9 Support for the assessment of fish stoc ks and climate change understanding

Project 9
5 years
US$ 16 751 705
All 6 FCWC countries

It is predictable that these changes positively and negatively affect the availability of food according to changes involved in Habitat, stocks and the distribution of the species in marine ecosystems. The incomplete understanding of these phenomena at local and sub regional levels increases the uncertainties and the complexity of the assessment of risk and future related transformations.

Background

The six FCWC Member States (Benin, Côte d'Ivoire, Ghana, Liberia, Nigeria, and Togo) total up 2500 km of coastline and produce annually over 1.293.000 tonnes of fisheries products. It is therefore clear that fishing is a vital source for more than 200 million people for food, jobs and income. In these countries, fishing is rooted in the traditions and actually represents a serious alternative to reduce the deficiency of nutrition, poverty and unemployment. However, this space is highly threatened by three phenomena:

- the negative effects of the illegal undeclared and or unregulated fishing: IUU fishing over exploits the resources of States, deteriorates marine habitat and infringes the sovereignty of States.
- the overexploitation of fisheries resources: major exploited stocks show disturbing trends from full operation to overexploitation.

Maritime capture fisheries are faced with overfishing, loss of habitats and gaps of development. Unfortunately, the quality of available data also tends to deteriorate because of low resources allocated to scientific research to ensure the monitoring. Fish stocks are not assessed regularly.

Fishing statistics are not regularly kept by the fisheries administrations or fisheries research centers. As a result, the available data are discrete and lack in general reliability and therefore cannot be used for analyses and build models for a better understanding of the dynamics of fish stocks exploitation.

Climate change: climate change is well observed at the global level of the planet with warming of oceans, rivers and lakes, the modification of precipitations, the salinity of the water and the acidity of oceans, and the increase in meteorological phenomena. These changes obviously introduce new variables, new uncertainties and new complexity in understanding the dynamics of fisheries management. Ultimately, fisheries management environment becomes more complex with the increase of uncertainty factors.

PROBLEMS TO SOLVE

Out of a population of 242.503.510 inhabitants of West Africa (Mauritania to Nigeria), the southern part (Liberia to Nigeria) represents alone 72%. South is clearly an area of high concentration of population whose food depends in large part on the import of fishery products. Out of the 856.563 tones of fish and fishery products imported in 2006, the southern part of West Africa has absorbed 94.6%. The demographic growth and urbanization trends suggest that the next 20 years will record increasing demand for fisheries products as fish and fishery products are generally more accessible to low-income consumers.

Fisheries resources in the sub region although limited compared to the demand will continue to contribute significantly to food security, income, employment and livelihoods of the most vulnerable ones. But to meet these challenges, important steps remain to be overcome.

An uncertain environment for rational management of fisheries resources: rational management of fishery resources must be based on the best scientific data available including a better knowledge of the State of stocks. On this chapter, the available data are disparate, discrete and often too unreliable to use for the purposes of analysis or model construction. Understanding the dynamics of the stocks and their exploitation is relatively inadequate. It is therefore difficult to build plans of management and conservation of fisheries resources in such an environment marked by a level of uncertainty.

Climate change, a complex phenomenon: it is observed at the global level. But at the local level, the elements of its manifestation and understanding are hardly noticeable by fishing communities, fisheries administrations and policy makers. However, several scenarios, mounted by the scientists, from hypotheses provide very important changes that will inevitably affect the State of stocks, habitats, distribution of species etc. Climate change could provide new opportunities and positive impacts with change of species and potential business. Ultimately, climate change at the level of the sub region deserves a better understanding to prepare populations to be adapted to its evolution to avoid being victims of disasters.

The weakness of the States: States are unable to cope before these major challenges. The resources allocated to scientific fisheries research and the management of the fisheries show downward trends. Institutes or research centers hard to ensure their mission of providing quality information and administrations develop management plans for which they have never had means of implementation, as the laws and regulations relating to fisheries are never applied.

Reliable data on fisheries and a better understanding of climate change is essential for a sustainable fisheries management.

PROJECT OBJECTIVE

- Improve the quality of the data relating to fishing through the creation of national and regional databases;

- Improve the knowledge of the State of stocks and the dynamics of their exploitation;

- Improve understanding of climate change in West Africa and prepare adaptation strategies.

PRODUCTS AND ACTIVITIES

Product 1:
National and régional databases on maritime fisheries are created

1.1 Recruit a Firm to prepare the establishment of databases

1.2 Organize a regional workshop to validate the blueprint maritime fisheries surveys methodology

1.3 Train national senior staff

1.4 Support States to conduct maritime blueprint surveys

1.5 Create 6 national databases

1.6 Support annually the States to improve the update of the database

1.7 A regional data base is created

Product 2:
Fish stocks and their dynamics are known

2.1 Carry out fisheries stock assessment campaigns

2.2 Carry out an evaluation study of the programs for fisheries, marine environment and climate change research.

2.3 Validate research programs

2.4 Hold annually a workshop for the evaluation of research programs

Product 3:
Elements for understanding climate change are shared and available

3.1 Define a regional research program on climate change

3.2 Support annually the institutes to conduct the program

3.3 Create a regional database on climate change

3.4 Organize a regional workshop on climate change

3.5 Develop a regional strategy for adaptation to climate change

Product 4:
Lessons learnt from the implementation of the project are disseminated

4.1 Organize the project supervision

4.2 Organize the project evaluation

PARTNERS and BENEFICIARIES

The challenges have obvious impacts on the whole of the population of the States and of the sub region. From this point of view, decision-makers through fisheries administrations and fisheries research institutes are the first groups concerned. Come then the international scientific community and the international community (sub regional, regional and international fisheries organizations) whose support are essential to the conduct of the project. Resource users and other sectors which interact with fishing must actively participate in the implementation.

SITUATION EXPECTED AT THE END OF THE PROJECT

At the end of the project, the six FCWC Member States have a database on maritime fisheries regularly updated on the basis of blueprint surveys at regular periods, fisheries administrations' data, studies and scientific research.
Fisheries research institutes or centres develop cooperation approaches to address the management of shared resources especially the pelagics and "grands migrateurs" and for pooling their efforts to carry out stock acoustic assessment campaigns. They develop programs on climate change and participate in the development of an adequate database for a better understanding of the phenomenon. FCWC collects and disseminates data and relevant information on the impacts of climate change on fisheries, on the economy, on society and on the livelihoods of populations.
Finally, FCWC helps to develop regional strategies to support the modifications induced by climate change.

Product 1 Activities 1 to 7: US$ 1 799 000

Product 2 Activities 1 to 4: US$ 9 319 500

Product 3 Activities 1 to 6: US$ 3 220 000

Product 4 Activities 1 to 2: US$ 228 000

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