

1. Introduction

Developing countries are vulnerable to the expected climate change impact. Republic of Senegal is located in far West Africa and whose sixty percent of population lives in coastal area that is a very vulnerable situation. According to Human Development Report by UNDP, it has been ranked as 163th/182 countries. They are suffering from climate change impact rather than developed countries and the problem is that they don't have enough knowledge and money against it. Adaptation Fund (AF) is a financial funding mechanism which was established under the Kyoto Protocol. AF provides the fund for developing countries directly not through the international organizations. We call the unique characteristics about AF "Direct Access" scheme. Senegal's case "Adaptation to Coastal Erosion in Vulnerable Areas" is the first case of Direct Access and AF accredited CSE (Center de Suave Econogique) as a NIE (National Implementing Entity). In this opportunity, I went to Senegal to investigate to the mechanism of Direct Access Funding by expert hearing and interviews for the actors. I would like to discuss about the structure of direct funding and also find some implications about the enhancement of the ownership of Senegal.

2. Study Area

My affiliation of this opportunity was IRD (Institute Recherche Pour Developpment) Senegal to learn the geographical information and knowledge. The study are three project sites of the AF project, Rufisque, Saly and Joal. The location are within 100km of Dakar, and struggleing with the severe coastal erosion. The interviews are cooperated by CSE, Environmental E Green Senegal, and Dynamique Femme. The actors are Executing Entity (EE) of the project. The unique characteristics of AF program is that NIE can access the fund directly and it also enables to developing countries can manage the planning and implementations by themselves. This is expected to enhance the ownership of Senegal and also as an innovative financing scheme for the global adaptation funding mechanism.

3. Methods and materials

I had semi-structured interviews for the Institutions which related to the projects. In addition to that, I had some interviews for International Organizations, for example UNDP, EU Representative and IUCN and so on. This purpose of interviews are how they think about the situation about climate change cause and relations in Senegal and have their opinions about mainstreaming climate change into national development of Senegal. "vulnerability and resilience in West African coastal zone management".

4. Results

I will summarize the achievements of the project and talk about the experiences.

- (1) Rufisque, located from 30km from Dakar. Constructing 730m seawalls and 1.4m underwater berms to slow coastal erosion and build sandy beaches
- (2) Saly, located from 60km from Dakar.(a)Rehabilitation for women's community for fishery processing industry.(b)3,000 tourism industry people was preserved
- (3) Joal, located from 80km from Dakar (a)Rebuilding 3.3km dikes to protect rice-growing land from salinization (b)Reducing use of firewood in fish processing facilities (c)5,000 food producers benefited by infrastructure improvements

In addition to above results, they trained the residents in climate-smart adaptation, increased awareness among residents about climate change strategies and developed coastal zone management policies and regulations. Some implementation was delayed because of the technological problem and insufficient feasibility study. Some improvements should be required in terms of the implementation and management.

5. Discussion

The AF board says that NIE need a financial integrity, Institutional capacity, and transparency and self-investigative powers. In Senegal's context, we have to consider more about the qualification of NIE. They may need an external audit system. The most important thing is how to maintain the sustainability after finishing this program. They need more technological knowledge in terms of MRV (Mesurable Reportable Verifiable) in collecting data of the ground. In order to do other projects in Senegal near future, they also have to explain their strategy of financial additionality.

6. Conclusions (including limitations of your study and future works)

I have to research about another adaptation project in Senegal, because we need more dynamic support for Senegal's climate change problems. MOLOA (Cooperation mechanism for the management of the coastline and the reduction coastal risks in West Africa) is also my main objectives for my next survey.. I would also like to have interviews for government of Senegal, and talk about the policy formulation for climate change and national development.

7. Reflection on the GLTP in Africa

In this opportunity, the most impressive one is African social system that they help each other as a big family. I experienced those standards by capitalism not always effective and reasonable in Africa's context in some extent. We have to reconsider and sometimes change our perspectives for Africa. I think the person who has a global leadership in Africa can respect one's culture and religion and diversity. I had many opinions from the actors that Japanese contribution in Senegal will be needed more in near future.

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