009. See timeline and appendix 4.

office equipment acquisition. Nowhere in the project document financial support to the regions was mentioned while initially the project was built on the regions' initiative and was funded through the partnership the regions have built. Considering the fact to be excluded from the management of the Senegal TACC project unfair, the regions and their partners interpreted the behaviour of the representatives of the government (DirCoD and CAP) as an attempt to re-centralise a project that was designed for decentralisation purposes. According to the vice-president of Rhône-Alpes region, Mrs Moreira, the activities of the interregional partnership should not led to re-centralisation but rather to foster the decentralisation process by improving the livelihood of communities living in the regions. Consequently, having the feeling that their initiative was being "hijacked" by the CAP and the DirCoD as stated by the president of Ferlo Entente, the regions initiated the formulation of an alternative project that would meet their expectations. With the portfolio of projects that were the basis of the Senegal TACC project, the regions started with the support of their partners (Rhône-Alpes, Poitou-Charentes) to draw the boundaries of an alternative TACC project (interview with Mr War). The inconsistencies between the UNDP country office and the Hub for Innovative Partnerships in Geneva about the availability of the regions' budget increased their lack of trust and suspicion towards the UNDP country office.

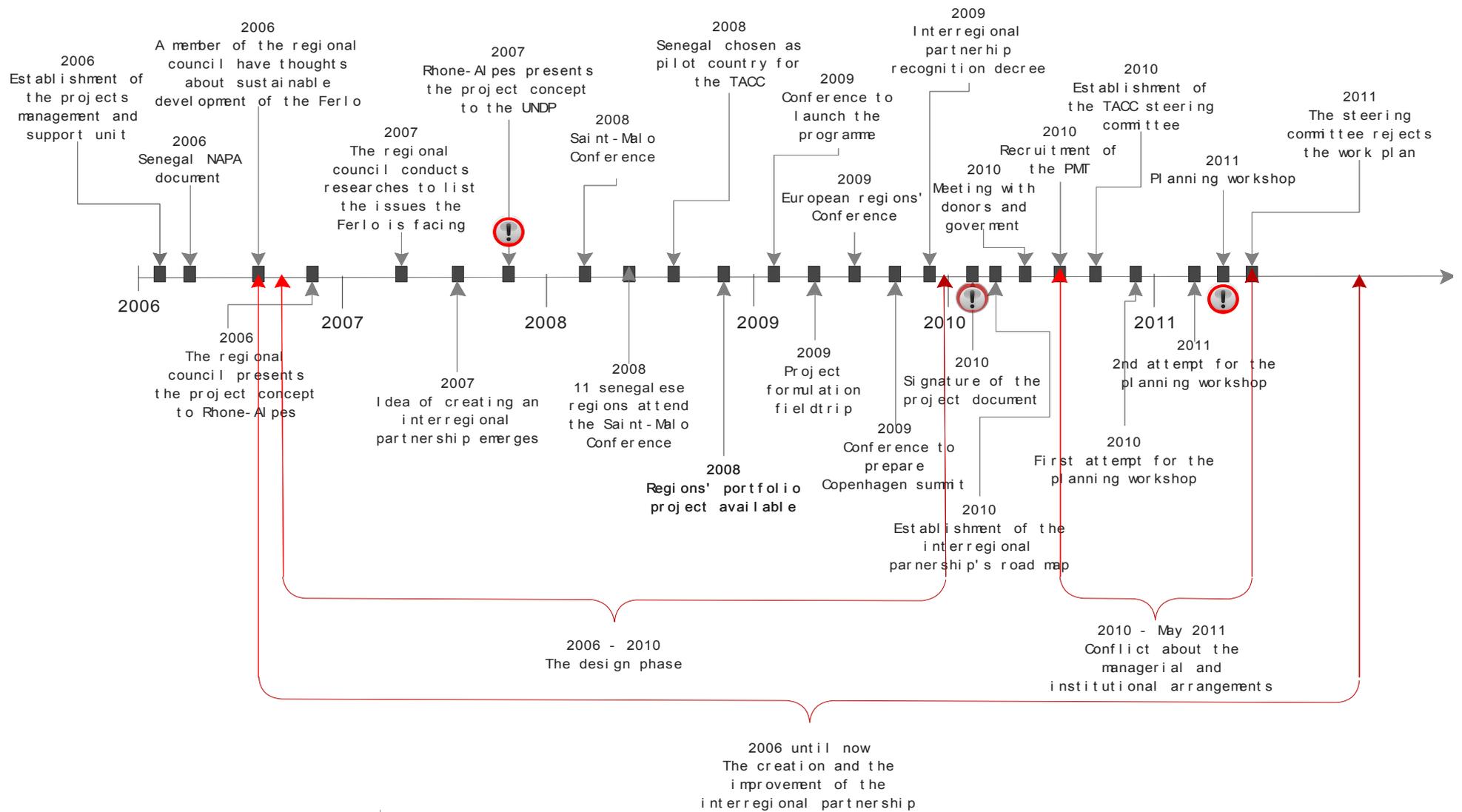
For the DirCoD and the CAP, the Senegal TACC project was a project of the Government of Senegal with the regions as the main beneficiaries. As such and according to them, the regions did not have to decide the way it should be managed. Besides, it would have been difficult to contradict them because the approval and the signature of the project document was done as a convention between the Government of Senegal and the UNDP without any consultation or involvement of the regions despite their role in the process. The recruitment of the project management team exacerbated the regions frustration as expressed by the president of the Ferlo Entente and the director of the ARD of Saint-Louis. Notwithstanding the willingness expressed by the DirCoD, the CAP and the UNDP to find an agreement with the regions' requests, they did not want to reconsider the recruitment of the project team and particularly the experts' positions on decentralisation and climate adaptation. Regions found this initiative totally disrespectful and decided in return to not recognize the new team and particularly the experts' positions which were the major point of disagreement. In fact they wanted to be able to recruit the needed experts themselves. Within the interregional partnership, the regions already planned to recruit an expert according to the main issue faced by each region. By doing so, they will have a whole range of experts in different domains who could be used by the regions for specific purposes in the Ferlo area; according to Mr Kane, this arrangement would ensure a multidisciplinary contribution of the experts and more possibilities for the regions to benefit from each other's experts to improve their development initiatives.

The main consequence of this conflict was the successive delays in organising a planning workshop to produce the project work plan which lead to a delay of

about one year in the starting of the Senegal TACC project. The alignment of the donors' position with the regions' position showed the sensitivity of the issue. Despite the fact that the UNDP signed the project document as the fund provider, it was not in reality the funder of the Senegal TACC project. In fact as previously explained, 1/3 of the funds secured by regions for their project were reallocated to the Senegal TACC project as the regions' counterpart in the project budget. In reality the regions' partners in Europe were providing the entire amount of the budget of the Senegal TACC project though the UNDP which had to reallocate 2/3 of the amount to the regions and the other third (1/3) for the functioning of the Project Coordination Unit. The Director of the ARD of Saint-Louis reported that during their attempts to modify the project managerial arrangements, the regions realised there were inconsistencies between the UNDP office in Geneva and the UNDP country office in Senegal about financial resources. Indeed they have got the confirmation from UNDP Geneva that the budget was already available while the UNDP country office was saying the opposite. These inconsistencies within the UNDP and the vain promise of its financial support triggered regions' lack of trust in the UNDP. The regions' disappointment about the DirCoD which was seen as a governmental agency assisting them in the formulation of the Senegal TACC project increased the climate of distrust. Meanwhile, the DirCoD was lobbying actively with the CAP to overcome the regions' opposition and according to the director Mr Diaw, there was no doubt about the implementation of the Senegal TACC project. His main concern was about the participation of regions. Given the role the regions were supposed to take such position appeared very awkward and unsupportive of the regions. Still, the way each of these actors frame the issues can help understand the diverging positions and hopefully help finding ways to come to an agreement.

Figure 4 provides a timeline describing the process and major events.

Figure 4: Process description with major events*



* Timeline inspired from Klerkx *et al.* 2010 -



Key events that impacted the formulation process of the Senegal TACC project

5.2.- The stakeholders' issue frames

Climate change issues are at highly important in Senegal and involve several players. Each of these actors is addressing these issues according to their own perspective.

Because of the complexity of climate changes issues and the diverging interest of involved stakeholders, the type of interventions preferred reveals project managers and important participants' issue frame.

Table 1 shows how the project's participants and managers frame the issue at stake and how according to them it should be addressed. The table is designed on the basis of the information we have collected through our different interviews with stakeholders complemented with the analysis of important background documents.

Table 1: Stakeholders' issue frames

Stakeholders	Core issue to address	How the issue should be addressed by the project	The project management
Regional authorities (Ferlo regions and Fatick)	Climate change issues need to be integrated in development projects	A national coordination unit that supports the regions to implement and manage the project at the regional level	The Ministry of Environment and Nature Protection
Regions' development partners (Poitou Charentes, Rhone-Alpes, Catalogne and Wallonia)	Climate changes issues are a threat for the development initiatives that have been implemented so far with our support.	Regions have to implement and manage the project as formerly planned with a light support of the national government	To be decided by the regional authorities.
Directorate of Decentralised Cooperation (DirCoD)	Regions lack capacities to face Climate change issues	A national project management team will implement the project for the benefit of the regions	The Ministry of Decentralised Cooperation
Projects management and implementation support unit (CAP)	Climate change issues mobilise huge amount of money that have to be spent in an efficient way.	A project management team under the supervision of CAP and DirCoD will be hired to implement the project.	The Ministry of Decentralised Cooperation and the Ministry of Finance
Directorate of Waters and Forests (DEFC)	Climate change issues are a threat for sustainable natural resources management and our combat against desertification	Regions should get sufficient support to successfully implement and manage the project	The Ministry of Environment and Nature Protection
Directorate of Environment (DEEC)	Climate change issues are a threat to the communities' wellbeing and sustainable development	Regions should get sufficient support to successfully implement and manage the project	The Ministry of Environment and Nature Protection

The UNDP (Hub for Innovative Partnerships Geneva)	Climate change is a key challenge when addressing human development	A substantial financial support to regions' initiatives through a national execution (NEX) approach	Not communicated
The UNDP (Senegal country office)	Climate change issues are a threat for regions' development	A project management team will support regions to implement their projects.	To be decided by the Government
TACC coordinator (PMU)	A fruitful collaboration between governmental and regional authorities is crucial for the success of climate adaptation initiatives in Senegal	The project management team will support regions' to successfully implement their climate adaptation initiatives	There are legal dispositions organising collaboration between regions and technical departments

The analysis of the issue frame shows convergence of views amongst the majority of stakeholders for whom climate changes is a threat for sustainable development and a major hindrance for regions to achieve their development goals. However, the way the issue should be addressed reveals diverging point of views that could be understood according to each stakeholder's perspective. In fact despite many differences mainly on how the issue should be addressed and managed all the stakeholders have the aspiration to work on climate changes. However they plan to do it from a different perspective. It appeared from the interviews and from the interregional partnership agreement that they all seem willing to achieve climate adaptation. According to stakeholders such as regions, climate change issues need to be integrated in development projects. A national coordination unit at national level can be useful to harmonise the different interventions implemented at local level. Another point of divergence is related to the project's tutelage. It is clearly stated in the third article of the interregional partnership recognition decree n° 2009-1268 that the Minister of Environment and Nature Protection is responsible for the implementation of the decree with the Ministers in charge of Decentralisation, of Agriculture, of Fisheries and of Livestock. In the different interviews with the Ferlo regions' representatives, all regions were supportive to the idea to have the project under the tutelage of the Ministry of Environment and Nature Protection with whom they have been collaboration in different projects since 1998. This position is shared by the regions' partners in Europe that align with the Ferlo regions' position. However for the Project management and implementation support unit (CAP) and the Decentralised Cooperation Directorate (DirCoD), the project is an outcome of decentralised cooperation and as such administratively belongs to the Ministry of Decentralisation.

“According to the head of the DirCoD Mr Diaw, the choice of Senegal as a pilot country to experiment the TACC approach after the Saint-Malo conference has nothing to do with the Ferlo initiative. During the launch of the programme in 2009, the UNDP and its partners took the engagement to support regions to include climate adaptation in their regional plans.

The project formulation mission including regions' partners in Europe (Rhone-Alpes and Nord-Pas-de-Calais for the Ferlo and Catalogne and Poitou-Charentes for the Sine Saloum) had then chosen the Ferlo area and the Sine-Saloum area for the implementation of the project. Nevertheless, Mr Diaw recognises that the Ferlo initiative is develop prior to the TACC project and was used as the basis for its formulation. That's why he is willing to find with the interregional partnership ways to harmonize the Ferlo initiative to the programme TACC". (Minutes of the meeting between the regions and the DirCoD)

For the regions climate change is threatening local development and might annihilate all their development efforts. Regions that are directly concerned and have to deal with development issues should manage and implement climate adaptation initiatives as well. The involvement of regions in the implementation is also a crucial for sustaining the outcomes. Regions expect support from the government in term of legal arrangements and technical support to be able to successfully implement such projects and ensure the sustainability of both their activities and outcomes.

"It has to be noted that the principle of decentralised cooperation supposes a direct cooperation from region to region. That's why the funds that came from decentralised cooperation partnerships should be used to bring an added-value to activities that are being directly implemented by beneficiaries regions". (Minutes of the meeting between the regions and the DirCoD)

The regions' development partners in Europe frame the issue as a threat to the benefit of the development support they have been providing to the Ferlo regions so far. To successfully address such threat and for more sustainable outcomes, they believe that the regions should be in charge of the implementation of the TACC project at local level. This will also help to ensure the monitoring of activities and outcomes beyond the duration of the project. A national coordination team with an advisory role will support regions to build their capacity in order to better implement the project activities and improve its management.

"The first vice president of Rhône-Alpes region Mrs Veronique Moreira emphasised the legitimate clam of regions to conduct their own territorial programmes". (Minutes of the meeting between the regions and the DirCoD)

According to the regions' partners in Europe, the institutional anchorage of the project should be decided in conformity with the regions' visions about their future development.

The Decentralised Cooperation Directorate (DirCoD) frames the issue in term of a lack of technical and operational skills from regions to face climate changes issues. With the mission to promote regions' development through the decentralised cooperation, the DirCoD stresses the fact the regions still need guidance before they will be able to manage projects and programmes themselves. Being aware of their limits, the Ferlo

regions consider this TACC programme as an opportunity to improve their skills and to get new ones. Because of their lack of skills the regions are excluded to the management of the TACC project. For managerial purposes, a project management team under supervision of the DirCoD is more suitable to steer the implementation of the TACC. According to the DirCoD, the institutional anchorage of the project belongs naturally to the Ministry of decentralised cooperation because the funds secured for the project have been obtained through decentralised cooperation.

For the Project management and implementation support unit (CAP) that aims to support the implementation of projects in line with the Government's accountancy rules, climate change issues are framed in terms of massive financial expenses. For a country with a weak economy like Senegal such an issue might hamper development efforts because they need lots of investments. Having to be implemented under the National Execution (NEX) approach, the Government is accountable *vis-à-vis* the donors and for that is responsible for the financial and managerial arrangements of the project and the monitoring of the project's expenses and outcomes. To do so, a project management team supervised by the DirCoD and CAP with the obligation to meet the project's goals has to be recruited for the successful implementation of the project. The institutional anchorage of the project should be the Ministry of Finance and the Ministry of decentralised cooperation.

The Directorate of Waters and Forests frames climate change issues as an unprecedented threat for sustainable development that might jeopardise the country's efforts to combat desertification. Regional or local climate adaptation initiatives are crucial and represent one of the most relevant responses to such issues. It is therefore important to support and accompany regions to successfully manage and implement the TACC project. The technical support from governmental departments combined with sufficient financial support will ensure the success of regions' initiatives. Its institutional anchorage to the Ministry of Environment and Nature Protection will guarantee more efficient support and assistance.

The Directorate of Environment which is in charge of all initiatives related to climate change adaptation has been providing technical support for regions for quite a while and was fully involved in the design of the TACC project through the production of the country NAPA document. As all technical governmental departments, climate change is perceived as a major threat for the country's sustainable development. According to Mrs SARR staff member of the DEEC the best strategy to address climate change issues is to actively involve regions in the implementation of climate adaptation initiatives. This is considered as a good way to ensure the delivery of valuable and sustainable outcomes but also to trigger the necessary regions' ownership for such initiatives. Mrs SARR believes that climate adaptation projects should be anchored to the Ministry of Environment and

Nature Protection which is responsible of environmental decision making and the implementation of environmental policies.

The UNDP's Hub for Innovative Partnerships in Geneva appears to be an important stakeholder with regard to the role it played to trigger and enhance the conceptualisation phase of the TACC. For this stakeholder, climate change is a threat for human development that can be efficiently tackled through innovative initiatives such as regions' partnership. The UNDP positions itself as a provider of substantial financial support to improve the ability of regions to implement successful climate adaptation initiatives. However, the question of the anchorage of the implementing body is not at all a stake for the UNDP Geneva because the project is executed under the national execution (NEX) approach which means it up to the State to decide about the project's managerial arrangements.

The UNDP country Office frames the issue in the same way as the HIP and commit itself to help regions to find additional funds through collaboration or partnerships to support their climate adaptation initiatives as explained by Mr Fall (programme adviser and team leader). It has also stressed the fact that the UNDP doesn't provide funds directly but rather can help to mobilise fund through lobbying and advocacy. The UNDP country office believes that because of the limited managerial skills of regions, a project management unit will have to be in charge of the implementation of the project and provide to the regions the needed technical and managerial support. The tutelage of the project is out of their concern because the project is under national execution.

The project coordinator frames the issue of climate changes as a major threat that requires effective collaboration between governmental and regional authorities to be successfully addressed. According to Mr Dia, the project coordination unit he is heading has a boundary role because it aims to build the capacity of regions to fill their knowledge gap and also helps to improve the political environment in which the implementation of the project is embedded. The tutelage of the project to a Ministry doesn't represent a major concern for him since there are clear legal arrangements about the requisition of technical departments' competences by regional authorities when needed.

In summary, there are as many converging opinions about the main issue as diverging points of view regarding the tutelage of the Senegal TACC project. This is mainly linked with how the stakeholders expect the issue should be addressed.

5.3.- The stakeholders' expectations

The stakeholders' expectations about the final plan of the project are important when designing a development project. In the case of the Senegal TACC project including several actors with more or less diverging interests, an inadequate management of

stakeholder's interest and expectations towards the issue to address lead to conflicts and controversies about its implementation (Olander and Landin, 2005). Throughout the formulation of the Senegal TACC project, the interest and the stake of the actors did not remain static. Indeed actors' expectations are related to their interest on the issue at stake but also to the extent to which the final plan inspires or predicts the achievement of desired outcomes.

Amongst the project's important actors, the following stakeholders were identified as the most relevant in term of power and stake towards the Senegal TACC project's objectives assessed.

- *The regions* (Ferlo regions and Fatick);
- *The regions partners in Europe* (Poitou-Charentes, Rhône-Alpes, Catalonia, Wallonia);
- *The United Nations Development Program* (country office);
- *The projects and programs implementation support unit* (CAP) representative of the governmental coordination agency: the Ministry of Economy and Finances;
- *The Directorate of Decentralised Cooperation* (DirCoD) representative of the governmental cooperation agency: the Ministry of Decentralisation Cooperation.

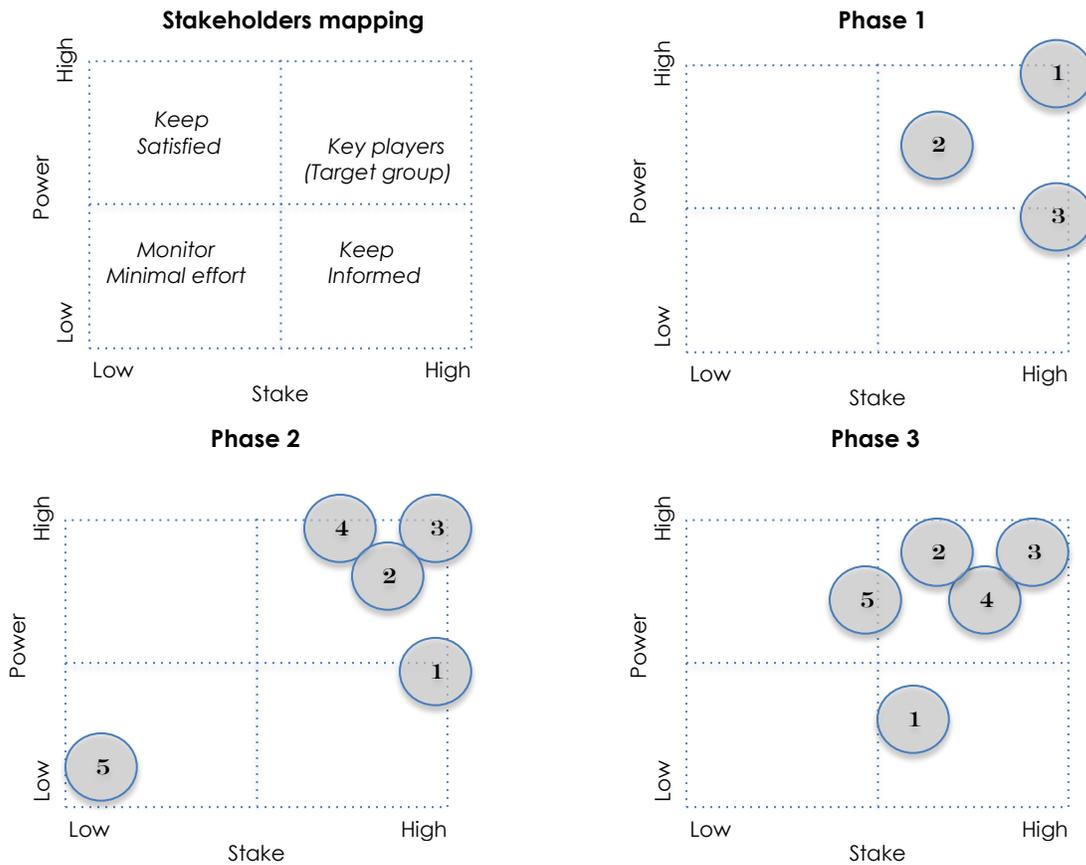
5.3.1.- Analysis of the shifting power/stake over the process

The different interviews I conducted with the project's stakeholders, complemented with the analysis of the minutes of meetings were the basis for the Power/Stake matrix analysis which is shown in **Figure 5**.

The stakeholders' expectations are analysed in order to describe how their power evolved throughout the project's formulation process. The different phases to consider are **phase 1** (the mobilisation of actors around the concept-project), **phase 2** (the design process of the project), and **phase 3** (the conflict over the institutional and managerial arrangements of the project). The presentation is presented in the next chapter.

The following matrixes were built up on the basis of the stakeholders' story about their role in the process and what they expect would happen. It is worth noting that there were huge differences between stakeholders' power and stake throughout the design process of the Senegal TACC project.

Figure 5: the power/stake matrix



1. Regions. 2. Regions' partners. 3. UNDP. 4. DirCoD. 5. CAP

During the **phase 1**, only three players were involved in the nurturing of the project concept. There was a strong and shared interest among the regions and their partners about the Ferlo issue. This sharing interest led to fruitful collaboration among them and fostered their willingness to pursue such collaboration in order to improve the effectiveness of their development initiatives. Furthermore, this also led to increase the regions' ambition and widen their network concerning development cooperation. As for the interest, stakeholders were sharing the same expectations which were to conduct in-depth researches on the Ferlo issues in order to be able to design effective solutions. Without clear stake, the power position was not yet an issue.

Phase 2 was characterised by the proceeding of the regions' collaboration and its outcomes. The involvement of stakeholders such as UNDP had implied new research paths and new focus for the Ferlo initiatives but had also provided to the regions the opportunity to access a world-class tribune to get themselves known. Highly committed and distracted by the fabulous financial promise of the UNDP, the regions did not interpret what this shift in the Ferlo initiative was preludeing. Still, the actors' expectations

were remaining the same and the common goal was to ensure a sustainable development of the Ferlo area. However, the choice of the Senegal as a pilot country for the TACC approach introduced new players and involved a higher level of decision (State level) that excluded to some extent the regions from the process. This caused then a shift in power position and competing interests between the regions and the new players (the Ministry of Decentralised Cooperation and the Ministry of Finances) whose legitimacy and power were deriving from the Government.

Phase 3 was a confirmation of the power shift from the regions to the DirCoD and the CAP. These new actors did their best to keep the control of the project and relegate the regions to the role of passive receiver. From the interviews, it was obvious that they don't feel the need nor the desire to hand any authority over to the regions. They acknowledged the role played by the regions before but did not want to let them play their real role. Since regions were the owners of the problem and the fund providers through their partners, they convinced their partners to require the renegotiation of their position in the project as an essential condition for the release of the funds. This had blocked the project from starting and seriously questioned its relevance without the regions. The power/interest matrix clearly shows how the regions' stakes were still high but also how powerless they were in comparison with the DirCoD and the CAP within the final institutional arrangement of the Senegal TACC project. The high position of the UNDP is due to the fact that it has co-signed the project agreement with the State and is then seen as the main donor of the project. The regions' partners which are in fact the real donors (they provide the funds to the UNDP) have still high power and stake in the project but are not playing a role in the current institutional arrangements.

The main consequences of the power shifts and floating interest among the project's important actors are:

- An important delay in the starting of the Senegal TACC project. More than one year after its signature, no single activity is implemented yet;
- Serious doubt about the project's implementation and future effectiveness among the regions and their partners in Europe;
- Competing claims among the project's important actors;
- A lack of clarity about the purpose of the project among the project's important participants;
- A lack of trust between the project's stakeholders;
- A lack of cooperation among project's important participants.

5.4.- The role played by the “innovation brokers”

In the case of the Senegal TACC project, three actors have been identified as having played a brokering role in the concretisation of the Ferlo's concept project:

- The region of Saint-Louis;

- The French's region of Rhone-Alpes and;
- The United Nations Development Program.

I will describe their brokering role through the tasks each of them performed as described by Klerkx and Leeuwis (2008) according to Howells' (2006) typology.

5.4.1.- The region of Saint-Louis

The idea of a sustainable and integrated development of the Ferlo area originated from the region of Saint-Louis in 2006. As the “prime driver” (Batterink *et al.* 2010) of the Ferlo concept project, the region of Saint-Louis through its Regional Council adopted a resolution in which mandate was given to the Regional Development Agency (ARD) to conduct the necessary researches to seek the feasibility of such idea. The researches consisted of analysing the problem, conducting information needs assessment and identifying the potential collaboration partners. The information exchanged through mails and phone and during meetings (knowledge exchange) were real opportunities given to regions to learn (learning process) more about the Ferlo area and the issue at stake.

By initiating the researches (diagnostics and scanning and information processing) and succeeding to trigger the interest and the engagement of all the regions bordering the Ferlo area (Matam, Tambacounda, Louga and Kaolack at that time) the region of Saint-Louis performed an innovation broker role. The solicitation of Rhône-Alpes as strategic partner that provided financial and technical support can be also considered as a brokering task performed by Saint-Louis.

5.4.2.- The French's region of Rhone-Alpes

Rhone-Alpes is one of France's 22 administrative regions. As Saint-Louis in Senegal, it has two assemblies at the institutional level: the Regional Council (Conseil Régional) and the Regional Economic and Social Council (Conseil Economique et Social régional).

Once the Ferlo regions had agreed about the approach and the needed researches, the region of Saint-Louis sought Rhone-Alpes for additional support. Rhone-Alpes was enthusiastic to provide technical and financial support. Beside the financial support, Rhone-Alpes was keen to exchange and provide its expertise and to mobilise within its networks, partners that were willing to support such initiative. International non-governmental organisations such as “Agronomes & Vétérinaires sans Frontières” and “Bioforce” were consequently involved to provide the necessary technical support to Saint-Louis to conduct the problem diagnosis and the situation analysis of the Ferlo area.

By providing financial funds (funding) and selecting and appointing the relevant actors (selection of collaborative partners and network brokerage) that could provide technical support to regions, Rhone-Alpes acted as innovation broker. Rhone Alpes

introduced the last actor that had played a brokering role in the conceptualisation of the Senegal TACC project: the United Nations Development Program.

5.4.3.- The United Nations Development Program: Hub of Innovative Partnerships (HIP)

The involvement of the Hub of Innovative Partnerships of the UNDP explains the actual shape of the Senegal TACC project. Indeed, the original idea was about the sustainable management of the Ferlo area, the climate change focus and the territorial perspective had been suggested by the UNDP.

The UNDP helped the regions to have a more relevant focus and a perspective that would ensure the funding of all projects identified and formulated. By promising to top-up by 40 times the amount of financial support regions could get, it triggered the regions commitment and high expectation that constitute key constituent in innovation process. The UNDP also offered the regions the opportunity to attend international climate changes meetings (Saint-Malo conference, Copenhagen, Cancun) during which the Senegal was selected to experiment the TACC approach.

By providing advice about the focus on climate change and “promise” of funding, the UNDP contributed to the process as innovation broker.

5.5.- CONCLUSION

The evaluation of the design process of the Senegal TACC project shows successive oversights and awkwardness that have led to ineffective stakeholders involvement and alleged misappropriation of objectives that seriously question the future of the project. The expected harmonisation between the regional and the national levels of decision making which is considered to be crucial for the effectiveness of climate adaptation initiatives is also compromised by the diverging interests and frames of the different actors. The analysis of the formulation process provides an idea about how complex the Senegal TACC project is and how heterogeneous the involved stakeholders are, in term of stake and expectations. The project's institutional and managerial arrangements constitute the sticking point between the regions and the governmental agencies (CAP and DirCoD). The distrust the regions and their partners have towards the UNDP and the governmental agencies showed a lack of interdependency so far.

Furthermore, the analysis shows how the regions' position was weakened with the emergence of new players and the change of the scope of the Ferlo initiative. The project itself became more relevant when addressing climate change issues which gave it a national stature but moved it away from the regions' control. The actual arrangement refers more to a command system than to a coordination/cooperation

system between the regions and the governmental agencies. The main concerns can be resumed as follows:

- How to overcome the lack of trust?
- How to create a sense of interdependency especially amongst those parties in order to get them collaborate?
- How to share power and foster complementarity among stakeholders?

Hopefully the potential contribution of the Senegal TACC project to the improvement of the communities' livelihood in the Ferlo and Fatick regions remains highly promising.

6.- THE RMA-BASED MONITORING AND EVALUATION PLAN FOR THE TACC PROJECT

A proposal concept for an RMA-based monitoring and evaluation plan for the Senegal TACC project is outlined in this chapter. The reflexive monitoring plan to design for the Senegal TACC project will include a selection of appropriate RMA tools to be used at each stage of the project to overcome hindrances that might arise. Beforehand the project's stakeholders' expectation concerning M&E will be identified and discussed. The condition for the use of such tools in term of space (room) and opportunity in the current project will be discussed and improved or created if needed.

In order to overcome the concerns identified during the conceptualisation of the Senegal TACC project (lack of trust, lack of a sense of interdependency among project's actors to trigger collaboration), it is important to create conditions that stimulate continuous reflection on the project activities and effective communication among the involved actors. In fact it is also important to remember that the regions' lack of interest in the Senegal TACC project's management as a consequence of their exclusion from the project management team caused by the controversial and ineffective formulation process. This constitutes a major concern that makes the implementation of the Senegal TACC project precarious.

The construction of a monitoring and evaluation (M&E) plan for the Senegal TACC project is challenging with regard to the complexity and the uncertainty of climate changes and the complexity which characterises the project regarding the variety of the stakeholders involved in term of stake and expectations. Getting all these stakeholders to collaborate constitutes also one of the main challenges for the start of the Senegal TACC project.

Decentralisation is a complex and unpredictable process that involves fundamental changes (Smoke, 2003) and requires people to redefine their roles, their means, their capacities, and their interrelationships. Given the scientific uncertainties about climate changes and actually how to adapt to climate changes, experiments are needed to raise prospects for early success and to create a base on which to build future adaptation strategies.

The M&E plan that was outlined during the design of the Senegal TACC project's work plan for 2011 aims to improve management effectiveness and accountability. In order to design a new M&E plan for the Senegal TACC project based on the ideas of RMA, the expectations of the involved stakeholders concerning M&E will be investigated.

6.1.- Stakeholders' expectations concerning monitoring and evaluation

The relevance of conducting M&E activities was acknowledged by all the project's stakeholders attending the Senegal TACC project's planning meeting to be important. However they did not show high interest in the discussions dedicated to the identification and the definition of M&E activities to be implemented. The work was led by the CAP who was appointed as the control body for the Senegal TACC project and therefore considered to be more knowledgeable in the domain of M&E.

In the project document of the Senegal TACC project and from the positions expressed by the participants during the planning workshop held in may 2011, the project's M&E plan is seen to be an activity separate from the other activities of the project. It is felt to consist mainly of producing periodical reports about the implementation of the project's activities for accountability and for learning and/or communication purposes. To illustrate this, where exchanges about communications activities lasted hours and hours during the planning workshop, the M&E activities were identified and planned in about an hour. There were no specifications or recommendations given the way the M&E plan should be implemented except the idea to create an evaluation team including the representatives of the Ministries involved in the Senegal TACC project, the COMNACC, the different cooperation's partners and the UNDP. I noticed that the Ferlo regions and Fatick were neither mentioned nor involved in the evaluation team.

The expectations of major players such as CAP and DirCoD concerning M&E are related to accountability purposes. In fact, in order to guarantee donors and partners that the project is on track and worthy of continued funding, the production of regular reports on the project activities and the situation of the expenditures is considered crucial. Likewise, these reports can be used in a lesser extent for learning and communication.

The Ferlo regions and Fatick did not clearly express their expectations concerning M&E during the Senegal TACC project's planning workshop despite the fact that they expressed their interest for M&E during interviews. This lack of interest of the regions towards M&E activities can be explained by the fact that they were more concerned about their role in the project, their decision-making power and the settlement of the different disagreements they expressed before particularly regarding the project management and the recruitment of the experts for example. However, the Director of the RDA of Saint-Louis expressed after being informed about RMA prior to the interview the regions' willingness to have an M&E approach that can help them to improve and sustain the impact of their development initiatives. He expected that by engaging the project participants to reflect on process conditions and the relation between project activities and the incumbent system, RMA can trigger a learning process that will help

regions to design and to implement successful development initiatives. Hence, the regions' expectations concerning M&E are mainly related to learning purposes (**Table 2**).

The regions' partners in Europe are certainly eager to know how their financial support is being used and what impact it has on regions' development and on their climate adaptation efforts. Besides these accountability expectations, they also have learning expectations because the Senegal TACC project is a new experiment from which they want learn how future similar initiative arranged in the same way can be improved. The Fatick region's partner Poitou-Charentes has high expectation about the financial accountability of the project as expressed by its representative Mrs Bel during our interview. One of the main concerns of Poitou-Charentes was the potential delay in the delivery of the funds which have henceforth to be transferred through Geneva and New York before it arrives in Dakar and reaches the target group. Hence the potential leaking of the amount of the funds during this long journey.

Table 2: Stakeholders' expectation concerning monitoring and evaluation

Stakeholders	Expectations concerning M&E
Regions (Ferlo regions and Fatick)	Transfer of experiences: monitoring information should provide guidance to better address climate changes issues.
Regions' partners in Europe	Financial accountability: To ensure that the project is on track and is being implemented for the benefit of the regions (Ferlo regions and Fatick)
CAP	Financial and procedural accountability: To assure the donor (UNDP) and his tutelage (MEF) that the project is on track and worthy of continued funding and is also doing what it intended to do.
DirCoD	Procedural accountability: To assure the partners (the donors included and governmental coordination agencies) that the project is on track and worthy of continued funding and is also doing what it intended to do.
UNDP Senegal	Financial and procedural accountability: To ensure that the project is on track and will achieve its development purposes.
UNDP HIP	Replication: M&E should provide information and guidance about the TACC approach for its dissemination worldwide.

Source author

Players such as the UNDP (Senegal country office and Geneva HIP) equally look for accountability (financial and procedural) and replication (a basis on which they will be able to design and improve future climate adaptation initiatives). As shown in **Table 2**, the interest for accountability is preponderant for UNDP country office while the

capitalisation of the successful experiences is of greater interest for the Hub of Innovative Partnerships. Indeed, beyond the achievement of the Senegal TACC project, the TACC approach is expected to be replicable throughout the world and as such the M&E should provide valuable information for its improvement.

To sum the stakeholders' expectations concerning M&E, the expectations are mainly related to financial and procedural accountability than to external learning and communication. Likewise, the existent M&E system of the TACC project is result-oriented and does not seem to be important to the project participants. Its relative top-down design makes it also less participatory because the project participants are considered as 'means to an end' and their participation as tools to achieve pre-defined goals (Johns, 2011). However it is advised in the project document that the M&E plan has to be implemented in a participatory way and should involve, if possible, all the project's stakeholders. It is also assumed that local communities and authorities that can be involved in the implementation of the M&E plan lack M&E skills and therefore will be consequently trained beforehand.

Another important point is that the M&E plan of the Senegal TACC project has to be approved by the CAP before it can be implemented, in order to make sure it suits the result-based managed project. Because of this requirement, the RMA-based M&E plan for the TACC project will not be designed as an alternative M&E plan for the Senegal TACC project. Rather this study proposes an additional tool that can help the project to successfully step up towards its system innovation goal by addressing the current main challenges in the process. It will be presented as a set of complementary actions that can help to sustain the project outcomes and contribute to the achievement of the goal.

6.2.- Identification of RMA-based M&E activities

The identification of new activities and goal(s) has to be done after an analysis of the concerns identified in the actual project's activities. The identification of the problems occurring in the Senegal TACC project and their causes provides ideas about the actions that have to be undertaken in order to improve the implementation of the project and then contribute to its achievement.

A causal analysis (**Appendix 2**) was done in order to identify the main problems and their interrelationship. It shows that the variety of actors involved in the Senegal TACC project is also part of the observed problematic context (van Mierlo *et al.*, 2010b). Because of decentralisation, it is clear that the Senegalese government is not anymore the actor who has to address issues that represent a global threat for the country's national development. Non-governmental organisations, local communities associations, regional authorities, and the private sector also have an important role to play in tackling complex issues such as climate changes. However the recourse of

multiple actors requires then new forms of organisation and collaboration that can facilitate such collective process (van Mierlo *et al.*, 2010).

The way the Ferlo initiative emerged and turned into the Senegal TACC project can be apprehended as a collective endeavour. Indeed the Ferlo regions have triggered convergent learning among the different actors involved throughout the conceptualisation phase of the Senegal TACC project by developing shared visions on complementary solution and problem into the framework of the interregional partnership in which all actors were assigned new roles and goal (van Mierlo *et al.*, 2010). The analysis of the actors' expectations, issue frames and the role they have played in the project's conceptualisation phase also reveals the premises of convergent learning. Therefore an RMA-based M&E plan can help the Senegal TACC project's participants to "scrutinize the relationships between the incumbent system, project activities, intermediate results, and the long-term, ultimate aim of system change" (van Mierlo *et al.*, in AJE 31(2), p 145).

The aim of the TACC approach as expressed in a UNEP⁶ publication is to enable sub-national governments to adopt a more sustainable development model by facilitating the exchange between regional governments in developing and developed countries that will result in emission reductions and greater resilience to climate change. Regions (sub-national governments) in Senegal have been exchanging with sub-national governments in Europe since 1998 through decentralised cooperation. The fulfilment of this prerequisite of the TACC approach explains the choice of the Senegal as country-pilot in 2008. However, despite the Senegalese regions commitment and expectations in such approach, the Senegal TACC project has had difficulties to starting. The assessment of its process design revealed major threats for the project implementation and achievement but also for the achievement of project's system innovation ambition. The identified hindering factors are:

- Lack of trust among the project's actors;
- Conflict of interest among the main project's stakeholders;
- Lack of involvement of regions in Senegal TACC the project;
- Inadequate project arrangements for effective stakeholders' participation;

Given the delicateness of the issue related to the project managerial arrangements, the RMA-based M&E plan will be designed as an additional tool which can help the project to achieve more sustainable outcomes.

⁶ Regions: A solution to climate change Territorial Approach to Climate Change - a global partnership between the United Nations and sub-national governments Available at http://www.unep.org/pdf/TACC_brochure_unep.pdf

I propose then to add within the fourth purpose of the Senegal TACC project' s logical framework and related to the successful management of the project the following sub-purpose: **“Improve regions participation and contribution towards more effective and sustainable outcomes”**.

Apart from the existing project' activities the implementation of the activities of the proposed sub-purpose will also be financially supported via a funding mechanism different to the Senegal TACC project financial arrangements. The Hub of Innovative Partnerships, which is interested in innovations, and the regions' partners in Europe, will be sought to financially support the implementation of the activities related to this new sub purpose. The last requirement is that the regions will be the implementers of the RMA activities (that are part of the RMA-based M&E plan) because they are more innovation-oriented than the governmental agencies. However, they will have to closely collaborate with the project management team in order to assure that all the activities (the existent and the new) are all tending towards the achievement of the Senegal TACC project. Moreover, such collaboration ensures to keep trust and improve collaboration among the regions and the project management team. Although the M&E plan is distinct from the project activities, it has to be closely entangled with the project plan in order to be part of the project management (RMA guide, 2010).

Since the Senegal TACC is being implemented and with regards to the hindrances identified previously, the main activities to achieve the new purpose will mainly consist of periodical workshops including all the projects stakeholders during which the project's progress, the implementation of the project's activities and the project's interactions with the incumbent system will be regularly monitored and assessed. During these workshops, the different RMA tools (actors analysis, timeline, audio-visual learning history...) will be used according to the purpose of each meeting and according to the issue which has to be discussed. For a detailed description of these tools see **Appendix 5**.

I assume that it is quite impossible to already predict the problems that will arise and to design a detailed M&E plan on this basis. Therefore, the plan shown in **Table 3** is a sketch of different activities and meetings to reflect on the problems which have been already identified and which can hamper the achievement of the Senegal TACC project's ambition. What can be clearly established is the schedule of the meetings and the composition of the participants and their main purposes which will be to identify the project's hindrances and reflect on ways to solve them as they emerge in order to keep high the ambition of the project.

As can be seen in **Table 3** the first concern is that stakeholders do not trust each other and especially the regions have a lot of distrust towards the UNDP and the National agencies (CAP and DirCoD). Overcoming such concern is one of the goals of the M&E plan. Because RMA is not intended for trust building, getting project's actors to discuss

about such issues will require negotiation skills. The different parties will be contacted and informed about the purposes of the “negotiation” initiative during informal discussions and consultations and once they show the willingness to discuss more openly with the other parties, it will be possible to apply then RMA. In fact in order to bring regions to trust more the national authorities and the UNDP, the national authorities have to accept to involve the regions in the management of the project and then to have some decision making power. This can be achieved through the use of RMA tools such as *Audio-visual Learning History* and *Timeline*. Focusing on the past, these tools can help to motivate people and make them aware of the importance and value of what they have achieved by looking backward in project's formulation phase. Making an Audio-visual Learning History of the first phase of the conceptualisation of the Senegal TACC project will emphasise what the regions did, how much effort it took and actually what they have achieved especially through the interregional cooperation. Such video could help national authorities to allow regions to be more involved in the management of the Senegal TACC project. In doing so the regions' lack of involvement in the project management will also be settled.

Table 3: Sketch of the RMA-based M&E plan

Desired outcomes	Key activities	RMA Tools	Resources	Timeframe
Increase trust among stakeholders	Identify the causes of distrust; Create sense of interdependency among them; Agree on clear collaboration rules.	Audio visual learning history	External monitor All the project stakeholders	First RMA workshop; Informal talks; Interviews;
The main project's stakeholders have complementary frames in the achievement of the project	Identify each party's claims; Re-framing; Clarify agreement's arrangements.	Audio visual learning history Actor analysis	External Negotiator/ facilitator All the opponents	As soon as possible; Informal meetings; Informal talks; Workshop
The regions are involved in the management of the project	Create sense of interdependency; Empower regions in decision making	Audio visual learning history	External monitor All the project stakeholders	As soon as possible; Informal talks, meetings
The project arrangements ensure effective stakeholders' participation	Consensually define the project arrangement	Audio Visual Learning History; Actor analysis	External monitor All the project stakeholder	Planning meeting

In order to overcome the second concern which is about achieving complementary frames among project's stakeholders, a more careful approach will be initiated. In fact the diverging frames among the project's stakeholders mainly explain the difficulties they have to agree about the urgency of the intervention and the way it should be

addressed. Before any meeting, informal talks with the different parties can be helpful to make them accept the necessity to meet up in order to settle all misunderstandings. Once the approach phase is achieved, a meeting involving all the parties can be scheduled and again a tool such Audio Visual Learning History can be used to help each party to “re-frame”. Moreover by stressing the value of the project's actors' participation in the process it is possible to create a sense of interdependency among them and therefore make them aware of the necessity to closely collaborate.

Actor analysis can be essential when it comes to create shared vision among the project's stakeholders and to enhance their involvement in a process. In fact actor analysis provides insights into the roles the regions have played in the project's formulation phase and why and how they should be involved in the management of the Senegal TACC project. It is an important tool which builds future action(s) on the ground of past experiences.

These concerns show how entangled and interdependent the problems are. This confirms again the need of a tool that can motivate the Senegal TACC project's actors to keep reflecting on the interrelation between the content of the project and its implementation process.

Again the RMA-based M&E plan is just a sketch of what could be done in order to achieve the new sub purpose. In fact given the dynamic character of change, new problems can emerge and the context of the Senegal TACC project might have changed over time since this research was conducted. That's why it is important to have room for reflection in order to identify hindrances as they emerge, to assess their level of harmfulness towards the project's ambition and to take action (for instance by initiating informal discussions with actors and once they feel willing to have constructive talks each other, define with them the structure of the workshop and identify the appropriate RMA tools to use).

7.- FINAL CONCLUSIONS

In this chapter the context of the study is summarised and the different research questions answered. The second part is a reflection about the issue addressed in this study, the limitations of the study design and the theories use. It ends with my personal reflection about the contribution of RMA for climate adaptation initiatives in developing countries.

7.1.- Conclusions

The way the Senegal TACC project has been formulated since the sustainable development of the Ferlo initiative until it became a national governmental project provides an interesting insight in project design and development cooperation in Senegal. Overall, the study has clearly demonstrated the complexity of the Senegal TACC project but also the complexity of the issue to address.

It can be seen in this study that the decentralisation in Senegal is a policy process which despite its ambitious goals reveals lots of ambiguities. Declaring that a sector is “decentralised” does not guarantee success because the decentralisation process is considerably more complex (Andrews and Schroeder, 2003). In fact regional actors still have to adapt to all kind of new duties, rules and policies in order to redefine their roles, means, capacities, and interrelationships. However notwithstanding this unstable institutional context, regional actors in Senegal managed to undertake development initiatives. These initiatives were designed according to the identified issues and their potential solutions. Since 2006, the Ferlo regions and Fatick are addressing several issues with the financial and technical support of regions partners in Europe. This regions' joint-initiative to identify means for the integrated sustainable development of the Ferlo area inaugurated a new form of collaboration between them around a common ambition. The Ferlo initiative was also sparked by the regions' interest to find technical support to effectively address the issues that were threatening their development initiatives and to acquire financial means to improve their working conditions. As the owners of the interregional partnership from which the TACC is originated, regions are key stakeholders or important actors for the Senegal TACC project. The Ferlo initiative was facilitated or brokered by the Saint-Louis region in Senegal, Rhône-Alpes (one of the regions' partner in Europe) but also by international development agencies such as the UNDP's Hub for Innovative Partnerships. So it can be said that the decentralisation context and its complexity in which the intervention takes place can be considered as a window of opportunity because it gives more autonomy to the regions to establish innovative collaboration arrangements among each other and with other partners in order to better address climate changes issues. The importance of innovation brokers was demonstrated and there is a need to involve organisations that are specifically dedicated to these brokering roles in the entire project life cycle. Furthermore through

the role in transforming the initial idea about the sustainable development of the Ferlo area into an ambitious national governmental project, the region of Saint-Louis, the French region of Poitou-Charentes and the UNDP's Hub for Innovative Partnerships were recognized to be innovation brokers. The contribution of such innovation intermediaries is also considered to be essential not only during the formulation phase of the Senegal TACC project but also during its implementation.

As mentioned above, the conceptualisation phase of the Senegal TACC project was mainly initiated by the Ferlo regions during the studies on the integrated sustainable development initiative of the Ferlo area. The final outcome of the conceptualisation of this Ferlo initiative resulted in a national project approved by the Senegalese government with the intention to be managed by national authorities. Known as the Senegal TACC project, it was shaped by institutional and managerial arrangements that did not include the regions. The process through which this important change occurred investigated in this study.

The analysis of the conceptualisation phase of the Senegal TACC project showed that all the relevant stakeholders were involved in the formulation process. Despite the fact that their expectations and stake were taken into account, the final shape of the Senegal TACC project revealed that the main stakeholders that initiated the Ferlo initiative were just used as a means to an end and their involvement in the process was a pretext to legitimate or to claim the participatory character of the process. It was found that the conceptualisation phase of the Senegal TACC project did not provide enough space for effective stakeholder involvement. The study reveals then how the outcome of this formulation phase led to the difficulties observed in the start the Senegal TACC project.

Despite the fact that the stakeholders' concerns were taken into account in the formulation phase, the final outcome of this phase failed to translate these concerns into managing role or decision-making power for the regions. This triggered what Petrocik (1996) called *issue ownership* among the project's stakeholders which highlighted the difficulties noticed in the start the Senegal TACC project. This conflict shows the limitation of the formulation process but also constitutes an important starting point for the improvement of the Senegal TACC project implementation. In fact it is from the concerns observed during the formulation phase and the stakeholders' expectations regarding M&E that an additional sub-purpose that supports the development of a Reflexive Monitoring in Action (RMA)-based M&E approach was proposed. A reformulation of the projects activities and goals was however not considered appropriate since the additional sub-purpose is intended to fill the gap and the inconsistencies in the formulation phase. The proposed RMA-based M&E plan for the Senegal TACC project, derived from the stakeholders' M&E needs assessment, the complexity of the issue to be addressed and the policy context (in which it has to take

place), was designed in a way that allows to integrate and take into account new concerns that might emerge. It is also worth noting that facilitating learning among the Senegal TACC project's actors and continuous reflection on the project's activities are essential to enhance the far-reaching ambition of the project.

Through this study it became clear that climate change projects such as the Senegal TACC project face problems which are inherent to their management but also to the way they address the issues at stake. If not taken into account and managed carefully, these problems can be serious threats for the projects' achievement.

The Stern Review (2007) stated that the mutual interdependency of climate change and development poses a real threat to developing countries and according to Fulco *et al.* (2007) development is considered by to be one of the best adaptation strategies. This implies that the design of climate adaptation projects should also include development goals. Integrating development goals to climate adaptation initiatives will involve more actors and therefore requires more coordination abilities. People need to be empowered to be able to better address and adapt to climate changes issues. Because climate change adaptation is a social learning process (Adger and Kelly, 1999; Adger, 2003) the successful involvement of the TACC project's actors from the conceptualisation phase is therefore essential to establish a basis for reflection and fundamental learning.

The complexity and uncertainty characterising climate change issues require interventions that are designed to adapt to the unpredictable nature of the issue. The analysis of the project's important stakeholders' issue frames showed that climate change is seen as a serious threat to overall development. However the way the stakeholders think climate change has to be addressed is different. Hence to be able to effectively address climate change, climate adaptation projects must be innovative design-oriented and supported by a monitoring approach that emphasizes experimentation, learning by doing, and dynamic interactions among the project's actors (RMA guide, 2010). With the ambition to address climate change issues through the enhancement of the regions capacities, the Senegal TACC project needs an appropriate management and monitoring approach to be in place that ensures the achievement of this ambition. The study was initiated with the assumption that Reflexive Monitoring in Action (RMA) can help climate adaptation projects to achieve more sustainable outcomes. The analysis of the TACC formulation phase complemented with the analysis of the involved stakeholders, their issue(s) frames and expectations provided insight about the Senegal TACC project's needs regarding M&E. From the analysis of expectations concerning M&E of the Senegal TACC project's manager and important participants, a set of new activities aiming to trigger and enhance reflection, learning and new practices were outlined in an RMA plan and tools to facilitate such process were chosen. It would however be unrealistic to design a predefined M&E plan

since the hindrances the Senegal TACC project would face cannot be predicted in advance. However, by facilitating the emergence of reflection, learning and new forms of collaboration through the use of specific RMA tools, one can make the relevance of RMA for the Senegal TACC project more salient.

7.2.- Final reflection

This study was a wonderful learning journey. After a couple of years of working experience in the sector of development projects, I was excited for having the opportunity to experiment RMA in a development project in Senegal. The complexity of the project combined with the complexity of the addressed issue enabled me to apprehend the enormous potentials of RMA. With the prime “intention” to apply RMA as a blue print at the beginning, I discovered that RMA was not only intending to a reflexive way of measuring and taking into account the actions of an intervention but also a way of thinking and acting that provides provisions for great achievement. Applying RMA requires flexibility and willingness to reconsider the goal of the intervention.

This study contributed to widen the scope of application of RMA into the complex domain of climate change. Moreover it provided insights about the use of RMA in an early stage of a system innovation project. Because of the political context and the difficulties at the start of the project in 2010, the focus of this study which initially intended to investigate the extent to which RMA could contribute to improve climate adaptation project was shifted into the evaluation of the formulation phase of the Senegal TACC project. This new focus was challenging and led to unexpected outcomes. In fact it came out that the main hindrances in the start up were related to the process (the managerial arrangements) and not to the content (activities to implement). The fact that the RMA plan which has to be designed for the Senegal TACC project has to be based on issues identified during the assessment of the project's formulation phase will increase the consistency of such M&E plan.

One of the biggest constraints when conducting the research was the lack of trust between the different stakeholders. On top of that the political stakes were high. As a result most stakeholders were hesitant to discuss and share their real feelings and ideas about the project. The stakeholders found it difficult to share sensitive issues with an outsider not knowing where the information might end up.

Another limitation of this study was the time constraint because there was a long *statu quo* during which I was unable to take any action concerning the researches to conduct because the stakeholders did not want to talk about the project and to reveal to an outsider the sensitive exchange they were having together. Due to the lack of trust there was also a delay in action and the planning workshop was delayed with 2 months. This delay resulted in a long status quo during which I was unable to take any

action. Since the political stakes were high it was also difficult to conduct my inquiries. In the end these delays limited my research because it was impossible for me to wait till all disputes between the stakeholders were finished. So all in all it took me a while before I could have something concrete to work on and in the end it resulted in a lack of time to translate the interviews and to transcript them all.

The stakeholder theory was of great help in conducting this study. It provided an interesting framework to analyse the stakeholders' involvement in the Senegal TACC project. Finally it contributed to my understanding on how the variety of actors involved in an intervention could improve it but also make it more complex.

The role of innovation intermediaries was stressed and their contribution for ambitious initiative demonstrated. Innovation brokers are predicted to play a greater role in the achievement of climate adaptation initiatives.

Reflexive Monitoring in Action was not just a theory used in this study. It was the lead of the process I went through from the fieldwork to the writing of his report. Its potential for climate adaptation initiatives was demonstrated and will be undoubtedly be confirmed by further research.

I was also expecting to have a nice an beautiful M&E plan for the TACC project as an outcome of this study (I think I promised to the regions to share it with them) but I realised that the M&E plan has to be filled up step-by-step as the problems emerge with regards to the project's purposes. This shows the dynamic nature of RMA, each intervention faces it own problems and then will require a specific RMA intervention. This also widens the scope of the use of RMA which constitutes from my student point of view the future of M&E.

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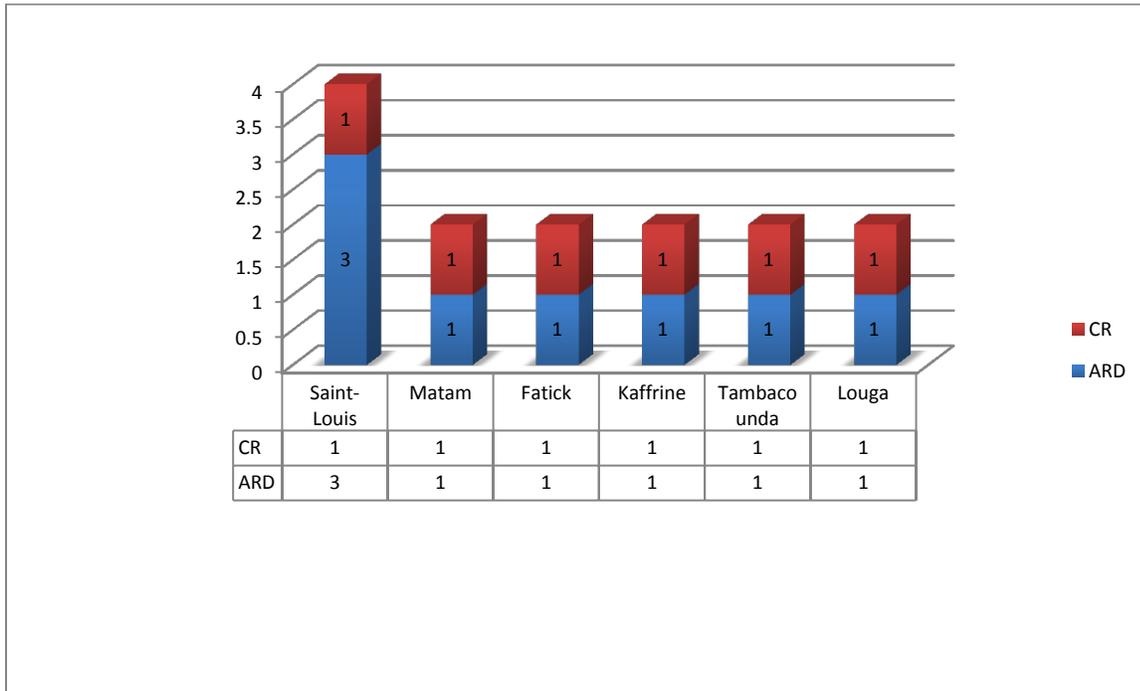
9.- APPENDICES

Appendix 1

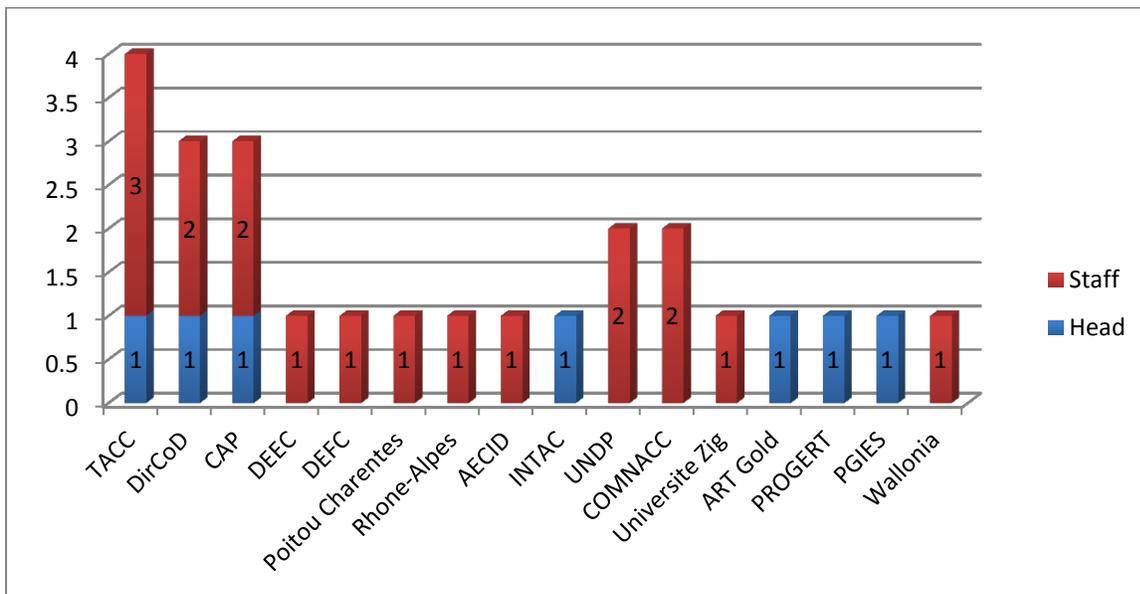
Appendix 1.1. List of interviewees:

Momar	NDIAYE	ARD Louga
Babacar	GAYE	CR Kaffrine
Maguette	KAIRE	Universite de Ziguinchor
Aliou	NIANG	CR Saint-Louis
Aliou	KANDJI	ART GOLD
Alassane	NDOUR	CR Fatick
Famara	SARR	CR Fatick
Abdoul Aziz	TANDIA	ARD Tambacounda
Bakary	SIGNATE	CAP
Birame	DIOUF	COMNACC
Babacar	DIA	TACC
Bouna	WAR	ARD Saint-Louis
Mahmoud Elimane	KANE-	ARD Saint-Louis
Arona	DIA	CAP
Khalifa Ababacar	FALL	CAP
Samba Khary	CISSE	CR Louga
Mamadou Saliou	DIALLO	CR Tambacounda
Mamadou	LO	ARD Kaffrine
Abdoulaye	DRAME	CR Matam
Alioune Blaise	MBENGUE	ARD Matam
Madeleine Sarr	DIOUF	DEEC
Daniel	ANDRE	DEFC
Mamadou Dior	DIAW	DirCoD
Khady	FALL	DirCoD
Aliou	NIANG	CR Saint-Louis
Amath	DIA	CR Saint-Louis
Babacar	DIOUF	INTAC
Moussa	DIOUF	PGIES
Ibra Sounkarou	NDIAYE	PROGERT
Judith	BEL	Poitou Charentes
Adama	SOW	Rhone Alpes
Amadou	KANE	Wallonia
Dieynaba	DIAW	CAP
Ines	DIEGO	AECID
Ibrahima	DIENG	TACC
Issa	FOFANA	TACC
Amadou Methiour	NDIAYE	TACC
Arona	FALL	UNDP
Mame Dagou	DIOP	UNDP

Appendix 1.2: Number and origin of the interviewees from the regions

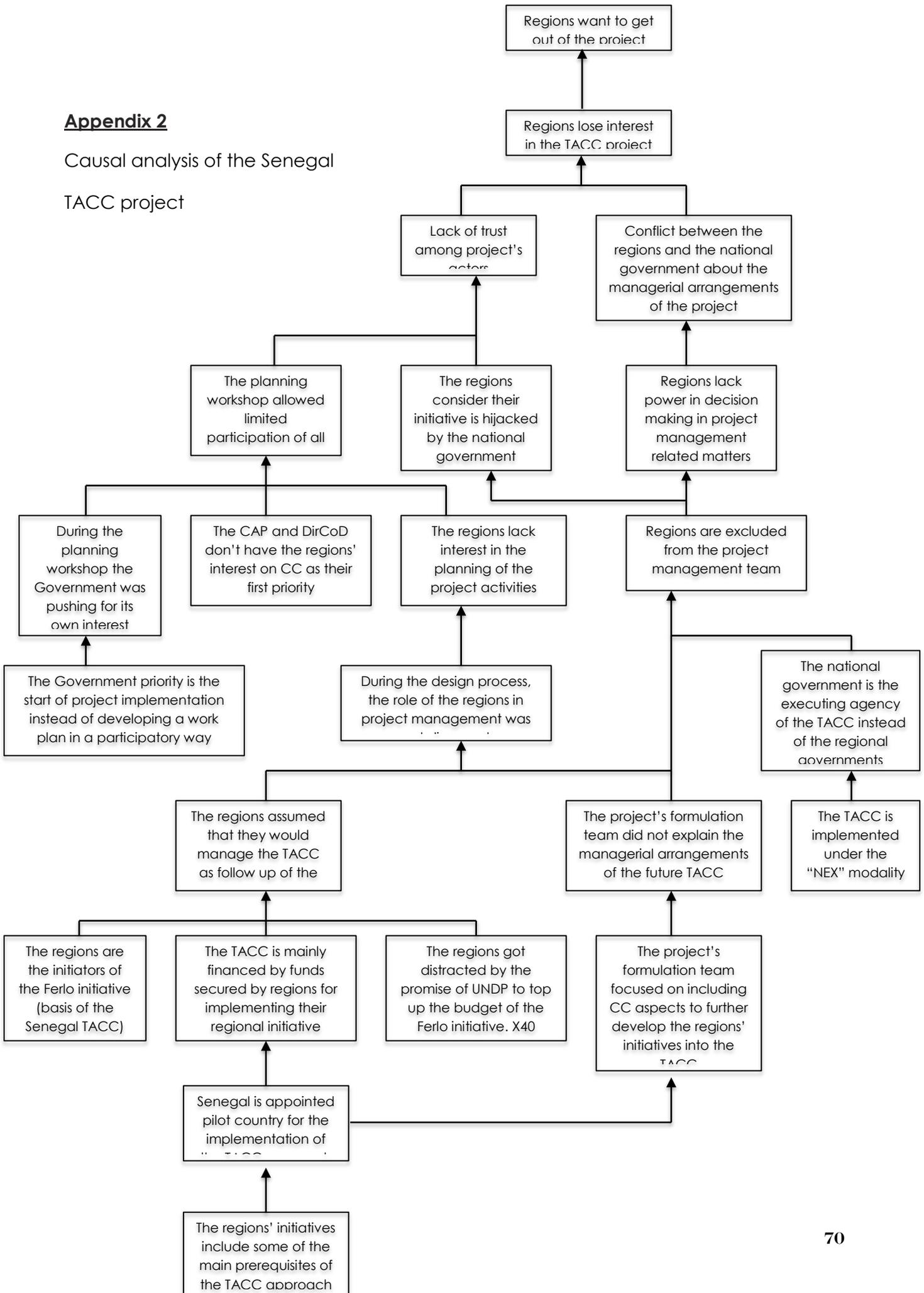


Appendix 1.3: Number and origin the other stakeholders interviewed



Appendix 2

Causal analysis of the Senegal TACC project



Appendix 3

Appendix 3.1: Questionnaire

Atelier de planification du TACC

Je vous invite à remplir ce questionnaire afin de m'aider a compléter les informations que j'ai déjà collectées (**ceux qui appartiennent a des structure autre que les régions peuvent commencer directement par le point 4**)

Nom :

Contact :

1. Le nombre de partenariats ou partenaires de votre région:
2. Le nombre de vos partenaires soutenant le programme TACC
3. Les objectifs de l'Entente a laquelle votre région fait partie
4. L'ambition du programme TACC selon vous
5. Le ou les problèmes auquel(s) le TACC est confronté(s) selon vous :
6. La configuration idéale du programme TACC selon vous

Appendix 3.2: Semi-structured interviews

Pouvez-vous me dire comment le project TACC a ete elabore? *Could you please tell me about the way the Senegal TACC project was formulated?*

Pouvez vous me parler du role que votre region dans ce processus? *Could you please tell me the role your region played in the formulation process?*

Qui etait en charge de la coordination de ce processus au sein de votre structure et au niveau regional? *Who was in charge of the coordination of the formulation process in you organisation and at the regional level?*

Que pouvez vous me dire a propos du projet TACC? Comment trouvez vous ses objectifs? *What can you tell me about the Senegal TACC project? What do you think about its purposes?*

Que constituent les changements climatiques pour vous? *Can you please tell what climate changes inspire you or represent for you?*

Comment appréciez-vous le travail qui a été fait jusqu'ici? *How do you find what have been done so far?*

Pouvez-vous m'expliquer ce qui retarde le démarrage du programme TACC? Y a-t-il autre chose que vous pouvez me dire sur le montage du projet? *Can you tell why the Senegal TACC project did not start yet? Are there any other things you can tell me about that?*

Appendix 4: Decree of recognition of the interregional partnership.

JOURNAL OFFICIEL DE LA REPUBLIQUE DU SENEGAL

MINISTERE DE LA DECENTRALISATION ET DES COLLECTIVITES LOCALES

Décret n° 2009-1268 du 13 novembre 2009

Décret n° 2009-1268 du 13 novembre 2009 portant approbation de l'Entente interrégionale entre les conseils régionaux de Louga, Matam, Saint-Louis, Tambacounda et Kaffrine.

[| RAPPORT DE PRESENTATION |]

L'article 71 de la loi n° 96-06 du 22 mars 1996 portant Code des Collectivités locales permet à deux ou plusieurs conseils régionaux de créer entre eux, à l'initiative de leur Président, des ententes sur des objets d'intérêt régional commun dans leurs attributions.

C'est dans cette perspective que les présidents des conseils régionaux de Saint-Louis, de Louga, de Matam, de Tambacounda et de Kaffrine ont pris l'initiative de mettre en place une Entente Interrégionale pour une gestion concertée de la Zone Sylvopastorale par la formulation et la mise en oeuvre d'un programme intégré de développement durable.

Cette entente a pour objectifs :

- ▶ la prise en charge efficace des compétences transférées, par une offre de services publics de qualité, touchant le plus grand nombre de citoyens ;
- ▶ la lutte contre la pauvreté ;
- ▶ la gestion durable des ressources naturelles et la sauvegarde des écosystèmes, pour assurer de bonnes conditions de vie aux générations actuelles et futures.

Conformément à l'article 71 précité, ces ententes font l'objet de conventions autorisées par les conseils régionaux respectifs, signées par leur président et approuvées par décret.

Telle est, Monsieur le Président de la République, l'économie du présent projet de décret.

Décrète :

Article premier. - La Convention d'Entente Interrégionale pour une gestion concertée de la Zone sylvopastorale signée, entre les présidents des conseils régionaux de Louga, Matam, Saint-Louis, Tambacounda et Kaffrine est approuvée.

Art. 2. - Ladite Convention a pour objet la formulation et la mise en oeuvre d'un plan intégré de développement durable de la Zone sylvopastorale au profit des populations des Collectivités locales concernées.

Art. 3. - Le Ministre d'Etat, Ministre de l'Environnement, de la Protection de la Nature des Bassins de rétention et des Lacs artificiels, le Ministre de la Décentralisation et des Collectivités locales, le Ministre de l'Agriculture, de la Pisciculture et des Biocarburants et le Ministre de l'Elevage sont chargés, chacun en ce qui le concerne, de l'exécution du présent décret qui sera publié au Journal officiel.

Fait à Dakar le 13 novembre 2009.

[/ Abdoulaye WADE.

Par le Président de la République :

II. Actor analysis plus causal analysis

Introduction

As a monitor or project manager, you may get the feeling during the design phase that some of the members of the project team have a restricted view of their contribution and role. One may see himself only as an adviser on various substantive aspects; another only takes action when something needs organising. Discussions and progress seem to be determined by those who have the most to say, based on their own contribution or expertise. As a result of this, there is no shared vision about the role that this project has in contributing to a longer-term ambition, namely system innovation. There are two reasons for this superficiality:

1. A limited picture of the way the project is embedded in the wider system (i.e. the various social parties and institutions). This wider insight is needed in order to obtain a better understanding of the role of the fields of expertise in the project team. That also incidentally enables particular fields of expertise to be identified that are lacking. Expansion of the project team or the network of participants may then be necessary.
2. A limited picture of the factors at the system level (and their interrelationships) that are holding back the project. This insight is needed for building on the project description: what should be done? What items are we going to tackle and in what order? What exactly are the key items and the peripheral issues? And will this contribute to the desired system innovation or not?

An actor analysis provides insight into which actors are playing a role within the system, and who should be involved with the project and in what way. A causal analysis provides genuine understanding of factors that are holding back the project. In the causal analysis, 'why' questions are used to gather reflective answers systematically, thereby allowing the causes of problems or stagnating processes to be determined at increasingly deep levels. The answers can then be glued together to produce a coherent schema of cause-and-effect relationships: the causal tree.

Causal analyses are good at revealing *hierarchical cause-and-effect relationships*. It produces *diagrams* in which the symptoms are at the top and the deeper-lying causes at the bottom. The relationships are constructed using logic rules. Each connecting line from top to bottom represents an answer to the question "why" or "what is the underlying cause of this?" If you read the tree upside down, from the roots to the top, then it provides insights that are structured as: if <the lower argument> is the case, then one consequence is <the associated higher argument>. Working on solutions for problems that are high up in the causal tree is merely tackling symptoms temporarily. The causal analysis shows what the best and worst areas to put your efforts into, from an effectiveness point of view. A good project strategy focuses on aspects that are as low as possible in the tree but are still changeable, thereby resolving the higher-placed symptoms at one fell swoop.

VII. Timeline and eye-opener workshop

Introduction

The monitor or project manager may find it valuable to reflect, along with the participants, on the challenges, successes and learning experiences of the project. Another important task is to get these lessons across to others, such as clients, other project managers and colleagues. Because these 'outsiders' are not familiar with the experiences acquired by the project, the more generic insights that the participants have gained may seem to them to be self-evident. It is for example pretty obvious that mutual trust has to be created. But why it is so difficult and how it can nevertheless be achieved are insights that are worth getting across.

The timeline method¹ provides a working format for expressing the challenges, successes and learning experiences explicitly, together with the project participants.

The eye-opener workshop is an additional tool for turning outsiders into project insiders, as it were. The experiences and results of the project are narrated in detail during the eye-opener workshop. The participants then reflect on the events, each from their own perspective. This lets them extract the lessons from the project experiences that are significant for their own situations. It is therefore not the monitor or project manager who determines which lessons are relevant, but the (potential) knowledge recipient. A timeline or eye-opener workshop takes at least three hours and is done with a small group (between three and eight participants).

Comparison with the audiovisual learning history and other tools

What distinguishes the eye-opener workshop from other monitoring tools is the interactive transfer of learning experiences, in contrast to the (textual) reports and the audiovisual learning history.

The timeline, combined with the eye-opener workshop, does have an overlap with the audiovisual learning history. The transfer of experience/knowledge, both internally and externally, is central to both tools. However, the differences are that the eye-opener workshop (1) is face to face, (2) is aimed at a specific, small target group and (3) takes far less time to prepare.

The timeline and the eye-opener workshop can incidentally be combined very well with the audiovisual learning history. The film fragments that are gathered for the latter can be used to tell the story of the project in the workshop.

Approach

The timeline and the eye-opener workshop are extensions of each other. The biggest difference is that the timeline is done with project participants, and the eye-opener workshop with outsiders. The eye-opener workshop can build on the results of reflecting on the timeline.

Timeline

The timeline workshop is suitable for getting project members to reflect jointly on project events. Depending on the duration of the project and the number of participants, a timeline workshop will take about 2 to 4 hours. The timeline workshop can be led by the monitor or project manager.

VI. Audiovisual learning history

Introduction

Recording the learning experiences that a project has generated in an accessible and attractive way is quite a challenge for the monitor or project manager. The project results are often described in conceptual terms (for example in scientific publications) or in management terms (in reports and memoranda). The 'personal' history of the project, however, can be lost in this process. The challenges that the project participants encountered along the way, the choices that they made and the lessons they learned – such aspects are not expressed enough in the conceptual and management texts. Yet recording these narratives of experiences is precisely what is crucial if the project members are to learn from their own experiences and from those of each other. Participants in other comparable projects can also benefit from this record of experience and knowledge.

The audiovisual learning history fulfils this need. Participants can use this tool to put their learning experiences into words and record their knowledge and experience on video. The audiovisual learning history is different from other tools because it is audiovisual in nature. It creates an accessible and attractive product that not only gives the viewer insights into the abstract learning experiences within the project, but also into the struggles and questions faced by the project team members. The visible presence of the person who has gone through the learning experience can let them act as a source of inspiration or role model for the viewer.

Appendix 6: The Senegal TACC project stakeholders

The regions: They are subnational entities established for the purpose to improve the effectiveness of administration. Granted with political and economical autonomy by the “decentralisation act” (*loi sur la decentralisation*) of 1996, regions self-manage themselves through their own local elected governments. Despite this political willingness to make regions autonomous, regional governments are still financially limited to carry out their responsibilities. In order to overcome such limitation, regions in Senegal have developed technical and financial cooperation with regions in Europe. The Ferlo regions and Fatick are the initiators of the Senegal TACC project through their local climate adaptations initiatives (Ferlo concept project and Fatick's sustainable development project). By means of innovative strategies and fruitful cooperation, they have succeeded to put the Senegal in the front of the countries that have to provide guidance for climate adaptation initiatives. Moreover, regions support the implementation of the Senegal TACC project by allocating the third of the budget of their development projects to the functioning of the Senegal TACC project. Despite this commitment, they are excluded in the management of the project and are just considered as beneficiaries.

The regions partners in Europe: Regions in Europe (France, Spain, Italy and Belgium) such as Poitou-Charentes, Rhone Alpes, Catalonia, and Wallonia have been supporting the development efforts of regions in Senegal for more than a decade within the framework of decentralised cooperation. The technical and financial support they have provided to regions in Senegal contributed to enhance regions efforts to carry out their own responsibilities. Through this long and effective partnership, regions in Europe are key partners for regions to implement local development initiatives. Beyond this targeted support, regions in Europe play also help regions' in Senegal to be in touch with organisations, institutions or actors that can somehow contribute to improve the impact of their actions. For instance Rhone-Alpes supported the Ferlo concept-project by providing the financial means necessary for the preliminary researches but also by involving the UNDP that provided the final shape of the project. Regions in Europe are mainly funding the Senegal TACC project on the basis of their agreement with the Ferlo regions and more recently Fatick to allocate the third (1/3) of their projects' budget for the functioning of the TACC project. They also share the Ferlo region position about the Senegal TACC project institutional anchorage but did not yet show enough commitment to influence the process.

The Projects and Programs Implementation's Support Unit (CAP): The CAP is a support unit of the Ministry in Charge of Economy and Finances that has been established jointly by the Senegal State, the UNFPA and the UNDP since 2006. Its main purpose is to provide advise and support to development projects and programs that are executed under the National Execution (NEX) modality in order to improve and make more effective their implementation. Under this “NEX” modality, the Government of the

recipient country has the final executive responsibility and “assumption of accountability for the formulation and management of UNDP-supported programmes and projects”(Governing Council decision 92/22 of 26 May 1992 in Cox 2007). The CAP is responsible for monitoring the Senegal TACC project's financial performance and coordinating its annual audit. Moreover it supports its implementation, the formulation of the project's procedures manual and if necessary the strengthening of the managers capacity on result-based management. The CAP steered the annual planning workshop of the Senegal TACC project and supervised the design of the 2011 work plan.

The Decentralised Cooperation Directorate (DirCoD): The DirCoD is part of the Ministry in charge of Decentralised Cooperation that is the governmental cooperation agency within the framework of the Senegal TACC project. It was established in 2003 with the main objective of achieving harmonious local development in the entire Senegalese territory by strengthening the powers and capacities of local communities. The DirCoD has in charge the design and the implementation of the national policy concerning decentralised cooperation, to assist regions to find development partners and to advise and assist them in their collaboration with their partners. The DirCoD has also the role to ensure that the initiatives taken through decentralised cooperation fit into the national development strategy structure. Within the framework of the Senegal TACC project, the DirCoD is leading the National Steering Committee on the behalf of the Ministry in charge of Decentralised Cooperation and as such has to guide and coordinate the implementation of the Senegal TACC project. It's one of the key players of the project.

The Environment Directorate: Under the tutelage of the Ministry in charge of Environment and Nature Protection, the Environment Directorate (DEEC) aims to prevent and control pollutions and nuisances by monitoring air quality and regulating hazardous waste, and critical quality of life issues, including noise. The DEEC has also to systematically assess the potential environmental impact of new policy, legislative initiatives and development programme. It advocates also the integration of environmental concerns into national and regional policies. Within the framework of the decentralisation process, the DEEC is providing essential support to regional governments to put environment objectives at the frontline of their development effort. The DEEC through its regional offices provided technical support and assisted the Ferlo region and Fatick in designing their climate adaptation projects. The DEEC has steered the formulation of the country National Adaptation Plan of Action (NAPA) and is at the national level the responsible body for all activities related to climate adaptation, clean development mechanisms.... It plays an advising and support role within the Senegal TACC project through the COMNACC and the COMRECC. The role of the DEEC will be crucial for the design of the Integrated Territorial Climate Plan which has to be one of the major outcomes of the Senegal TACC project.

The Waters and Forests Directorate: Established since 1932 under the colonial regime, the Waters and Forest Directorate has the following purposes:

- Research and production: By identifying, designing and implementing relevant development projects; identifying, improving and promoting the botanical performances of plant species;
- Advise and support: by advising stakeholders involved in sustainable natural resources management through a participatory approach and gender equity; assisting communities in the construction of rural engineering works (dams, canals, tracks, firewall...);
- Protection and forestry police: against bush fires, poaching, over exploiting the timber resources and pollution; enforce regulations on natural resources management, including the provisions of the Forestry, Hunting, and Inland Water Fisheries Acts.

The DEFC has in charge the design and the implementation of the country national forestry policy with regards to soil conservation and wildlife conservation. The DEFC is a privileged partner of the regions since the Forestry has been especially adapted to the decentralisation context. Its regional departments (IREF) were closely involved in the researches and the formulation of the Ferlo initiative. This long partnership and collaboration between the DEFC and the regions partly explains the willingness of the latter to anchor the Senegal TACC project to the Ministry in charge of Environment and Nature Protection.

The United Nations Development Program UNDP (Senegal Country Office⁷): The UNDP is the UN's global development network, advocating for change and connecting countries to knowledge, experience and resources to help people build a better life. UNDP aims to develop strategic alliances with European Regions and Local Authorities for decentralized cooperation and helps developing countries attract and use aid effectively.

In Senegal the UNDP intervention is based on the so-called "country programme" which focuses on strengthening national capacities for the achievement of the MDGs through the access to development resources. The "country programme" strategy is based on the development of dynamic partnerships, including South-South partnerships with government agencies, civil society, grassroots communities, the private sector and development partners. Programme management focuses on results (Result-Based Management approach). The national execution (NEX) is the standard by which projects and programs are executed with application of the specialized agencies of the UN system, civil society and the private sector. Therefore, the experience of the Government and the UNDP on the "NEX" modality led to the establishment and

⁷ Information gathered from the UNDP.

operationalization of the Project and Programs Implementation's Support Unit (CAP) of the Ministry of Economy and Finances (MEF), jointly funded by the Government, UNFPA and UNDP.

The UNDP country office also develops partnership with regions and local authorities through several programmes, such as the ART GOLD Programme (Governance and Local development), the UN-Regions Partnerships "Towards Carbon Neutral and Climate Change Resilient Territories" (TACC programme), the LEDA Programme (Local Economic Development Agency) and the WACAP Programme (World Alliance of Cities Against Poverty). The UNDP contributed to incorporate the initiatives of the Ferlo regions and Fatick into the worldwide TACC programme in which its contribution is about 90.000 \$ per year.

The United Nations Development Program UNDP (Hub of innovative initiatives Geneva):

The role of regional and local communities (subnational governments, regional and local actors from the private, associative and academic sectors) in the field of development is increasingly recognised by the United Nations. Because of their responsibilities, their expertise and their accountability in planning and implementing development strategies for their own territories, they play a crucial role in the achievement of the Millennium Development Goals (MDGs) by the bridging of "the global" and "the local" level.

In September 2005, the United Nations Development Programme (UNDP) established, within its Liaison Office in Geneva, the Hub for Innovative Partnerships, aiming at recognizing the role of regional and local communities and supporting them in facing development challenges. The main purposes of the Hub are to support national governments to achieve their decentralization policy processes by assisting regional and provincial governments in identifying and implementing their own development strategies and through facilitating innovative partnerships with all stakeholders: intergovernmental organizations, governments, communities, civil society, universities and the private sector. A Trust Fund, managed by the Hub, has been implemented for this purpose. According to the interviewees from the Ferlo regions, the Hub promised during the formulation of the Senegal TACC project to provide a financial support up to forty (40) times the budget regions will be able to secure. According to them there is miscommunication between the Hub and the UNDP country office in Senegal concerning the funds of the project.

The Project Management Unit (the PMU): The PMU is responsible for the effective implementation of the project mainly concerning the planning, the supervision and the correct execution of the activities such as: the design, development and implementation of national and regional work plans; the production of periodical and annual regional and national progress reports; the correct disbursement of financial resources accordingly to work plans and corresponding budgets in coordination with

the UNDP and the CNP; operations and financial accounting; the project's internal and external communication, *inter alia*, to ensure the effective management of the Programme's implementation. The Government and the UNDP toward which the PMU is accountable have recruited the entire team of the PMU. Some member staff such as the experts are firmly recused by the regions that want expecting to recruit their own expert according to their future development plans.

The National Climate Change Committee (COMNACC): Created in 1992 and legally established in 2003 by the decision n°1220 MEPN/DEEC of the Ministry in charge of Environment and Nature Protection (MEPN), the National Climate Change Committee (COMNACC) aims to be a tool for the training, awareness raising, coordination, consultation, management and monitoring of the different activities identified as part of the implementation of Green House Gas Emissions' reduction measures and for climate change adaption. The COMNACC is constituted of all stakeholders governmental or non-governmental involved in or related to the climate sector in Senegal. It acts in all domains related to activities taken into account by the United Nations Framework Convention on Climate Change and its additional legal instruments.

Besides its informing, awareness raising, and training role, The COMNACC also facilitates the design, the funding, the implementation, the approval and the monitoring of national, sub-regional and regional projects related to, *inter alia*, climate change, capacity building, biodiversity preservation, carbon sequestration, wetlands management etc. The members (President and the Vice-President) of the COMNACC are appointed by the MEPN for a two years term mandate. The Executive secretariat of the COMNACC is ensured by the DEEC and the President should be a member of the civil society or from a non-governmental organisation while the Vice-president has to be a civil servant. The Regional Climate Change Committee (COMRECC) fulfils at the regional level the role of the COMRECC. The COMRECCs are the steering bodies of the Senegal TACC at the regional level. With about sixty members with real expertise on climate or environment related domains, the COMNACC is at the frontline of the struggle against climate changes in Senegal.