conducted by Dominica office: March 2014

Country Name	Project for Construction of Small Scale Fisheries Contor in Paramariha
Republic of Suriname	

I. Project Outline

Project Cost	E/N Grant Limit: 81	7 million ven	Contract Amount: 693 million ven		
E/N Date	January 2007 (Extension date: January 2008)				
Completion Date	October 2008				
Implementing Agency	Ministry of Agriculture, Animal Husbandry and Fisheries (MAAHF)				
Related Studies	Basic Design Study: June 2006 - January 2007, Detailed Design Study: February 2007 – March 2008				
Contracted	Consultant	Overseas Agri-FIsheries Consultant	s Co. Ltd.		
Agonaios	Contractor I	WATA CHIZAKI INC.			
Agencies	Supplier I	WATA CHIZAKI INC.			
Related Projects	 [Japan's cooperation] The Project for the Modernization of Small-Scale Fisheries in Commewijne District, Eastern Suriname I/II (Grand aid, FY1990) The Project for the Modernization of Small-Scale Fisheries in Commewijne District, Eastern Suriname II/II (Grand aid, FY1991) The Project for the Improvement of Fishing Gear and Equipment in the Republic of Suriname (Grant aid, FY1995) [Other donors' cooperation] Assistance for regional cooperation on fishery resource management and statistics by CRFM (Caribbean Regional Fisheries Mechanism) under CARICOM Assistance for fisheries management planning by FAO and ACP (African, Caribbean and Pacific 				
Background	Group of States). The fisheries industry in Sriname constituted about 5.6% of the total export value (2004) and it was an important source of foreign exchange after mining products such as aluminum, gold, and crude oil. As the annual landing of fishery products in Paramaribo, the capital city of Suriname, amounted to16,000 tons by the industrial fishing boats and 6,000 tons by small-scale fishing boats (2004), Paramaribo had played an important role as a central fishing boats in the country. However, due to lack of public fish landing facilities for small-scale fishing boats in and around Paramaribo area, small-scale fishermen were forced to unload and prepare for fishing in unsanitary conditions. Also insufficient supply of ice restricted small-scale fishermen from going on planned fishing or limited the number of days per fishing. In addition, as none of the existing landing bases satisfied the level of facility development stipulated by the Fish Inspection Act (2002), their improvements were required in order to meet sanitary control standards for export of fishery products to European countries.				
Project Objectives	Outcome To construct hygi and small-scale fisl Outputs Japanese Side • Construction of supply facility) • Construction of • Procurement of freshness mete Suriname Side • Securing and la • Provision of fac • Supply of oil tar	enic and functional public landing fa neries center equipped with jetty in jetty (landing jetty, access jetty, rev management building, security gua fishing gear mending shed insulated container, fish container, nd preparation of the project site litites for distribution of electricity an iks and feeders fence and gate, procurement of offi	acilities in compliance with the Fish Inspection Act Paramaribo. etment, ice-making facility, oil filling facility, water and room, power-receiving room spring scale, flat scale, pallet, handy pallet truck, and water supply and telephone lines		

II. Result of Evaluation

Summary of the Evaluation

As for relevance, this project has been highly relevant with Suriname 's development policy, development needs, as well as Japan's ODA policy for Suriname, at the time of both ex-ante and ex-post evaluation. As to effectiveness and impact, this project has achieved one objective of "increase in efficiency of landing works for small-scale fishermen". Meanwhile, although an improvement in quality of catches was observed after the ice production capacity was expanded by the project, the project has not yet achieved the other objective of "improvement in quality of fishery products" so far because the necessary infrastructure and system for sanitary inspection have not been established yet in the Center. The increased efficiency of landing works brought about a positive impact of improvement in working environment of fishermen and brokers. For efficiency, the project period exceeded the plan due to delay of project implementation period cause by high

rainfall. As for sustainability, the institutional capacity and system for quality management is still weak. The implementing agency has been working to respond to the challenges accrued from day to day such as securing O&M budget and replacement of damaged ice making machines by the support of the government. Therefore, this project has some problems in institutional aspect and O&M status of project facilities.

In light of above, this project is evaluated to be partially satisfactory.

1 Relevance

This project has been highly relevant with Suriname's development policy ("promotion and strengthening of fisheries related industries" in the Multi-Year Development Plan 2001-2005 and "improvement of food security and strengthening of national economy through agriculture and fishery sector development" in the Multi-Year Development Plan 2010-2015), development needs ("construction of hygienic and functional fisheries facilities for small-scale fishermen"), as well as Japan's ODA policy for Suriname "A New Framework for Japan-CARICOM Cooperation for the Twenty-First Century (February 2002)" with the priority area of promotion of tourism, fishery and agriculture development, at the time of both ex-ante and ex-post evaluation. Therefore, relevance of this project is high.

2 Effectiveness/Impact

This project has achieved one objective of "increase in efficiency of landing works for small-scale fishermen", however, the project has not yet achieved the other objective of "improvement in quality of fishery products" so far. It was confirmed that the implementing agency has been working on construction of inspection facility of fishery products in the Fisheries Center for improving their quality. Regarding the project effect on "increase in efficiency of landing works for small-scale fishermen", all key indicators such as "period that sufficient quantity of ice can be supplied to small-scale fishing boats", "time for preparation and unloading for fishing" and "number of trips for fishing (SK-OG type fishing boats)" met their target values. According to the interview results with staff of Fisheries Department, MAAHF and the Center, brokers, ship owners and fishermen, it was recognized that efficiency of landing works was increased because waiting time at landing facility was shortened after construction of jetty, and efficiency of transport was increased because trucks were able to access to near fishing boats.

Meanwhile, an indicator of "number of small-scale fishing boats that utilize jetty" was below its target value. Initially it was planned that other landing facilities in Paramaribo would be integrated to the Center, however, eight existing landing facilities are still functioning in Paramaribo according to the statistics officer of Fisheries Department. It is assumed that this affected the achievement of the above indicator. The reason why existing landing facilities are utilized continuously after the project completion is unknown. The project installed two ice making machines with production capacity of 10 tons/day/unit. Currently one unit of ice making machine with production capacity of 10 tons/day installed by the project and other two units with production capacity of 4 tons/day are operational. Therefore, current ice production capacity of the Center is 18 tons/day, which is slightly below the target value. However, the supply of ice is generally sufficient since the catches are directly transported by trucks from jetty to clients based on the contract agreement between fishermen and brokers/fishery households, hence demand of ice for fish processing and storage at the Center is not so much. Regarding the indicator of "volume of catches", an accurate statistical data is not available.

Regarding the effect on "improvement in quality of fishery products", according to the interview survey results, the improvement in freshness of catches due to increased capacity of ice production and the improvement in hygiene of work place was recognized. On the other hand, the sufficient quality management system has not been established as a sanitary inspection of catches is only conducted once a month randomly. In this respect, the implementing agency plans to strengthen the quality management system in the Center by establishment of independent quality management unit separated from the Fisheries Department and new construction of a quality management building. As for the impact, improvement in working environment of fishermen and brokers by increased efficiency of landing works was identified as a positive impact.

According to the results of water quality monitoring by Suriname Environmental Development Association, no major negative impact on natural environment was identified. Meanwhile, discharge of wastewater from fishing boats and dumping of fuels from jetty to the river is observed and there is a need for regulating these acts. However, no specific measures have been taken by the related organizations so far. It was confirmed that there was no resettlement of people associated with the land acquisition since the land was provided by the state-owned fisheries company free of charge and prior consultation between the implementing agency, the state-owned fisheries company and other companies near the project site was carried out successfully. There was no negative impact on navigation of vessels

Therefore, effectiveness of the project is fair.

Quantitative Effects

	Baseline value (2007)	Target value (After project completion)	Actual value (2008)	Actual value (2012)
Indicator 1 Period that sufficient quantity of ice can be supplied to small-scale fishing boats	4 months	12 months	12 months	12 months
Indicator 2 Time for preparation and unloading for fishing				
a) Time for unloading of catches (SK-OG type fishing boats)	Approx. 2 hours	Approx. 1 hour	Approx. 1 hour	Approx. 1 hour

b) Time for procurement and loading of ice	4 hours – more than 1 day	Approx. 2 hours	Approx. 2 hours	Approx. 2 hours
 c) Time for procurement and loading of fuel and water 	2 – 4 hours	Approx. 1 hour	Approx. 1 hour	Approx. 1 hour
Indicator 3 Number of trips for fishing (SK-OG type fishing boats)	Average 15 times/ year/boat	Average 16-17 times/ Year/boat	N.A.	20-24 times/ year/boat
Indicator 4 Volume of catches	2,646 tons/year	2,999 tons/year	N.A.	20,000 tons (the yearly total landings of the region Paramaribo). (Note 1)
Indicator 5 Number of small-scale fishing boats that utilize jetty	-	10 boats/day ^(Note 2)	N.A.	5-6 boats/day

Source: Ministry of Agriculture, Animal Husbandry and Fisheries (MAAHF).

Note 1: This data was based on the interview results to the staff in charge of statistics since no official statistic data of catches was recorded. Note 2: In the Basic Design Report of this project (2007), it was confirmed that 218 boats (including SK-GG, SK-OG, and SK-B type fishing boats) were based in Paramaribo and engaged in landing and preparation for fishing in the existing landing sites in the Paramaribo district. Among 218 boats, 16 boats were possessed by the ship owners who also owned jetties and having secured landing sites and 30 boats were out of service. The project presumed that the rest of 172 boats were the users of jetty. Based on the above assumption, the target value for number of small-scale fishing boats that utilize jetty per day (i.e.10 boats/day) was calculated considering other conditions such as number of fishing boats by types, average number of trips for fishing per year, and operated days.



The brokers buy fresh fish when catches are unloaded at jetty.



The fuel supply from the fuel tank at jetty to mooring boats became possible after the project completion.



The supply of sufficient volume of ice for fishing became possible after the project completion.

3 Efficiency

Although the project cost was within the plan (ratio against the plan: 84%), the project period exceeded the plan (ratio against plan: 153%) because of prolonged project implementation period caused by bad weather such as high rainfall. Outputs were produced as planned. Therefore, efficiency of this project is fair.

4 Sustainability

The operation and maintenance (O&M) of the project facilities have been carried out by Paramaribo Small-Scale Fisheries Center under Fisheries Department, MAAHF. Although there are vacancies in some staff positions including the manager of the Center, the O&M activities of the Center has been conducted without serious problems by the existing staff of the Center with support of staff of Fisheries Department. However, as the institutional capacity and system for quality management is still weak, the institutional aspect of the project has some problems. The maintenance works for ice making machines, refrigerators, and stand-by generators are outsourced to the private service providers. Since the technical level of private service providers is sufficient, the technical aspect of the project has no problem. Principally the Center is run on a stand-alone basis, its main source of revenue is sales of fisheries products.

The balance of revenue and expenditure of the Center is positive, the necessary O&M budget including labor cost is secured at a certain level. However, the O&M cost for project facilities is separately allocated by the Government of Suriname. For example, when one unit of ice making machine with production capacity of 10 tons/day was out of order due to refrigerant leak, the Center was difficult to repair it within its own budget. In this case, the government secured the budget and installed two units of new ice making machines with production capacity of 4 tons/day. It was confirmed that the Center has been work to raise the project effects through new construction of a building for sanitary inspection and allocation of fisheries statistics offices together with securing their necessary budget.

Therefore, sustainability of this project is fair.

III. Recommendations & Lessons Learned

Recommendations for Implementing Agency

- Although the institutional aspect of the Center is generally sufficient, the position of manager is vacant and its function has been carried out by the head of Fisheries Department temporarily. Since the Center is expected to play a central role as a major landing base in Suriname and its function and responsibility will be expanded in the future, it is recommended that the Center must appoint full-time manager as soon as possible and prepare the staffing for sanitary inspection and fisheries statistics in order to further improve its institutional capacity.
- The works for quality inspection and statistics have been started by staff of Fisheries Department. The collected data is
 utilized for national statistics data base. However, it was revealed that the collected data at the Center was not sorted
 out as an individual statistical data of the Center. It is suggested the Center must record the exclusive basic statistical
 data of the Center such as volume of catches. Also it was revealed that there is a possibility of dumping of wastewater

and fuels from the fishing boats and jetty. In this respect, the Center is expected to let related organizations take necessary preventive measures for above illegal dumping such as promotion of educational campaign for users of the Center including fishermen, establishment of regulatory measures and strengthening of its enforcement.

Lessons learned for JICA

• In relation to the above recommendations for implementing agency, JICA is suggested to consider the possibility of organizing training program in Japan as well as Suriname for staff of implementing agency concerning management improvement and fishing in consideration for environment.