Country Name	—— Projet d'enide de la de promotion de la cogestion d	Projet d'etude de la de promotion de la cogestion des pecheries par le developpement de la chaine de valeur					
Republic of Seneg	gal	r					
I. Project Outline	e						
Background	Mbour is a department <sup>1</sup> where small-scale fisheries have been most active in Senegal. Both the annual volume of landing in the department and export from the department accounted for approximately 50% of the total volume by small-scale fisheries in the country in 2011. However, in fishing villages without landing facilities, the quality of fish rapidly deteriorated due to improper handling on vessels, landing beaches, and in distribution processes. Even in villages with landing facilities, the sanitary conditions of fish became unfavorable because the larger the facilities were, the greater number of workers and users visited there. As for fishery companies, particularly for small ones, environment in and around their factories were unhygienic and quality control was inadequate. In Senegal, the fishery sector was expected to make a significant contribution to the national economic growth with its high potentials. However, due to overfishing and shortcomings in various stages of a value chain from catching to selling, opportunity loss in the sector became at a significant level.						
Objectives of the Project	<ul> <li>The project aims to formulate a Master Plan and an Action Plan for value chain development for fishery products in Mbour Department by conducting a current issue analysis of fishery industry in the department and implementing pilot projects, thereby contributing to promote fisheries co-management* in the department.</li> <li>* Co-management by fishery workers and public administrations.</li> <li>Expected Goals through the proposed plan<sup>2</sup>:</li> <li>Through utilization of the Master Plan and the Action Plan, fishing methods, quality control, distribution, and other activities related to the value chain of fishery products are improved.</li> <li>Value adding approaches demonstrated in Mbour Department through implementation of the Master Plan and the</li> </ul>						
Activities of the Project	Action Plan are incorporated in national strategies and related project plans.         1. Project Site: Mbour Department         2. Main Activities:         1) Collection and analysis of basic information,         2) Development of the draft of Master Plan to indicate the direction of promotion of fisheries co-management in value chain of fishery products in Mbour Department and the Action Plan for implementation of the Master Plan,         3) Implementation of pilot projects,         4) Formulation of the final drafts of Master Plan and Action Plan,         5) Support for the government's approval procedures for the Master Plan and the Action Plan, and publicity of the plans to stakeholders.         3. Inputs (to carry out above activities)         Japanese Side       Senegalese Side         1) Mission members: 8 persons       1) Staff allocated: 3 persons         2) Equipment: vehicles       2) Land and Facilities: project office         3) Local cost: cost for utility of offices (electricity, water and telephone)						
Project Period	(ex-ante) August 2013 - December 2016 (42 months) (actual) March 2014 - April 2018 (48 months)		Project Cost	(ex-ante) 420 million yen, (actual) 534 million yen			
Implementing Agency	Ministry of Fisheries and Maritime Affairs (current Ministry of Fisheries and Maritime Economy (MPEM)): Directorate of Maritime Fisheries (DPM), Department of Fisheries Processing Industries (DITP), Studies and Planning Unit (CEP) Mbour Department: Directorate of Maritime Fisheries						
Cooperation Agency in Japan	OAFIC Co. Ltd.						

#### II. Result of the Evaluation

<Special Perspectives Considered in the Ex-Post Evaluation>

 Sustainability of the project effects was verified by the project effects including the effects made by the "Project for Capacity Building of the Co-Management of Fisheries Resources in West African Countries" (COPAO) (2019-2023)<sup>3</sup>.

1 Relevance/Coherence

[Relevance]

<Consistency with the Development Policy of Senegal at the Time of Ex-Ante Evaluation>

The project was consistent with the development policy of Senegal at the time of ex-ante evaluation. One of four strategic pillars of the "National Social and Economic Development Strategy 2013-2017" (SNDES 2013-2017) was "growth, productivity and creation of wealth." The pillar placed high priority on the stabilization of macro economy in urban areas and economic development in rural areas. Major instruments for economic development in rural areas were agriculture and fishery industries. Fishery sector was expected to

<sup>&</sup>lt;sup>1</sup> Department is an administrative district under region. Administrative hierarchy in Senegal is composed of region, department, commune, arrondissement, and village.

 $<sup>^{2}</sup>$  The degree of achievement of expected goals is not to be assessed in principle at the time of ex-post evaluation, since it is defined as the medium-to-long-term goals which will be attained as a result of crystallizing the proposed plan ("output" of the project).

<sup>&</sup>lt;sup>3</sup> A technical cooperation project assisted by JICA targeting capacity building for and dissemination of co-management of fisheries resources in Senegal and implementation promotion of the co-management in the neighboring countries including Mauritania and Guinea.

contribute to economic growth and food security, and the targets were set on 1) sustainable management of fisheries resources, 2) improvement of production and productivity of fishing and cultivation, and 3) value adding to fisheries resources. <Consistency with the Development Needs of Senegal at the Time of Ex-Ante Evaluation>

The project was consistent with the development needs of Senegal at the time of ex-ante evaluation. Struggling with the issues of decreasing volume of fish catches and reducing size of fishes, the Mbour Department government formulated and implemented resource management plans applying the approach of co-management. However, the introduction of resource management faced with difficulties because it imposed short-term income decrease on those involved in the fishery industry. Besides, it was expected to increase income of the players in the fishery industry by eliminating opportunity losses in value chains. Therefore, the Master Plan and the Action Plan for promoting co-management of fisheries resources combining with the development of value chain was needed.

<Appropriateness of Project Design/Approach>

The project design/approach was appropriate. The project plan took due account of socially vulnerable people and equity by targeting small-scale fishers (around 17,700) as the main beneficiaries along with brokers, sellers, processers, and other parties involved in the fishery industry. No problem attributed to the project design/approach was confirmed. <Evaluation Result>

In light of the above, the relevance of the project is  $3^4$ .

[Coherence]

<Consistency with Japan's ODA Policy at the Time of Ex-Ante Evaluation>

The project was consistent with the Japan's ODA policy to Senegal at the time of ex-post evaluation. In the "Country Assistance Policy for the Republic of Senegal" (May 2012 revised in April 2014) of the government of Japan, one of the two priority areas (intermediary goals) was support of sustainable economic growth aiming to increase income of farmers and fishers through the primary industry's development including the promotion of sustainable fishery industry.

<Collaboration/Coordination with other JICA's interventions>

Any collaboration/coordination between the project and other JICA's intervention was not clearly planned at the time of ex-ante evaluation.

<Cooperation with other institutions/ Coordination with international framework>

Any cooperation/coordination with other institutions or international frameworks was not clearly planned at the time of ex-ante evaluation.

<Evaluation Result>

In light of the above, the coherence of the project is (2).

[Evaluation Result of Relevance/Coherence]

In the light above, the relevance/coherence of the project is (3).

### 2 Effectiveness/Impact

<Status of Achievement for the Objectives at the Time of Project Completion>

The objectives of the project were mostly achieved as planned by the time of project completion. Basic information about overview of the fishery sector in the country and Mbour Department was collected and analyzed. To formulate specific strategies to address the issues found by the analysis, pilot projects were implemented for 20 months in four places in Mbour Department and Dakar city. Based on the findings from the pilot projects and surveys conducted by the project, the Master Plan for fisheries resources co-management promotion through value chain development, and the Action Plan consisted of six projects to be completed by the end of 2023 were formulated. <Utilization Status of the Proposed Plan at the Time of Ex-post Evaluation>

The proposed plan has been partially utilized by the time of ex-post evaluation. The Master Plan was approved in 2018 by the steering committee composed of DPM, DITP, and CEP (Indicator 1). Specified budget for the Action Plan has not been prepared, but resource management activities including the projects planned by the Action Plan have been implemented with the budget allocated to DPM and the Local Councils of Artisanal Fishers (CLPA)<sup>5</sup>. According to DPM and CLPAs, although the budget has not been prepared for all activities they planned, highly prioritized activities have been implemented without any significant financial constraints (Indicator 2). Out of six projects planned in the Action Plan to be completed by the end of 2023, three projects have been implemented but not completed at the time of ex-post evaluation in 2023. Other three projects have not been implemented due to limited human and financial resources (Indicator 3). The Master Plan was incorporated in the "Sectoral Policy Letter on Fisheries and Aquaculture Development" (LPSD-PA) for the 2016-2023 period, which was notified to all related agencies. The Action Plan was shared with some related organizations during the project period, but dissemination activities for the Action Plan have not been conducted after the completion of the project (Indicator 4). <Status of Achievement for Expected Goals through the Proposed Plan at the Time of Ex-post Evaluation>

The expected goals through the proposed plan have been partially achieved at the time of ex-post evaluation. According to DPM, the fishing and preservation methods for octopus have been improved by applying methods introduced by the project to fishers, brokers, sellers, and processers. The fishing and preservation methods were proven to be eligible for the Japanese market as shown in the international trade fairs held in Tokyo and OSAKA in August 2015. However, quality improvement of other fish species including high-price bottom fish has not been confirmed. Landing facilities constructed by the project have been highly utilized (Indicator 1). The value adding approach stated in the Master Plan was incorporated in the LPSD-PA 2016-2023 (Indicator 2). <Other Impacts at the Time of Ex-post Evaluation>

The project was classified as Category C according to the JICA's "Guidelines for Environmental and Social Considerations" (April 2010). Octopus fished, preserved, and processed by the methods introduced by the project were exhibited in the aforementioned international trade fairs, and known by its taste and hygienic conditions. Because of this, although no quantitative data are available, according to DPM, export of octopus to Japan has increased and made benefits for small-scale fishers, brokers, sellers, and processers in

<sup>&</sup>lt;sup>4</sup> (4) : very high, (3) : high, (2) : moderately low, (1) : low. To be the same afterwards.

<sup>&</sup>lt;sup>5</sup> A local governance structure organized to validate co-management measures and rules put in place by stakeholders in sustainable management of fisheries resources. It consists of a wide variety of stakeholders including a local government, local key personalities, fishers, sales brokers, fish sellers, fishing equipment makers, processors, investors, and others. ("Emergence of CLPAs in artisanal fisheries governance in Senegal," USAID, 2018, p.4)

Mbour Department. No negative impacts on natural, social and economic environment have been observed at the time of ex-post evaluation. Moreover, the currently implemented grant aid project, "The Project for the Construction of National Analysis Laboratory for Fishery Products" (2022-2025) supported by JICA, is planning to contribute to strengthening the seafood inspection system by constructing a national analysis laboratory for fishery products in Senegal. In addition, "The Project for the Improvement of Advanced Fish Landing Facilities for Value Addition to Fishery Products in the Municipality of Joal-Faiouth" which is a grant aid project currently under the formulation process, plans to promote the export of fishery products by improving the stability of seafood distribution for export of catches by small-scale fishers through construction of landing facilities capable of advanced hygiene management in Mbour Department where the project implemented. These projects will establish systems for value adding approaches for fishery products, and are expected to have synergistic effects with the Master Plan and the Action Plan developed by the project.

<Evaluation Result>

In light of the above, the effectiveness/impact of the project is ②.

Aim	Indicators	Results	Source
Utilization Status of the Proposed Plan The Master Plan and the Action Plan for fishery products value chain development approved by the government of Senegal are utilized and	Indicator 1: Progress of deliberation by the implementing agencies (DPM, DITP, CEP) to approve the Master Plan.	Status of Utilization: Mostly utilized. (Ex-post Evaluation) The Master Plan was approved in 2018 by the steering committee composed of DPM, DITP, and CEP.	DPM
implemented in projects of the Senegalese government Mbour Department with the assistances of development partners.	Progress of budget preparation for implementation of the Action Plan.	(Ex-post Evaluation) The Master Plan and the Action Plan have been utilized by the government of Mbour Department as basic policies for its fisheries resources management, but not as rigorous plans to be completed by the end of 2023. Therefore, no specified budget for the Action Plans has been prepared. But resource management activities including the projects planned by the Action Plans have been implemented with the budget allocated to DPM and CLPAs. According to DPM and CLPAs, although the budget has not been prepared for all activities they planned, highly prioritized activities have been implemented without any significant financial constraints.	DPM
	The number and continuation status of the projects implemented by Mbour Department according to the Action Plan.	Status of Utilization: Partially utilized. (Ex-post Evaluation) Out of six projects planned in the Action Plan to be completed by 2023, three projects have been implemented but not completed at the time of ex-post evaluation in 2023. Three projects implemented are 1) quality improvement of octopus, 2) quality improvement of high-price bottom fish, and 3) development of authenticated fish landing sites. Three projects not implemented are 4) conversion of fishing method for cuttlefish, 5) strengthening of the Market Extension Strategy Office, and 6) establishment of the Senegalese proprietary labelling system. Those projects have not been implemented due to limited human and financial resources.	
	Indicator 4: The situation of publicity of the approved Master Plan and Action Plan to stakeholders (fishery industry and fishery workers in	Status of Utilization, Dortiolly utilized	
Expected Goals through the Proposed Plan: Through utilization of the Master Plan and the Action Plan, fishing methods, quality control, distribution, and other activities related to the value chain of fishery products are improved. Value adding approaches demonstrated in Mbour Department through	Indicator 1: Improvement of fishing methods, quality and sanitation control, processing, distribution, and others related to the	(Ex-post Evaluation) According to DPM, the fishing and preservation methods for octopus have been improved by applying methods introduced by the project to fishers, brokers, sellers, and processers. The fishing and preservation methods for octopus complied with hygiene requirements eligible for the Japanese market, which was proven in the international trade fairs held in Tokyo and Osaka in August 2015. However, quality improvement of other fish species including high-price bottom fish has not been confirmed. Two landing sites constructed by the project in Nianing and Point Sarene are well utilized. It was observed in 2022 that fishes transported to factories for export were kept fresh with ice at those	

implementation of the Master Plan and the Action Plan are incorporated in national strategies and related project plans.	adequacy and profitability of quality and sanitation control, work efficiency and profitability of processing and distribution, etc.). Indicator 2: Number of adoptions of value-adding approaches developed and improved by the project in national strategies and related plans.	Status of Achievement: Partially achieved. (Ex-post Evaluation) The Master Plan was incorporated in LPSD-PA for the 2016-2023 period. In LPSD-PA, the Master Plan's plan for co-management of resources was taken as a part of sustainable resource management, and the plan for value-chain development as a part of the promotion of value-added fishery products.		
---	---	---	--	--

#### 3 Efficiency

The project cost exceeded the plan (the ratio against the plan: 127%) mainly because of the construction of two landing sites. The project period slightly exceeded the plan (the ratio against the plan: 114%) because of the extension of the contract period of Japanese consultants. Outputs were produced as planned. In the light above, the efficiency of the project is ②.

#### 4 Sustainability <Policy Aspect>

LPSD-PA is a sectoral development policy document for the development of fisheries and aquaculture for the period 2016-2023. Its overall objective is the strengthening of food security, economic growth, and local development. The main objectives to be achieved in terms of fisheries and aquaculture are to sustainably manage fisheries resources and restore habitats, to promote aquaculture, and to valorize fisheries production, which adopted some goals and approaches introduced by the Master Plan formulated by the project.

<Institutional/Organizational Aspect>

Implementation and supervision of the activities of fisheries resources management in Mbour Department have been managed by three officials in DPM. According to DPM and Japanese experts assigned to COPAO, although the number has been limited, they have properly executed their responsibilities collaborating with CLPAs. There are four CLPAs in Mbour Department. DPM visits CLPAs once every one or two months to coordinate and support them for conducting fisheries resources management activities including the projects planned by the Action Plan formulate by the project. Also, COPAO has promoted system development for fisheries resources co-management nationwide including Mbour Department as one of its major outputs.

#### <Technical Aspect>

According to DPM and COPAO, staff of DPM and CLPAs have enough capabilities to promote resource management activities. Besides, COPAO has developed dissemination tools and methods for fisheries resources co-management, and improved management skills and knowledge of staff of DPM and CLPAs and other stakeholders.

# <Financial Aspect>

According to DPM and CLPAs, although the budget has been limited and not prepared for all activities they planned, highly prioritized activities have been implemented within the available budget. Therefore, no significant financial constraints have been reported at the time of ex-post evaluation. Besides the budget allocated by MPEM, CLPAs have their own financial resources from landing fees, equipment utilization fees, and others.

<Environmental and Social Aspect>

Each CLPA has an environmental committee for monitoring the environment of its covered area. In case any environmental issue is found, it will be reported to DPM and prefectural governor through CLPA. No particular environmental and social issues have been reported by the time of ex-post evaluation.

### <Evaluation Result>

In light of the above, slight problems have been observed in terms of the institutional/organizational and financial aspects of the implementing agency. Therefore, the sustainability of the project effects is ③.

# 5 Summary of the Evaluation

The project prepared the Mater Plan and the Action Plan for fishery products value chain development in Mbour Department. After the project completion, the proposed plans have been partially utilized. Out of six projects planned in the Action Plan, three projects are in execution at the time of ex-post evaluation within the budget available for DPM and CLPAs. As for sustainability, slight problems have been observed in terms of the institutional/organizational and financial aspects. But, due to the effects of COPAO, no serious negative issues were observed in sustainability. As for efficiency, the project cost exceeded the plan, and the project period slightly exceeded the plan. Considering all of the above points, this project is evaluated to be partially satisfactory.

#### III. Recommendations & Lessons Learned

Recommendations for Implementing Agency:

Sustainability of the project was highly evaluated with the positive effects made by COPAO. However, COPAO is planned to be completed in 2023. Therefore, it is recommended that DPM prepares for the situation after COPAO to keep fisheries resources co-management promotion activities. To analyze the current situation and find what are needed to sustain the activities, it might be

appropriate to ask for the support of COPAO before its completion if possible.

Lessons Learned for JICA:

- The project, a development planning project, prepared the Mater Plan and the Action Plan for the promotion of fishery resources co-management for one particular department, Mbour Department, in Senegal. And, following the project, a technical cooperation project, COPAO, has extended its activities for the co-management promotion throughout the country including Mbour Department. With the COPAO's contribution, the project has maintained its sustainability at a relatively high level. This indicates the effectiveness of a program approach composed of a development planning project to prepare a master plan followed by a technical cooperation project to implement the master plan. From this experience, for a development planning project preparing a master plan, it is recommended to take a program approach with a technical cooperation project implementing the master plan. In addition, while what was verified in this project was the effectiveness of the program approach consisting of a development planning project and a technical cooperation project, it is assumed that this lesson is also effective in program approaches with grant aid projects and yen loan projects.
- Senegalese implementing agency did not regard the Master Plan and the Action Plan prepared by the project as rigorous plans to be fully implemented by their target years but as basic policies for middle- to long-term fishery resources management activities. Therefore, the Plans have been used flexibly in the changing situations of the fishery industry as indicators for the direction of the activities. This can be a case worth considering as a status of a master plan. Note, however, that if this is the case, the status of the master plan must be agreed by both parties prior to the start of the project along with clear definitions of medium-to-long-term objectives and short-term objectives together with appropriate evaluation indicators for them. (In the case of the project, the evaluation indicators were not adequate for the said status of the Master Plan because one of the evaluation indicators was the number of the action plans implemented.)