

Background

Chilika Lagoon in the state of Orissa has been designated as Ramsar site since 1981. About 120,000 traditional active fishers in fishing communities in and around the Chilika Lagoon depend on its fishery resources for income as well as protein sources. However, it is concerned that the fishing pressure on lagoon has increased due to vitalization of economic activities and increasing population. Therefore, it is an important issue to improve and stabilize the livelihood of people in extreme poverty around the lagoon while simultaneously protecting the wetland and maintain sustainable use of natural resources.



This JICA-CDA project aims to strengthen the capacity of CDA for implementing sustainable development of the rural communities in and around Chilika Lagoon with formulation of Fishery Resources Management Plan and development of alternative livelihood for fisher's communities.

Overall Goal

Sustainable rural development activities are expanded in and around the Chilika Lagoon.

Project Purposes

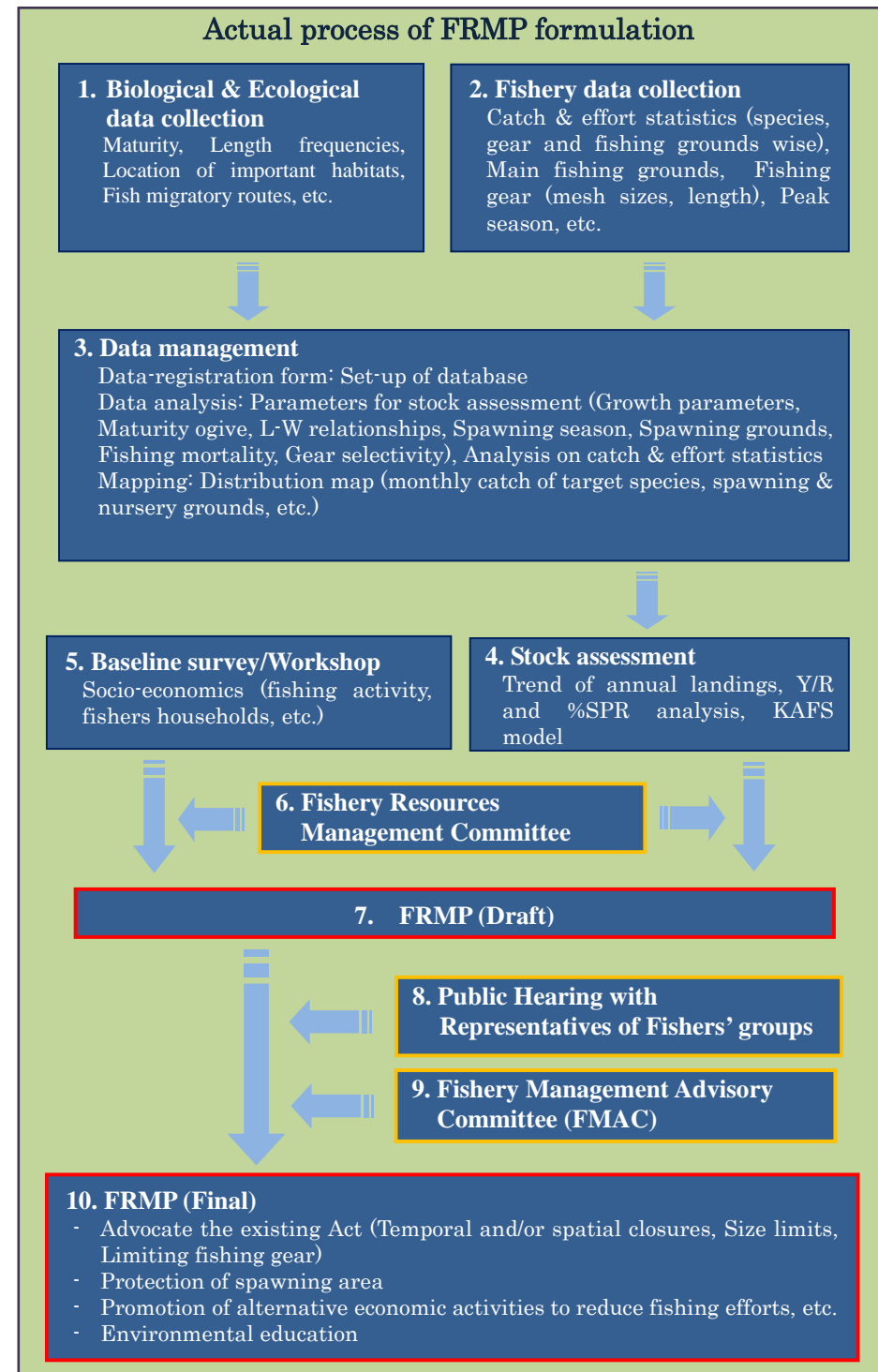
Strengthening the capacity of Chilika Development Authority(CDA) to plan and carry out sustainable development of rural communities inhabiting in and around Chilika Lagoon.

Activities done by the project

1. Formulation of Fishery Resources Management Plan (FRMP)

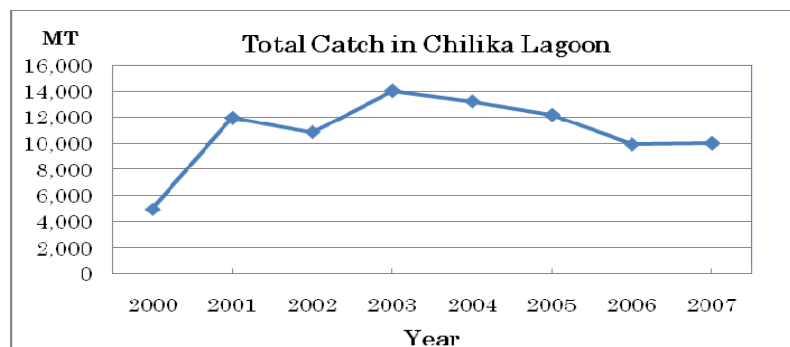
This project is proceeding to formulate FRMP, which is for sustainable use of fishery resources in Chilika Lagoon by fishers. Fisher's opinions which are extracted by the Sensitization Workshops in their villages are also reflected in FRMP.

1-1. Process to Formulate Fishery Resources Management Plan



1-2. Fishery Resources Assessment

Total fish landing volume in Chilika Lagoon has increased rapidly after opening mouth in 2000 though it kept decreasing till that time. But it began to decrease again after peaking in 2004.



The Project carried out resources survey of **Bhekta, Khainga, Boraga, Kundala, Sahala, Bagada, Kantala, Green mud crab and Red mud crab**, which are most important among all species for fishery industry in Chilika Lagoon.

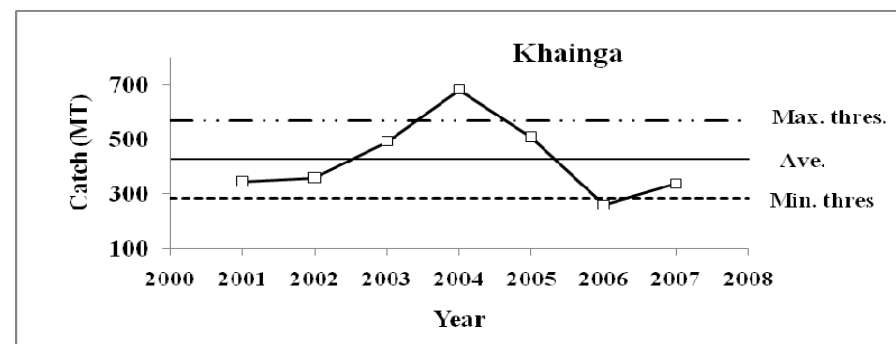
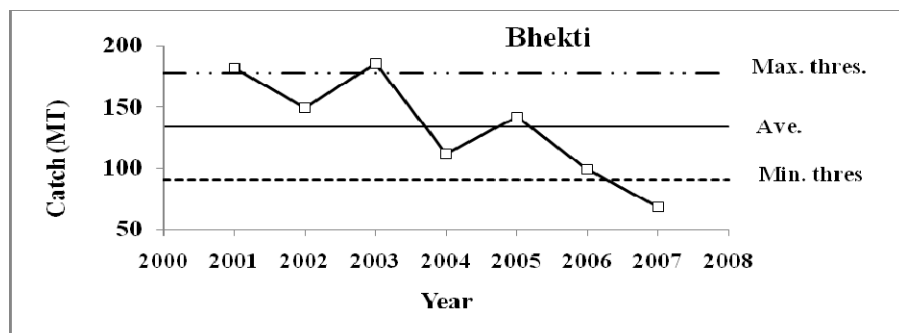
Analysis of fish landing data revealed that some of the main fishing species have a tendency of depletion due to overfishing. Especially, Bhekta (*Lates calcarifer*) and Khainga (*Mugil cephalus*) are in a critical condition.



Bhekta (*Lates calcarifer*)



Khainga (*Mugil cephalus*)



In order to recover the fishery resources of these species, the FRMP proposes following actions to initiate on urgent basis. It is expected that fishery resources of Khainga and Bhekta will recover adequate status by the enforcement of these regulations.

Countermeasures to be taken for Recovery of Fishery Resources

1. To enforce the existing Act (OMFRA), which prohibits all fishing during the months of July to January (7 months) and net fishing (except Khonda fishery) throughout the year in Outer channel.
2. Ban on all fishing activities in Palur Chanel throughout the year.
3. To conserve spawning ground of Kundala and Sahala.
4. To stipulate catch size below 150mm by any fishing method throughout the year.

1-3. Baseline survey / workshops for extracting fisher's opinions

The Project carried out baseline survey for grasping socio-economic condition of the fishers in and around Chilika Lagoon. In addition, the Project also held workshops for extracting fisher's opinions against the FRMP aforementioned at the selected fisher's villages. Major opinions of fishers are as follows.

1. To prohibited fishing activity in outer channel for some months. Necessity of alternative livelihood activities as their income source during the ban period was also expressed.
2. To clear all illegal nets in Palur canal to lead fish into Chilika Lagoon.
3. To remove all illegal prawn culture encroachment (Ghery) which causes siltation and occupies spawning ground of fish.
4. To enforce the regulations and patrol by the Government to demolish illegal fishing gears such as Zero net and Alim net which are killing juveniles of fish, prawn and crab.

2. Pilot Project for Alternative Livelihood

① Target villages

- 1) Bhusandapur (Northern sector)
- 2) Alandapatna (Central sector)
- 3) Gourangpatona (Southern sector)
- 4) Mahisa (Outer channel)

② Activities of Alternative Livelihood

Several activities have been selected according to the discussion with the villagers, and eight activities have started in 4 villages as follows.

- 1) Goat farming
- 2) Dairy
- 3) Duck farming
- 4) Grocery shop
- 5) Tent house
- 6) Dry fish marketing
- 7) Vegetable marketing
- 8) Irrigation for groundnut cultivation



Irrigation for Groundnuts



Vegetable Marketing



Goat Farming

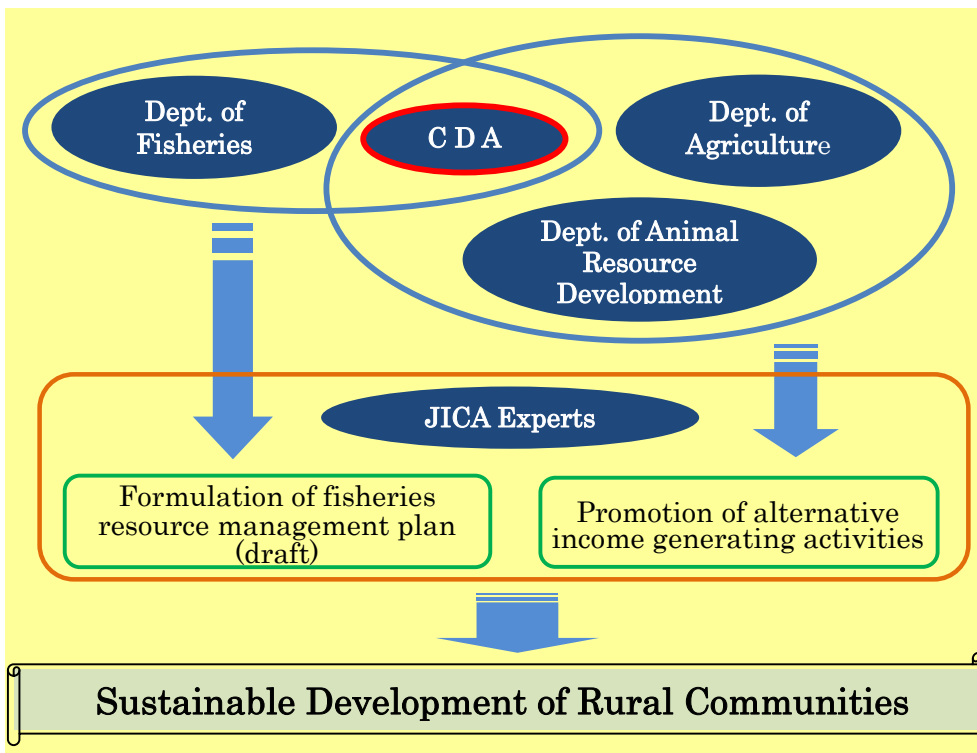


Dry Fish Marketing

It was concluded that **Goat farming**, **Dry fish marketing**, **Vegetable marketing**, and **Irrigation for groundnut cultivation** are effective and can be replicated to other villages.

3. Collaboration Mechanism with Other Government Agencies

The project established effective collaboration mechanism with related government agencies for smooth implementation of the project activities. CDA collaborates with Department of Fisheries to formulate FRMP, and also collaborates with Department of Agriculture and Department of Animal Resource husbandry to promote alternative income generating activities.



Training for goat farming by Veterinary Officer



Fishery Resources Management Committee