Integrating Gender Aspects in Natural Resource Management: Ensuring the Sustainability of Environmental Projects in Senegal

Astrid Bagouna Akoyoko
Integrating Gender Aspects in Natural Resource Management: Ensuring the Sustainability of Environmental Projects in Senegal

Astrid Bagouna Akoyoko

Supervisor: May-Britt Öhman
Evaluator: Lars Rudebeck
Contents

1. Introduction ........................................................................................................................................ 1
   1.2 Sustainable Development approach ............................................................................................. 2
   1.3 Foreign Aid and Non-Governmental Organisations ................................................................. 3
   1.3.1 Environmental NGOs and gender aspects ............................................................................... 4
   1.4 Thesis description ......................................................................................................................... 4
   1.4.1 Aim of the Thesis .................................................................................................................. 4
   1.4.2 Structure of the Thesis ........................................................................................................... 5

2. Contextual and Conceptual framework ............................................................................................. 6
   2.1 Contextual framework ................................................................................................................ 6
   2.1.2 Official Development Assistance to Senegal in the environmental sector gender issues .... 7
   2.2 Conceptual framework .............................................................................................................. 8
   2.2.1 Natural Resource Management ............................................................................................ 8
   2.2.1.1 Natural Resource Management in Senegal ........................................................................ 9
   2.2.1.2 Social issues in community’s forest and land management .................................................. 9
   2.2.1.3 Protected Marine Areas and communities’ participation .................................................... 10
   2.2.2 Role of Gender in Natural Resource Management ............................................................... 11
   2.2.2.1 Gender issues, environmental issues and access to assets ................................................. 11
   2.2.2.2 Women and Development versus Gender and Development ........................................... 12
   2.2.3 Project management and Gender Mainstreaming .................................................................. 13
   2.3 The study’s Framework .............................................................................................................. 14

3. Methodology ..................................................................................................................................... 15
   3.2 Sampling selection .................................................................................................................... 15
   3.3 Research setting and Data collection ....................................................................................... 16
   3.4 Anonymity ............................................................................................................................... 17
   3.5 Data analysis .......................................................................................................................... 17
   3.6 Methodology limitations ......................................................................................................... 18

4. Results ............................................................................................................................................ 19
   4.1 NGOs working with Natural Resource Management in Senegal ........................................... 19
   4.2 NGOS working within land/forest natural resource management ........................................... 19
   4.2.1 Gender issues as an organizational focus ............................................................................ 20
   4.3 NGOs working within Marine natural resource management ............................................... 24
   4.3.1 Interviews ........................................................................................................................... 24

5. Analysis ........................................................................................................................................... 29
   5.1 Question 1: Which factors influence the integration of gender aspects in NRM project management? .... 29
   5.1.1 Analysis .................................................................................................................................. 29
   5.1.2 Sub-Conclusion 1 ................................................................................................................ 30
   5.2 Question 3: How is the integration of gender aspects perceived by the project manager? ........... 31
   5.2.1 Analysis .................................................................................................................................. 31
   5.2.2 Sub-Conclusion 2 ................................................................................................................ 33
   5.3 Question 3: How does the organisation integrate gender aspects in projects? ......................... 33
   5.3.1 Analysis .................................................................................................................................. 34
   5.3.2 Sub-Conclusion 3 ................................................................................................................ 35
   5.4 Question 4: What impact does gender integration have on NRM projects? .......................... 35
5.4.1 Analysis ........................................................................................................................................................36
5.4.2 Sub-Conclusion 4 ........................................................................................................................................ 37
5.5 Gender integration by interviewed organisations ....................................................................................... 37
6. Conclusion ....................................................................................................................................................... 39
   6.1 “Can the integration of gender aspects ensure the sustainability of an NRM project?” .................... 39
   6.2 Suggested areas of study ............................................................................................................................ 39
7. Acknowledgement ........................................................................................................................................... 41
References ........................................................................................................................................................... 45
List of Abbreviations

<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Full Form</th>
</tr>
</thead>
<tbody>
<tr>
<td>CBNRM</td>
<td>Community-based Natural Resource Management</td>
</tr>
<tr>
<td>CFA Franc</td>
<td>Communauté Financière Africaine</td>
</tr>
<tr>
<td>EU</td>
<td>European Union</td>
</tr>
<tr>
<td>GNI</td>
<td>Gross National Income</td>
</tr>
<tr>
<td>GDP</td>
<td>Gross Domestic Product</td>
</tr>
<tr>
<td>GAD</td>
<td>Gender and Development</td>
</tr>
<tr>
<td>HDI</td>
<td>Human Development Index</td>
</tr>
<tr>
<td>MPA</td>
<td>Marine Protected Areas</td>
</tr>
<tr>
<td>ODA</td>
<td>Official Development Assistance</td>
</tr>
<tr>
<td>NRM</td>
<td>Natural Resources Management</td>
</tr>
<tr>
<td>NGO</td>
<td>Non-Governmental Organization</td>
</tr>
<tr>
<td>SOP</td>
<td>Sector Operations Plan</td>
</tr>
<tr>
<td>UNDP</td>
<td>United Nations Development Programme</td>
</tr>
<tr>
<td>UN Women</td>
<td>United Nations Entity for Gender Equality and the Empowerment of Women</td>
</tr>
<tr>
<td>WAD</td>
<td>Women And Development</td>
</tr>
<tr>
<td>WCED</td>
<td>World Commission on Environment and Development</td>
</tr>
<tr>
<td>WHO</td>
<td>World Health Organisation</td>
</tr>
<tr>
<td>WWF</td>
<td>World Wide Fund</td>
</tr>
</tbody>
</table>

List of Tables

Table 1: Characteristics of private and public goods (Perman, et al., 2003)
Table 2: List of NGOs interviewed, working in Land/Forest natural resource management
Table 3: List of NGOs interviewed, working with Marine natural resource management

List of Graphs

Graph 1: Research questions diagram
Graph 2: Factors influencing gender integration. Graph produced using data from interviews.
Graph 3: All interviewed organisations except one integrate gender using the WAD approach.

List of Figures

Figure 2: Map of Senegal showing the capital city, Dakar, and other main cities.
Figure 3: Kolda, Kaolack, Fatick, Zinguichor, Fatick, Dakar
Figure 4: Senegalese Groundnut Basin.

Figure 5: Kaolack, Kaffrine, Kedougou, Tambacouda

Figure 6: Thies, Louga

Figure 7: Tree-planting activities

Figure 8: Thies, Louga, Saint louis, Djourbel, Kaffrine

Figure 9: Tambacounda

Figure 10: Women harvesting shellfish

Figure 11: Women selling fish and dried shellfish

Figure 12: Joal-Fadiouth, Bamboung, Nyjor

Figure 13: Joal-Fadiouth, Kayar

Figure 14: Kayar, Sine-Saloum

Figure 15: Dakar
Integrating gender aspects in natural resource management: ensuring the sustainability of environmental projects in Senegal.

ASTRID BAGOUNA AKOYOKO


Abstract: In Senegal, rural communities depend on natural resources close to their settlement. Therefore, Natural Resource Management efforts require the effective participation of communities, specifically members whose socio-economic activities have the biggest impact on the resource. While men's participation is not an issue, social and cultural norms still govern women's participation and may prevent women from being involved. Non-Governmental Organisations working in NRM have to evaluate the importance of this gender imbalance and its impact on the sustainability of their projects. Open-ended questions during semi-structured exploratory interviews with NGO project staffs as well as the results of analyses using Progressive Focussing highlight the role of a project staff’s perception of gender as a concept and its utility in achieving the project’s objectives. The study concludes that project staff members interpret the concept of “gender integration” as meaning “women integration”. The gender-sensitivity of the project staff is important if gender aspects are to be included in the project cycle. Finally, gender integration ensures the sustainability of NRM projects in Senegal when socio-cultural factors are taken into consideration.

Keywords: Sustainable Development, Gender, Natural Resource Management, Non-Governmental Organizations, Project Staff, Senegal.

Akoyoko Bagouna Astrid, Department of Earth Sciences, Uppsala University, Villavägen 16, SE-75236 Uppsala, Sweden
Integrating gender aspects in natural resource management: ensuring the sustainability of environmental projects in Senegal.

ASTRID BAGOUMA AKOYOKO


Summary: Senegal is a West African country where most of the population lives in rural areas. These communities depend heavily on socio-economic activities related to fishing and agriculture, which in turn have an impact on natural resources close to their settlement. According to the Senegalese government and its donors, such impacts are negative and lead to environmental degradation, which is also aggravated by rural communities’ poverty. Rural poverty increases communities’ dependence on natural resources as a source of income as well as a source of subsistence. In order to address environmental degradation, Senegal has been receiving bilateral and multilateral aid that aims at improving institutional capacity at both the policy-making level and the local level. At the local level, Non-Governmental Organisations (NGOs) use bilateral funds to provide technical support to local institutions in order to implement or improve Natural Resource Management (NRM) by rural communities. This is done through community-based Natural Resource Management (CBNRM) that advocates for the integration of local communities within NRM efforts due to their resource dependence and the communities’ traditional knowledge of the use of natural resources. Thus, environmental NGOs design and implement projects in Senegal that aim at improving the management of the country’s natural resources (land, forest, marine) while having local communities as participatory parties. The main issue in implementing projects involving communities is that not all members can always be included, even when they are the main users of the resource. This is the case with women. In rural Senegal, women have a low social and cultural status coupled with no decision-making power in their communities. However, they are the households’ main providers in terms of nutrition, energy and income. All these needs require an extensive exploitation of natural resources in different forms, which also leads to environmental degradation. Project staffs working within environmental NGOs face issues related to effectively ensuring the full participation of communities in NRM regardless of gender, but a great emphasis is put on women’s participation. In the course of the study, interviews with project staffs revealed that “gender integration” is often mistaken for “women’s integration”. For them, “gender integration” in NRM, which implies men and women integration, means ensuring women’s participation, which is in fact “women integration”. According to interviewees, this integration is important in addressing social injustice and poverty faced by women, but mostly because it ensures the sustainability of NRM projects. In fact, when socio-cultural factors are taken into consideration, the involvement of women ensures the sustainability of knowledge acquired in relation to sustainable NRM practices, while men’s participation ensures the social sustainability in terms of greater involvement of women in NRM. This social sustainability is important because women’s involvement is done at the expense of household needs and in opposition to social and cultural norms. Furthermore, the gender-sensitivity of project staffs is key if gender aspects are to be included in the project cycle.

Keywords: Sustainable Development, Gender, Natural Resource Management, Non-Governmental Organizations, Project Staff, Senegal.

Akoyoko Bagouna Astrid, Department of Earth Sciences, Uppsala University, Villavägen 16, SE-75236 Uppsala, Sweden
1. Introduction

1.1 A presentation of Senegal

Senegal is a country located on the west coast of the African continent (Fig.1, Fig.2). It is currently home to 13,300,410 inhabitants (CIA, 2013) and is a lower middle-income¹ country with a Gross National Income per capita of $1,070 (WorldBank, 2013). With a Human Development Index (HDI)² of 0.470 (UNDP, 2013), Senegal is also a poor country with a low literacy rate³, with only 39% of Senegalese women able to read and write while 62% of men can do the same (UNICEF, 2013; UNDP, 2013). The population is mostly rural in nature, with 56.2% living in rural areas (WorldBank, 2013). A low economic growth rate of 4% on average (2000-2010), a series of poor agricultural harvests, low mining production (2012 estimate) and poor governance have undermined the ability of the country to effectively reduce poverty and ensure sectoral growth (EU, 2008; World Bank, 2014). In order to address the aforementioned issues, the country is the recipient of Foreign Aid or Official Development Assistance (ODA) from various countries and institutions through bilateral and multilateral cooperation (Annex 1, Fig 1 and 4). As an example, between 2008 and 2013 the European Commission gave a total financial budget support amount of 297.8 million Euro to the Senegalese government to address sectoral growth (EU, 2008).

One sector that has received such assistance is the environmental sector (EU, 2008). Senegal is facing severe threats to its environment and natural resources, such as:

- chemical pollution from agriculture, which reduces water quality;
- aquatic vegetation invasion and over-exploitation of groundwater;
- demographic dynamics, cultural practices, overgrazing, drought, bush fires and the loss of vegetation cover affecting agronomic potential of soils;
- pastoral practices and agricultural expansion putting forest resources under pressure (EU, 2008).

All of these threats are aggravated by population growth and linked to low agricultural productivity. Reserved Forest and national parks have been set up to protect forest resources and wildlife; however, these protected areas are threatened by bush fires and poaching from rural communities (EU, 2008). This illustrates the difficulty of reconciling biodiversity conservation and local livelihood strategies.

In Senegal, marine resources are threatened by over-exploitation. Fishing, being the country’s main socio-economic activity and a source of income, employs a high percentage of the population, with a total turnover estimated at 278 billion CFA francs⁴ in 1999 and a contribution to 2.5% of national GDP and 11% of the GDP of the primary sector between 1996 and 2000 (Mboup, 2005). It also generates a vast number of socio-economic activities that are either concentrated around the main activity of fishing or derived from it. Specifically in the

---

¹ Middle-Income countries are countries with a Gross National Income bigger than $1,045 but less than $4,125 according to the World Bank (2014)
² The HDI measures development by combining indicators of life expectancy, educational attainment and income (Anon., 2014). The highest value is one.
³ Literacy rate reflect the ability for a person over 15 years to read and write.
⁴ Approximatively $ 565,323,749.87 (2014 estimate)
non-industrialized fishing sub-industry\(^5\), fishers\(^6\) (who are always men) sell their fish products to wholesalers\(^7\) (who are mostly women) and to fish processors\(^8\) (who are also mostly women) (Diouf, 2012; Bâ, 2012; Ndaye, 2012). Another activity is shellfish harvesting\(^9\), which is mainly done by women as well (Diouf, 2012; Bâ, 2012; Ndaye, 2012). This chain of activities primarily provides income and jobs to women.

The high dependency of Senegal on its natural resources creates vulnerabilities, which are the results of a complex equation between environmental degradation and the local population’s livelihood strategies. Ultimately, the country recognizes poverty as the main factor behind environmental deterioration (EU, 2008). Following this perspective, the Senegalese government’s Sector Operations Plan (SOP) seeks to reconcile economic and social development and environmental protection through a series of programmes in which emphasis is placed on capacity building in natural resource management and community management of protected areas (EU, 2008). In trying to reconcile economic development and social and environmental concerns in its environmental protection strategy, Senegal’s approach is the foundation of Sustainable Development. In order to succeed in achieving this, a clear understanding of what this approach entails has to be made and the necessary steps taken to ensure the full participation of local community members.

### 1.2 Sustainable Development approach

The Brundtland Commission Report\(^{10}\) (WCED, 1987) lays down the modern approach to sustainable development through its definition and its framework of action. Sustainable Development should be regarded as “development that meets the needs of the present without compromising the ability of future generations to meet their own needs” (WCED, 1987) and is achieved if economic growth, environmental protection and social equity co-exist in a cohesive manner. Sustainable development therefore includes within its framework three approaches: economic, environmental and social. An understanding of each is required in order to allow for the inter-disciplinary actions that will produce desired sustainable results (WCED, 1987). They are not only approaches but disciplines of their own with occasionally conflicting theories, which have to be integrated in a way that contributes to ensuring that future generations’ needs are met. Below, I present these three approaches and how the Brundtland report interprets their roles in achieving sustainable development.

**Environmental Approach.** Humanity’s survival depends on ecosystem resources, and this is the main reason for ecosystem deterioration (WCED, 1987). In terms of dependence on ecosystem resources, a distinction between the environmental impacts of industrialized countries and developing countries has to be made, and the latter should receive more benefits from natural resource exploitation than the former (WCED, 1987). Unfortunately, due to the lack of proper governance, lack of capacity and inadequate policies, developing countries have experienced higher rates of decline in biodiversity, with rural communities being the most affected (WCED, 1987). Moreover, developing countries rarely have enough resources to invest in environmental protection and prefer to invest in development policies and infrastructures that have a positive impact on their economy (WCED, 1987). Therefore, while economic growth and a country’s development have to be encouraged, the Brundtland Report advocates that in order for biodiversity to be preserved, economic growth and “development patterns must be altered to make them more compatible” with natural life cycles (WCED, 1987).

**Social Approach.** Current population growth exceeds the carrying capacity of the environment (WCED, 1987). The current level at which humanity reproduces has forced society to increase its consumption of natural resources to the point of exceeding nature’s ability to renew itself (WCED, 1987). As time passes, nations experience or will experience greater difficulties in providing their population with basic welfare needs such as education and health services (WCED, 1987). To solve this problem, population growth has to be managed efficiently, and this can only be achieved through women empowerment (WCED, 1987). The Bruntland Report (1987) does not address women’s struggles within industrialized countries, but sees it as a social issue in

---

\(^5\) Called *pêche artisanale* in Senegal.

\(^6\) The term « fisher » will be used throughout the study. While « fishermen » is commonly used to refer to both men and women having fishing as an activity, especially in the French language, the gender focus of the study requires readability as well as to better illustration labor division, and gender-neutral terms will be used as much as possible.

\(^7\) Called *mareyeurs(ses)* in Senegal.

\(^8\) Called *transformateurs (trices) de poisson* in Senegal.

\(^9\) Called *ramasseuses de coquillages* in Senegal.
developing countries where measures to manage population growth are closely related to other development issues and where “[s]ocial and cultural factors dominate all others in affecting fertility” (WCED, 1987).

While the Brundtland Report (1987) sees gender equity as an issue, it limits the contribution of women to sustainable development as one related to reproduction control. It emphasizes the importance of implementing policies that “include economic incentives and disincentives, but must aim to improve the position of women in society. Such policies should essentially promote women’s rights” (WCED, 1987). Essentially, sustainable development taking social aspects in consideration implies achieving social equity for men and women.

**Economic Approach.** The Brundtland Report (1987) advocates the importance of ensuring that industrialized and developing countries integrate environmental protection in all their economic policies. Due to their dependence on environmentally-sensitive economic sectors such as agriculture or fishing, developing countries must integrate environmental concerns in their economic policies, although this is only possible if the development of technological and managerial skills is ensured (WCED, 1987). Such skills will contribute to damage mitigation in rural areas and to productivity; therefore, the world economy must integrate reforms dealing with economic and environmental issues in such a way as to allow economic growth of developing countries (WCED, 1987). Thus, the world’s common interest in environment and development issues will contribute to ensuring that all countries, irrespective of their economic levels, achieve sustainable development (WCED, 1987).

While the Brundtland Commission Report (1987) on Sustainable Development highlights the necessity for industrialized countries to take into account the environmental impact of their economic growth, it also contributes in the stigmatization of the “development will” of developing countries. These countries have not yet achieved industrialization or are on the road to industrialization, and most of them are rich with natural resources and have a population still heavily dependent on these for subsistence. In this sense, striving to achieve the same level of economic growth as developed countries by over-exploiting these resources is simply sacrificing the right of future generations to enjoy the same natural resources (WCED, 1987). In spite of that, developed countries have invested in many resources through foreign aid to help developing countries achieve an acceptable level of development and economic growth that may cost them the very natural resources that they must protect for generations to come.

### 1.3 Foreign Aid and Non-Governmental Organisations

Foreign aid as defined by Lancaster (2008) is:

> “Voluntary transfer of public resources, from government to another independent government, to an NGO, or to an international organization (such as the World Bank or the UN Development Programme) with at least a 25 percent grant element, one goal of which is to better the human condition in the country receiving the aid.” (p.9)

It is a transfer of public funds (loans or grants) from one country to another one (bilateral aid) or from a multilateral agency to a country (multilateral aid) (WHO, 2013). Recipient countries use such funds to improve situations in a variety of areas such as economic empowerment, education, health, food security, environmental protection and social equity. In general, such funds are used to build and improve capacity at the policy and decision-making level within institutions first, local communities and organizations thereafter (Godfrey, et al., 2002). Foreign aid follows an approach where donors invest in capacity building programmes within public institutions working on targeted areas with the objective of building the capacity of policy-makers. Such a practice can be viewed as a top-down approach to decision-making. It is assumed that targeted communities cannot provide solutions to the issues they face and policies should be decided and implemented by policy makers (Korten, 1980).

Another way of using funds is to allocate them through an attribution of grants to Non-Governmental Organizations (NGO), national or international, in charge of developing and implementing their own programmes and projects following specific directives attached to the fund received. Such organizations follow the bottom-up approach, where capacity is built within the community/population itself. It is assumed that solutions to a problem lie within communities’ expertise; in case such expertise is lacking, communities can be empowered (Korten, 1980; Mitlin, 1992). Foreign aid is directed to specific sectors and cross-cutting social issues in an attempt to follow the development choices of the recipient country or to redesign them. Gender equity is one of the cross-cutting issues that are addressed, among others, in natural resource management efforts carried out by NGOs within the governmental legal framework set up by Senegal’s government and with
funds provided by donors. In Senegal, natural resource management efforts by NGOs are concentrated in coastal management, sustainable fishing and natural park management.

1.3.1 Environmental NGOs and gender aspects

NGOs receiving funds design and implement projects at the grassroots, local and higher institutional levels with the explicit task of achieving well-defined objectives. Environmental NGOs mostly work with Natural Resource Management (NRM), where capacity is built at the community, rural and local institutional levels to achieve better management of a specific resource. Involving the community living in direct contact with the natural resource is the most effective way to achieve optimal management of the resource (Kellert, et al., 2000; Brosius, et al., 2005; Blaikie, 2006). In that sense, previous statements about the bottom-up approach are true when dealing with NRM within communities that heavily depend on natural resources for subsistence. Effective NRM implies sensitizing communities to the necessity of carrying out sustainable activities, meaning sensitizing all members — men and women alike. While it might seem obvious that community participation involves both men and women, it is still an assumption that one must make carefully. In fact, studies (Ellis, 2000; Kellert, et al., 2000; Douma, et al., 2002; Ndoye, et al., 2002; Mboup, 2005; Blaikie, 2006; Irene Dankelman, et al., 2008; Arora-Jonsson, 2013; Arora-Jonsson, 2014) have pointed out the gender aspect of the division of labor in rural communities directly in contact with natural resources and its effects on female participation in NRM activities. Arora-Jonsson (2014) intensively discusses the role of gender in environmental governance, and within this study the same subject is touched upon on a smaller scale. At the international level, an extensive report (UNDP-b, 2012) discusses the role of gender, specifically women’s roles in achieving better resource management, effective rural productivity and helping communities reach sustainable development. It is therefore within this framework of action that NGOs working with NRM operate.

Involving the community in NRM is the best approach when resource utilization concerns the community as a whole. However, environmental impacts due to unsustainable resource utilization in a given community might be related to specific activities carried out by its various members in a different manner. In order to better assess or analyze this interest, it is important to understand how project managers working within NGOs perceive social interactions among men and women. It is also important to examine whether attention to gender aspects in general and the gender-based division of labour should be a key component in project design. While definite progress has been made in acknowledging the importance of women participating in NRM in rural areas, little has been written on the role of the social environment in which they live, which may render their participation ineffective at best and non-important at worst. Little attention has been put on the male-dominated social construction of the community where they live and the necessity to take it into account. It has to be effectively addressed in all aspects of a project cycle that will in turn ensure the sustainability of NRM efforts; efforts in which females can participate only if males allow it. Even taking into account their tangible contribution to a community’s social and economic welfare, a problem statement can be made: is it truly relevant to advocate for the integration of women in Natural Resource Management activities when they have little or no rights on natural resources subject to property rights and have little or no decision-making powers in their communities?

1.4 Thesis description

1.4.1 Aim of the Thesis

This thesis attempts to investigate the importance of the integration of gender aspects within environmental projects dealing with NRM. While focusing on the integration of women might be important, it is the effective integration of men and women that is considered and analyzed in this study. The study is focussed on the integration of gender aspects within environmental projects by project managers. Beyond that, this thesis aims to look at this issue from the project manager perspective and address what s/he faces which has not yet been scientifically studied within the gender integration framework. Ownership of gender as a concept by the project manager can have an influence on whether issues arising during implementation are correctly addressed or not and on the ability of the project to be socially sustainable.

This thesis solely focusses on NGOs working on environment protection, conservation, agriculture and fishery in Senegal, West Africa. Climate change, environmental degradation index or indicators will not be discussed in order to limit the scope of the thesis. The analysis is based on interviews carried out with project managers; no target populations or beneficiaries were formally interviewed. As the interest of this thesis is on the perception
of the importance of gender by NGOs during the project management cycle, only project managers, programme managers and related project staff were interviewed in order to find answers to research questions. Therefore, this study aims to answer one main research question, while further investigation leads to several sub-research questions that are addressed through the related inquiries that follow:

**Graph 1: Research questions diagram**

1.4.2 Structure of the Thesis

**Chap 2: Contextual and Conceptual Framework.** Firstly, the context of the study from the author’s personal experience is presented. Then, concepts guiding the study are presented, namely natural resource management, gender studies where the “Women and Development approach” and “Gender and Development approach” will be presented, and finally the project management cycle. Throughout this chapter, the Senegalese context will be discussed with respect to using data collected during interviews and secondary sources.

**Chap 3: Methodology.** Presentation of methods used to carry out the research.

**Chap 4: Results.** Data from interviews carried out are presented, including facts about contacted NGOs.

**Chap 5: Analysis and Discussion.** Data collected using chapter 3’s methodology are analyzed and discussed using previously presented theoretical and contextual framework. Answers to sub-research questions discussed in Chapter 1 will be presented here as well.

**Chap 6: Conclusion.** Concluding remarks and possible future areas of research are presented here.
2. Contextual and Conceptual framework

This thesis is multi-disciplinary in nature, encompassing natural resource management, sustainable development, gender approaches and the project management cycle. This calls for a clear approach of each discipline and concept, making equal the boundaries of the created framework within which the subject will be analysed. Before that, the contextual framework of the study has to be clarified in terms of the author’s interest in the subject as well as the extent of ODA in the environmental sector and gender issues in Senegal.

2.1 Contextual framework

This thesis is carried out within a very specific context, which has shaped the way the research questions were designed and approached. Firstly, there is the dependence of Senegal on ODA, without which effective environmental protection and combating gender inequity will not be achieved. Even though the country has taken institutional measures to address both issues, it must rely on donors’ assistance to achieve sustainable results. Secondly, my personal and social background in the subject of gender equity in NRM within rural communities has definitely influenced the approach to the research questions and the study’s direction.

2.1.1 Situated knowledge: author’s interest in the subject

The cultivation of research and knowledge is ultimately a contribution to change, working to achieve a better life situation and a better world. The aim is to conduct completely objective research, but there can be a subjective component deriving from the human/social side in the production of knowledge. Such a component also plays a role in the transmission of knowledge. Thus, when doing research, it is of importance to acknowledge oneself — the researcher, the author — in the context of the knowledge production. It is an important practice within feminist and indigenous research (Haraway, 1991; Öhman, 2010; Lykke, 2010; Arora-Jonsson, 2013; TallBear, 2014). The following description grounds the study in terms of motivation and location, therefore openly addressing the researcher’s conscious and unconscious motivations. In doing so, I, the researcher, follow the Feminist Studies of situated knowledge, where I “situate” and “locate” my knowledge production initially within my own personal experience and finally within the combination of circumstances that led to the collection of the data used in this study.

When Ellis (2000) states that access to assets such as education by women in rural areas is an issue due to their gender. I agree. It is the case in Cameroon, particularly in my native division of Mbam-Enoubou, located in the central part of the country. My mother and her eight sisters had a father who believed that access to social assets such as education was the right of all children regardless of gender. My mother’s tribal community did not share this belief. Investing in a girl’s education was seen as a waste, given that she would get married and this “investment” would profit her husband’s family only. When my mother was a youth, females were viewed as resources and tools working for the welfare of the family they belonged to by birth or marriage. By the time I was able to question my surroundings, this view had not changed.

Whether it was in urban areas, where my siblings and I lived with my mother, or in rural areas, where my extended family lived and where I would spend all my summers farming, the reality was the same: females were only acknowledged and valued by their abilities and contributions in the households’ workforce. Doing chores such as cooking, fetching water, cleaning the house, farming and other activities were the responsibility of females. Male counterparts did virtually nothing. The female elders of my family, those very women who had access to education only due to their father’s stubbornness, encouraged their daughters and nieces to go to school and train them to be housewives. This emphasis on education and training to be good spouses was not extended to sons and nephews, of whom little was asked in terms of household’s participation. Moreover, in rural areas, and to a certain extent urban areas, the responsibility of young females to carry out household chores is always put first, before any other obligation such as attending school. It is the norm.

While I cannot claim that in my particular tribe and region women do not have access to natural capital such as land or do not have property rights, access to these assets is firstly made systematically to males, regardless of their order of birth, and then to females. In my case, while I am the first-born, our family house will be given to my younger brother, whether or not I marry into another household.

Constraints on financial resources are also one of the reasons females do not have access to education. When financial resources are limited, families will chose to keep their male children in school rather than their
females. I have witnessed female classmates and cousins vanish from the school system between my primary school years and my years at university. This situation is very common in urban areas and systemic in rural areas. The feeling of being socially expendable and the essentially gender-based discriminatory norms promoted by elder women, who had the good fortune of being educated, are the reasons my thesis has a strong gender focus.

Coupled with the above, I had the opportunity to do an internship in Senegal, where I worked with rural women, women’s associations and NGOs working within NRM. It gave me the opportunity to interact with gender specialists, Senegalese women, Senegalese feminists and project professionals. Similarities to my country context and the prevalence of gender discrimination in both countries at the rural and community levels shaped my desire to make NRM and gender the subject of this thesis and further studies.

2.1.2 Official Development Assistance to Senegal in the environmental sector gender issues.

By establishing its national Sectoral Operational Plan (SOP) on environmental protection (2008-2013), Senegal acknowledged that poverty is the main factor behind environmental degradation (EU, 2008). Therefore, there is a need to combine NRM and the fight against poverty in order to lay down the foundations for sustainable human development. Despite governmental efforts, serious challenges remain in terms of reforestation, conservation of biodiversity, pollution and involvement/awareness of stakeholders. This applies also to environmental management and institutional participation at the local level, where little progress has been made mainly because of the weak financial capacity of local governments and local communities (EU, 2008).

In order to face this financial issue, Senegal has received ODA specifically directed to environmental protection, with implemented programmes such as the Support to Community Management of Natural Resources of Mangrove Forestry Reserve in Saloum Delta Biosphere project (2002-2006) (EU, 2008). Multilateral ODA strategies in the environmental sector are also directed towards strategic support of environmental governance such as institutional framework and ownership by stakeholders (EU, 2008). On the other hand, bilateral ODA are directed towards technical assistance and institutional support of national parks co-managed with local communities, support of institutions through training, equipment, establishment of a network of databases and surveys in order to build capacity (EU, 2008), sometimes with a clear gender integration component (PERACOD, 2010).

Senegal exhibits gender disparities in many sectors and is ranked 102nd out of 134 countries according to the Global Gender Gap Index11 (Rubin & Niang-Mbodj, 2010). Laws and policies have been implemented to correct those disparities; however, women and men still do not have equal access to opportunities during their lifetimes. Even though the country has ratified gender equality-related international laws, customary laws are still enforced, particularly in rural areas (Rubin & Niang-Mbodj, 2010).

Despite this lack of clear enforcement of international law, “Senegal provides a positive environment for donor programming on gender equality because it has a relatively gender equitable legal infrastructure and history of both political support for women by its national leaders and an active community of women’s and human rights in civil society” (Rubin & Niang-Mbodj, 2010). As of 2010, there is a Donor Coordination Group on Gender that includes international agencies and NGOs; the group develops plans/strategies and disseminates information among various partners, and UN Women plays a coordinating role in this group (Rubin & Niang-Mbodj, 2010).

Addressing gender issues in Senegalese local and rural communities is done directly through specific programmes and in crosscutting within programmes addressing other issues. Overall, while multilateral ODA focus on integrating gender at the institutional level, bilateral ODA addresses gender issues at the local and community projects through programmes implemented in partnership with the Senegalese government (Albaret, et al., 2005; FIBA, 2010; PERACOD, 2010). While women have gained more visibility at the ministerial and legislative levels, this is not the case at the district and rural levels. This has led numerous NGOs working on gender issues in different sectors that are active in local communities to target implementing partners and  

11 The index measures the relative position of women to men in terms of outcomes in four areas: economic participation and opportunity, educational attainment, political empowerment, and health and survival.
stakeholders using approaches focussed on women. Concepts such as gender mainstreaming are used to define sets of activities designed to actively integrate female participation. This concept, among others, needs to be clearly defined and understood even within this essay.

2.2 Conceptual framework

In this section, a framework will be constructed using concepts relevant to our study. These concepts include Community-based Natural Resource Management (CBNRM), Women and Development, Gender and Development and Gender Mainstreaming. While a definition will be provided for each concept according to various authors, how these concepts are used and my understanding of them will be provided in this section as well.

2.2.1 Natural Resource Management

Natural Resource Management (NRM) has been defined by Altieri (2012) as a

“Responsible and broad based management of land, water, forest and biological resource base needed to sustain agricultural productivity and avert degradation of potential productivity.”

While this definition is closely related to the use of resources for human consumption, Altieri (2002) further develops the definition by stating that methods used in NRM, mainly scientific in nature, should include a set of actions that take into account all interactions between humans and natural resources. Not focussing on the use of science, NRM can then be defined as a management of interactions between people and natural landscapes,

“(…) which brings together land use planning, water management, biodiversity conservation, and the future sustainability of industries like agriculture, mining, tourism, fisheries and forestry. It recognises that people and their livelihoods rely on the health and productivity of our landscapes, and their actions as stewards of the land play a critical role in maintaining this health and productivity.” (UNEP, 2002)

In order to achieve an efficient NRM, it is important to identify a natural resource as a good, and according to Perman, et al. (2003), any given resource can be Excludable or Non-Excludable and Rivalrous or Non-Rivalrous (Table 1). This lead to four types of goods: private goods (rivalrous and excludable), club goods (excludable and non-rivalrous), common goods (rivalrous and non-excludable) and public goods (non-rivalrous and non-excludable). Natural Resources are considered to be common goods (Perman, et al., 2003). Perman et al (2003) argue that Common Goods have to be managed by an authority to ensure that they are used fairly. This is the case for natural resources such as fisheries, forests and land. Without clearly defined property rights, such resources can be depleted if not properly managed.

<table>
<thead>
<tr>
<th>Rivalrous</th>
<th>Non-rivalrous</th>
</tr>
</thead>
<tbody>
<tr>
<td>Excludable</td>
<td>Private goods (example: a laptop)</td>
</tr>
<tr>
<td>Non-excludable</td>
<td>Common goods (examples: ocean fishery, forest, land)</td>
</tr>
</tbody>
</table>

Table 1: Characteristics of private and public goods (Perman, et al., 2003)

Without clearly defined property rights in developing countries, this top down approach of resource management has its limitations. Most damages done to national natural resources are due to the government’s actions, which claim ownership over resources and prevent indigenous communities from accessing them, contributing to their unsustainable exploitation (Brosius, et al., 2005). Brosius et al. (2005) argue that local and indigenous communities, if given the proper ownership and empowerment, will certainly manage natural resources better. Rather, in Sub-Saharan Africa, central authorities have marginalized indigenous populations and local governments and the former has not included them in NRM strategies, though their expertise, competency and non-corruptible authority would have ensured a better NRM (UNDP, 2012). Thus, due to their expertise, local communities must be included in decision-making and be provided with resources and a means to ensure grassroots participation towards an effective NRM (UNDP, 2012).
Brosius et al. (2005) suggest a Community-based Natural Resource Management (CBNRM) approach. CBNRM is a NRM approach that assumes that local populations have a bigger interest than the state in ensuring that resources remain available in the long term (Brosius et al., 2005). Moreover, due to their familiarity and longer interaction with the resource, local populations have a better knowledge of local ecological systems and a better grasp of practices to employ when consuming the resource (Brosius et al., 2005). Local communities are also better equipped to manage resources effectively using traditional and ancestral means (Brosius et al., 2005). Local communities are occasionally subject to social inequity from outsiders as well as within the community itself, and CBNRM has been used by NGOs to link NRM and the search for social justice (Brosius et al., 2005). In this light, Senegal has been considered a success in the application of CBNRM (Granier, 2005). However, limitations to this approach also have been pointed out (Kellert et al., 2000; Blaikie, 2006).

2.2.1.1 Natural Resource Management in Senegal

In Senegal, rural communities in partnership with the government conduct NRM in a decentralised manner. Rural communities as well as communes and regional councils have been capacitated in dealing with natural resources (Granier, 2005). This is achieved through a legal framework called Local Conventions of Natural Resources and Environmental Management (CL-GRN or Conventions Locales de Gestion des Ressources Naturelles et de l’Environnement), the aim of which is to boost local development and secure socio-economic empowerment while integrating environmental interests (Granier, 2005). Its main functions are to facilitate the implementation of capacity given by the state to the communities, work as a contract to coordinate local actions and ensure that local dynamism operates through well-organized actions and programmes (Granier, 2005). It is the Senegalese approach to CBNRM.

According to Granier (2005), CBNRM is not a new concept in Senegal but rather the re-implementation of traditional practices that were discontinued during the colonisation and decolonisation of the country; local communities easily and widely accepted its re-introduction since they recognized a system that they used before losing their property-rights to the centralized state. According to Granier (2005), CL-GRN as a CBNRM is a legal framework which specifies that local communities are not beneficiaries of the project/programme, but rather signatories; the beneficiary is the natural resource which is managed by the local community. While local populations are involved from the beginning and have an influence, Kellert et al. (2000), Granier (2005) and Blaikie (2006) insist that the state as well as NGOs have to be in charge of measuring environmental impact. They should also ensure that all members of the community enjoy profits in an equitable manner that is not always guaranteed because of local cultural practices (Kellert et al., 2000; Granier, 2005; Blaikie, 2006).

2.2.1.2 Social issues in community’s forest and land management

According to Senegalese Land Law, rural communities have the usufructuary right to manage forests and lands (Respondents O1, O2, O3, O5, Interviews, 2012). Within rural communities, the male populations hold such rights while females are the direct users through agricultural activities and wood consumption (Respondents O1, O2, O3, O5, Interviews, 2012). In major parts of Senegal and specifically in rural areas, women are responsible for providing nutrition and consumable energy for the household. This includes cooking, fetching water, gathering food, agricultural activities and energy generation in the form of wood fire, which implies seeking firewood as well (Irene Dankelman, et al., 2008). Households in Senegal can choose between firewood and oil when it comes to a household’s energy consumption. Firewood is much cheaper than oil and more readily available; however, finding wood is difficult. This is due to a number of reasons, such as:

- deforestation: over time, timber is located further and further away from villages;
- the low rate of growth of the vegetation, which is a characteristic of local timber species;
- unsustainable agricultural practices affecting soil productivity;
- agricultural development requiring large areas of forest to be cleared (Irene Dankelman, et al., 2008; PERACOD, 2010).

While agriculture has a negative impact on forests, it is also a source of income and subsistence to rural Senegal. Weather’s unpredictability as well as the low amount of precipitation have resulted in a loss of soil fertility, poor harvests and food shortages (Irene Dankelman, et al., 2008). This has led to an impoverishment of population and male urbanization. One tangible impact is the fact that women have been left behind to take care of families and they have no choice but to use intensive agricultural practices that further diminish soil productivity (Irene Dankelman, et al., 2008). Irene Dankelman et al. (2008) use as an example a village located in an agriculturally

---

12 Usufructuary right is the right to use a property as one pleases without having the legal ownership right. In Senegal, the state has legal ownership of all natural resources.
intensive area that has seen its male population reduced to 20 while the female population has remained at 118. Intensive agricultural activities by women are performed using rudimentary tools which add to the toughness of their efforts. They require more time on top of what is necessary for other household needs, and despite this, women have access to the ownership of only 13.4 percent of land (Irene Dankelman, et al., 2008).

In order to reduce the impact of Senegalese consumption on its forests, NGOs have adopted two main strategies that involve either participatory forest management or reforestation of degraded areas to increase the sustainable supply of wood and charcoal land or promotion of improved stoves to reduce household consumption (Respondant O1, Interview, 2012; PERACOD, 2010). Therefore, when it comes to forest and land management in Senegal, NRM is concerned with the prevention of unsustainable consumption of wood and unsustainable agricultural practices (Respondents O1, O2, O5, Interview, 2012). The inclusion of local communities is done through community forestry, where communities themselves manage the forest and the land which belongs to the state and of which communities only have an usufructuary right.

2.2.1.3 Protected Marine Areas and communities' participation

According to Irene Dankelman et al. (2008), the location of Senegal on the West African coast provides opportunities for communities to invest in various socio-economic activities related to fishery, the products of which depend heavily on their ability to sustain themselves. According to Ndoye et al. (2002), Senegalese waters are among the richest in terms of fish stock because of the "upwelling"13. These conditions add to the favourable geographical position of Senegal; with its 700 km of coastline, fishing has always been one of the main activities in the country. Unfortunately, access to a vast amount of natural resources does not always ensure its sustainable usage.

In the Senegalese fishing industry, natural resources encompass sea resources such as fish stock and shell stock, as well as ecosystem habitats such as mangrove swamps (Mboup, 2005; WWF, 2006; FIBA, 2010). Access to these resources are provided by two main fishing systems: non-industrialized fishing and industrialized fishing (Ndoye, et al., 2002). Industrialized fishing mainly supplies international demand, whereas non-industrialized fishing supplies domestic demand. Both systems have deep but different impacts on the resources that sustain them (Mboup, 2005).

NGOs have developed different strategies to mitigate the environmental impact of fishing activities. CBNRM is widely used in this sector (Ndoye, et al., 2002; Mboup, 2005; WWF, 2006; Irene Dankelman, et al., 2008; FIBA, 2010), all within the framework of West-African countries and Senegalese law governing natural resource management that is mainly represented through Marine Protected Areas (MPAs). MPAs are:

“any area of intertidal or subtidal terrain together with its overlying waters and associated flora, fauna, historical and cultural features which has been reserved by law or other effective means to protect part or all of the enclosed environment.” (Pomeroy, et al., 2007)

Such areas are organised into reserves by Senegalese law in partnerships with local communities, international donors and NGOs which provide financial and human resources (Albaret, et al., 2005; Féral, 2007; Ferraro, et al., 2011).

CBNRM strategies by NGOs in the maritime sector are built around MPAs in Senegal and involve:

- supporting processes for creating MPAs and strengthening the management effectiveness of existing MPAs;
- sustaining coherence and network functionality through status definition and issue identification of critical areas and corridors;
- ensuring the institutionalization of organizations involved in the regional network of MPAs;
- the implementation of tools to improve the state of biodiversity of MPAs (WWF, 2006; FIBA, 2010).

According to Féral (2007), while MPAs are important to preserving endangered ecosystems, it is equally important to recognize the imported nature of MPAs’ concept and to reconsider the assumption that civil society through local communities is an active participant. Féral (2005) argues that in Senegal, MPAs as a concept were not generated by the country itself; rather, they were generated from western societies through NGOs and

13 Upwelling of relatively cold but nutrient rich waters along parts of the African west coast.
donors that imported principles and protection objectives from various international conferences. Linked to this are imported administrative procedures that were integrated in the state in a manner similar to colonization (Féral, 2005). Management of MPAs becomes a co-administrative system between the government NGOs and donors, in a country that depends on the international community to establish protection norms and management measures (Féral, 2005). Civil society in that respect is not Senegalese, but rather an “imported civil society” that is made up of international networks of scientists, NGOs and conservation entities (Féral, 2005). Thus, there is a risk that objectives of MPA programs do not reflect communities’ interests and Senegalese interests. Féral (2005) argues that it is impossible to ensure the existence of MPAs without including local communities and their interests, since there are not enough governmental resources to enforce strict laws and prevent communities from having access to marine resources.

CBNRM in the Senegalese marine sector is concerned with how the community exploits marine resources and requires an understanding of who exploits what and how. Fishing activities in Senegal are carried out based on gender (Ndoye, et al., 2002; Mboup, 2005; WWF, 2006; Irene Dankelman, et al., 2008; FIBA, 2010). Not counting agriculture, fishing is the main activity of women in Senegal. In fact, more than 90 percent of women are involved in the fishing industry through various occupations (Irene Dankelman, et al., 2008). While men are involved with going to the sea and catching fish, women control the processing sector. The latter activity takes place along shorelines where fishing products are discharged (Irene Dankelman, et al., 2008). It is a non-industrialized activity, tedious and lacking proper health quality control (Irene Dankelman, et al., 2008).

Women, through the processing sector, provide the majority of processed fish consumed in Senegal, which they buy directly from fishermen or from wholesalers who are men (Ndoye, et al., 2002). Women organize themselves in microenterprises, individual or familial in nature, composed of their daughters, female workers and occasionally seasonal labourers (who are mostly men from the countryside looking for work on the coast) (Ndoye, et al., 2002). However, more and more men are interested in this activity and invest in buying equipment; whereas female processors remain quite poor and often look for credit to sustain their activities (Ndoye, et al., 2002). Due to the intensive nature of their activities, these women have an impact on the surrounding environment where they establish their micro-enterprises (Mboup, 2005). Initially, male-dominated activities were concentrated around fishing and fish transportation to processing sites, but the change in distribution of tasks, with more men entering the processing market and having greater means than women do, imply a change of market and a competition that women may not be able to face (Ndoye, et al., 2002). Nevertheless, irrespective of the activity, men as well as women have an impact on the environment through their unsustainable practices. While MPA strategies involve the communities as a whole, there is an issue in ensuring the full participation of women in decision-making processes (Mboup, 2005; Irene Dankelman, et al., 2008).

2.2.2 Role of Gender in Natural Resource Management

2.2.2.1 Gender issues, environmental issues and access to assets

Gender plays an important role in the choice of socio-economic activities in rural areas and it is a source of social injustice. Integrating gender equity is a matter of human rights and ensuring social justice, which is also essential for the sustainable use and management of natural resources (Douma, et al., 2002). For Douma et al. (2002), women are in the best position to ensure the guardianship of biodiversity since they are mostly small-scale farmers and provide food security and water for families as well as communities. When it comes to understanding of the natural resources on which they depend, women are the most knowledgeable and the most likely to re-invest most of their income in sustaining their family (90% compared to 30-40% for male) (Douma, et al., 2002). Even though women have this expertise, control over resources lies in the hands of men in male-dominated communities. Moreover, women are poorly represented at the decision-making level, and even if they participate in discussions about resource management, their power is limited due to the social and cultural settings (Douma, et al., 2002). Therefore the intersection of gender and environmental concerns in development make it necessary to clarify “that gender is an analysis of power relationships and the practices through which what is a ‘man’ or ‘woman’ get defined and made to appear as natural in different environmental contexts” (Arora-Jonsson, 2014). Taking gender and environmental contexts into account, Douma et al. (2002) argue that when resources are freely available, women have access to and control over them. However, resources with monetary value, though scarce, are dominated by males and factors such as population growth, climate change and pollution can reinforce and aggravate current gender inequalities (Douma, et al., 2002). The integration of women can ensure that their valuable knowledge is taken into account and used, but it might also lead to a re-
assess the advantage of social issues which in turn have a positive impact on the resources (Douma, et al., 2002).

While Douma et al. (2002) advocate for the full participation of women in environmental management efforts because of their role as biodiversity’s guardians, Ellis (2000) argues that this line of thinking is just another variant “of the notion that women are natural custodians of the environment”. Different perspectives tend to link women and the environment: firstly, the involvement of women in activities requiring a high interaction with the environment, like fetching water; secondly, the eco-feminist perspective, which describes this relationship at the biological level; and finally, the role of women in conservation activities (Ellis, 2000). However, Ellis (2000) and Arora-Jonsson (2014) point out that any policy aiming at empowering women within an environmentally related strategy is less of a gender equity effort and more of a policy-maker choice, where it is assumed that women will be more environmentally concerned than men are. These policy choices tend to burden women more; on top of the usual household chores they have to perform, they also have to take on environmentally-related initiatives (Ellis, 2000; Arora-Jonsson, 2014). These policies do not address gender relations and their impact on women’s access to natural resources. Instead, such policies consider increasing the role of women in environmental efforts as the key component that will ensure their success. For Arora-Jonsson (2014), not taking into account power relationships between men and women and instead focussing in increasing women’s roles may lead to environmental project failure, which in turn might lessen any willingness from policy-makers to integrate gender concerns in environmental policy.

For Ellis (2000), a good understanding of gender relations in rural area settings makes the association between integration of women and better natural resources management less evident. Women’s access to assets such as natural resources happens within a specific framework where gender relationships are important (Ellis, 2000). In those settings, men in general have control, ownership and decision-making power over the use and livelihood strategies that require such resources (Ellis, 2000). Control over assets such as land is not guaranteed for women or secure enough for them to be willing to get involved in conservation efforts. In addition, social pressure in relation to their social status/roles as well as their domestic demands plays a considerable role in the involvement of women in environmental efforts (Ellis, 2000).

### 2.2.2.2 Women and Development versus Gender and Development

While the analysis so far advocates for the active integration of women, it is important to acknowledge that due to their position in their community, this integration will only happen and be sustained if men are also integrated in the process. For Zwart (1992), there is an issue of how social justice should be achieved using gender equity, depending on whether it is done using a women integration approach or a gender approach. A women integration approach, also called Women and Development approach (WAD), assumes that the low degree of female participation in economic processes demonstrates in itself their disadvantageous position; therefore, their assimilation into a specific project or policy, in which they would not have been integrated otherwise, will systematically improve their situation (Zwart, 1992; Charlesworth, 2005). Zwart (2002) still argues that WAD fails on a crucial level when implemented. Firstly, it does not fully take into account the link that exists between patriarchy, production mode and the submissive role of women. Secondly, the essential impact of the productive nature of WAD policies on the reproductive nature of women’s roles in society is downplayed (Zwart, 2002). In other words, policies aiming at creating socio-economic activities for women or at increasing their decision-making power within the community do not take into consideration that these policies are adding a greater burden to the set of household and agricultural chores that are considered by their communities to be the women’s responsibilities. For Arora-Jonsson (2014), such policies do not investigate if women have “resources or time to be able to carry them out” and this is another form of “feminization of responsibility”, where environmental chores are added to the list of unpaid chores of women.

All these issues could be tackled if there is a re-definition of gender by identifying the origin of the social assignment of gender roles that contribute to the exploitation of women (and men). The fact that the necessity of a re-definition was understood and directly contributed to the emergence of the Gender and Development approach (GAD) (Zwart, 1992). The GAD approach gives tools to help organizations look at the “sexual division of labour but also the sexual division of responsibility” (Zwart, 1992). Moreover, this goes beyond the society’s view of the functions men and women should have and analyzes relations between them, as well as “the impact of these relations on development, and the forces that both perpetuate and change these relations” (Zwart, 1992).

In light of the above, an organization wishing to integrate gender aspects in its operation should carefully plan, analyse and evaluate strategies to do so. While organisations may recognise the importance of gender aspects,
Douma et al. (2002) assert that there is a need to practically integrate them in their operations. This may not always be effective, due to lack of key knowledge about specific socio-cultural interactions. Key challenges in integrating gender aspects are:

“The lack of sufficient time and resources for a genuine analysis of existing Gender relations and inequities in areas they work in, and the underlying causes (…) the difficulty to question power relations in the communities they work with, as they are deeply embedded in social, political and cultural structures (…) the fact that many existing tools and guidelines on gender mainstreaming are often rather general and not easy to apply to the specific contexts in which organisations are working (…) the lack of insight in the role of gender in natural resources management (…) the language barriers between gender experts and practitioners” (Douma, et al., 2002)

2.2.3 Project management and Gender Mainstreaming

A project is a set of activities that have to be performed within a specified time with a specific allocated budget and clearly defined objectives; it has to include stakeholders (the main target group and final beneficiaries), coordination and management mechanisms with clearly defined funding, an evaluation and monitoring system and a financial cost and benefits evaluation (European Commission, 2004). Development projects are viewed as a mean to identify and accurately manage investments and change processes (European Commission, 2004).

Irrespective of the objectives of the project, the European Commission (2004) advocates that gender issues are cross-cutting in nature and should be included in the project cycle from beginning to end. This gender integration is identified as gender mainstreaming. Charlesworth (2005) uses the 1997 U.N. Economic and Social Council (ECOSOC) definition in her analysis of the concept of gender mainstreaming, calling it a

“process of assessing the implications for women and men of any planned action, including legislation, policies or programmes, in all areas and at all levels. It is a strategy for making women’s as well as men’s concerns and experiences an integral dimension of the design, implementation, monitoring and evaluation of policies and programmes in all political, economic and societal spheres so that women and men benefit equally and inequality is not perpetuated. The ultimate goal is to achieve gender equality” (Charlesworth, 2005)

In short, gender mainstreaming as a concept directly deals with divisions of labour based on gender and works towards achieving equal access and control for women and men over resources (Evers & Hofmeister, 2011).

As a cross-cutting issue, gender mainstreaming is subject to all development project weaknesses, chief among them the lack of local ownership, which has a negative impact on the sustainability of results (European Commission, 2004). Thus, for Cecelski and Dutta (2011), gender mainstreaming in a project can still be a success if the person responsible for it is the project manager him/herself and there is clearly established support from senior management in all activities related to it.

The project should also include a gender consultant, who can be internal to the organization or external, but it is also important that budget and resources are secured and specifically allocated to all gender mainstreaming activities (Cecelski & Dutta, 2011). Gender mainstreaming as a cross-cutting issue must be clearly understood by the manager and the person in charge of gender as an approach that does not focus on women solely, but rather on men and women at the same time while identifying them as stakeholders as well as beneficiaries (Cecelski & Dutta, 2011). The project manager should have the following steps in mind to successfully mainstream gender in the project:

“(...) 1-identify gender issues in the project; (...) 2-agree on gender with the stakeholders; (...) 3-develop a strategy and action plan on how these gender goals can be met; (...) 4-successfully implement gender focussed activities; (...) 5-institutionalise gender mainstreaming capacity within the project and its partners; (...) 6-track the performance of the project in implementation, impacts and institutionalisation of gender issues.” (Cecelski & Dutta, 2011)

Not all gender scholars are advocates of gender mainstreaming. Main criticisms lie on the administrative nature of gender mainstreaming as a concept. For Arora-Jonsson (2014), it can easily be viewed as a technocratic exercise where quantitative data are given prevalence, which do not sufficiently capture contextual realities. Gender mainstreaming is built around a very specific assumption that women are marginalized, and according to Arora-Jonsson (2014) this legitimizes “preconceived ideas about development that have nothing to do with gender or relationships of power”.

13
2.3 The study’s Framework

The study is multi-disciplinary and uses different concepts as a basis to analyse the data collected. All concepts were explained and discussed in the previous section; however there is a need to summarize and highlight which specific concepts and definitions were considered when the study was carried out. Below is a conceptual summary of the study:

**Natural Resource Management:**

The main concept under which NRM will be analysed is Community-based NRM (CBNRM), where it is assumed that local populations have a bigger interest than the state in ensuring that resources remain available in the long term. The main assumption from NGOS will be that local communities are not beneficiaries of the project/programme but rather signatories. The beneficiary is the natural resource which is managed by the local community.

**Gender, environment and access to assets:**

Considering the intersection of gender and environmental concerns, the study has to be conducted while assuming that there is a power relationship implied by the concept of gender. In that context, the gender-construction of “men” and “women” is done in very specific labour-oriented contexts. These contexts imply a degree of interaction between a very specific gender and the environment as a whole or specific activities attached to such interaction. Women’s non-access to assets ought to be improved in order to ensure that their valuable knowledge is taken into account and used, which in turn has a positive impact on the resources.

**Project management and Gender Mainstreaming**

Gender mainstreaming can be subject to all development project weaknesses. In this study, local ownership is viewed as one of the main weaknesses of gender mainstreaming. Also important is the overlapping of the term “gender mainstreaming” and “women integration”, which prompted the author to use the term “integration” instead of “mainstreaming” within the study.
3. Methodology

This study aims to address the importance of the integration of gender aspects in ensuring the sustainability of an environmental project. In doing so, the study focuses on project managers working in NGOs and how they integrate gender aspects throughout the project cycle. This section offers a description of the methods used to carry out the study, including how the method selection was done.

3.1 Sampling process

There are currently about 30 environmental NGOs in Senegal (Les ONG dans l'environement au Senegal, 1999), which at the time of the study was a large population. When a population is large and available resources cannot allow for all members to be studied, Schensul & LeCompte (1999) suggest using a sample of the population. That sample should comprise all characteristics the researcher desires to observe and should be more manageable to study. It was not possible to contact all of the environmental NGOs working in Senegal; therefore, sampling was necessary. Schensul & LeCompte (1999) define sampling as “the process of identifying from a large population a smaller group which not only shares the former’s characteristics but is more manageable”. In order to create the sample of study, a selection must be made where a set of criteria is established in order to identify and bound the issue to the research project; however, it is important to know if sampling is the appropriate method of study.

For this study, NGOs working with natural resource management in Senegal were identified using the internet, all of them with main offices located in Dakar and projects being implemented in rural areas. Due to the large number of NGOs, limited time and data collection methods, sampling and therefore a sample selection had to be applied. Other characteristics which made sampling a good method to use for this study, according to Schensul & LeCompte (1999), were the size of the population of study (which was large, 30), the phenomenon to be studied (which was known, gender integration) and the representation of all categories of environmental NGOs working in Senegal (marine protection, forestry, sustainable agriculture). Furthermore, limiting the choice of NGOs to those located in Dakar is acceptable. According to Schensul & LeCompte (1999), convenience sampling (which allows for the use of a readily accessible group that reasonably possesses all characteristics relevant to the study, as done in this study) is acceptable if specific variations in the population have little effect on the results of the study.

3.2 Sampling selection

Initial contact was made through exchange of emails, with email addresses obtained from NGOs’ websites. A specific email written in French included the presentation of the researcher, the purpose of the study, an inquiry about who might be more suitable for an interview, a suggested meeting date and place and a request for phone contact. Not all organisations contacted in that manner replied, and of those who replied not all of them had project officers available for an interview or an implemented gender strategy. This allowed for a sample selection where NGOs with the following characteristics were selected:

**The NGO has a website:** This characteristic derives from the convenience sampling which was used to identify NGOs more conveniently following Schensul & LeCompte (1999), who consider this sampling method adequate when the easily accessible population has the same characteristics as the population of study. In this case, it is reasonable to assume that given the relatively low economic development of Senegal, not all NGOs have the means to create and maintain a website. Therefore, NGOs without a website, and therefore with relatively low financial means, were not included in the study.

**Clearly stated Natural Resource Management mission on their website:** This was necessary to eliminate NGOs that would not be relevant to the study. For example, an NGO whose mission statement is *recycling of urban waste* would not be considered even though it could include urban waste dumped on beaches or affecting mangroves. Specific activities carried out by the NGOs must include direct involvement with natural resources.

**NGOs with international status:** Most NGOs in Senegal receive financial support from grants allocated by organisations that are mostly located outside of Senegal. However, there are also Senegalese NGOs with no international exposure. NGOs with international status are more likely to be exposed to trends in development than local NGOs. This is a discussion point in the study and therefore only such NGOs were included.
Main Senegalese branch office in Dakar: This characteristic was for the sake of convenience as well as the fact that most international organisations have their offices in Dakar, Senegal’s capital city. Their location in the capital made it easier for the researcher to have access to them.

Projects implemented in rural areas: Some Senegalese NGOs have projects implemented in peri-urban settings where the Senegalese population lives in conditions similar to those found in rural settings. These NGOs were not included in the analysis.

Project officers/managers available for interview: The data used has to be directly obtained from project officers or managers; therefore, their availability determines the availability of data to be collected.

3.3 Research setting and Data collection

Exchange of emails throughout a period of 3-7 days was necessary in order to secure an interview with the officer/manager with the adequate job description. Typically, the researcher would contact a person from the organisation through email. This individual would then acknowledge reception but direct the researcher to another person. The researcher would send an email to the person to whom she had been referred or contact him/her by phone, then the researcher would suggest a date and time at the convenience of the future interviewee as well as suggest the interviewee’s office as the interview venue. Data collection occurred during a two-week period at interviewees’ offices throughout August 2012.

Secondary data about Senegal and information about NGOs’ missions, activities and region of project implementation were obtained using the internet. Primary data about project management, beneficiaries, gender components in projects and programmes were obtained through interviews. Interviews were directed to 10 respondents, all managers all in charge of a programme or a project which, when taken collectively, covered Senegal and a large target population.

Structured, open-ended questions were designed at the beginning. Questions included: What is your job description within the organization? Have you experienced gender issues during the project cycle? Are gender issues addressed during the project cycle? At what level? For Schensul & LeCompte (1999), “open-ended questions leave the response open to the discretion of the interviewee and are not bounded by alternatives provided by the interviewer”. This study gave room for discussion in the current research. During the first interview, it became clear that given the limited experience of the researcher in local cultural specifics and on the subject of gender integration in project management as compared to the interviewee, semi-structured questions using exploratory interview techniques were an appropriate choice. Semi-structured interviews allow the interviewer to be flexible in order to acquire “unexpected” new information through an interview’s framework, which gives space to the interviewee to “challenge” the views and conceptions of the interviewer (Anon., 2014). Furthermore, according to Schensul & LeCompte (1999), “exploratory interviews allow to explore domains believed to be important to the study and about which little is known”. For this study, this is how more information was gathered concerning specific cultural practices, cultural norms in household politics, gender specific norms, religious beliefs on gender roles within the community and cultural shock during activity implementation.

Therefore, even though the above initial questions were posed during the first 15 minutes of the first interview, they were all changed from the second interview onwards as follows: Could you please tell me more about your organisation and your job description within the organisation? Do you experience gender issues during the project cycle? Which gender issues do you experience during the project cycles? How are gender issues addressed at the implementation by field officers? Each question could therefore lead to a discussion within which other questions were asked. This interview format allowed “flexibility in exploring a wide range of topics”, as argued by Schensul & LeCompte (1999). Additionally, topics that were not known to be important to the study became relevant upon receiving information about them from the interviewees. Exploratory interview was also a good choice given the perceived sensitive nature of the subject by interviewees, thus it was essential to create an environment in which the respondent would feel comfortable enough to give her/his personal view rather than the institutional view.

During semi-structured exploratory interviews, open-ended questions largely contributed to collecting a vast amount of data concerning cultural and institutional practices in Senegal. The information obtained helped the researcher quickly understand all the different realities that each project faces when implemented in very different NRM settings. These interview formats also influenced the willingness of interviewees to be more open about the limitations of their own organisations, information difficult to obtain if the interviewer does not have very specific data about the organisation beforehand.
One weakness of using this method is the fact that interviews were conducted during the month of Ramadan\textsuperscript{14} and, with one exception, all interviewees were Muslims. This implied that they were unavailable for afternoon interviews due fatigue resulting from fasting. During morning hours, they were quite busy most of the time. This limited the time allocated for interviews. Other limitations of the semi-structured interviews in this essay include the amount of time required to make the interviewee comfortable before asking sensitive questions; the gender of the interviewee and the institutional settings within which the interview was conducted played some role in this. The researcher’s bias on gender issues and the perceived lack of knowledge were also potential limitations.

3.4 Anonymity

During all interviews, subjects did not request anonymity, but while reviewing the data collected, it became clear to the researcher that a certain level of discretion was needed. Therefore, no names will be disclosed in the study, whether it is the respondent’s name or the organisation’s name.

3.5 Data analysis

This study is qualitative, and according to Pope & Mays (1995), qualitative research is a “[d]evelopment of concepts which help researchers to understand social phenomena in natural (rather than experimental) settings, giving due emphasis to the meanings, experiences and views of the participants”. Semi-structured interviews are one of the qualitative data collection methods; therefore, data collected should be used in a qualitative research with the objective of providing results which are qualitative in nature. Data collected for the purpose of this study were qualitative and required to be analysed using a qualitative data analysis method.

For Schutt (2012), “the focus on text—on qualitative data rather than on numbers—is the most important feature of qualitative analysis”. The text referred to here is the sum of notes obtained from interview sessions with respondents (cf Annex 2). Even though Schutt (2012) argues that “text is only one possible interpretation among many”, notes from interviews were primary data collected from respondents who were very clear concerning their viewpoints and feelings and whose professional experience in the relevant field was proven. Therefore, no further interpretation of each interview taken solely was necessary, but a comparison of interviews gave room for analysis, which provided further insight into what was being said (cf Annex 2). Nevertheless, Schutt (2012) states that “qualitative data analysts seek to describe their textual data in ways that capture the setting or people who produced this text in their own terms rather than in terms of predefined measures and hypotheses”. In this study, information such as respondents’ sex, religion and region of origin was taken into account during the analysis of the data.

In this sense, data was analysed from one interview to the next, which Schutt (2012) calls “progressive focussing”. During progressive focussing, the researcher “adjusts the data collection process itself when it begins to appear that additional concepts need to be investigated or new relationships explored” (Schutt, 2012).

Schutt (2012) lists progressive focussing steps as follows:

- Know yourself, your biases, and preconceptions.
- Know your question.
- Seek creative abundance. Consult others and keep looking for alternative interpretations.
- Be flexible.
- Exhaust the data. Try to account for all the data in the texts, then publicly acknowledge the unexplained and remember the next principle.
- Celebrate anomalies. They are the windows to insight.
- Get critical feedback. The solo analyst is a great danger to self and others.
- Be explicit. Share the details with yourself, your team members, and your audiences.

Subsequently, following the progressive focussing method, information obtained was analysed and new interview questions were formulated for each subsequent interview, which made the analysis an inductive one. According to Schutt (2012), inductive qualitative data analysis requires the researcher to identify “important categories in the data, as well as patterns and relationships, through a process of discovery”. This was reflected during data analysis where patterns in different statements were discovered. This also served to control hypotheses that were made before interviews.

\textsuperscript{14} One-month long fasting period to be carried out by a Muslim as part of one faith, as prescribed by the Quran.
3.6 Methodology limitations

The researcher’s personal bias toward the essay’s subject and perceived lack of experience on the subject could have had an impact on how interviews were structured and how respondents answered questions. There have been cases where the interview was “hijacked” by respondents possessing defensive attitudes toward the subject and perceiving criticisms from the researcher on the organisation’s project management practices. In such cases, the interview was cut short and the researcher politely asked for official documentation from the organisation to use as secondary data.
4. Results

This chapter will present the results of the data collection. A presentation of all NGOs interviewed during the study will be given along with a short summary of their mission statements through the NRM issues they aim to tackle. A short description of the projects discussed is provided, as well as a description of beneficiaries to which NGOs provide capacity building and other development services. The chapter starts with NGOs working within land/forest natural resource management, and then moves to a presentation of NGOs working with marine natural resource management.

4.1 NGOs working with Natural Resource Management in Senegal

Data was collected using semi-structured interviews from ten NGOs working within NRMs in various locations in Senegal. Discussions centered on the following questions:

<table>
<thead>
<tr>
<th>Question</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>q1:</td>
<td>What factors influence the integration of gender aspects in NRM’s projects?</td>
</tr>
<tr>
<td></td>
<td>• Are those top-down or bottom-up factors?</td>
</tr>
<tr>
<td></td>
<td>• If top-down/bottom-up, what is the origin of the gender concern?</td>
</tr>
<tr>
<td>q2:</td>
<td>How is the integration of gender aspects perceived by the project manager?</td>
</tr>
<tr>
<td></td>
<td>• Is this integration important?</td>
</tr>
<tr>
<td></td>
<td>• Is the gender sensitivity of the project staff important?</td>
</tr>
<tr>
<td>q3:</td>
<td>How does the organisation integrate gender aspects in projects?</td>
</tr>
<tr>
<td></td>
<td>• Does the organisation follow the Women and Development approach or the Gender and Development approach?</td>
</tr>
<tr>
<td></td>
<td>• How does the organisation address the socio-cultural and socio-economic context of women and men participating in the project?</td>
</tr>
<tr>
<td>q4:</td>
<td>What impact does this integration have on the project?</td>
</tr>
<tr>
<td></td>
<td>• Do men and women have the same level of environmental concern?</td>
</tr>
<tr>
<td></td>
<td>• What influence does gender integration have on the sustainability of the project?</td>
</tr>
</tbody>
</table>

4.2 NGOS working within land/forest natural resource management

<table>
<thead>
<tr>
<th>Organisation</th>
<th>Type of Organisation</th>
<th>Interviewee, Respondents</th>
<th>Interviewee Area of responsibility</th>
<th>Sex of the Interviewee</th>
<th>Location of implemented projects</th>
<th>Area of work of the project</th>
<th>Area of NRM</th>
</tr>
</thead>
<tbody>
<tr>
<td>O1</td>
<td>Cooperation agency</td>
<td>R1</td>
<td>Technical Advisor</td>
<td>♂</td>
<td>Casamance, Kolda, Kaolack, Fatick, Dakar and Ziguinchor (Fig.3)</td>
<td>capacity building, employment generation, local governance</td>
<td>Land/forest</td>
</tr>
<tr>
<td>O2</td>
<td>International NGO</td>
<td>R2</td>
<td>Senior programme manager</td>
<td>♂</td>
<td>Kaolack, Kaffrine, Kedougou, Tambacouida (Fig.5)</td>
<td>Sustainable agricultural practice</td>
<td>Land/agriculture</td>
</tr>
<tr>
<td>O3</td>
<td>International NGO</td>
<td>R3</td>
<td>Communication and report officer</td>
<td>♂</td>
<td>Louga, Thies (Band FILAO) (Fig.6)</td>
<td>Tree-planting to stop desert advancement</td>
<td>Land/Tree-Planting</td>
</tr>
<tr>
<td>O4</td>
<td>International NGO</td>
<td>R4</td>
<td>Project manager</td>
<td>♂</td>
<td>Saint Louis, Louga, Thies, Kaffrine, Djourbel (Fig.8)</td>
<td>Carbon credit, Forest/Wood Consumption</td>
<td>Land/agriculture</td>
</tr>
<tr>
<td>O5</td>
<td>National NGO</td>
<td>R5</td>
<td>Programme manager</td>
<td>♂</td>
<td>Tamba zone (zone cottoniÈre)(Fig.9)</td>
<td>Sustainable usage of agricultural products</td>
<td>Land/agriculture</td>
</tr>
</tbody>
</table>

Table 2: List of NGOs interviewed, working in land/forest natural resource management
4.2.1 Gender issues as an organizational focus

**Organisation 1**

O1’s focus areas are capacity building, job creation and decision-making participation for beneficiaries. O1 has had a gender priority since 2010, has been using gender mainstreaming for 6 years and has developed gender indicators. Each of O1’s programmes has a gender focal point. O1 and the Senegalese government are jointly implementing a programme that promotes renewable energy, rural electrification and sustainable supply of domestic fuels. It contributes to the sustainable supply of domestic fuel through reduced deforestation and increased use of improved stoves.

**Problem Identification.** Wood consumption is the main issue. Wood is collected from the forest and transformed into charcoal, which is then sold to city-dwellers. Reducing charcoal consumption in cities will reduce wood consumption. The programme provides households with improved stoves, which use less wood and provide a good alternative to wood consumption for domestic purposes.

**Beneficiaries** are 180 peasants, among whom 56 are women. Women through the Improved Stoves Project participate in the construction of improved stoves by making the clay components and participating in the product’s marketing. Men are involved in the construction of the iron parts of the improved stoves.

- “Implementing gender oriented project while respecting local social-cultural norms is a necessity”, R1.

Gender mainstreaming is a priority for O1 following the “gender mainstreaming movement” that began a few years ago and was perceived through new choices of development focus by donors. Prior to 2010, gender issues were only taken into consideration during the implementation of HIV programmes with very little gender-specific activities. After 2010, new gender indicators were developed, such as number of beneficiary women and number of female beneficiary groups. Activities related to projects are implemented with the intention of having a well-defined role for each gender while regional socio-cultural realities are taken into account. For example, in the Improved Stoves Project, women prepare the stove’s ceramic parts because pottery is an activity traditionally carried out by women, and men are involved in the iron part because smithing is an activity traditionally carried out by men. In the charcoal project, men are engaged in production and women in commercialization. Jobs are created through the effective marketing of charcoal (men) and improved stoves (women). Integrating administrative authorities (council and ministerial) which are in charge of enforcing law in the forestry sector is important to ensure the effective participation of beneficiaries in decision-making processes. Administrative institutions at the council level and ministerial level are strongly male-dominated. There is a concrete lack of women in rural councils as well as in the management committee, so it is difficult to achieve decision-making objectives and governance objectives as requested by donors, but the existence of women’s groups in civil society can overcome it. There is a clear lack of ownership among technical staff regarding gender mainstreaming concerns, an issue that no training has yet addressed.

Gender mainstreaming is important when:
- female beneficiaries market improved stoves to households. Outreach activities are not only directed towards wives who are in charge of the household’s energy supply but also towards husbands who hold the financial power. Husbands have to be convinced of the benefits of investing in buying stoves;
- producing improved stoves, because with a ratio of 280 male charcoal producers to 250 female stove sellers, consultation activities and information between women and men are the keys to ensuring better marketing and sales results.
Organisation 2

O2 is a US-based NGO with offices in Africa only. It has been intervening in Senegal since the major droughts of the ‘70s led to a food crisis. Gender has played an important role since its creation and the NGO is a self-proclaimed “Women and Development specialist”. O2’s focus areas are advancement and diversification of agriculture in the Senegalese “basin arachidien” (Senegalese Groundnut Basin, where peanut production is the highest; Fig.4).

Problem Identification: Poor agricultural practices have led to soil degradation, deforestation and loss of biodiversity.

- “The institutional role in the advancement of the gender agenda was positive”, R2.

The role of institutions in the creation of women's groups is a reality. Historically in Senegal, the state has supported women’s economic empowerment through the establishment of the female’s groups. O2 took this as an opportunity to support the growth of women's groups in villages, districts, departments and across the country as a whole during and after the ‘70s drought. O2 has implemented activities with peasants, which include soil remediation activities. The role of women was especially important for the construction of the rural economy.

Gender mainstreaming starts from the moment the project is conceived; it is a concept that is integrated into all activities from the start. There is no gender focal point; indeed each programme manager is also the focal point of his/her programme. The programme manager has to ensure that gender is mainstreamed and that monitoring and evaluation tools capture it. Each programme has its own system of monitoring and evaluation, and programme manager develops gender indicators. Furthermore, O2 makes sure that all staff are gender-sensitive.

It is the positive impact and positive results of programmes integrating gender that have been an incentive for the staff to become gender-sensitive. As gender evaluation tools, O2 uses the Gender Analysis Matrix, and the gender evaluation system has been integrated in the monitoring and evaluation system for 20 years. Gender mainstreaming is important because:

- the donor community has decided to finance a number of activities which tackle gender issues;
- there is an availability of tools which capacitate staff on gender issues. For example, OXFAM training (1999-2000) has enabled the acquisition of gender concept and practical tools for its implementation in projects by project managers, while before the training there was a real problem of knowledge and capacity related to gender;
- there is an increasing number of Senegalese professional women.

Organisation 3

O3’s main project is the “FILAO Band Reforestation Project”, which involves planting 1,000,000 trees and raising awareness of the use of improved stoves. The Senegalese state and the Ministry of Water manage FILAO Band and Forests, and allocate reforestation plots. The financial partner is an internationally well-known hotel chain; the project is part of their Cooperate and Social Responsibility strategy. Initially, the project had a
deep focus on social incentives to ensure durability, but the social side of the project was not important for the partner, just the result (one million trees planted).

**Problem Identification**: Desert progresses faster in northern Senegal due largely to human deforestation and, to a lesser extent, climate change.

- “Involving the Community as a whole through various incentives”, R3

At the beginning of each year, O3 asks peasants, women and men alike, if they are willing to invest in the project. Individuals or communities commit themselves with their own land or land acquired from their village, and in some cases O3 is responsible for assigning plots. Tree planting is done in August/September and the assessment is done in April of the following year. Authorization for cutting and replanting is given only if there has been 95% success among the plants managed individually or in-group.

There are more men among individuals who commit themselves and more women's groups among groups that commit themselves to the project, and since 2010, the project’s implementation date, there are more beneficiaries’ groups than individual beneficiaries.

At the beginning of the project, O3 organised educational activities for peasants around improved stoves; meanwhile, local officials and rural councillors were trained in environmental management. Peasants, however, were not trained or educated on the importance and the environmental impact of the project. Before each period of tree-planting, activities are organised around plant management in order to obtain better results. Tree nurseries (Fig 7) are built by O3, but water bills and other related costs are the peasants’ responsibility, which is not always successful because they often say they cannot afford it.

Gender mainstreaming is an important concept for O3, as evidenced by the integration of mills as incentive for women to join the project. Only women are trained in the construction of improved stoves (Eritreans Stoves have a lifespan of two years and are non-mobile) and are responsible for marketing their construction to households.

Because O3 uses performance indicators instead of impact indicators, no evaluation study on the impact of improved stoves’ usage has ever been performed. O3 has no gender focal point, and although financial partners are very interested in gender issues, O3 staff has no gender-related capacity and there is a need to train staff on gender issues. There is a real commitment to females’ social status when projects are planned, and during that phase there is a genuine search for information about the community and economic dependence. Unfortunately, there is also an issue of information sharing between programme and technical staff, with the technical staff being more focused on their activity result than anything else.

**Organisation 4**

O4 began operations in 2010 and covers Senegal, Mali and Zambia. O4’s focus areas are Clean Development Mechanism (CDM), sustainable energy, improved stoves under the CDM framework and carbon credit production.

**Problem objective**: Replacing wood consumption from forests managed by the Senegalese Government, with the main beneficiaries being female groups and women in Senegalese households.

- “Using women’s groups as a marketing tool”, R4

O4 was a microfinance institution at the beginning and is now focusing on importing improved stoves from
South Africa. Beneficiaries are women’s groups and the choice of improved stoves is a response to problems created by the usage of wood as energy sources, including deforestation, soil degradation, health problems and biomass consumption leading to deforestation and the increase of wood’s price. With improved stoves, there is a limited consumption of wood as a domestic source of energy. O4 wants to tackle the problem through simple, everyday solutions. O4 uses women’s groups because they are a great help in making the improved stoves popular in households so it is necessary to train women in the use of these stoves. Women’s groups are also responsible for receiving money from households who have acquired stoves (priced at 10,000 cfa).

O4’s private donors did not insist on the integration of women, but gender is important for O4 because of their programmatic theme of poverty alleviation. Private donors are more interested in carbon credits. Carbon credits are important for private companies, which have carbon credit ownership. O4 only creates activities with a social focus if the donor is interested in it; otherwise, such investment represents an unjustifiable cost for O4. Women integration is only apparent during training and promotional activities.

**Organisation 5**

O5’s focus area is prevention of unsustainable usage of agricultural and fertilizer products.

**Problem objective:** Raising farmers’ and producers’ awareness, and developing alternative usage of agricultural products.

- “Promoting non-polluting practices while giving economic incentives is necessary”, R5

Environmental education contributes to the early adoption of sustainable practices by peasants, which is why O5 works with peasant groups to promote alternative techniques to fertilizers such as crop rotation\textsuperscript{15}. Changing culture influences the fertility of the soil by disturbing parasite cycles, making it possible to rotate between usual crops and cotton, and since the peasants have not used fertilizers on the soil, crops produced can be labelled as organic. Unfortunately, fair trade certifications are costly and are not profitable without a good return on investment.

- “There is an added value in having a gender trained staff”, R5

The state only counts each “household’s head” during census, but when distributing fertilizers at the production level, women and men are counted separately. Producers receive fertilizer per kg produced and the transparency of distribution channels allows women to receive compensation according to what they have produced. The gender approach strategy of O5 has always been reflected by their distinct female producers’ approach/male producers’ approach even though there is always an equity concern when dealing with both genders in the same producers group.

O5 staff is trained on gender issues and there is a gender focal point. The need to evolve from the usual project management strategy to a gender-sensitive one was felt quite early on, mainly because of the issues project

\textsuperscript{15} A technique which avoids cultivating the same plant each year in the same place
managers encounter with women. Women do not have time, they are illiterate, and although they may be initiators of a project once that project needs skill and time, O5 notes their gradual disappearance. It is the gender-oriented training of colleagues that has helped integrate issues such as “time”, which were previously identified but could not be addressed, into projects and programmes. In the case of projects dealing with land issues, O5 targets women to inform and sensitize them. It is noted that men and women use natural resources in different ways. Not take into account that fact can lead to activities with partial impacts. It is important to integrate the distinct usages of resources by both genders.

R5: “O5 had an anti-erosion project which included a number of villages where most of the available land was not exploitable and women were using the little remaining exploitable land to cultivate vegetables for the household’s consumption, activities men were not interested in and to which they preferred urbanization. In one of these villages, women used portions of the community’s land selected by community leaders for planting trees to cultivate their vegetables. ”

“In some cases, when working in rural communities we use religion (Islam) which promotes development for all to argue against people who are against the integration of women in activities.”

“Problem approaches are always different in women and men; for example, when you talk about water, a man only sees the usefulness of the water but the woman sees the workload and time which are necessary to fetch the water.”

Project managers have to be careful in not creating an imbalance. Gender is integrated as much as possible each time O5 feels the utility, but the gender approach is not systematically integrated in the project design even though it is a cross-cutting issue, as environmental education and marketing is.

4.3 NGOs working within Marine natural resource management

4.3.1 Interviews

<table>
<thead>
<tr>
<th>Organisation</th>
<th>Type of organization</th>
<th>Interviewee</th>
<th>Interviewee's area of responsibility</th>
<th>Sex of the Interviewee (female♀; Male♂)</th>
<th>Location of implemented projects</th>
<th>Area of work of the project</th>
<th>Area of NRM</th>
</tr>
</thead>
<tbody>
<tr>
<td>O6</td>
<td>National NGO</td>
<td>R6</td>
<td>Programme manager</td>
<td>female♀</td>
<td>The Delta Faloun, Joal Fadiouth, (Fig 12)</td>
<td>Training women for better natural resource management and diversifying their sources of income</td>
<td>Marine/Fishery</td>
</tr>
<tr>
<td>O7</td>
<td>National NGO</td>
<td>R7</td>
<td>Gender Focal Point</td>
<td>female♀</td>
<td></td>
<td>Gender-Energy Programme, Rural Electrification</td>
<td>O7 Project and programmes</td>
</tr>
<tr>
<td>O8</td>
<td>International NGO</td>
<td>R8</td>
<td>Project officer, Project manager</td>
<td>male♂</td>
<td>Kayar Ponguine (Fig 13)</td>
<td>Capacity building, Women and Marine Areas, Strengthening and creation of Marine Protected Areas</td>
<td>Marine/Protected marine areas</td>
</tr>
<tr>
<td>O9</td>
<td>International NGO</td>
<td>R10</td>
<td>Project manager</td>
<td>male♂</td>
<td>Joal Fadiouth MPAs, Kayar (Fig.14)</td>
<td>Overfishing</td>
<td>Marine/Fishery</td>
</tr>
<tr>
<td>O10</td>
<td>Foundation</td>
<td>R11</td>
<td>Project manager</td>
<td>male♂</td>
<td>Dakar (Fig.15)</td>
<td>Environmental education</td>
<td>Marine/Land</td>
</tr>
</tbody>
</table>

Table 3: List of NGOS interviewed, working with marine natural resource management

Organisation 6

O6’s projects focus on female entrepreneurship development, fishery products processing, women of Saloum’s economic empowerment and mangrove management.
**Problem objective**: training women for better natural resource management and diversifying their sources of income.

- "Recognizing the impact of both genders on the resource, the role of urbanization and sustainable ancestral practices is important”, R6.

Women are as predatory to the environment as men, but in the case of women there is sampling but also reintegration and transformation. Community-based mangrove management and protection is cultivated through increasing women’s awareness and economic empowerment, but also by identifying conservation initiatives that already exist within communities. Male urbanization created a population essentially made of women, children and elders. Project objectives focus on training women to become better natural resource managers and diversifying their sources of income. It is therefore necessary to analyze their methods of production and supply. The consensus is that only the state is responsible for the protection of nature while the population destroys it, yet it is a matter of information: rural communities are not educated.

In fact, after being informed and trained, women are more conscious and liable to act accordingly. Regarding resource protection activities, O6 works to raise awareness among the population about the necessity to let shellfish grow before harvesting them(Fig.10; Fig.11); therefore, economic alternatives during the resting period\(^\text{16}\) such as working with female groups in Dakar and eco-tourism development are investigated. The project also tries to settle the household energy consumption problem, which is the direct cause of logging by rural communities. It is then important to put communities at the heart of the conservation efforts because the recovery of ancestral practices allows long-term effective natural resource management.

Urbanization has reduced male population, which has resulted in more women being involved in O6’s activities. The environmental impact by men is greater than that of women and traditionally women are more present in environmental protection initiatives than men are. In spite of that, field observations show that when NRM’s initiatives are local and grass rooted they tend to be implemented by men and when they are initiated by an NGO it is done by both genders.

The sustainability of transmitted environmental knowledge is more effective when women are trained. Women best convey this knowledge to others and subsequent generations. Men constitute a minority but make all the decisions. Even though women dominate in fisher communities and women's groups support the local economy, they are not recognized. Men are becoming increasingly present in processing activities, which leads to the impoverishment of women who might start a micro-business but end up being simple workers in this same micro-business because of the cost of production. NGOs should not impose an initiative that may not work; rather, they should first identify what is happening in the field and traditional ways that could be revived. Fishery done by men is more destructive than that performed by women given the fact that they use more advanced and technologically aggressive means compared to women, who use non-industrialized means. In the

\(^{16}\) During which the shellfish stock replenishes itself.
case of shellfish harvesting, the dependence of women on fishermen is a fact; women only deal with fish processing, therefore they depend on men for their fish supply.

There are no specific indicators for women. Gender indicators are effective only in projects where men and women are beneficiaries. In projects specifically related to and run by women, women indicators are not useful, but it is necessary to capture the perception of men in the community concerning project activities. This perception must be captured even though it mostly reflects interactions within households rather than within the community. It is important for the sustainability of the project because long-term impact project should be collectively agreed upon in order to avoid distress, domestic and social pressures which could lead to its rejection. It is necessary that men accept women training activities and feel as though they are a part of it.

Organisation 7

O7’s programmes discussed were the Gender-Energy programme and the Rural Electrification programme

- Struggle of a Gender Focal Point.

When the gender focal point started working at O7, gender issues were not well known. Her role initially was to produce information leaflets to inform staff, coach trainers who work on gender issues, participate in United Nations sessions implementation, complete gender mainstreaming and train programme officers on the process. There was a necessary discourse revision to be made, because at the beginning terms like ‘men’ and ‘women’ were not used, only the collective ‘households’.

If policies at the headquarters and senior management levels do not have gender’s components, O7 does not integrate them in its programmes. Gender mainstreaming is an important but very long process, and is necessary in terms of awareness and training. At the programmes and projects levels, everything is done to influence policies but technical staff cannot integrate gender if it is not part of their mandate. Under the rural electrification project, it was the field staff who felt the need to integrate gender, and they did. After that, they carried out an awareness campaign for the integration of gender for the next programme and project development.

Challenges of gender mainstreaming concern projects that do not have a gender mandate because they do not have it in their project development strategy at the senior-level. Another challenge lies in the elaboration of the gender action plan for O7 and an action plan for each programme. Staff training on gender mainstreaming is necessary because the staff must be able to understand and express themselves on gender issues. During the process, indicators designed in partnership with the programme manager are necessary because without indicators it is not possible to know if women are effectively integrated and if there is a real impact.

The gender focal point role is to ensure that gender is taken into account by the staff, to ensure that what is in project documents is seen on the field, evaluate the programme's goal and highlight gender aspects if it is already present in the programme's objectives. The role of a gender focal point is to ensure that these issues are taken into account by the staff and at each level.

It is important to have a person who is trained and can ensure gender integration. This is why having a person or somebody at the monitoring and evaluation department can make a difference, but also ensures that the staff is also gender sensitive. The monitoring and evaluation officer will ensure that each activity and indicator centered on gender is properly integrated.

Organisation 8

O8’s focus areas are capacity building, women, marine areas, and the strengthening of marine protected areas.

- “Only the gender which activity has an impact on the resource matters”, R8.
The gender approach is not directly taken into account. If the population using the natural resource in a community is male, O8 works with men; if it is female, O8 works with women. Moreover, O8’s policies do not mention Gender and Equity. Projects are directed to civil society, which are working within marine areas from Mauritania to Sierra Leone and Cape Verde, with relevant activities in the maritime domain involving participatory management of local populations.

Sometimes communities decide for themselves to protect their marine areas. In this case, such areas are called Community Areas (Bamboung, Kawawana, Nyjor Islands). Nyjor, for example, is an island where fishermen and women have come together in a GIE (Groupe d’Interets Economiques) and petitioned local authorities to protect their area. This was done in response to overexploitation and wild fisheries’ practices done by fishes from other islands or other regions.

**Organisation 9**

O9’s focus areas are environmental education, microfinance and West African coastal marine conservation.

**Problem Identification:** Overfishing

- “Senegal has changed; now women speak to men and there are women in O9 who are female project managers”, R9.
- “Having a female as a project manager or officer makes the difference”, R9.

Gender approach is important. Traditionally in Senegal, women are more engaged than men in activities related to natural resource management and environmental protection. In the case of projects involving women sellers and women processors, gender is important because there is a clear division of labour based on gender, as men fish and women process. The fish trade is mixed so there are men and women fish sellers.

In the context of resource management, O9 works more with men who are involved in exploiting the resources through fishing, but it is important to work with women because they represent the market demand.

**R9:** “Reduction of fishing harvest can raise prices and when there are no products to process women become price sensitive; they can argue with fishermen that it is because of overfishing that there is no longer fish. It is important to capacitate women in their ability to educate their husbands on the consequences of overfishing.”

Gender aspects were not taken into account at the beginning because most of project managers were men. A female project manager is more open when it comes to project proposals but also too flexible. She can count on the support of female beneficiaries; in general, having a woman as a manager has a positive effect on women’s empowerment activities. Microfinance projects were designed as counter-measures to overfishing, giving women the financial opportunity to shift to other economic activities and even to develop and diversify their activities.

Under Monitoring and Evaluation activities, gender evaluation is not possible because there are no gender indicators, and this concerns 70% of projects; there are some activities that are necessarily more related to gender than others. Post-project assessment is systematically done to evaluate the impact of the project implemented.
Organization 10

O10’s focus areas are climate impact on environment, promotion and leadership strengthening of women and youth.

- “Women’s lack of skills and low level of literacy are not reasons to not include them in training activities”, R10.

Regardless of gender there is a considerable gap in environmental knowledge; it is therefore necessary to effectively train both genders and ensure a thorough knowledge of environmental issues. O10 has community assistants to ensure that target communities have a thorough environmental and institutional knowledge, and women are empowered and made aware of both issues.

The senior management decided to take gender into account and for gender mainstreaming to be specified in O10’s policies. The lack of professionalism and political competence of participating women is a fact. In this sense, for the senior management, gender mainstreaming is about fighting against all forms of discrimination and social injustice.

R10: “In the training programmes, O10 has to insist that women must be integrated into all training whatever their skill level might be, so that training not only benefits and capacitates men. In achieving that, the partnership with Caucus and the Gender Laboratory was crucial because it is this partnership that brought to light the lack of gender equity. The gender laboratory roles were to develop themes, propose new concepts to ensure that each female participant gets used very early in the project’s development.”

Programme evaluations are done using a scorecard, activity report, rating from participants and expert report. There is no annual work plan for the programme, so it is difficult to evaluate activities implemented within environmental and gender frameworks.
5. Chapter 5: Analysis

In this chapter, answers to each sub-research question presented in chapter 1 are analysed, with specific quotes to illustrate respondents’ thoughts. Graphs are used to summarize key data obtained from discussions, and a sub-conclusion from each sub-research question is provided to ground the analysis.

5.1 Question 1: Which factors influence the integration of gender aspects in NRM project management?

- Are those top-down or bottom-up factors?
- If top-down/bottom-up, what is the origin of the gender concern?

5.1.1 Analysis

All organizations interviewed are non-profit and depend on donor funding or a type of funding that cannot be used to make any type of profit. Such funding is definite in nature and is solely assigned to achieve specific outcomes with predefined activities. Therefore, project activities can only be planned if there is a specified budget assigned to them. Regardless of a possible positive impact on the overall project, if there is no budget, any issues raised during the implementation of the project are simply not addressed. This applies to activities that raise a gender issue which undermines the project implementation. During programme/project implementation, technical staff members, if gender-sensitive, raise the issue, which will not be integrated during the current phase but might be taken into consideration during the next round of activities.

R7: “Under the rural electrification project it was the field staff who felt the need to integrate gender; they did an awareness campaign for the integration of gender for the next programme and project development.”

The gender-sensitivity of the technical staff is the key to achieving a bottom-up process. In fact, because of the nature of projects which have to be implemented and closed within a specific time, if the technical staff is not gender-sensitive, activities are carried out with only the outcome in mind regardless of its social impact. If issues related to gender are raised, they are not looked upon or avoided all together.

R3: “Technical staffs are more focused on their activity result than anything else.”

A gender-sensitive technical staff is then required, to share information with the top management so that gender issues are translated into well-defined activities but which can only be implemented during the next project. In fact, for new activities to be included during the implementation of the project, the budget has to be very flexible. In most cases it is not. Furthermore, this sharing of information is necessary since only activities designed during the project’s design phase can be implemented.

R7: “If policies at the headquarters and senior management level do not include gender, O7 does not integrate it in programmes.”

“At programmes and projects levels, everything is done to influence policies, but technical staff cannot integrate gender if it is not part of their mandate.”

“Challenges of gender mainstreaming concern projects which do not have a gender mandate because they do not have it in their project development strategy at the senior-level.”

When programmes and projects with a clear gender agenda are designed, they result from a predefined gender strategy at the top management level. Such a gender strategy represents the donor’s interest in gender issues, which have to be integrated into the NGO’s action plan.
R1: “O1 has gender and gender mainstreaming as priorities following the ‘gender mainstreaming’ movement that began a few years ago and was perceived through new choices of development focus by the O1’s government, and especially because of donor’s interest.”

In this case, gender integration and designing activities to address gender issues are budgeted and easily implemented, in which case evaluating outcomes against gender indicators is easily performed. Gender is then integrated at the design level and subsequently included in all activities as a crosscutting issue or a social issue to be addressed. But the gender-sensitivity of the technical staff is an issue that has to be addressed.

R1: “The risk of lack of ownership of gender as a concept by the technical staff is real.”

In Senegal, technical staffs in projects with high community-based components are made of nationals and, ideally, locals from the implementation region or with a very good knowledge of local practices and customs. Most of the time, they also have the same religious affiliation—in the case of Senegal, Islam—and therefore share the same belief as the locals. When project staffs are from the region of project implementation, the risk is that their gender sensitivity is at the same level as the community where the project has to be implemented. Coupled with the affiliation to Islam, this renders communication with the community on the gender subject non-effective.

Out of 10 respondents, only five (R1, R3, R5, R6, R9) openly acknowledged how the beliefs and culture of technical staff can hinder the gender components’ implementation in a project. R3 recognized that most of the staff is Senegalese, male and Muslim. This makes it difficult to have an open discussion about integrating more women into projects. R9 argues that having a female at the technical level has a positive effect on participants, in the sense that it conveys a strong message to both men and women that women’s empowerment is acceptable. Nevertheless, R5 and R6 admit that they try to avoid religious discussion altogether whenever raised by community leaders, who are always male and, in most cases, religious leaders as well. Furthermore, R9 and R5 alluded also to the fact that during activities such as community meetings where the project is explained, a male project’s staff might not notice women’s absence; it is a common fact that women do not attend such meetings. A female project staff will notice it, investigate it and will come up with a strategy (eg: changing meeting time, changing venue). R5, R6 and R9 insist that a male staff will not think about asking questions or looking at an issue from a different angle, which would have provided more information on how and why resources are exploited in a certain way.

While most of respondents strongly believe that the gender-sensitivity of the technical staff is handled sufficiently by training, R1 did not believe this was the case and strongly argued that “ensuring that women are economically empowered through various activities does not mean that the technical staff believe in that concept at the personal level; therefore, how can you effectively convey a message you do not believe in?”

5.1.2 Sub-Conclusion 1

Factors influencing the integration of gender in a project arise from a bottom-up process as well as a top-down process (cf Graph 1). Top-down factors are donors’ interests, which come along with funding. These guarantee that all activities will be budgeted and ensure the financial sustainability of activities during the duration of the project. They also guarantee that there will be room for dialogue and discussion between the technical staff and the management, in relation to gender indicators and parallel activities to be organized. However, these do not guarantee the gender sensitivity of the technical staff involved; such sensitivity is also the most important factor during the bottom-up integration of gender. The gender of technical staff involved might be a bottom-up factor as well, but only four respondents (R3, R5, R6, R9) specifically argued so, insisting that female technical staff are more gender-sensitive than their male counterpart.
5.2 Question 3: How is the integration of gender aspects perceived by the project manager?

- Is this integration important?

5.2.1 Analysis

All respondents (R1-R10) were adamant about the importance of gender integration for managers. While its importance was stressed in a number of ways during all interviews, reasons were varied and overall can be summarized into three very specific points: social injustice, poverty alleviation and projects’ requirements.

**Social injustice.** Some respondents (R1, R3, R5, R6, R10) were extremely vocal; it is impossible to be involved in any CBNRM and rural development projects without noticing the sharp differences in social recognition, social welfare and access to profitable livelihood means between men and women. For those respondents, taking gender into account meant tackling the social injustice that women face in rural settings. Therefore, all respondents view gender integration as the most efficient way to address this. Implicitly as well as explicitly, they all describe gender integration as a set of activities within the project which increases women’s participation and representation in their community during the project and after the project is over.

For R1 and R6, improving social recognition of women in rural communities has to do with increasing their representation at the local decision-making level as well.

R1: “Rural councils are strongly male-dominated. There is a concrete lack of female rural councillors as well as in their management committee so it is difficult to achieve decision-making objectives and governance objectives having to do with women’s status.”

R6: “The number of male members at the local and regional level of the fisher’s association is low compared to women members, but at the decision level it is higher. Men take all the decisions. Even though women predominate in fisher’s communities and women’s groups support the local economy, they are not recognised.”

These facts, among others, render the sustainability of project results having to do with women’s social welfare problematic; if the local authority does not support activities targeting women, ensuring their sustainability at the community level becomes an issue due to the lack of interest of community leaders. Furthermore, the
literacy level of rural women is extremely low, close to null, and therefore having women involved in decision making at the council level as well as regional level is difficult. In spite of that, according to R10, the literacy level of women should not be an issue because if it is properly addressed and if the project still provides necessary skills to women a difference could still be made. Unfortunately, authorities and association leaders use this fact to limit women’s participation in training activities, a situation that R10 and R5 have faced:

R10: “Women’s lack of skills and low level of literacy are not reasons to not include them in training activities.”

R5: “Women are illiterate; although they may be initiators of a project once that project needs skill and time, we note their gradual disappearance.”

For O10, the issue was tackled by using community assistants who, while ensuring that programmes and project objectives were met, ensured that women were empowered and actively participated in activities. While acknowledging women’s lack of proper skills and specific competence that would otherwise produce more tangible project results, R10 and R5 stated that insisting on women integration and targeting women in projects where authorities do not think it is profitable to do so becomes an issue of discrimination and social injustice.

R10: “In the training programmes, O10 has to insist that women must be integrated into all training whatever their skill level might be, so that training does not only benefit and capacitate men. In achieving that, the partnership with Caucus and the Gender Laboratory was crucial because it is this partnership that brought to light the lack of gender equity. The gender laboratory’s role was to develop themes and propose new concepts to ensure that each female participant gets used to project development very early.”

R5 raised the issue of “time” as an unfortunate factor, which works against women participation. O5 have faced situations where while the willingness to participate in project activities was there, but women could not leave their numerous household chores to attend and participate in projects. It is the gender training of staff that makes them aware of issues of “time” and women attendance and therefore allows them to tackle it (eg. change meeting time, change venue). Nevertheless, for R5 social injustice also takes forms in which project requirements are used as an “instrument” against women’s subsistence activities.

R5: “O5 had an anti-erosion project which includes a number of villages where most of the available land was not exploitable and women were using the little remaining exploitable land to cultivate vegetables for domestic consumption, activities men were not interested in and to which they preferred rural exodus. In one of these villages, portions of the community land selected by community leaders for planting trees were used by women to cultivate their vegetables.”

**Poverty alleviation.** Poverty and lack of other means of economic livelihood are the reasons behind mis-exploitation of natural resources; therefore, while preventing local populations from having access to natural resources it is important to provide alternative means of economic activities. For R2, R3, R4, R5 and R6, rural poverty has a female face and the best way to address it is to focus on women when designing any poverty alleviation activity. Furthermore, as the main providers of household energy supply and food in rural areas, women are the main users of natural resource products, which they exploit mainly for subsistence, and through their activities they are also a valuable socle for the local economy. In spite of that, the lack of access to better sources of livelihood keeps them in poverty.

Gender integration is then viewed as a strategy that solely focuses on improving women’s socio-economic condition. For R2, women’s roles in the rural economy are important and the reasons why activities directed for natural resource management (eg, soil remediation) are designed with women as the main tool to achieve project objectives. R4 goes further by stating that even if donors do not specifically require it, activities are designed to include more women due to O4’s programmatic themes on poverty alleviation. Nevertheless, most NRM projects require preventing local communities from exhausting natural resources and therefore preventing women to carry out subsistence activities such as harvesting shellfish during their maturation period, which are also sold in local markets. This can result in an increase in poverty as well as food insecurity, and therefore R6 advocates providing economic alternatives during the resting, such as working with female groups in Dakar and eco-tourism development.
**Project necessity.** In CBNRM, the main beneficiary is the environment and local communities are participatory members; therefore, any project activity will have the environment at the centre of its objectives and related community activities build around it. Most respondents (R1, R3, R4, R5, R6, R7, R9) view the fact that women are most engaged in activities related to natural resource exploitation as the main reason why their involvement in projects is necessary. Nevertheless, for R8, the clear division of labour based on gender makes the integration of one gender over another more important depending on the natural resource whose management is being addressed, while the other gender is left out of consideration. This is argued against using R1, R5, R6 and R9’s statements, who consider the socio-economic interaction of both genders along the exploitation and production chain as a sufficient reason to believe that focussing on one gender over another based on interaction with the natural resource is a mistake.

In the case of projects involving women sellers and women processors (O9, O5) and projects involving stoves and agricultural products (O1, O6), having a clear gender integration approach, which takes into consideration both men and women’s interactions with the resource, is important because there is a clear division of labour based on gender. Men fish and women process the products brought in from the sea, in stove production men create the iron parts of the stove and women the clay parts (with women as the sole user of stoves), and in agricultural activities men own land rights while women use the land. Focussing only on the supply side (men) or on the demand side (women) might yield results that will be partial and the overall aim of the project will not be reached.

Moreover, for R5 and R6, even if the project targets women from the beginning, their low social status compared to men, as well as their lack of decision-making power, makes their participation problematic if men do not allow it. Therefore, even when they are not beneficiaries or participatory parties, men’s involvement in a project is still a necessity.

R6: “It is necessary to capture the perception of men in the community concerning project activities. This perception must be captured even though it is within the household that it is important rather than within the community.”

“Long-term impact projects should be collectively agreed to avoid distress, domestic and social pressure which will lead to the rejection of the project. It is necessary that men accept women’s training activities and feel part of it.”

When it comes to project requirements, focussing on women’s integration as a gender integration strategy is limited. On the contrary, the focus should be directed to effectively take into account the division of labour based on gender, acknowledge women’s social status compared to men in targeted communities and actively work with both men and women at all stages of the exploitation of the resources.

### 5.2.2 Sub-Conclusion 2

Social injustice, poverty alleviation and projects’ requirements were listed by the respondents as the main reasons why gender integration is important. All respondents view gender integration as a set of activities within the project which increases women’s participation and representation in their community during and after the project. However, at the community level the social dependence of women on men renders the effective integration of men in projects necessary even when they are not targeted by project’s activities.

### 5.3 Question 3: How does the organisation integrate gender aspects in projects?

- Does the organisation follow the Women and Development approach or the Gender and Development approach?
- How does the organisation address the socio-cultural and socio-economic context of women and men participating in the project?
5.3.1 Analysis

* The Women and Development approach vs. the Gender and Development approach

A women’s integration approach, also called Women and Development approach (WAD), assumes that the low degree of women’s participation in economic processes demonstrates in itself their disadvantageous position. Therefore, their assimilation into a specific project or policy, in which they would not have been integrated otherwise, will systematically improve their situation (Zwart, 1992; Charlesworth, 2005). The Gender and Development (GAD) approach provides tools to help organisations look at the “sexual division of labour but also the sexual division of responsibility” (Zwart, 1992). It goes above the social view of what functions men and women should have and analyses the relations between them and “the impact of these relations on development, and the forces that both perpetuate and change these relations” (Zwart, 1992).

All interviewed organisations considered themselves gender-sensitive in the design and implementation of projects. When asked “Do you integrate gender in your projects?” the answer was unanimously “Yes we do.” With Zwart’s (1992) Woman and Development definition in mind, as well as the Gender and Development definition, a closer look at how it was done and what indicators were used to evaluate the success of projects from a gender perspective provides a different view from these claims. All respondents consider that gender is taken into account as long as women are included in the project in one way or another. This is mainly due to the high male attendance in community-based environmental projects. In short, project managers believe that just increasing the number of women participating in activities fills their gender quota. This belief is also translated into gender indicators, which are fixed numbers capturing women’s attendance as groups or individuals.

Project: promotes renewable energy, rural electrification and sustainable supply of domestic fuels.
Organization: O1
Gender indicators: number of beneficiary women and number of female beneficiary groups.

The reverse does not apply. Increasing the participation of men in activities where women have high attendance does not qualify as a gender target. Gender relation’s impact on activities carried out by one specific gender is only considered when it is women’s activities which are negatively impacted.

R8: “Gender is not a priority in our projects because we only work with fishermen; women are not beneficiaries.”

R6: “There are no specific indicators for women; gender indicators are effective only in projects where men and females are beneficiaries. In projects specifically related to women and run by women, women indicators are not useful.”

When asked, “Do you take gender issues into account in projects?” respondents always answered as if s/he was being asked, “Do you take women issues into account in your projects?” Among Senegalese project managers working on environmental projects, the understanding is that the term “gender” represents a sum of social issues which are all eliminated once women’s participation is increased. This belief strongly reflects the WAD approach, which solely focuses on women’s representation without giving room for men. R2 is the only respondent who openly stated that O2 has a clear WAD focus in his projects and programmes.

Nonetheless, all respondents acknowledged the existing sexual division of labour in the social context within which their programmes and projects are implemented, and rather than challenging it, they design their activities around it:

R1: “Women make the clay part of the stoves while men make the iron part of the stove, which is in line with the prevalent tradition of men working with iron and women working with clay.”

R4: “Only women are trained to market stoves.”

R8: “We focus on sustainable fishing; all fishermen are men so we only work with men.”

While GAD is used to understand the social context and the sexual division of labour, all projects used the WAD approach in their community-based natural resource management.
*Socio-cultural and socio-economic context of women’s participation in environmental projects*

In Senegal, access to natural resources with property rights at the community level is governed by local and traditional laws, which discriminate against women. In the case of resources such as land and forest, the community as a whole may have a customary right to it, which is managed by male members while female members exploit the land as family labour. Moreover, customary laws and religion enforce such discrimination in rural areas. However, this is not regionally uniform. While women may not have access to land property in one region, they may have access to it in another, while women are not allowed to carry out any type of trade in one region but are allowed to do so in another region. In any case, while livelihood strategies may differ from one region to another, uniform access to resources governed by property, right or community is discriminatory against women.

R1, R3, R5: “Women are in charge of collecting wood for the household energy supply and agricultural production, but men have land rights and are culturally allowed to commercialize the agricultural product.”

Furthermore, regardless of the usage of the land, which in most cases is to feed families, decisions on how the land will be allocated are taken by males. For instance, O5 had an anti-erosion programme which consisted of planting trees to stop land erosion, and the land allocated to that purpose by male elders and leaders of the community was used by women to plant vegetables, the consumption of which was solely to feed their respective families, including those very elders.

This applies also to communities depending on fisheries for livelihood. There is a clear sexual division of labour where men are in charge of fishing and women are in charge of collecting shells, selling fish and transforming fish before commercialization. The dependence of women on men is quite high.

R6, R7, R8, R9: “Women’s dependence on fishermen is a fact.”

5.3.2 Sub-Conclusion 3

Organisations integrate gender aspects in NRM projects by using the WAD approach, where only women’s integration important. In doing so, there is a clear association of the term “gender” with women in development. They also integrate gender using local customs and cultural habits.

5.4 Question 4: What impact does gender integration have on NRM projects?
• Do men and women have the same level of environmental concern?
• How does gender integration influence the sustainability of projects?

5.4.1 Analysis

NRM efforts focus on sustainable management of natural resources by communities, and for some respondents (R2, R7, R5, R6, and R9) the main incentive for project staff to become gender-sensitive has been the positive results of projects and programmes with gender components.

R2: "It is the positive impact and positive results of programmes integrating gender that have been an incentive for the staff to become gender-sensitive."

For R5 it is the gender-oriented training of colleagues that has helped to integrate gender-related issues that have been noted but couldn’t be addressed. Experiences in the field have shown to respondents that, while targeting communities as a whole to inform and sensitize them, it is obvious that men and women use natural resources in different ways; therefore, it is important to integrate the usage of the resources by both genders.

R5: "Problem approaches are always different in women and men; for example, when you talk about water: a man only sees the usefulness of the water but the woman sees the workload and time which are necessary to fetch the water."

Furthermore, R6, R5 and R9 recognize that the impact of both sexes on the resource and the existence of sustainable ancestral practices are important. While all respondents agree that both sexes are equally predatory to the environment, R6 argues that in the case of women, there is sampling but also reintegration and transformation, while natural resource exploitation by men is more destructive due to the use of more advanced, technologically aggressive means compared to the non-industrialized means of women. This is explained by men’s access to more advanced technology and having the financial means to acquire it. If women had access to the same technology, their level of exploitation, and therefore destruction, would be the same.

Nevertheless, male urbanization has led to the formation of a population almost short of men. In that context, community-based natural resource management made through women’s awareness, environmental education and their economic empowerment is more adequate. Even though R5 and R6 argue that transmitted environmental knowledge is more effective when women are trained (as only women best convey this knowledge to others and subsequent generations), it can be argued that this knowledge transfer is not done across gender. In a gender-divided society such as rural Senegal, where elder men socialize more with young men and elder women socialize exclusively with young women, knowledge is transferred easily from one generation to another within gender and not across gender. Adding urbanization, this leads to fewer and fewer young men to which certain knowledge can be transferred, while the number of young women increase in the community. This knowledge is then gender specific, not community specific, even though it is done within the community. Furthermore, even if children of both sexes are involved in shellfish harvesting, for example, and receive knowledge about a sustainable method of shell collection, masculinisation of activities will prevent boys from remaining in this line of activities for long and the knowledge transfer to them will be lost.

For R6, R5 and R9, NRM is also about identifying conservation initiatives and ancestral practices that already exist within community. Projects are then designed around analysing the method of production and supply, training women in better natural resource management and diversifying their source of income. R6, R9 and R8 note that when reforestation and conservation initiatives are local and grass-roots, they tend to be done by men, and when they are initiated by an NGO, they are conducted by both genders.

For most respondents (R1, R2, R3, R5, R6, R9), having both genders involved in NRM efforts creates evident long-term effects and greatly contributes to the sustainability of the projects. As stated by R5, impact projects should be collectively agreed to avoid distress, domestic and social pressure which would lead to the rejection of the project. For R9, while a project might focus more on men’s impact on the resources, it is important to work with women because they represent the market demand.

R9: “Reduction of fishing harvest can raise prices and when there are no products to process women become price sensitive: they can argue with fishermen that it is because of overfishing that there is no longer fish. It is important to capacitate women in their ability to educate their husbands on the consequences of overfishing.”
5.4.2 Sub-Conclusion 4

All respondents stated that gender integration has a positive impact on the long-term sustainability of the projects. First, it ensures a better approach in understanding the various ways in which the resource is exploited, and secondly, it ensures the collective acceptance of projects by communities through women who ensure the sustainability of the knowledge acquired in terms of natural resource management and men whose acceptance is essential for its social sustainability.

5.5 Gender integration by interviewed organisations

Patterns emerged when analysing data obtained from interviews. These are apparent when all data are grouped under a table (cf Table 4), especially when taking into account the relationship between the origin of funding, factors influencing gender integration, and whether or not there is a Focal Point. The role of the Gender Focal Point is to ensure that gender aspects are taken into account at all programmatic and project stages. In theory, it is a good strategic organisational choice to have a gender “watchdog” who will ensure that gender aspects are actually practically integrated. However, it does not only mean ensuring that gender aspects are fully integrated; it also implies ensuring that monitoring and evaluation tools are properly designed to capture such integration.

The watchdog will essentially be the link between programmatic, project staff, and monitoring and evaluation staff. Such concentration of tasks within one person was pointed out as a relevant weakness. Respondents (R1, R3 and R9) consider that gender knowledge’s concentration in a single person, the Gender Focal Point, has the negative effect of ensuring that the rest of the staff’s gender sensitivity remains low. Moreover, if the staff’s gender sensitivity is non-existent, there can be a resistance, perhaps very open, towards sharing information with the Gender Focal Point.

<table>
<thead>
<tr>
<th>Information Sharing between Technical and management staff</th>
<th>Gender concern from the staff</th>
<th>Gender Training of staff</th>
<th>Gender focal point</th>
<th>Top-down Gender Priority</th>
<th>Bottom-up Gender Priority</th>
<th>Origin of Funding</th>
</tr>
</thead>
<tbody>
<tr>
<td>O1R1</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>✓</td>
<td>✓</td>
<td>X</td>
</tr>
<tr>
<td>O2R2</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>X</td>
<td>✓</td>
<td>X</td>
</tr>
<tr>
<td>O3R3</td>
<td>X</td>
<td>✓</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>O4R4</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>✓</td>
<td>Private</td>
</tr>
<tr>
<td>O5R5</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>O6R6</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>O7R7</td>
<td>✓</td>
<td>✓</td>
<td>X</td>
<td>✓</td>
<td>✓</td>
<td>X</td>
</tr>
<tr>
<td>O8R8</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>✓</td>
<td>✓</td>
<td>X</td>
</tr>
<tr>
<td>O9R9</td>
<td>X</td>
<td>✓</td>
<td>X</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>O10R10</td>
<td>✓</td>
<td>✓</td>
<td>X</td>
<td>✓</td>
<td>✓</td>
<td>X</td>
</tr>
<tr>
<td>10</td>
<td>5</td>
<td>7</td>
<td>3</td>
<td>5</td>
<td>7</td>
<td>5</td>
</tr>
</tbody>
</table>

Yes(✓) No (X)

Table 4: Summary of interviews

While not pointed out by respondents, the role of gender focal point requires interdisciplinary knowledge about all the organisation’s projects and programmes. In fact, each of the interviewed organisations has a vast range of environmental projects implemented in very different settings. These facts imply that for the gender focal point to be effective, he or she must have a profound knowledge of each project’s technicalities as well as very specific knowledge about gender relation/power/interaction in each of the regional settings where projects have to be implemented. In order to further acquire such knowledge, the gender focal points have to organise meetings with project managers, officers, and extension officers for each project in order to achieve effective gender integration.
Such organisational activities have to be conducted at every stage of the project cycle. This can lead to staff’s hostility, especially if they have low gender sensitivity. But still, five out 10 interviewed organisations chose to have a gender focal point and all of those depend on donors for funding. For R2, issues with having a gender focal point could be avoided if instead all the staff is trained and sensitised about gender issues. In fact, O2 decided early on to train their staff on gender concerns and do not have any gender focal points. That organisational choice implies that all project managers were de-facto gender focal points of their project, according to R2.

This does not imply that all organisations without gender focal points trained their staff. On the contrary, only one organisation (O2) without a gender focal point had done so. O3, O4, O8 and O10 had no gender focal point and none of their staffs were gender trained. Moreover, O3,O4 and O8 had in common the complete lack of information sharing between technical staff and management, on top of no gender focal point and no gender training. It is then not a surprise if the lack of information on gender issues between technical and management staff results in no effective steps to address them.

Further analysis of interviewed organisations shows that seven have a top-down gender priority and use donor fundings as well. This shows that in top-down gender priority, the origin of funding plays a role in the management’s decision to include gender aspects in projects. Out of the remaining three, two use private funding, and only two of them have a top-down gender priority. The last organisation, while using donor funding, has a bottom-up gender priority.

As it was expected, information sharing between technical and management staff is related to bottom-up gender priority. Information sharing about gender issues between technical and management staff resulted in a gender priority with direct input from field officers (O5, O6, O7). When no information was shared, the gender integration policy had no input from field officers (O1, O3, O8) but instead resulted from a gender policy decided at the management level.
6. Conclusion

6.1 “Can the integration of gender aspects ensure the sustainability of an NRM project?”

This study concludes that in Natural Resource Management, performed by NGOs working within the Senegalese context, integration of gender aspects can ensure the sustainability of an environmental project when social and cultural aspects are taken into account. In Senegal, the general consensus among NGO’s NRM practitioners is that gender integration is equivalent to women integration. Given women’s low social status, low representation and lack of economic power, there is a conscious effort from NGO management to focus more on women compared to men. In addition, other factors influencing the integration of gender aspects arise from a bottom-up process as well as a top-down process. Main top-down factors are donor’s interest, while main bottom-up factors are project staffs’ gender as well as their gender-sensitivity.

The study demonstrates conclusively that the most important factor is the gender sensitivity of project staff. It plays an important role in identifying and addressing gender issues that would otherwise be overlooked. Such gender sensitivity was assessed by investigating whether or not information sharing occurred between technical and management staff. All respondents view gender integration as a set of activities within the project which increase women’s participation and representation in their communities during the project and after it is over. Nevertheless, at the community level, the social dependence of women upon men renders the effective integration of men in projects necessary even when they are not targeted by projects activities. Finally, women ensure the sustainability of the knowledge acquired during NRM activities, while men ensure the social sustainability of NRM activities carried out by women.

This conclusion raises further questions on the trade-off that is required for NGOs to ensure the social sustainability of NRM. From the interviews gathered, it is obvious that NGO’s unspoken gender policy is to not question social roles and cultural norms in places but rather work with them while providing more opportunities to women. Even when projects target women, they do not challenge the established social system that may be the reason of their impoverishment. Rather, they use established gender role distribution to design NRM’s activities. Such criticisms are not different from those directed at Women and Development and Gender and Development’s policies; therefore, it is safe to assume that gender equality is not part of the final social benefits of NRM projects and programs in Senegal.

However, in most cases, the target of NRM’s projects remains the natural resource rather than the social well-being of communities. Therefore, ensuring direct and sustainable access to it, as well as the sustainability of their project, can be problematic if the male-dominated community turns hostile at attempts to influence gender power. The ethics of such a trade-off is questionable, especially when gender equality is used as one of the intended outcomes of community-based NRM.

6.2 Suggested areas of study

Throughout this study, as more information about Senegal was obtained, possibilities to investigate other issues related to gender studies arose. While I could not diverge from my subject during my thesis writing, it is my humble belief that the following subjects are important to investigate.

The strategic role of women’s groups and the limitations of Senegalese and Gambian institutions in increasing gender equality in local governance. As stated before, Senegalese institutions have played a considerable role in the creation of women's groups. Historically, the Senegalese state has always provided support to women’s economic empowerment through the establishment of female groups. NGOs use that fact as an opportunity to support the growth of women’s groups in villages, districts, departments and across the country as a whole. Nevertheless, the issue remains dependent on the effective participation of women at the local level. While the role of female’s groups has not been investigated in this thesis due to lack of data, it has been stressed by some respondents that their roles in increasing female representativeness at local fisher and peasants association have been considerable. In fact, respondents claimed that while there is a concrete lack of
females at the management committee level, the existence of women’s groups has overcome it. Investigating how female groups have contributed to greater gender equality in natural resource management is an area that calls for further studies. This is notably an area of academic and cultural curiosity for me, because in Cameroon, the women’s group creation dynamic is mostly the result of institution intervention, whereas in Senegal it is part of the country’s culture. Therefore, carrying a cultural comparative analysis between Senegal and Cameroon on the cultural aspect of women’s group creation at the grassroots level calls for further studies. Looking at the intersectionality in natural resource management can provide new answers on how women’s groups are created in rural areas. In that sense, the effect of male urbanization can be looked at by investigating questions such as: In light of male urbanization, how is a community with male-dominated governance maintained in a rural area?

Investigating the limitations institutions face when implementing laws at the local level could shed lights on how issues could be addressed. Respondents also highlighted the role of local institutions in the effectiveness of NRM by local communities, and it was stated that there is a difference in CBNRM practices before and after NRM revert back under a community’s ruling. Some of the organisations which could not be included in this study have activities in Gambia, a neighbour country, as well as in Senegal, with more or less same local culture and gender inequality but different institutions settings. A comparative analysis of the impact of usufructuary laws on environmental management as well as gender integration between a French-speaking African country (Senegal) and an English-speaking African country (Gambia) could be an interesting study.

Another study that could be conducted is a critical analysis of gender terminology during project management in French-speaking African countries. During interviews, it was obvious that officers and managers used the term “gender” in reference to increasing women’s participation. When it comes to NRM project management in the French-speaking African countries, there is a general confusion of what the term “gender” means and what gender integration entails. This is noticeable when reading project handbooks, project proposals and related documents, project marketing and community outreach activities. Such confusion might be due to an inadequacy of the French terminology used for gender policies, coupled with the relatively new gender discourse within the French-speaking world. In fact, the term “gender” is used as a generic term that describes a set of activities solely aiming at correcting a perceived gender imbalance. Such an imbalance is then “corrected” through increasing women representativeness in the targeted sector. I was personally disturbed by this fact and I believe this should be critically analysed.

Finally, my study already demonstrates that the sustainability of environmental projects is achieved through men and women, although I did not discuss the cost and benefit side. I believe this should be done. Therefore, a further study could focus on the social and economic benefits analysis of gender integration in environmental projects, coupled with a study on organisational cost and benefits analysis of the various methods of integrating gender in project cycles.
7. Acknowledgement

“Life is what happens while you are busy making other plans.”

John Lennon

To my mother, my brother and my sister, your undying love was always present under the mist of our respective life’s turmoil. I love you. To my Aunt Désirée, from one Akoyoko to another one. Love you so much. To all my extended family, John Lennon said it best. See you all soon.

To my friends, I always feel blessed by your affection. I do not take any of you for granted. Theo, Senegal would not have happened the way it did without you. Johan, thank you for everything, in so many ways I owe you so much. DC, Skype is such a wonderful thing. So happy to have you back. Thank you for your valuable comments. Dona, you have been there in so many ways. Thank you for being tough on me. To Carin, Cedrique, Myriam the world is not big enough to keep me apart from you. Love you, girls.

To all my wonderful friends from Dr. Linley Chiwona Karlton’s course “Rurality, Livelihood and Gender” at SLU. My dearest thoughts to Indré, Martina, Carol and Ana Paula. Thank you for being there that day.

To my supervisor, Dr. May-Britt Öhman, so calm, so confident in my abilities, gentle but firm in her supervision. Thank you for your valuable advice, comments and presence. Thank you for listening and supporting me the best way you knew how. I feel so grateful in so many ways.

To my evaluator, Dr. Lars Rudebeck, and the examiner, Dr. Ian Snowball. Thank you for your constructive and kind comments.

Finally, and not the least, to Sweden. So many years ago, I was seeking an education that I could not afford. Sweden gave me that and much more. I believe the Universe always gives you exactly what you need. Not what you want, but what you need.

Astrid.
ANNEX 1

Fig 3: Countries’s ODA disbursements to Senegal (Anon., 2014)

<table>
<thead>
<tr>
<th>Year</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>Japan</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>2007</td>
<td>France</td>
<td>176.66</td>
<td>Canada</td>
<td>47.91</td>
<td>Spain</td>
<td>41.35</td>
<td>U.S.A.</td>
</tr>
<tr>
<td>2008</td>
<td>France</td>
<td>189.00</td>
<td>Canada</td>
<td>73.31</td>
<td>U.S.A.</td>
<td>71.69</td>
<td>Spain</td>
</tr>
<tr>
<td>2009</td>
<td>France</td>
<td>145.88</td>
<td>U.S.A.</td>
<td>67.67</td>
<td>Spain</td>
<td>50.90</td>
<td>Canada</td>
</tr>
<tr>
<td>2010</td>
<td>France</td>
<td>167.20</td>
<td>U.S.A.</td>
<td>101.48</td>
<td>Canada</td>
<td>56.71</td>
<td>Japan</td>
</tr>
<tr>
<td>2011</td>
<td>France</td>
<td>177.32</td>
<td>U.S.A.</td>
<td>114.03</td>
<td>Japan</td>
<td>52.83</td>
<td>Canada</td>
</tr>
</tbody>
</table>

Fig 4: International organizations’s ODA disbursements to Senegal (Anon., 2014)

<table>
<thead>
<tr>
<th>Year</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>Others</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>2007</td>
<td>IDA</td>
<td>132.70</td>
<td>EU Institutions</td>
<td>93.25</td>
<td>ADF</td>
<td>56.23</td>
<td>Islamic Development Bank</td>
</tr>
<tr>
<td>2008</td>
<td>IDA</td>
<td>141.19</td>
<td>EU Institutions</td>
<td>133.40</td>
<td>ADF</td>
<td>88.96</td>
<td>IDF-CIF</td>
</tr>
<tr>
<td>2009</td>
<td>IDA</td>
<td>174.49</td>
<td>EU Institutions</td>
<td>124.32</td>
<td>ADF</td>
<td>99.80</td>
<td>IDF-CIF</td>
</tr>
<tr>
<td>2010</td>
<td>IDA</td>
<td>114.44</td>
<td>EU Institutions</td>
<td>84.05</td>
<td>ADF</td>
<td>63.57</td>
<td>IDF-CIF</td>
</tr>
<tr>
<td>2011</td>
<td>IDA</td>
<td>172.13</td>
<td>EU Institutions</td>
<td>109.77</td>
<td>ADF</td>
<td>94.24</td>
<td>Islamic Development Bank</td>
</tr>
</tbody>
</table>
ANNEX 2: Sample of Interview’s Notes
References


Available at: http://library.fes.de/fulltext/bueros/senegal/00264003.htm
[Accès le 10 July 2012].

Anon., 2014. Human Development Reports. [En ligne]
Available at: http://hdr.undp.org/en/statistics/hdi
[Accès le 02 June 2014].

Anon., 2014. Japan’s ODA. [En ligne]
Available at: http://www.mofa.go.jp/policy/oda/data/pdfs/senegal.pdf
[Accès le 02 June 2014].

Anon., 2014. University of Strathclyde. [En ligne]
Available at:
http://www.strath.ac.uk/aer/materials/3datacollection/unit1/semiunstructuredinterviews/
[Accès le 20th August 2014].


Bank, W., 2014. Senegal Overview. [En ligne]
Available at: http://www.worldbank.org/en/country/senegal/overview#1
[Accès le 26 May 2014].


Douma, A. et al., 2002. Towards a workable approach to mainstream gender in natural resources management, Amsterdam: Both ENDS.


