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資料一1 調査団員・氏名

(1) 現地調査

現地調査の調査団員の構成は、以下のとおりである。

氏名	担当	所属
杉山 俊士	総括	国際協力機構 国際協力専門員（水産分野）
甲谷 伊佐雄	技術参与	国際協力機構 農村開発部 参事役
井川 晴彦	計画管理	国際協力機構 農村開発部 乾燥畑作地帯第二課 主任調査役
本間 謙	水産政策	国際協力機構 コートジボワール事務所 漁業・養殖専門家
竹本 仁之	業務主任／運営維持管理計画（注1）	株式会社エコー
越智 裕	業務主任／運営維持管理計画Ⅰ（注2）	株式会社エコー
岩崎 渉	施設設計／水産物流通／積算	OAFIC 株式会社
黒木 賢二	土木設計／施工計画・積算（注1） 土木設計／運営維持管理Ⅱ（注2）	株式会社エコー
佐瀬 攻	自然条件調査（注1） 自然条件調査／運営維持管理Ⅲ（注2）	株式会社エコー
森 潤一郎	機材計画／調達計画／積算	OAFIC 株式会社
渡部 和石	環境社会配慮	株式会社 ICI
山本 雄平	施工計画・積算（注2）	株式会社エコー

（注1） 協力準備調査①

（注2） 協力準備調査②

(2) 協力準備調査②

日数	月日		官団員		コンサルタント			
			杉山俊士	井川晴彦	越智裕	岩崎渉	渡部和石	黒木賢二
	日	曜日	総括	計画管理	業務主任/ 運営維持管理Ⅰ	施設設計/ 水産物流/ 積算	環境社会配慮	運営維持管理Ⅱ/ 積算
1	12/14	土	成田→					
2	12/15	日	→アクラ, 団内打合せ	ドバイ→アクラ、団内打合せ				
3	12/16	月	JICA 事務所打合せ 移動：アクラ→セコンディ				移動：GPHA タコラディ・ セコンディと事前打合せ	
4	12/17	火	先方政府概要説明 (GPHA タコラディ港・セコンディ漁港関係者) ステークホルダー・ミーティング、移動：セコンディ→アクラ					
5	12/18	水	先方政府合同説明・ミニッツ協議 (運輸省、GPHA 本部、漁業省、財務省)、団内打合せ					
6	12/19	木	現地調査報告作成・取りまとめ 団内打合せ					
7	12/20	金	GPHA 打合せ ミニッツ協議・署名、JICA 事務所報告					
8	12/21	土	アクラ→	アクラ→	アクラ→			
9	12/22	日	→ドバイ→			→ドバイ→		
10	12/23	月	→成田			→成田		

資料－3 関係者（面談者）リスト

(1) ガーナ国政府官公庁

1) Ministry of Transport (MOT) : 運輸省

Ms. Joyce A. B. Mogkui	Hon. Deputy Minister
Selby Twumasi-Ankra	Chief Director
Siisi E. Ocran	Director, Policy and Planning
Alhaji Ibrahim Tyani	Director, Finance

2) Ministry of Fisheries and Aquaculture Development (MOFAD) : 漁業・養殖開発省

Hon. Nayon Bilijo	Minister
Matilda Quist	Director of Marine Resources
Emmanuel Aryee	Director of Inland Fishing
Cecilia Erzuah	Director of Finance
Samuel Quaatey	Director of Fishery Commission
Thomas Insaidoo	Deputy Director of Fisheries Commission
Rebecca Amooh Aboagye	Ministry Officer
Alex Sarbah	Regional Director of Fisheries Commission/ Takoradi
Paul Bannerman	Head of Marine Research

3) Ministry of Finance (MOF) : 財務省

Kwadwo Awua-Peasah	Director, External Resources Mobilization/Bilateral
David Quist	Deputy Director
Edward Yeboah	Program Officer
Philip Ihompson	Tax Policy Unit

4) Environmental Protection Agency (EPA) : 環境保護庁

Lawrence Kotoe	Programme Officer
Ebenzer K.Appah-Sampong	Director of Planning, Programming, Monitoring & Evaluation
Hakeem Seidu	Western Regional Officer

5) Forestry Commission (FC) : 林野庁野生動物保護局

Nana Kofi Adu-Nsiah	Executive Director
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6) Lands Commission (LC)Western Region : 法務庁 WesternRegion 支局

Stephen Oduro-Kwarteng	Division Head
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7) Naval Base Sekondhi : セコンディ軍港

G.K. Zowonoo, Cdr.	FOC (WNC)
E. Osei, Cdr.	CO WTTS
W. Nyasembi, Cdr.	CTO (WNC)
S. Walker, GN., Capt.	A/ FOF
E. Adu, GN., Capt.	COO (WNC)

A. Kennedy, S/LT. SEC/ FOC

8) Sekondi-Takoradi Metropolitan Assembly (STMA) : セコンディ・タコラディ市役所

Hon Anthony R. Cudjoe	Metro Chief Executive
Jacob A. Ntiamoah	Dev. Planning
Isaac Affum	Physical Planning
Anthony Moses	Budget & Rating
Opoku Boateng	Assistant P. R. O
Henry Owusu	Metro Div. Planning Officer
John Gorkeh-Miah	Waste Management Department

(2) Ghana Ports and Harbours Authority (GPHA) : ガーナ港湾公社

1) Tema 本部

Richard A-Y Anamoo	Director-General
James Owusu-Koranteng, Capt.	Ag. Director General
Komla Wogbemase Ofori, Ing.	Project Engineer
Abraham Mensah	General Manager of Administration
Mike Greffin	General Manager of Special Project
James Benjamin Gaisie	Manager of Port Estate and Environment

2) Takoradi 支部

James Owusu-Koranteng, Capt.	Ag. Director General
Alhaji Husein Suleman	General Manager (Engineering)
Robert Darku	Personal & Admin Manager
Tebon Zumah	Financial Manager
K. Asamoah, Ing.	Port Civil Engineer
David K.S. Halm	Ag. Estate & Environment Manager
Mathew Nunoo	Ag. Audit Manager
Samuel Ohene Amoako	Marketing

3) Sekondi 支所

Peter Guzee Cudjoe	Fishing Harbor Manager / Sekondi Fishing Port
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(3) 民間会社

Danny Kirk-Mensah	Chief Executive/Chairman, Mass Fisheries
藤田 吾一	川商フーズ株式会社ガーナ事務所長

(4) 日本国関係者

1) 在ガーナ日本国大使館

本田 真一	一等書記官
倉田 裕史	一等書記官

2) JICA ガーナ事務所

稲村 次郎

相良 冬木

白倉 紀

櫻井 理

長友 靖恭

所長

次長

所員

企画調査員（インフラ）

在外専門調整員

資料一4 討議議事録(M/D)

資料 4.1 協力準備調査① (2013年7月17日)


**Minutes of Discussions
on the preparatory survey on the Project for
Fisheries Promotion in Sekondi
in the Republic of Ghana**


In response to the request from the Government of the Republic of Ghana (hereinafter referred to as "GOG"), the Japan International Cooperation Agency (hereinafter referred to as "JICA") decided to conduct a Preparatory Survey on the Project for Fisheries Promotion in Sekondi (hereinafter referred to as "the Project") and sent the survey team (hereinafter referred to as "the Team") to Ghana, which is headed by Mr. Shunji Sugiyama, Senior Advisor, JICA. The Team is scheduled to stay in the country from 1st of July to 10th of August, 2013.

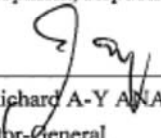
The Team held a series of discussions with officials concerned of GOG and conducted field surveys at the study area. As a result of the discussions and the field surveys, both parties confirmed the main items described in the attached sheets.

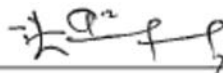
Accra, 17th, July 2013


Mr. Shunji SUGIYAMA
Leader,
Preparatory Survey Team,
Japan International Cooperation Agency


Mr. Twumasi-Ankra SELBY
Chief Director
Ministry of Transport, Republic of Ghana


Mrs. Rebecca Amoh ABOAGYE
Chief Director
Ministry of Fisheries and Aquaculture
Development, Republic of Ghana


Mr. Richard A-Y ANAMOO
Director-General
Ghana Ports and Harbours Authority


Mr. Kwadwo AWUA-PEASAH
Director, External Resources
Mobilization / Bilateral
Ministry of Finance, Republic of Ghana

ATTACHMENT

1. Title of the Project

It was confirmed by both sides that the title of the Project is "Fisheries Promotion in Sekondi".

2. Objective of the Project

The objective of the Project was redefined as "the capacity and functions of the fishing harbour in Sekondi are strengthened through improvement and expansion of harbour facilities, thus promoting efficient coastal fishery operations".

3. Responsible and Implementing Agency

The Ministry of Transport (MOT), in close collaboration with the Ministry of Fisheries and Aquaculture Development (MOFAD), will have oversight responsibility of the Project while the Ghana Ports and Harbours Authority (GPHA) takes charge of the implementation of the Project. Their organization charts are provided in the **Annex 1**.

4. Project site

The Project site is located in Sekondi, Western Region as indicated in the **Annex 2**.

It was noted that the land around the Project site is owned by GOG; however, boundaries of GPHA managed area have not been officially drawn. Since clear definition of the project area is an essential requirement for the implementation of the Project, GOG side shall take necessary measures to determine the boundary of the GPHA managed area and confirm that the Project site is located within that area. This process will be completed by the end of July 2013 and it shall be promptly reported to the Team and the JICA Ghana office.

5. Items requested by GOG

After discussion with the Team, GOG side agreed to remove 1) additional breakwater and 2) cold storage from the list of requested items, and replace the slipway for canoe with the slipway for inshore vessels. On the other hand, needs for some additional components have been identified in the course of discussion with key stakeholders of the Project. On this basis, the list of requested items was revised as shown in the **Annex 3**.

The final composition of the Project components will be decided after further studies. JICA will assess the appropriateness of the requested items and will summarize it into the draft (outline design) report.

6. Environmental and social considerations

In order to ensure that appropriate environmental and social considerations are to be made for the Project, GOG side agreed to abide by 'JICA Guidelines for Environmental and Social Considerations' in addition to the national environmental laws and regulations in Ghana.

It was affirmed that GPHA will take charge of conducting the Environmental Impact Assessment and obtain an environmental permission from EPA (Environmental Protection Agency) for the Project before the implementation of the Project.

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7. Stakeholder consultation

A series of stakeholder consultation meetings were held from 10th to 13th July, 2013 by inviting representatives from fishing communities, fish wholesalers/retailers, kiosk owners, NGOs and relevant government authorities. In the meetings, participants were informed of the proposed development plan of the fishing harbour, which could disturb their operations during the construction work.

Participants have given their general consent for the proposed plan and there was no objection voiced during the meeting. The minutes of the meeting with the list of participants is attached in the **Annex 4**.

8. Japan's Grant Aid Scheme

GOG side understood the Japan's Grant Aid Scheme explained by the Team as described in the **Annex 5** and shall take the necessary measures as specified in the **Annex 6** for smooth implementation of the Project.

9. Further schedule of the Study

- 1) Based on the survey results, JICA will prepare the draft (outline design) report and dispatch a mission to explain its contents in December, 2013.
- 2) Once both sides agree in principle on the contents of the report, JICA will finalize the report and send it to Ghana by February, 2014.

10. Other relevant issues

9-1. Site clearance

It was explained that site clearance will be one of measures to be taken by GOG, which shall involve the removal of abandoned/sunken fishing vessels, used vessels' engines left on the ground, fuel tanks, and the temporary boat repair yard in the project site. The boat yard was placed in the current location under an agreement with GPHA, which has been already expired. It was confirmed by GPHA that a letter of consent on the removal of the yard shall be obtained from the operator before the end of November 2013.

9-2. Sewerage discharge

The Team was informed that sewerage channels that discharge waste waters to the Old-beach area need to be diverted. GPHA will coordinate with relevant authorities so as to take necessary measures for this sewerage channel diversion.

9-3. Operation and Management Plan

The expansion of port facilities will inevitably require reinforcement in management personnel as well as upgrading of operation and management practices. The Team, together with key stakeholders, has identified the operation/management issues of the harbour as specified below;

- The Canoe jetty is occupied by inshore vessels, which inhibits canoe operators from using the jetty
- The landing wharf is often used for other purposes (e.g. those vessels that have completed their landing continue to occupy the landing wharf for resting and fishing trip preparation)
- A number of fishing nets are placed in the Fish handling shed as well as on the Landing/Lay-by wharves that would considerably reduce the functionalities of these facilities

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- A part of the Fish handling shed and landing wharf is used for boat building/repairing

In order to address the issues mentioned above, GPHA agreed to formulate an operation and management plan, which encompasses the following aspects:

- Revision of the organization structure that clearly defines terms of reference for each post
- Annual financial management plan that is supplemented by a long term maintenance plan of harbour facilities
- Establishment of a supervisory/advisory mechanism that facilitate participatory management and operation of the fishing harbour with key stakeholders
- Proper zoning of the harbour (e.g. landing area, Lay-by area, fuel/water supply area, fishing gear storing area, etc), for which formulation of local operation rules is necessary

The task of formulating the operation and management plan will be pursued by GPHA and the draft plan shall be submitted to the Team and JICA Ghana Office by the end of August, 2013.

9-4 Use of harbour facilities during construction

It is envisaged that current users of the fishing harbour in Sekondi (inshore fishing vessels and canoes, fish mongers and others) can continue to use the existing harbour facilities during construction work of the Project. However, creation of restricted areas and a limited degree of interference to users' activities are anticipated during the period. In this connection, GOG side agreed that users of the fishing harbour shall be properly informed and warned of the above-mentioned impacts.

In addition, a number of kiosk shops may be required to temporary relocate during the construction work. In the process of relocation, GOG side shall adhere to the relevant rules and regulations applied in the country as well as JICA Guidelines for Environmental and Social Considerations.

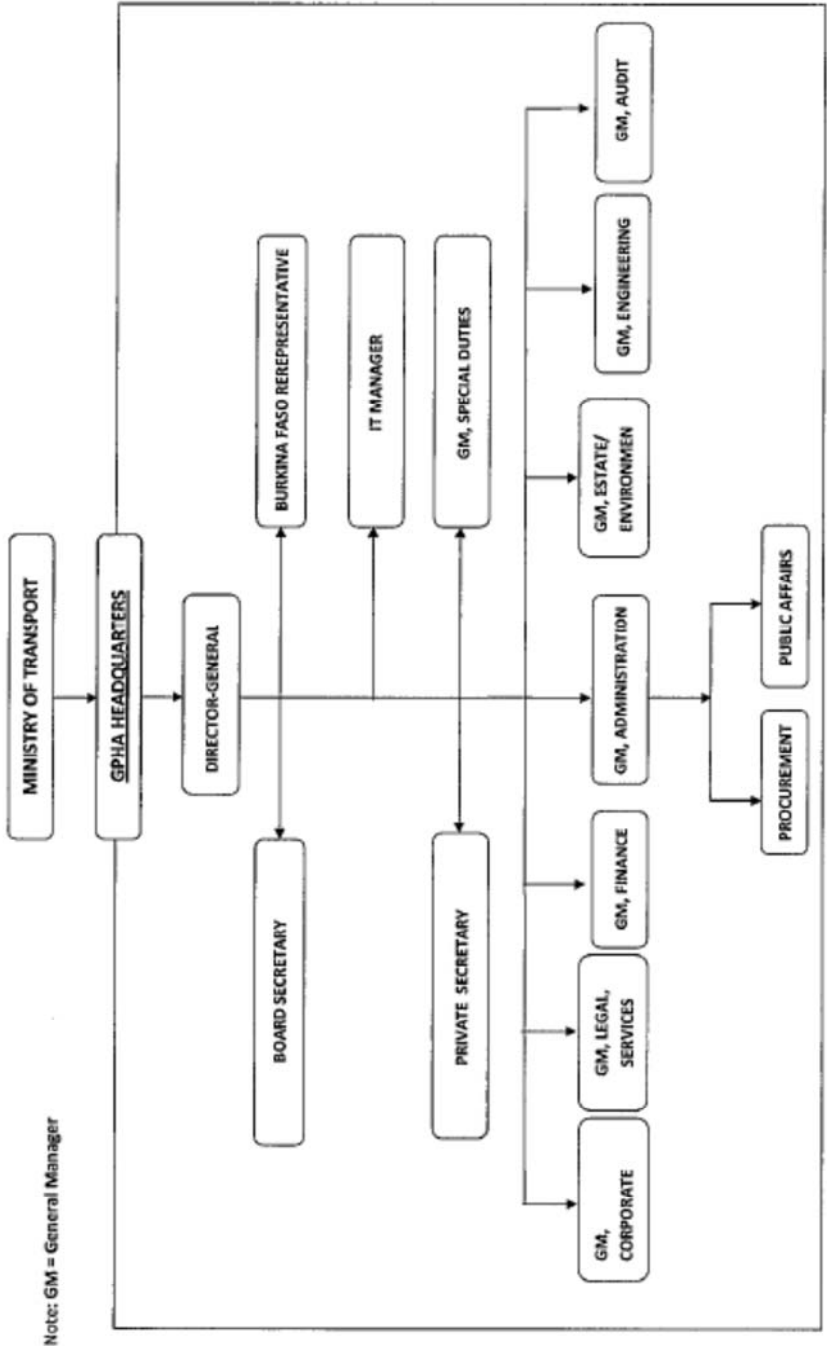
9-5. Development and construction permissions

It was affirmed by GPHA that construction of harbour facilities within GPHA managed areas will not require any development and/or construction permissions from government authorities concerned. Instead, the outline design of the project will be technically examined by the engineers and expert staff of GPHA.

- Annex 1 Organization charts
- Annex 2 Map and area plan of the project site (Indicative)
- Annex 3 Revised list of items requested by the Government of Ghana
- Annex 4 Minutes of the first stakeholder consultation meeting
- Annex 5 Japan's grant aid scheme
- Annex 6 Major undertakings to be taken by each Government

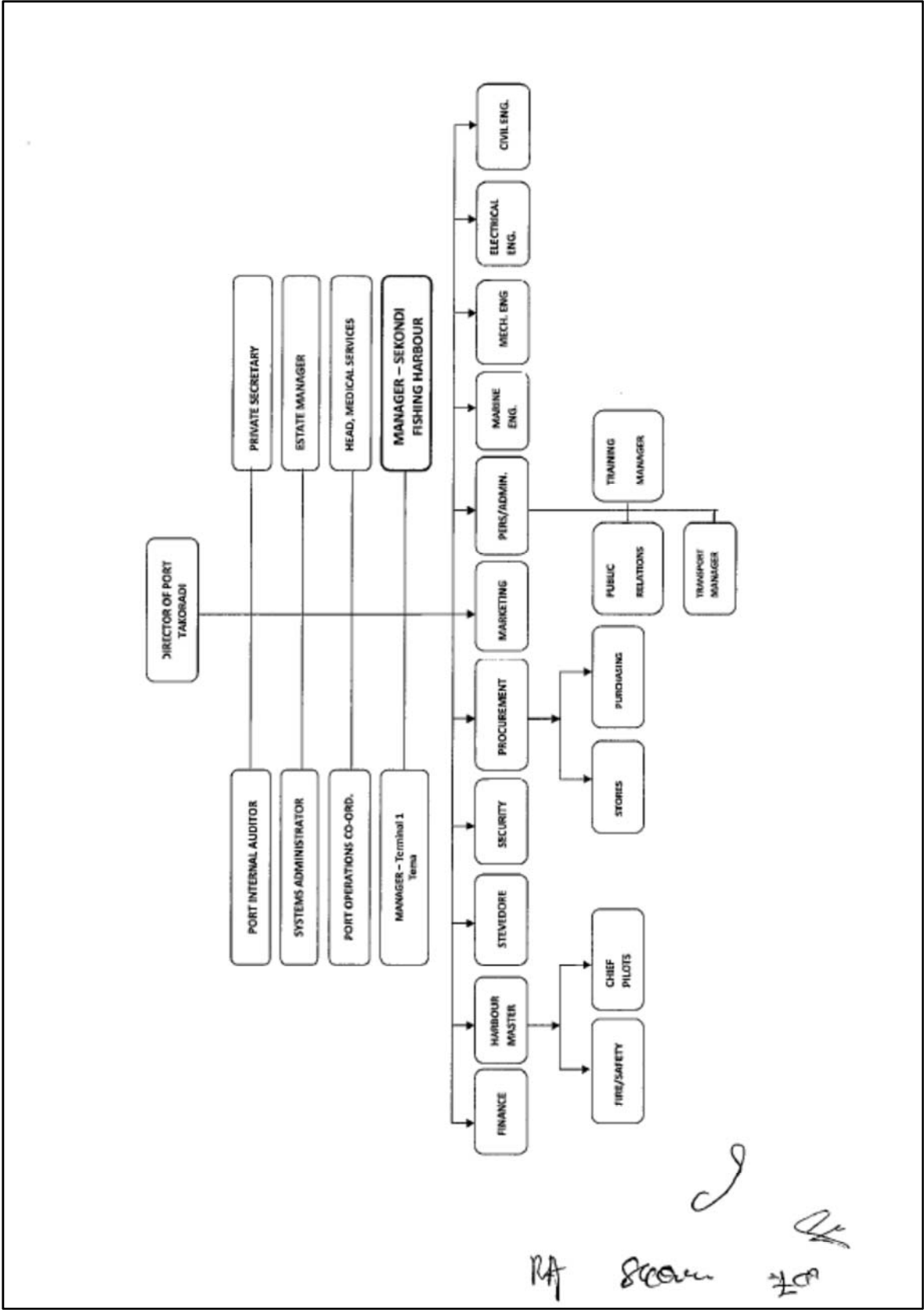

 Three handwritten signatures or initials are present at the bottom right of the page. The first is a stylized 'J' with a flourish, the second is 'seaw', and the third is 'JK' with 'JO' below it.

Organization Charts

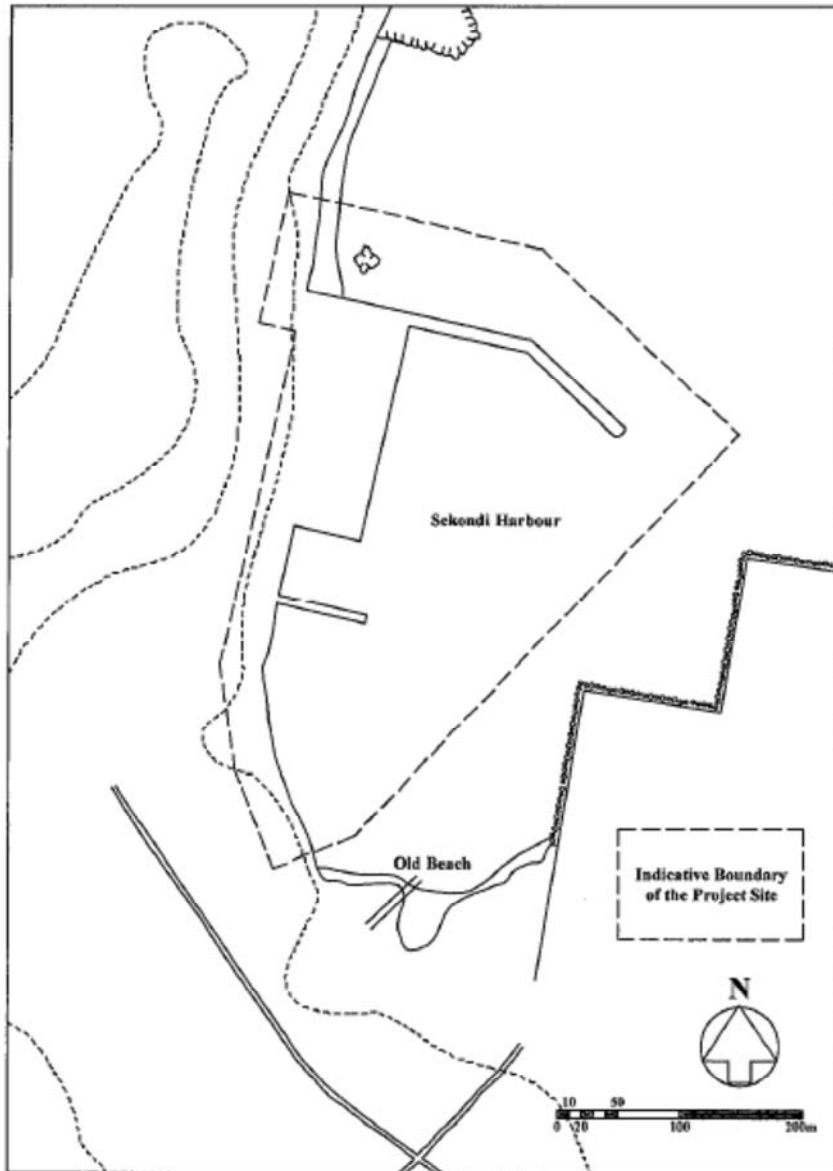


Note: GM = General Manager

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Map and area plan of the project site (Indicative)



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Revised list of items requested by the Government of Ghana

No.	Items requested
1	Supporting facilities for fishing vessels and canoes
1)	Additional Lay-by wharf
2)	Slipway for inshore vessels
3)	Fuel and water supply facilities
2	Buildings
1)	Housing for ice plant
2)	Additional administration office
3	Other Facilities
1)	Access driveway from canoe jetty to Old beach with canoe berthing facilities
2)	Net-mending area
4	Exterior works
1)	Pavement of the area behind the fish handling shed
2)	Lighting facilities
5	Equipment
1)	Ice making plant (block ice type)
2)	Emergency Generator
6	Technical assistance (Soft-component)
1)	Fishing harbour management, operation and maintenance

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Annex 4

MINUTES OF STAKEHOLDERS MEETING WITH JICA TEAM HELD ON 10TH JULY 2013
AT THE ABS FISHING HARBOUR FORE COURT

PRESENT

1.	MR. P.G.CUDJOE	-	ABS FISHING HBR. MANAGER (CHAIRMAN)
2.	MR. KWAME BONDZIE	-	PERS./ADMIN. OFFICER
3.	MR.KOBINA ASAMOAH	-	PORT CIVIL ENGINEER
4.	MR. DAVID HALM	-	PORT ESTATE ENVIRON. MANAGER
5.	MR. J. W. E. THOMPSON	-	PERS./ADMIN. OFFICER
6.	MR. SAMUEL O AMOAKO	-	MARKET/PUBLIC RELATIONS OFFICER
7.	MRS. SARAH CHRISTIAN	-	TRAFFIC OFFICER
8.	MR. FRANCIS QUATCOE	-	SUPERVISOR
8.	MISS. HANNAH R. KWOFIE	-	RECORDER

STAKEHOLDERS

1.	MR. AMEKO BLESS	-	GHANA IMMIGRATION SERVICE
2.	PW/INSPR MARY ADIABO	-	GHANA POLICE SERVICE
3.	MISS. WINNIFRED GHARTEY	-	KIOSK OWNERS ASSOCIATION
4.	MISS. MARY MENSAH	-	KIOSK AND SELLERS ASSOCIATION
5.	MR. JOSEPH KWESI DADDIE	-	FUEL DEALER
6.	MR. DANIEL -NYANTEH	-	FISHERIES COMMISSON
7.	MR. KWAME MENSAH	-	COORDINATOR
8.	MR. SMART -ABBEY ALIMATI	-	ADMINISTRATOR
9.	MR. EMMANUEL GORDON	-	SECRETARY (CHIEF FISHERMAN - SEKONDI)
10.	MR. NANA KOBINA MBIR	-	CHIEF FISHERMAN - NYIRESTA
11.	MR. FRANCIS K. ESHUN	-	G.I.F.A- CHARIMAN
12.	MR. EMMANUEL N. BOTCHWAY	-	G.I.F.A- SECRETARY
13.	MR. ALI KARIMU	-	TASK FORCE MAN
14.	MR. PAUL ROBERTS	-	TASK FORCE -LEADER
15.	MR. NANA KOFI ESSOUN	-	CHIEF FISHERMAN - SEKONDI
16.	MR. EYSA AKWANDOH	-	G.I.F.A- MESSENGER
17.	MR. STEPHEN EKOW FLANGE	-	CHARIMAN - SERVICE RENDERS ASSOCIATION
18.	MR. EKOW BRACC	-	BOAT OWNER
19.	MR. JOHN WILSON	-	BOAT OWNER
20.	MR. SAMUEL ANSAH	-	G.I.F.A- BOATOWNER
21.	MR. BERNARD YANKUM	-	ADMIN. OFFICER-FON
22.	MR. KWESI R. JOHNSON	-	COMM. DEVT COORDINATOR
23.	MR. DANIEL TETTEH	-	NORKOR
24.	MR. STEPHEN ESSTEN	-	KIOSK OWNER
25.	MR. HIKEEM SEIDU	-	OFFICER, EPA
26.	MR. JACOB SEY	-	SERVICE MAN
27.	MR. RAYMOND A. ASHIAQUAYE	-	HOOK & LINE
28.	MR. KOFI ARHIN	-	G.I.F.A- BOAT OWNER
29.	MR. JOSHUA MANTEAU	-	TICKET SELLER
30.	MR. ISAAC MENSAH	-	NASHI FISHERIES
31.	MR. PHILIP MENSAH	-	HOOK & LINE
32.	MR. KOFI FINYIN YE NA	-	BOAT OWNER
33.	MR. GEORGE NORTEY	-	HOOK & LINE
34.	MR. ASSAH QUASHIE	-	HOOK & LINE
35.	AUNTIE NKUMAH	-	FISH MONGER
36.	MISS BECKY	-	FISH MONGER
37.	AUNTIE ADDAE	-	FISH SMOKER
38.	AUNTIE FAAWAH	-	FISH SMOKER
39.	MAAME NYAB BAH	-	FISH SMOKER
40.	VICTORIA DARKO	-	FISH SMOKER
41.	MISS NAADU ASHONG	-	FISH MONGER
42.	MR. STEPHEN ESHUN	-	KIOSK OWNER
43.	MR. KWAME MENSAH	-	NGO
44.	MR. KWESI JOHNSON	-	NGO
45.	MR. BERNARD NYANKUM	-	NGO
46.	MR. SAMUAL ASSAH	-	BOAT OWNER
47.	MR. ANDREWS TETTEH	-	BOAT OWNER
48.	MR. K.K. KANTOH	-	FUEL DEALER
49.	MR. JOHN BAIDEN	-	NYAME YIE COLD STORES
50.	MAHATIMA GHANDI	-	MECHANIC

Handwritten signatures and initials at the bottom of the page, including "J", "S", "F", "K", and "Z".

OPENING

The meeting was declared opened at 1030 hours. Auntie Faawah said the opening prayer.

The chairman welcomed all members present and said it was the second meeting for the year 2013. He made a roll call to make sure that all the invited guest were present.

He called the meeting to order and asked everybody to put his or her phone on silent or vibration.

MATTERS ARISING

1. INTRODUCTION

The chairman informed the house that the Japanese team requested for this meeting today.

The chairman informed the meeting that the Fishing Harbour was put up in 1999 and since then it has grown over the years and become congested with activities. The government of Ghana appealed to the Japanese government to have the harbour expanded to cope with the increased traffic. He outlined the proposal made by the Ghana Ports & Harbour Authority to the Japanese government.

The proposal included the followings.

- a. Additional lay- by wharf/berthing
- b. Facility for canoes and small sized motorized boats
- c. Breakwater extension up to 150 meters, part of which may be developed for large vessels under various programmes
- d. Slipway for canoes (350m²) for repair services at old beach
- e. Fish landing shed
- f. Cold storage area
- g. Ice making plant of 30tons a day production
- h. Ancillary facilities: sanitation, utilities, net mending areas and access driveways etc.

The chairman also said if the project is approved, the construction period would last for period of one and a half years, commencing November 2014 to April 2016. During construction period there would be a lot of shifting of structures, so stakeholders should bear with the contractors.

Chairman explained the followings.

There would be the need to move all unserviceable engines to create enough space for easy movement to trucks and machinery.

All sunken vessels should be salvaged before commencement of the Project. This goes to Mass Fisheries Ltd and owners of two (2) other wooden vessels.

All stakeholders should give their maximum co-operation to the Japanese team.

Asked boat/canoe owners if they had any ideal place for shifting of unseaworthy vessels to.

Asked shop owners if they had any place for temporal resettlement, i.e. temporal place in case a road construction.

The harbour entrance was too wide so any time there was a storm, the boat could not berth at Lay-by Wharf. There was the need for the entrance to be reduced by extending the breakwater.

The chairman said the fishermen have also requested for a slip way for both the canoes and

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the inshore vessels.

He also said the purpose for the fish landing shed has been defeated by storing nets under the shed.

The chairman said cold store facilities would be factored into the expansion project. The Project would also include the capacity of the ice block by adding another 30 tons production machine. They would also take care of mending facilities and extend the access way to the old beach. He said if everything goes through, the contractors would come and begin work from November 2014 and the period of completion would be one and half years. Our commitment would be to remove all structures that would impede the progress of the Project.

The Port Civil Engineer also stated that the mission of the Japanese team here this morning was to make the necessary survey to enable them secure the money needed for the Project from their government as the their parliament has to approve.

The Fishing Harbour Manager outlined the meeting dates and times for the following associations / groups to have small stakeholder meetings.

GROUP A 11TH JULY 2013

- Ghana Inshore Fisheries Association Members (Boat Owners) - Morning 1000hrs
- Canoe Owners Association & Line And Hook Association - Afternoon 1400hrs

GROUP B 12TH JULY 2013

- Fish mongers (mummies) - morning 1000hours
- Fish smokers - afternoon 1400 hours

GROUP C 13TH JULY 2013

- Small business eg, Shop, kiosk and container owners - morning 1000hours
- Meeting with GPHA Fishing Harbour staff - afternoon 1200 hours

2. THE FLOOR WAS OPEN FOR QUESTIONS/ SUGGESTIONS.

A participant of the stakeholder meeting informed the house that the access way to gate two (2) becomes slippery when rain falls so it makes it difficult to pass there.

The chairman of the service renders association also talked about the second phase issue and said the expansion should be made once and for all so that there was no need for the further expansion.

The Fishing Harbour Manager stated that the expansion would not end here and it would continue because more people are expected to visit and use the port, and sited references where both Tema and Takoradi Ports were being expanded.

3. BERTHING SPACE FOR CANOE

A member of canoe owners association also welcomed the Project for the second phase, but pleaded if the Authority would get a place for them to berth canoes after fish landing.

The chairman answered and said their request would be met.

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A member from the market women Association asked whether GPHA would relocate them during the construction of the drive way to the Old Beach.

The chairman replied that their request had been noted and would be discussed. They would be given a temporary place.

4. PLACING OF FISHING NETS

It was also reported that a place should be allocated to the fishermen to place and mend their nets instead of placing them on the wharf and under the fish landing shed.

The chairman said he would meet the Ghana Inshore Fisheries Association (G.I.F.A.) and the boat owners to see how best they could address this problem.

A member enquired, if they could get a bigger place for them to berth their vessels.

Someone from the Service Renders Association also talked about the second phase because they have heard about it from radio and TV station so they were thankful to the Lord that their prayers have been answered.

5. SICK BAY AND HOSTEL

The secretary of G.I.F.A. also informed the house that the harbour had to get a sick bay and a hostel so that when someone falls sick he/she would get first aid and the hostel for those fishermen from different towns so that they could go and sleep there when they migrate to the harbour for fishing especially in the peak seasons.

A member from ticket sellers also complained that some of the men do not pay for the entrance ticket so the Authority should take note of that and make them pay.

The chairman replied that GPHA would make sure all men entering the harbour without a permanent harbor permit would pay a toll.

A member also informed the house that there should be a canteen where they could eat.

The senior traffic officer replied that the fish market was now being used as food market so they could go and eat there.

There was a complain that the entrance from the fish smoking area into the harbour was really bad when it rained and for that matter, remedies would be made before the Project commences.

6. CONSTRUCTION OF ROAD

Another member from the Western Regional Development Networks of NGOs wanted to know what was coming to take place, what would be the negative impact that would affect the fishing activities and those who stay at the fishing harbour.

He said when the Project's road construction starts it would affect some of the people, especially those with their kiosks and containers at the road side, this work would temporary relocate them because of the expansion. And when you were putting up the cold store, also it would affect people's kiosk. What were the measures put in place to ensure that the relocated people should be compensated.

The chairman replied that there would be no compensation because those who be affected

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would be go back to their original place after the completion of the construction.

7. ENVIRONMENTAL PROBLEM

A member from Friends of the Nation, (NGO) also said that the construction of this harbour has contributed to their coastal erosion which usually occurred at nearby villages, which are Aboadzi and Abuesi. Some have observed that it was the impacts of construction of the harbour, and they said we should think about these towns when constructing the harbour.

The port civil engineer said that the Project was not a new one but only included additional construction works.

A member from Fisheries Commission was complaining that they didn't have office in the harbour and they needed to get an office at the fishing harbour.

The chairman replied that the Fisheries Commission had an office at the Old Beach so they could rehabilitate it and use it.

The person from the Fisheries Commission further said that the office at their Old Beach was nothing to write home about. So they needed a new and modern office close to the fishing harbor.

8. NEW OFFICES

The immigration officer complained that their number has increased so they also needed a bigger office.

The officer in charge of police station also complained about their office being too small for them. She said that the Marine Police would join the fishing harbor so there was the need to expand the police station. She further stated that their CID office was also too small.

The port civil engineer answered that the expansion of the police station was going to be taken care of by GPHA.

9. PLACE OF CONVENIENCE

A mechanic at the fishing harbour complained about the locking up of the public toilet in the night. That was the reason why people defecate into the sea at night which was really bad.

So he was pleading with GPHA to do something about it. He suggested that the toilet attendants should run shift i.e. day and night.

The chairman replied that his suggestion was noted and GPHA would do something about it.

The chairman thanked all members and advised them not to wait for stakeholders meetings before they raise concerns about issues pertaining to the welfare of the harbour.

CLOSING

In the absence of further deliberations Nana Addae, secretary of fish smokers association moved for the adjournment of the meeting and it was seconded by Mr. Francis Eshun, chairman of GIFA bringing the meeting to an end at 1216 hours with a prayer by Auntie Faawah.

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JAPAN'S GRANT AID

The Government of Japan (hereinafter referred to as "the GOJ") is implementing the organizational reforms to improve the quality of ODA operations, and as a part of this realignment, a new JICA law was entered into effect on October 1, 2008. Based on this law and the decision of the GOJ, JICA has become the executing agency of the Grant Aid for General Projects, for Fisheries and for Cultural Cooperation, etc.

The Grant Aid is non-reimbursable fund provided to a recipient country to procure the facilities, equipment and services (engineering services and transportation of the products, etc.) for its economic and social development in accordance with the relevant laws and regulations of Japan. The Grant Aid is not supplied through the donation of materials as such.

1. Grant Aid Procedures

The Japanese Grant Aid is supplied through following procedures:

- Preparatory Survey
 - The Survey conducted by JICA
- Appraisal & Approval
 - Appraisal by the GOJ and JICA, and Approval by the Japanese Cabinet
- Authority for Determining Implementation
 - The Notes exchanged between the GOJ and a recipient country
- Grant Agreement (hereinafter referred to as "the G/A")
 - Agreement concluded between JICA and a recipient country
- Implementation
 - Implementation of the Project on the basis of the G/A

2. Preparatory Survey

(1) Contents of the Survey

The aim of the Preparatory Survey is to provide a basic document necessary for the appraisal of the Project made by the GOJ and JICA. The contents of the Survey are as follows:

- Confirmation of the background, objectives, and benefits of the Project and also institutional capacity of relevant agencies of the recipient country necessary for the implementation of the Project.
- Evaluation of the appropriateness of the Project to be implemented under the Grant Aid Scheme from a technical, financial, social and economic point of view.
- Confirmation of items agreed between both parties concerning the basic concept of the Project.
- Preparation of an outline design of the Project.
- Estimation of costs of the Project.

The contents of the original request by the recipient country are not necessarily approved in their initial form as the contents of the Grant Aid project. The Outline Design of the Project is

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confirmed based on the guidelines of the Japan's Grant Aid scheme.

JICA requests the Government of the recipient country to take whatever measures necessary to achieve its self-reliance in the implementation of the Project. Such measures must be guaranteed even though they may fall outside of the jurisdiction of the organization of the recipient country which actually implements the Project. Therefore, the implementation of the Project is confirmed by all relevant organizations of the recipient country based on the Minutes of Discussions.

(2) Selection of Consultants

For smooth implementation of the Survey, JICA employs (a) registered consulting firm(s). JICA selects (a) firm(s) based on proposals submitted by interested firms.

(3) Result of the Survey

JICA reviews the Report on the results of the Survey and recommends the GOJ to appraise the implementation of the Project after confirming the appropriateness of the Project.

3. Japan's Grant Aid Scheme

(1) The E/N and the G/A

After the Project is approved by the Cabinet of Japan, the Exchange of Notes (hereinafter referred to as "the E/N") will be signed between the GOJ and the Government of the recipient country to make a pledge for assistance, which is followed by the conclusion of the G/A between JICA and the Government of the recipient country to define the necessary articles to implement the Project, such as payment conditions, responsibilities of the Government of the recipient country, and procurement conditions.

(2) Selection of Consultants

In order to maintain technical consistency, the consulting firm(s) which conducted the Survey will be recommended by JICA to the recipient country to continue to work on the Project's implementation after the E/N and G/A.

(3) Eligible Source Country

Under the Japanese Grant Aid, in principle, Japanese products and services including transport or those of the recipient country are to be purchased. When JICA and the Government of the recipient country or its designated authority deem it necessary, the Grant Aid may be used for the purchase of the products or services of a third country. However, the prime contractors, namely, constructing and procurement firms, and the prime consulting firm are limited to "Japanese nationals".

(4) Necessity of "Verification"

The Government of the recipient country or its designated authority will conclude contracts denominated in Japanese yen with Japanese nationals. Those contracts shall be verified by JICA. This "Verification" is deemed necessary to fulfill accountability to Japanese taxpayers.

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(5) Major undertakings to be taken by the Government of the Recipient Country

In the implementation of the Grant Aid Project, the recipient country is required to undertake such necessary measures as Annex.

(6) "Proper Use"

The Government of the recipient country is required to maintain and use properly and effectively the facilities constructed and the equipment purchased under the Grant Aid, to assign staff necessary for this operation and maintenance and to bear all the expenses other than those covered by the Grant Aid.

(7) "Export and Re-export"

The products purchased under the Grant Aid should not be exported or re-exported from the recipient country.

(8) Banking Arrangements (B/A)

- a) The Government of the recipient country or its designated authority should open an account under the name of the Government of the recipient country in a bank in Japan (hereinafter referred to as "the Bank"). JICA will execute the Grant Aid by making payments in Japanese yen to cover the obligations incurred by the Government of the recipient country or its designated authority under the Verified Contracts.
- b) The payments will be made when payment requests are presented by the Bank to JICA under an Authorization to Pay (A/P) issued by the Government of the recipient country or its designated authority.

(9) Authorization to Pay (A/P)

The Government of the recipient country should bear an advising commission of an Authorization to Pay and payment commissions paid to the Bank.

(10) Social and Environmental Considerations

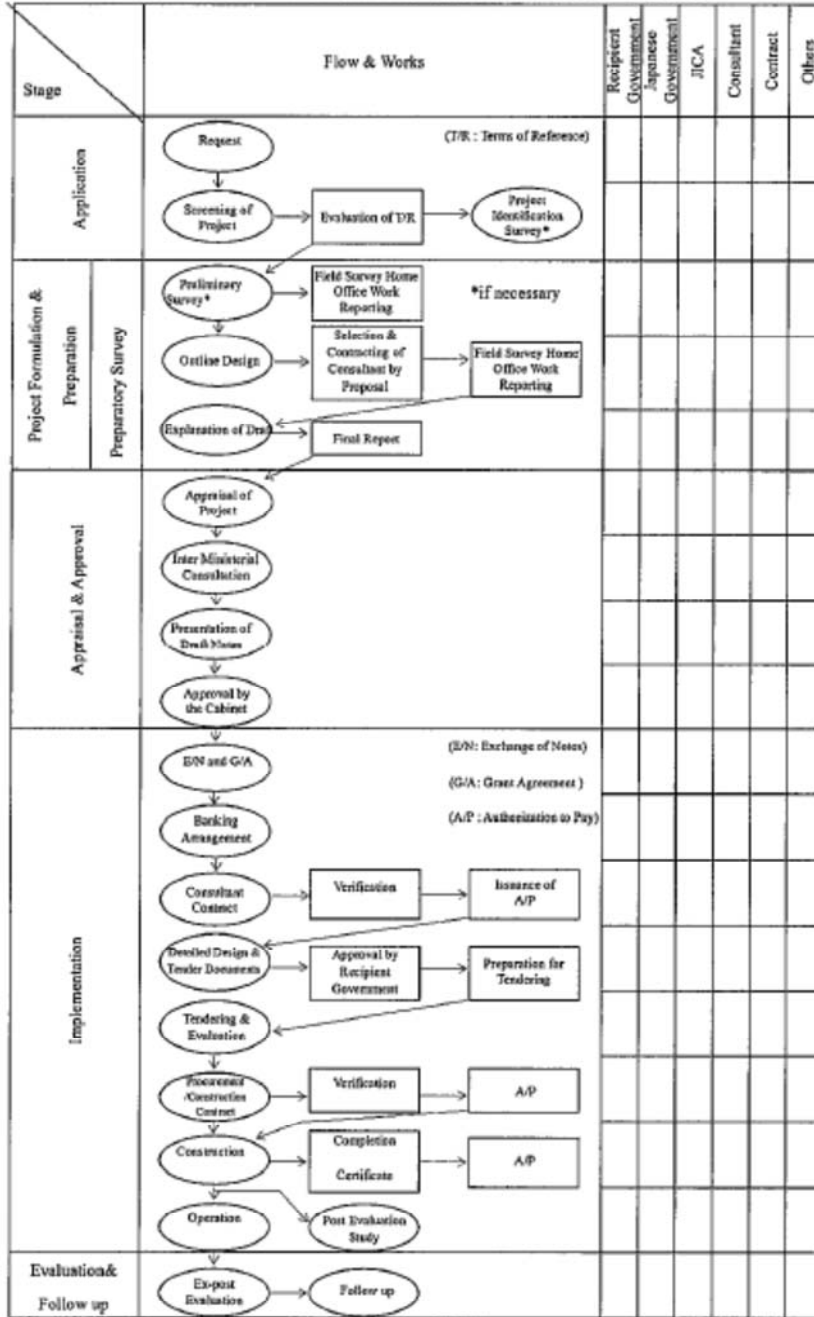
A recipient country must carefully consider social and environmental impacts by the Project and must comply with the environmental regulations of the recipient country and JICA socio-environmental guidelines.

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FLOW CHART OF JAPAN'S GRANT AID PROCEDURES



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Major Undertakings to be taken by Each Government

No.	Items	To be covered by Grant Aid	To be covered by Recipient Side
1	To secure [a lot] / [lots] of land necessary for the implementation of the Project and to clear the [site] / [sites];		●
2	To construct the following facilities		
	1) The building	●	
	2) The gates and fences in and around the site		●
	3) The parking lot	●	
	4) The road within the site	●	
	5) The road outside the site		●
3	To provide facilities for distribution of electricity, water supply and drainage and other incidental facilities necessary for the implementation of the Project outside the [site] / [sites]		
	1) Electricity		
	a. The distributing power line to the site		●
	b. The drop wiring and internal wiring within the site	●	
	c. The main circuit breaker and transformer	●	
	2) Water Supply		
	a. The city water distribution main to the site		●
	b. The supply system within the site (receiving and elevated tanks)	●	
	3) Drainage		
	a. The city drainage main (for storm sewer and others to the site)		●
	b. The drainage system (for toilet sewer, common waste, storm drainage and others) within the site	●	
	4) Gas Supply		
	a. The city gas main to the site		●
	b. The gas supply system within the site	●	
	5) Telephone System		
	a. The telephone trunk line to the main distribution frame/panel (MDF) of the building		●
	b. The MDF and the extension after the frame/panel	●	
	6) Furniture and Equipment		
	a. General furniture		●
	b. Project equipment	●	
4	To ensure prompt unloading and customs clearance of the products at ports of disembarkation in the recipient country and to assist internal transportation of the products		
	1) Marine (Air) transportation of the Products from Japan to the recipient country	●	
	2) Internal transportation from the port of disembarkation to the project site	(●)	(●)
5	To ensure that customs duties, internal taxes and other fiscal levies which may be imposed in the recipient country with respect to the purchase of the products and the services [be exempted] / [be borne by the Authority without using the Grant]		●
6	To accord Japanese physical persons and / or physical persons of third countries whose services may be required in connection with the supply of the products and the services such facilities as may be necessary for their entry into the recipient country and stay therein for the performance of their work		●
7	To ensure that [the Facilities and the products] / [the Facilities] / [the products] be maintained and used properly and effectively for the implementation of the Project		●
8	To bear all the expenses, other than those covered by the Grant, necessary for the implementation of the Project		●
9	To bear the following commissions paid to the Japanese bank for banking services based upon the B/A		
	1) Advising commission of A/P		●
	2) Payment commission		●
10	To give due environmental and social consideration in the implementation of the Project.		●

(B/A : Banking Arrangement, A/P : Authorization to pay)

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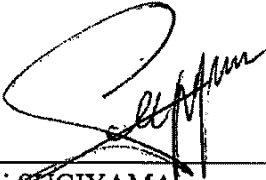
**MINUTES OF DISCUSSIONS
ON THE PREPARATORY SURVEY
ON THE PROJECT FOR FISHERIES PROMOTION IN SEKONDI
IN THE REPUBLIC OF GHANA
(EXPLANATION OF DRAFT REPORT)**

In July 2013, Japan International Cooperation Agency (hereinafter referred to as "JICA") dispatched the Preparatory Survey Team on the Project for Promotion of Fisheries in Sekondi (hereinafter referred to as "the Project"), in response to the request from the Government of the Republic of Ghana (hereinafter referred to as "GOG"). Based on the results of the survey, JICA prepared the draft report of the Project.

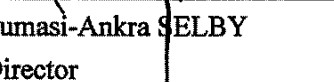
In order to explain and to discuss with the authorities concerned of GOG side about the components of the draft report, JICA sent a Preparatory Survey Team (hereinafter referred to as "the Team") to Ghana from 15th to 21st December, 2013 headed by Mr. Shunji SUGIYAMA, Senior Advisor, JICA.

As a result of discussions, both sides confirmed the main items described in the attached sheets.

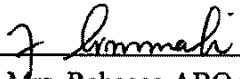
Accra, 20th December 2013



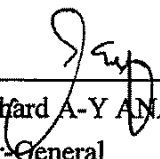
Mr. Shunji SUGIYAMA
Leader,
Preparatory Survey Team,
Japan International Cooperation Agency



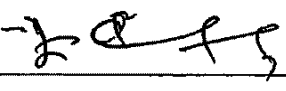
Mr. Twumasi-Ankra SELBY
Chief Director
Ministry of Transport, Republic of Ghana



Mrs. Rebecca ABOAGYE
Chief Director
Ministry of Fisheries and Aquaculture
Development, Republic of Ghana



Mr. Richard A-Y ANAMOO
Director-General
Ghana Ports and Harbours Authority



Mr. Kwadwo Awua-Peasah
Director, External Resources
Mobilization/Bilateral
Ministry of Finance, Republic of Ghana

ATTACHMENT

1. Components of the draft report

GOG side agreed and accepted the components of the draft report explained by the Team including obligations of the recipient country which are mentioned in the Chapter three (3) of the draft report. It is understood that further request of change in the Project components shall not be considered; however, the components of the Project are still subject to change depending upon the result of the tender for contractor.

2. Japan's Grant Aid Scheme

GOG reconfirmed its understanding of the Japan's grant aid scheme and major undertakings of each Government as described in the Annex 5 and 6 of the Minutes of Discussions signed on 17th July, 2013.

3. Further schedule of the survey

JICA will complete the final report in accordance with the confirmed items and send it to GOG side by the end of March, 2014.

4. Estimated cost of the Project

4-1. Estimated cost of the Project

The Team provided the estimated cost of the Project as described in the Annex 1.

4-2. Confidentiality

GOG side affirmed that the estimated cost of the Project, together with other project related information such as facility design drawings and specifications of equipment, shall not be released to any outside parties before conclusion of all the contract(s) for the Project since they are confidential information that is concerned with the tender.

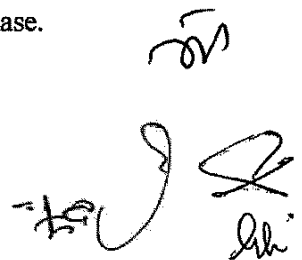
5. Environment and Social Considerations

5-1. Environmental Impact Assessment

It was affirmed that Ghana Ports and Harbours Authority (GPHA) shall complete the Environmental Impact Assessment and obtain an environmental permission from the Environmental Protection Agency (EPA) for the Project.

5-2. Monitoring of the status of environmental and social considerations

The status of environmental and social considerations shall be periodically monitored by GPHA in accordance with the monitoring plan for the Project. The results will be provided to JICA on a quarterly basis until the completion of the Project by filling in the monitoring form as part of progress reports during the construction phase.



6. Other Relevant Issues

6-1. Timely fulfilment of obligations of the recipient country

It was assured that the GOG shall take necessary measures to fulfil those obligations listed below with due observation of respective time limit.

(1) Site clearance

The project site shall be secured and entirely cleared before the tender call for contractor of the Project. The site clearance includes removal of abandoned/sunken fishing vessels, used vessels' engines left behind of the administrative building, fuel tanks and dispensers, and the temporary boat repair yard in the project site.

(2) Environmental permission

The environmental permission shall be obtained from EPA before the tender call for contractor of the Project.

(3) Recruitment/assignment of additional staff

Recruitment process of additional staff members namely traffic supervisors, ice men, electrical/mechanical engineers, and tariff clerks shall be completed by GPHA three month before the completion of the construction work.

Assignment of the Ministry of Fisheries and Aquaculture Development staff to be stationed at the harbour shall be completed before the completion of the construction work.

6-2. Proper operation and maintenance of the fishing harbour facilities

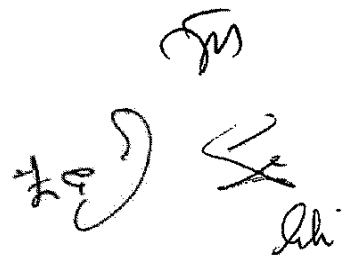
It was reconfirmed that the GOG side assume overall responsibilities for the proper operation and maintenance of the Project facilities and duly undertake the following measures.

(1) Continued financial support for the Sekondi Fishing Harbour

The financial report of GPHA reveals that the operation of the Sekondi fishing harbour alone remained in deficit last few years. However, GPHA considers that these are necessary expenditures to provide needed support to vulnerable coastal fishing communities. On this basis, GOG side assured that any future deficit in operation of the Sekondi fishing harbour shall continue to be reimbursed by GPHA.

(2) Regular monitoring of the facility operation

In order to facilitate proper management and operation of the fishing harbour facilities, the GOG side agreed to establish a set of performance indicators. It is planned that adequate indicators and means of verification will be selected/identified during the soft component. It is urged that the GPHA regularly monitor and record the operational status of the fishing harbour with these indicators. The copies of monitoring report shall be provided to the JICA Ghana office upon request.



(3) Stakeholders' involvement in the fishing harbour management

The effectiveness of the fishing harbour management can be significantly improved when key stakeholders are adequately consulted and/or involved in the decision making process of the harbour management. In this project, it is planned that such stakeholders' involvement will be institutionalized through establishment of the multi-stakeholder advisory committee whereby major groups of harbour users are adequately represented. It is hence advised that the GOG side fully utilize the functions of the committee.

6-3. Soft component (technical assistance)

Both sides discussed the terms of reference of technical assistance to be implemented as part of soft component and agreed its outline as described in the Annex 2.

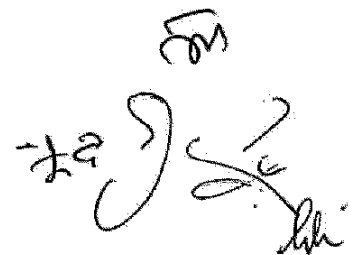
6-4. Use of harbour facilities during construction

It is envisaged that current users of the fishing harbour in Sekondi (i.e. inshore fishing vessels and canoes, fish mongers and others) continue to use the existing harbour facilities during construction work of the Project. In order to ensure the safety of these users, GOG side shall take all the necessary measures including creation of restricted areas and proper fencing of construction areas during the project implementation period. GOG side also agreed to inform users of the fishing harbour of the above-mentioned measures.

Annexs:

Annex 1 Estimated Project Cost to be borne by Japan's Grant Aid

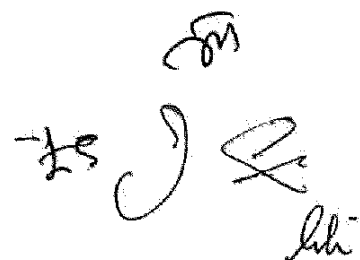
Annex 2 Outline of the Soft Component (Technical assistance)



Estimated Project Cost to be borne by Japan's Grant Aid

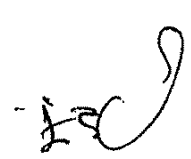


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「施工・調達業者契約認証まで非公開」

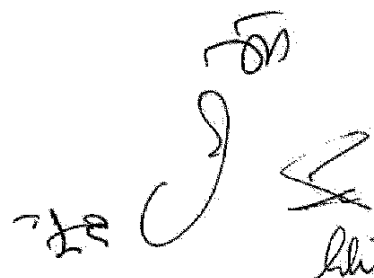
Handwritten signature and initials in black ink, including the characters 'HS' and 'Lili'.

Outline of the Soft Component (Technical assistance)

Achievement 1	Operation and management plan of the Sekondi Fishing Harbour is finalized.
Activities	<p>1) Discuss with relevant stakeholders to facilitate the followings in a participatory manner</p> <ul style="list-style-type: none"> • Description of the Multi-stakeholder Advisory committee's terms of reference • Detailed description of the duties and responsibilities for management and operation staff • Formulation of rules and regulations for the use of fishing harbour, which include zoning of the harbour (e.g. designation of landing area, lay-by area, fuel/water supply area, fish handling area and fishing gear storing area) • Formulation of the plan to ensure compliance of rules and regulations • Determination of performance indicators • Establish procedures to monitor the status of harbour operation • Determination of user fees /charges and their collection system <p>2) Assist in institutionalization of the above matters</p> <p>3) Provide necessary training for management and operation staff of the harbour to pursuit their duties and responsibilities</p> <p>< Target groups ></p> <ul style="list-style-type: none"> • Management and operation staff of fishing harbour • Users of fishing harbour (Ghana inshore vessel association, canoe associations, fish mongers, store operators, fish processors, fish retailers and fishers)
Implementation Resources	<ul style="list-style-type: none"> • 1 Japanese consultant : 1.5 MM • 1 Local interpreter: 0.5 MM
Expected outputs	<ul style="list-style-type: none"> • Officially adopted documents on 1) terms of reference of the Multi-stakeholder Advisory committee, 2) the duties and responsibilities for management and operation staff, 3) Operation and management plan (including rules and regulations, compliance plan, performance indicators and their monitoring plan, and financial management plan) • Operation monitoring formats • Completion report

Achievement 2	Responsible use of fishing harbour facilities is promoted
Activities	<ul style="list-style-type: none"> • Provide necessary training for fishing harbour operation staff on effective implementation of compliance measures and monitoring/reporting • Organize awareness building workshops/meetings with user groups including boat owners, fishers and fish mongers to raise their awareness of the rules and regulations of the harbour and to ensure proper compliance • Assist in preparation of information media <p>< Target groups ></p> <ul style="list-style-type: none"> • Management and operation staff of fishing harbour • Users of fishing harbour (Ghana Inshore Vessel Association, Canoe Associations, fish mongers, store operators, fish processors, fish retailers and fishers)
Implementation Resources	<ul style="list-style-type: none"> • 1 Japanese consultant : 1.0 MM • 1 Local interpreter: 0.5 MM
Expected outputs	<p>< Japanese side ></p> <ul style="list-style-type: none"> • Record of training/workshops for harbour operation staff • Minutes of stakeholder meeting by user group • Completion report <p>< Ghana side ></p> <ul style="list-style-type: none"> • Installation of signs and information boards that indicate zoning and other rules



資料—5 参考資料

資料 5.1 Technical Notes (T/N) <協力準備調査① (2013年8月4日) >

**Technical Notes
on the Preparatory survey
on the Project for Fisheries Promotion in Sekondi
in the Republic of Ghana**

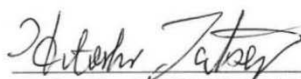
Based on the discussions held between the Government of the Republic of Ghana (hereinafter referred to as “GOG”) and the Japan International Cooperation Agency (hereinafter referred to as “JICA”) during the field survey on around Sekondi Fishing Harbour in July and August, 2013, JICA dispatched a Preparatory Survey Team (hereinafter referred to as “the Team”) on the Project for Fisheries Promotion in Sekondi (hereinafter referred to as “the Project”) to the Republic of Ghana.

JICA sent the Team, which is headed by Mr. Shunji Sugiyama, Team leader, JICA, and is scheduled to stay in the country from 1st July, 2013 to 10th August, 2013.

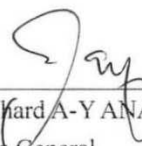
The basic principles such as objective, project site, and the project components has been confirmed and Minutes of Meetings was signed on 17th July, 2013 between the Team leader and Ghana side.

The Consultant members of the Team continued field survey in the study area and carried out a preliminary analysis of collected data and information. In the course of the discussion and field survey, both sides have confirmed items undertakings by GOG described in the attached sheets.

Sekondi, August 4, 2013



Mr. Hitoshi TAKEMOTO
Chief Consultant,
Preparatory Survey Team,
Japan International Cooperation Agency



Mr. Richard A-Y ANAMOO
Director General
Ghana Ports and Harbours Authority

ATTACHMENT

Items Undertakings by GOG

1. Reporting that the Project site is located within the boundary of the GPHA managed area to the JICA Ghana office by 14 August, 2013
2. Conducting the Environmental Impact Assessment and obtaining an environmental permission from EPA (Environmental Protection Agency) for the Project before the implementation of the Project
3. Temporary relocation of a number of kiosk shops during construction work
4. Site clearance
 - a) Removal of abandoned/sunken fishing vessels, used vessels' engines left on the ground, fuel tanks, and the temporary boat repair yard in the project site
 - b) Obtaining of a letter of consent on the removal of the yard from the operator before the end of November 2013
5. Diversion of sewerage channels that discharge waste waters to the Old-beach area
6. Securing temporary construction yard and cutting down the trees and grass
7. Installation of new fuel tanks (diesel and pre-mix), oil pipes and dispensers
8. Securing temporary administration office (if necessary)
9. Securing disposal area of sludge dredged by expansion of lay-by wharf
10. Informing and warning creation of restricted areas and a limited degree of interference to users' activities during the period to users of the Sekondi fishing harbour
11. Fence and gates around the Project site (if necessary)
12. Securing assistants of soft component for technical assistance (Fishing harbor management, operation and maintenance)
13. Conducting maintenance dredging in the Sekondi fishing harbour

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GHANA PORTS AND HARBOURS AUTHORITY

HEADQUARTERS

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OUR REF: DG/HQ/C.2/VOL.2/259

NOVEMBER 11, 2013

**THE RESIDENT DIRECTOR
JICA OFFICE
ACCRA**

Dear Sir,

**THE PROJECT FOR FISHERIES PROMOTION IN THE REPUBLIC OF GHANA
MANAGEMENT AND OPERATIONS PLAN FOR THE SEKONDI FISHING
HARBOUR**


Please we attach herewith the proposed Management and Operations Plan for the Sekondi Fishing Harbour which is currently under study for expansion under the above Project.

We sincerely regret the delay in the submission due to factors that we would take steps to avoid a repetition of this situation.

Kindly submitted for your necessary action in accordance with the requirements of the Project.

Yours faithfully,

FOR: GHANA PORTS AND HARBOURS AUTHORITY


**RICHARD A-Y ANAMOO
DIRECTOR GENERAL**

cc: ECOH Corporation Study Team
Project Engineer, Headquarters
Director of Port, Takoradi

SEKONDI FISHING HARBOUR MANAGEMENT AND OPERATION STRUCTURE

The Management and Operation of the Sekondi Fishing Harbour [SFH] is to be accordance with the plan as indicated above.

GPHA, as represented by the SFH Management, will retain the primary role of providing facilities and services to the increasing fishing and fish processing businesses community that use the SFH. The operations of the facilities would be in tandem with the operations of other services by several other stakeholders and government bodies, and therefore this operation and management plan relates only to the sections directly under the responsibility and budget allocations of the GPHA. However all other agencies and offices operating within the port areas would be subject to the applicable regulations of fees, taxes, levies, etc., and would be expected to comply with laid-down rules and regulations for the effective management and operation of the Sekondi Port facility.

Strategic Intent

To provide modern, safe and environmentally friendly fish landing, handling and management facilities to the Ghanaian fish-consuming community in the Western Region. As part of an expansion project under the auspices of the Government of Japan, through the Japan International Cooperation Agency (JICA), additional facilities such as a lay-by wharf, net mending and storage area, ice making plant, administration and management offices, slipway and related utilities would step up interest and preference for the SFH. GPHA would uphold its corporate managerial responsibility as far as the SFH is concerned to continue the contribution to food security and related socio-economic growth in Ghana.

Objective

Our objective is to optimize the limited resources in maintaining sustainable socio-economic activities and improved livelihoods for local and small-scale fishing community at the Sekondi Fishing Harbour. It is expected that, being a social venture, the port facility would continue to be supported under the annual corporate budget of the Ports and Harbours Authority [GPHA] at the same time being managed to sustain optimum revenue streams through responsible use and management. While the SFH would not be considered as a profit-making venture, the management of the SFH would commit to the judicious collection of all

possible revenue streams from all users to sustain the design life of all the facilities.

Performance Indicators

Performance indicators would be defined and updated from time to time in accordance with the corporate strategic management plan and methods of determining the performance of port facilities. Most especially, revenue generation, cargo throughput and classifications: fish, productivity of staff at service points such as the slipway, ice plant, fresh water supply stations, fuel depots, planning and administering regular maintenance schedules, budget compliances, etc., would be defined to sustain the best performance practices within the culture of practices in the Sekondi Fishing Harbour. Performance indicators and management forms would be revised annually.

Responsibility

The responsibility of managing the SFH would be held by the Fishing Harbour Manager, with oversight supervision of the Director of the Port of Takoradi. Operations and technical expertise / support for various sections such as civil engineering, slipway operations and maintenance, estate and environment, fire and safety, security, public relations and multi-stakeholder participation activities would be supported by the respective relevant offices under the Port of Takoradi. Also budgeting, finance and audit sections of SFH would receive support from the respective managers of the Takoradi Port.

The management chart enclosed considers four major sections under the direct supervision of the SFH manager. The fifth section is the advisory body of major stakeholders who would not be under the budget payroll of the Authority but must play major consultative advisory roles in the development of tariffs, bills, ground rules and regulations, data and information sharing, etc., to help keep the SFH in sound operations. It is envisaged that such a body would be constituted with representations from the Fishermen, Boat Owners, Fisherwomen / market Queens, Ministry of Fisheries and Aquaculture, Port Authority and any such stakeholders who may be relevant to the smooth collaborative management of the port facility.

SFH Manager

The Manager of the SFH would provide general managerial oversight of the SFH on behalf of the GPHA. He shall also be responsible for the preparation and administration of annual operational budgets for the enclave and would supervise all the subordinate sectional heads.

He shall coordinate, where necessary, assistance from the Port of Takoradi and other partners in the formulation and implementation of policies to govern the day-to-day operations of the Fishing Harbour. He shall report to the Director of Port, Takoradi.

Multi-Stakeholder Advisory Committee

This group would, on behalf of their various representations, advise and SFH Management. It advises the Fishing Harbour Management on issues pertaining to ground rules, responsible usage of facilities, payment of levies / fees / the coordination of the activities of the Fishing Harbour and other stakeholders.

Administrative Supervisor and Secretary / General Administration Office

Documentation of all administrative processes and proceedings, secretarial and front-desk duties and relations to support the general management and advisory committee's work. This office would also carry out staff and personnel filing and documentations.

Accounts and Finance Supervisor

Receives and accounts of all disbursements and all payments involving operation activities in SFH. This could cover activities such as the sale of ice blocks, gate proceeds, rents, fish landings, levies, tariffs, etc., and all related daily financial transactions in the SFH. This office would also be responsible for the lodgment of cash and cheque receipts to the bank and the up-to-date records of such accounts and transactions.

Audit Officer / Supervisor

Responsible for the monitoring and ensuring the compliance of all operations work procedures involving sales, cash receipts and lodgment or bank transactions, issuance of value books, providing internal audit services to keep fiscal activities in check, etc., in the SFH.

Senior Traffic Officers, Supervisors, and Assistants

This traffic office and the relevant staff would co-ordinate all activities in the SFH related to the movement of vessels, vehicles, persons and other items, the berthing and discharging of vessels, etc., and shall, through the leader of the office, report to the SFH Manager. The office would also supervise the tallying and documentation of tally records of fish landed and report the daily traffic situation to the Traffic Officer. The Traffic office would also submit fish tallies and other billable declarations to the Finance and Accounts sections for billing purposes.

As part of the Traffic / Operations office would be the Tally Clerks, Ice Men who would be taking care of tallying of landed fish volumes and the removal, storage and sale of ice-blocks to customers.

Engineering and Maintenance Unit

Electrical / Electro-Mechanical / Mechanical Engineering Technicians would take care of the operations and maintenance of the ice making plant, power generating sets and other electrical/mechanical installations and facilities.

Civil Engineering Tradesmen (Masons, Carpenters, Painters, Plumbers, etc.) would be responsible for general basic routine civil engineering maintenance activities in the SFH. Where necessary, the Port Civil Engineer of Takoradi Port would support the supervision of small works contracts within the tenets of the prevailing procurement regulations.

The operations and maintenance staff who would slip and unslip / launch vessels for repairs and other services would man the Slipway. Bills for slipway services would be raised by office of the Slipway Officer who would also ensure, with the support of the Finance / Accounts and Audit Officers, the payment for such services. Major maintenance / repair works of the slipway would be supported by Marine Engineering Department of the Port of Takoradi.

Security Personnel

Security personnel would be responsible for maintaining lawful entry and operations, keep law and order of movements and use of facilities for what they are meant to be as well ensure as proper documentations e.g. payments tickets and receipts, entry passes, etc., within the SFH area. The security personnel would also be coopted to assists in the collection of tolls from time to time. Security guards would be expected to keep surveillance of the SFH area against thieves, miscreants or such persons who may want to infringe on the security regulations of the SFH. Where necessary, SFH Security persons would collaborate with the Ghana Police Service within the community.

Fire/Safety Personnel

Responsible for prevention of fire outbreaks, uphold safety standards and practices related to activities such as hot works, fuel discharge and bunkering, maintain emergency escape routes, assembly points, coordinate fire drills, etc. within the SFH. Safety personnel would also conduct regular training and awareness programmes to educate fisher folks on causes of fire

and its precautionary measures. This section would also be responsible for the supply of fresh water to vessels.

Estate and Environment

This officer would work with non-permanent staff or sub-contracted entities to take care of the operations of fresh water stand pipes, public places of convenience and showers, waste collection and managements and the monitoring of clean environmental standards within the SFH. This section would also keep updated records of tenants, leases, etc., within the SFH estates.

Other Non-Permanent / Commissioned Staff

Ticket Sellers and Issuing Staff: They are responsible for collecting tolls, issuing receipts / tickets, etc. for vehicles, market tolls, port dues, pedestrian tolls, etc. and would be stationed at vantage point from time to time.

Local Task Force: these are usually local adult men who are engaged to assist the port security staff to control the fisher folks.

RECOMMENDED MANNING LEVELS FOR SEKONDI FISHING HARBOUR

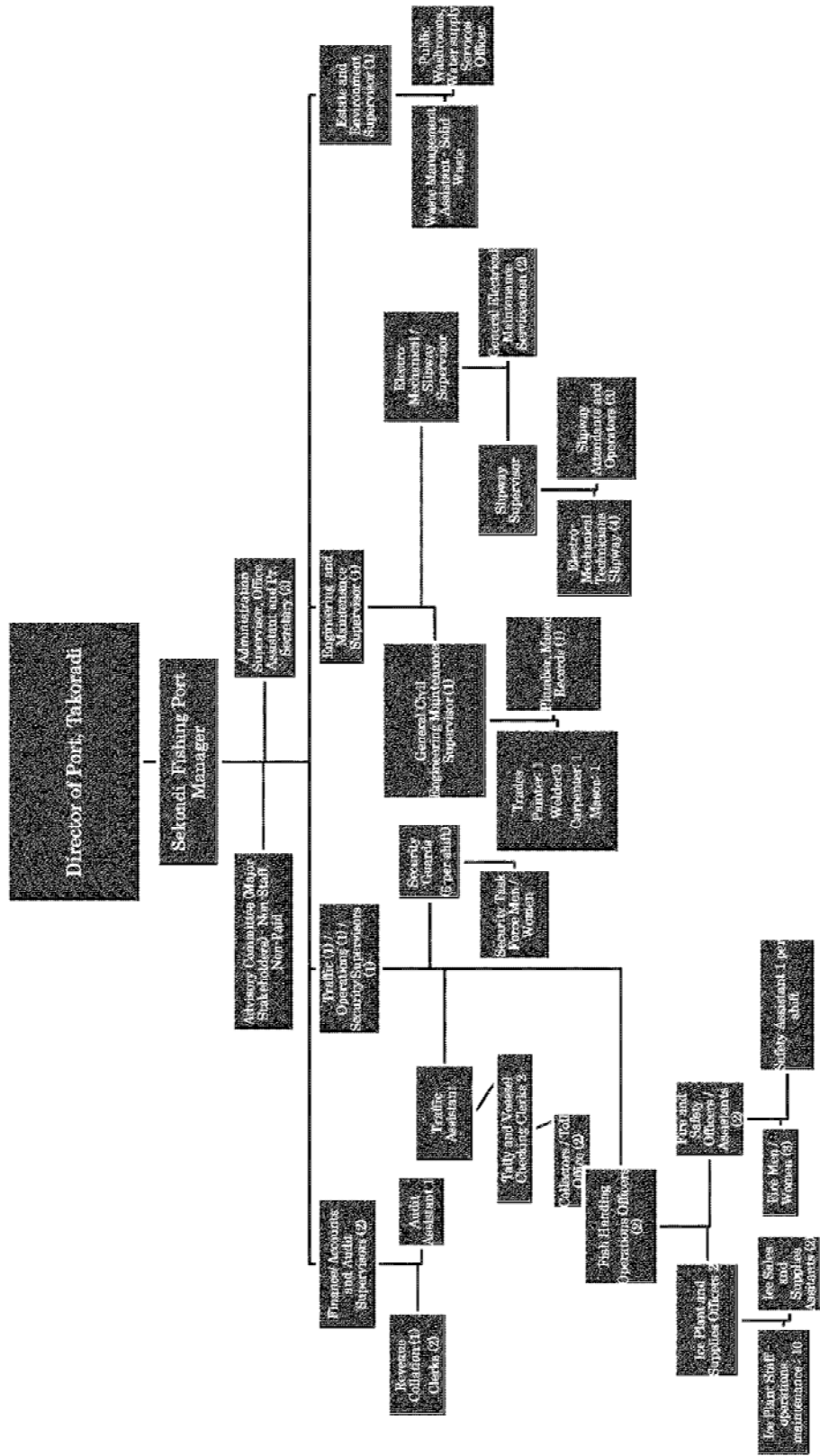
NO.	DESIGNATION	CURRENT No. OF STAFF	PROPOSED No. OF STAFF	REMARKS
1	FISHING HARBOUR MANAGER	1	1	
2	SENIOR TRAFFIC OFFICER	1	1	
3	TRAFFIC OFFICER	1	1	
4	SECRETARY	1	1	
5	ADMINISTRATIVE SUPERVISOR	1	1	
6	AUDIT SUPERVISOR	1	1	May be supported by at least a temporary staff – National Service, internship, etc.
7	FINANCE SUPERVISOR	1	1	To be assisted by 2 national

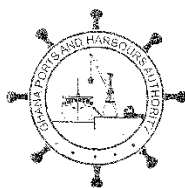
NO.	DESIGNATION	CURRENT No. OF STAFF	PROPOSED No. OF STAFF	REMARKS
				service persons for the collection, collation, accounting and lodgment of receivables, etc., and bank relations.
8	TRAFFIC SUPERVISORS	NIL	2	
9	TALLY CLERKS	1	2	
10	ICE MEN (SUPERVISOR)	1	1	
11	ICE MEN	7	12	Operations, preparations and issuing of ice, sales, etc.
12	MECH. ENGINEERING (SUPV.)	1	1	
13	MECH. TECHNICIANS	4	4	Support the electro-mechanical maintenance of the Ice Plant facilities
14	ELECT. ENGINEERING (SUPV)	1	1	
15	ELECT. TECHNICIANS	3	4	
16	SLIPWAY OFFICER	NIL	1	
17	SLIPWAY SUPERVISOR	NIL	1	
18	SLIPWAY ATTENDANTS	NIL	2	
19	CIVIL ENGINEERING (PLUMB.)	NIL	1	
20	SECURITY SUPERVISORS	2	2	
21	SECURITY GUARDS	18	18	6-per shift of 8 hours.
22	FIRE/SAFETY SUPERVISOR	1	1	
23	FIRE/SAFETY MEN	9	9	
24	OFFICE ASSISTANT	NIL	1	Support the administration activities, collation and transmission of correspondence, internal communications, etc.

NO.	DESIGNATION	CURRENT No. OF STAFF	PROPOSED No. OF STAFF	REMARKS
	TOTAL	55	70	
COMMISSIONED WORKERS – NON PERMANENT STAFF				
1	TICKET SELLERS / TOLL COLLECTORS	11	11	To be supervised by the Finance / Accounts Officer, the Audit Officer
2	PUBLIC PLACES OF CONVENIENCE, SHOWER OPERATORS	3	3	Jointly supervised by the Finance / Accounts / Audit Officers and the Port Environment and Estate Manager, Takoradi Port.
3	TASK FORCE MEN / WOMEN	6	6	To be under the supervision of the Security Supervisor.
4	STAND PIPE ATTENDANTS	2	2	Under the supervision of the Fire and Safety Supervisor and the Finance / Audit supervisors. Standpipe meters to be regularly monitored by the Civil Engineering Supervisor to match consumption with revenue streams.
	TOTAL	22	22	

SEKONDI FISHING HARBOUR

MANAGEMENT AND OPERATION STRUCTURE





GHANA PORTS AND HARBOURS AUTHORITY

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OUR REF: DG/HQ/V.2/V.2/328

28TH JANUARY, 2014

HITOSHI TAKEMOTO,
CHIEF CONSULTANT,
ECOH CORPORATION.

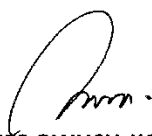
Dear Sir,

**SUBJECT: THE PREPARATORY SURVEY ON THE PROJECT FOR FISHERIES PROMOTION
IN THE REPUBLIC OF GHANA**

**RE: INDEMNITY FOR TEMPORAL AND PERMANENT RELOCATION OF KIOSKS
DUE TO PROJECT IMPLEMENTATION**

Ghana Ports and Harbours Authority (GPHA), as promised, is going to indemnify all matters to the people suffering from the new relocation place, relocation means, non-business period caused by the relocation in conjunction with "Temporal and Permanent Relocation of Kiosks and Containers" in this project.

Yours faithfully,
GHANA PORTS AND HARBOURS AUTHORITY


**CAPT. JAMES OWUSU-KORANTENG
DIRECTOR OF PORT, TAKORADI
FOR: DIRECTOR-GENERAL**

資料 5.4 セコンディ漁港利用沿岸漁船の月別水揚量

表-5.4(1) セコンディ漁港で操業する沿岸漁船の月別水揚量

(単位トン)

	1月	2月	3月	4月	5月	6月	7月	8月	9月	10月	11月	12月	合計
1986年	219.2	55.9	258.6	219.9	187.5	97.9	637.4	473.1	121.0	235.8	225.8	186.8	2,918.9
1987年	86.0	86.9	117.2	60.6	71.8	94.0	231.1	191.7	74.0	445.9	466.6	121.0	2,046.8
1988年	60.8	33.8	66.2	50.3	93.5	80.3	116.0	69.9	114.5	156.4	337.6	135.4	1,314.7
1989年	106.1	89.6	124.4	107.5	67.8	40.9	184.1	230.4	151.2	229.2	191.3	293.2	1,815.7
1990年	341.4	199.2	110.6	21.7	42.8	60.6	220.9	263.0	224.2	38.2	130.8	69.0	1,722.4
1991年	94.2	67.9	54.8	29.1	41.6	21.7	43.2	632.6	151.3	443.9	69.9	58.9	1,689.1
1992年	53.2	84.5	43.2	51.7	34.8	48.7	249.2	227.2	108.4	68.0	35.8	22.8	1,027.5
1993年	74.0	35.0	44.4	25.2	35.2	151.2	714.9	178.3	85.4	107.4	69.1	143.7	1,663.8
1994年	87.1	82.3	134.4	104.8	91.6	67.4	11.7	121.7	141.6	149.3	152.3	131.3	1,275.5
1995年	82.3	109.9	106.0	69.1	101.5	98.6	199.3	92.0	147.9	81.9	105.2	145.4	1,339.1
1986～1995年				各月標準偏差			124.1	各月平均		140.1	各年平均		1,681.3
2002年	141.4	114.2	64.6	96.1	98.5	84.1	198.7	281.2	202.9	128.7	131.8	169.8	1,711.8
2003年	258.5	106.1	88.9	69.0	133.6	125.3	473.9	513.5	283.6	289.4	170.1	172.8	2,684.6
2004年	212.5	90.0	83.3	66.2	267.3	45.9	149.5	199.0	205.4	171.0	131.8	106.0	1,728.0
2005年	176.1	120.0	58.8	60.2	18.4	86.1	120.1	200.8	186.3	94.8	89.0	107.1	1,317.7
2006年	204.8	135.0	128.0	133.7	164.6	97.1	184.7	336.3	249.4	210.8	143.0	134.0	2,121.2
2007年	134.7	90.3	83.4	90.6	89.5	86.0	136.1	406.5	175.8	110.1	125.8	56.5	1,585.7
2008年	288.6	115.0	46.9	35.4	26.5	66.2	49.9	197.2	203.6	34.6	98.8	75.4	1,238.2
2009年	149.5	188.9	145.9	175.9	157.4	286.8	259.9	160.5	111.6	107.0	154.0	238.8	2,136.2
2010年	52.8	94.9	109.7	428.3	378.1	393.3	165.9	208.3	307.0	218.4	261.4	160.7	2,778.8
2002～2010年				各月標準偏差			95.5	各月平均		167.7	各年平均		1,922.7

(注) 前段は1986～1995年(10年間)、後段は2002～2010年(9年間)の沿岸漁船の水揚量。

表中、各年の水揚量の多かった月(盛量月)の水揚量に網掛け表示している。

500トン/月を超える盛漁月は太字で表示している。1986～1995年には4回出現しているが、2002年以降は1回しか出現していない。

資料：MFRD 資料より作成

表-5.4(2) セコンディ漁港で水揚された施網漁沿岸漁船の月別水揚量と
セコンディ漁港以外で水揚された施網漁沿岸漁船の月別水揚量

(単位トン)

セコンディ漁港で水揚された施網漁沿岸漁船の月別水揚量													
	1月	2月	3月	4月	5月	6月	7月	8月	9月	10月	11月	12月	合計
2002年	0.0	0.0	0.0	0.0	0.0	0.0	148.1	234.1	130.6	0.0	0.0	0.0	512.7
2003年	23.7	19.5	27.9	0.0	57.9	0.0	438.7	498.5	226.0	186.7	125.7	135.7	1,740.3
2004年	150.8	40.7	0.0	10.9	200.6	22.4	142.8	149.7	159.4	120.3	55.1	48.5	1,101.3
2005年	105.8	86.6	0.0	0.0	0.0	0.0	101.1	176.0	76.0	70.9	51.6	76.7	744.7
2006年	141.3	78.8	70.4	78.2	100.7	22.9	117.3	297.5	173.2	133.0	78.2	74.7	1,366.2
2007年	80.8	49.9	40.9	49.6	47.0	39.7	95.9	355.2	121.6	47.7	71.3	6.8	1,006.6
2008年	203.9	0.0	46.9	35.4	26.5	31.9	44.7	153.1	145.4	34.6	46.8	44.4	813.6
2009年	89.2	177.5	107.8	127.9	111.7	227.1	220.6	133.6	51.7	79.6	88.8	162.2	1,577.6
2010年	26.8	66.3	86.8	361.1	317.6	343.7	139.3	182.8	263.8	185.9	215.2	132.1	2,321.4
全国の施網漁沿岸漁船の水揚量に占めるセコンディ漁港比率							15.8%	9年間月平均	103.6	9年間合計		11,184.1	
セコンディ漁港以外で水揚された施網漁沿岸漁船の月別水揚量													
	1月	2月	3月	4月	5月	6月	7月	8月	9月	10月	11月	12月	合計
2002年	281.3	139.5	132.8	194.9	206.1	5.0	440.0	959.8	748.9	683.6	323.5	346.3	4,461.6
2003年	841.6	482.6	925.1	1,081.0	526.0	317.3	635.2	866.4	647.7	1,099.5	1,129.2	1,617.9	10,169.6
2004年	518.6	150.4	543.6	618.7	269.9	33.2	632.6	349.4	722.9	109.9	189.4	247.7	4,386.4
2005年	541.6	246.8	319.8	562.7	801.4	0.0	914.0	922.0	736.1	449.2	170.4	309.9	5,973.6
2006年	599.8	617.2	404.8	291.9	373.2	307.7	795.1	1,277.6	731.9	731.4	404.3	497.1	7,032.1
2007年	372.8	358.4	1,517.5	78.7	531.8	627.7	1,157.0	847.6	656.3	707.3	583.6	342.6	7,781.2
2008年	336.4	612.2	73.7	83.4	2.8	35.4	239.5	986.1	1,088.2	655.2	134.1	184.3	4,431.2
2009年	551.3	87.7	185.6	900.9	313.3	254.5	539.6	516.4	1,317.4	1,799.7	2,434.9	362.6	9,264.1
2010年	515.1	126.4	209.0	1,063.7	639.1	545.5	705.8	740.9	697.4	210.1	527.5	227.6	6,208.1
全国の施網漁沿岸漁船の水揚量に占める他の水揚浜の比率							84.2%	9年間月平均	552.9	9年間合計		29,707.8	

(注) セコンディ漁港で水揚量の多かった3カ月を盛漁月として網掛け表示している。

セコンディ漁港以外の水揚量を合計し、水揚量の多かった3カ月(盛漁月)を赤字表示している。

セコンディ漁港の盛漁月とセコンディ漁港以外での盛漁月が合致していた月数は12、盛漁月が異なっていた月数は15である。このことから、「ガ」国の沿岸漁船の盛漁月は地域によって異なる傾向があると思料される。

資料：MFRD 資料より作成

資料-6 その他の資料・情報

資料 6.1 ベースライン調査集計結果

表-資 6.1(1) 閑漁期の日別活動漁船数と水揚げ量

月	日	活動漁船 (単位:隻)				水揚げ量 (単位:t)											
						浮き魚				底魚				合計			
		大型 船	沿岸 漁船	カス 一	合計	大型 船	沿岸 漁船	カス 一	合計	大型 船	沿岸 漁船	カス 一	合計	大型 船	沿岸 漁船	カス 一	合計
7	15	2	4	10	16	0	1.47	5.17	6.64	9.4	2.32	2.61	14.33	9.4	3.79	7.78	20.97
7	16	0	1	0	1	0	0.09	0	0.09	0	0.2	0	0.2	0	0.29	0	0.29
7	17	1	6	30	37	5.58	7.51	11.17	24.26	0	3.54	7.17	10.71	5.58	11.05	18.34	34.96
7	18	2	8	25	35	5	6.59	11.13	22.72	3.8	0	4.08	7.88	8.8	6.59	15.21	30.6
7	19	0	8	21	29	0	2.73	11.7	14.43	0	0	4.48	4.48	0	2.73	16.18	18.92
7	20	1	1	18	20	9.45	0.45	64.36	74.26	1.5	0	4.35	5.85	10.95	0.45	68.71	80.11
7	21	1	0	16	17	1.95	0	63.25	65.2	0.35	0	3.26	3.61	2.3	0	66.51	68.82
7	22	0	0	28	28	0	0	74.03	74.03	0	0	4.47	4.47	0	0	78.5	78.5
7	23	0	0	3	3	0	0	3.75	3.75	0	0	0	0	0	0	3.75	3.75
7	24	2	0	29	31	8.54	0	10.85	19.39	4.86	0	9.86	14.72	13.4	0	20.71	34.11
7	25	2	0	33	35	1.1	0	20.18	21.28	7.7	0	9.32	17.02	8.8	0	29.5	38.31
7	26	1	4	27	32	0.5	0.51	9.08	10.09	5.85	0	5.74	11.59	6.35	0.51	14.82	21.68
7	27	3	10	23	36	4.85	2.99	17.83	25.66	6.27	0	2.41	8.68	11.12	2.99	20.24	34.35
7	28	0	2	33	35	0	0.25	84.16	84.42	0	0	3.41	3.41	0	0.25	87.57	87.83
7	29	1	15	31	47	6.3	10.56	48.23	65.09	0	0.9	7.98	8.88	6.3	11.46	56.21	73.97
	合計	16	59	327	402	43.27	33.15	434.9	511.32	39.73	6.96	69.15	115.84	83	40.11	504.05	627.16

表-資 6.1(2) 盛漁期の日別活動漁船数と水揚げ量

月	日	活動漁船 (単位：隻)				水揚げ量 (単位：t)											
						浮き魚				底魚				合計			
		大型 船	沿岸 漁船	カヌー 一	合計	大型 船	沿岸 漁船	カヌー 一	合計	大型 船	沿岸 漁船	カヌー 一	合計	大型 船	沿岸 漁船	カヌー 一	合計
7	31	0	23	43	66	0	28.71	28.99	57.7	0	0.36	11.58	11.94	0	29.07	40.57	69.64
8	1	0	37	26	63	0	20.02	14.15	34.17	0	3.53	4.69	8.22	0	23.55	18.84	42.4
8	2	1	31	40	72	1.29	19.05	34.03	54.38	2.79	5.25	18.72	26.76	4.08	24.3	52.76	81.14
8	3	2	14	29	45	1.65	11.73	8.38	21.76	8.01	6.81	18.09	32.91	9.66	18.54	26.46	54.66
8	4	1	19	26	46	1.65	14.72	12.47	28.84	5.67	20.43	7.1	33.2	7.32	35.15	19.57	62.04
8	5	1	24	41	66	1.7	22.73	32.21	56.64	7.2	11.73	10.29	29.22	8.9	34.46	42.5	85.86
8	7	2	25	40	67	4.2	10.82	24.78	39.81	8.55	6.83	9.85	25.23	12.75	17.65	34.63	65.04
8	8	2	15	17	34	3.6	11.95	32.97	48.52	1.8	8.86	3.41	14.07	5.4	20.82	36.38	62.6
8	9	0	8	18	26	0	17.22	25.25	42.47	0	0.9	3.26	4.16	0	18.12	28.51	46.63
8	11	2	7	18	27	6.48	9.18	50.24	65.91	8.1	1.35	2.74	12.19	14.58	10.53	52.99	78.1
8	12	2	20	29	51	6.6	17.58	33.31	57.49	6.84	16.3	6.73	29.87	13.44	33.88	40.04	87.36
8	13	0	2	0	2	0	0	0	0	0	0.9	0	0.9	0	0.9	0	0.9
8	14	1	48	37	86	0.84	39.32	13.56	53.73	6.03	84.44	26.65	117.12	6.87	123.76	40.22	170.84
8	15	1	15	25	41	2.2	5.1	11.61	18.91	7.74	12.15	5.55	25.44	9.94	17.25	17.16	44.35
8	16	2	17	25	44	7	15.3	9.72	32.02	5.85	10.5	6.97	23.32	12.85	25.8	16.69	55.34
	合計	17	322	444	783	37.21	258.99	345.71	641.92	68.58	203.57	144.06	416.21	105.79	462.57	489.77	1058.13

表-資 6.1(3) 調査全期間における日別活動漁船数と水揚げ量

月	日	活動漁船 (単位:隻)				浮き魚				底魚				水揚げ量 (単位:t)			
		大型船	沿岸漁船	カヌー	合計	大型船	沿岸漁船	カヌー	合計	大型船	沿岸漁船	カヌー	合計	大型船	沿岸漁船	カヌー	合計
7	15	2	4	10	16	0	1.47	5.17	6.64	9.4	2.32	2.61	14.33	9.4	3.79	7.78	20.97
7	16	0	1	0	1	0	0.09	0	0.09	0	0.2	0	0.2	0	0.29	0	0.29
7	17	1	6	30	37	5.58	7.51	11.17	24.26	0	3.54	7.17	10.71	5.58	11.05	18.34	34.96
7	18	2	8	25	35	5	6.59	11.13	22.72	3.8	0	4.08	7.88	8.8	6.59	15.21	30.6
7	19	0	8	21	29	0	2.73	11.7	14.43	0	0	4.48	4.48	0	2.73	16.18	18.92
7	20	1	1	18	20	9.45	0.45	64.36	74.26	1.5	0	4.35	5.85	10.95	0.45	68.71	80.11
7	21	1	0	16	17	1.95	0	63.25	65.2	0.35	0	3.26	3.61	2.3	0	66.51	68.82
7	22	0	0	28	28	0	0	74.03	74.03	0	0	4.47	4.47	0	0	78.5	78.5
7	23	0	0	3	3	0	0	3.75	3.75	0	0	0	0	0	0	3.75	3.75
7	24	2	0	29	31	8.54	0	10.85	19.39	4.86	0	9.86	14.72	13.4	0	20.71	34.11
7	25	2	0	33	35	1.1	0	20.18	21.28	7.7	0	9.32	17.02	8.8	0	29.5	38.31
7	26	1	4	27	32	0.5	0.51	9.08	10.09	5.85	0	5.74	11.59	6.35	0.51	14.82	21.68
7	27	3	10	23	36	4.85	2.99	17.83	25.66	6.27	0	2.41	8.68	11.12	2.99	20.24	34.35
7	28	0	2	33	35	0	0.25	84.16	84.42	0	0	3.41	3.41	0	0.25	87.57	87.83
7	29	1	15	31	47	6.3	10.56	48.23	65.09	0	0.9	7.98	8.88	6.3	11.46	56.21	73.97

7	31	0	23	43	66	0	28.71	28.99	57.7	0	0.36	11.58	11.94	0	29.07	40.57	69.64
8	1	0	37	26	63	0	20.02	14.15	34.17	0	3.53	4.69	8.22	0	23.55	18.84	42.4
8	2	1	31	40	72	1.29	19.05	34.03	54.38	2.79	5.25	18.72	26.76	4.08	24.3	52.76	81.14
8	3	2	14	29	45	1.65	11.73	8.38	21.76	8.01	6.81	18.09	32.91	9.66	18.54	26.46	54.66
8	4	1	19	26	46	1.65	14.72	12.47	28.84	5.67	20.43	7.1	33.2	7.32	35.15	19.57	62.04
8	5	1	24	41	66	1.7	22.73	32.21	56.64	7.2	11.73	10.29	29.22	8.9	34.46	42.5	85.86
8	7	2	25	40	67	4.2	10.82	24.78	39.81	8.55	6.83	9.85	25.23	12.75	17.65	34.63	65.04
8	8	2	15	17	34	3.6	11.95	32.97	48.52	1.8	8.86	3.41	14.07	5.4	20.82	36.38	62.6
8	9	0	8	18	26	0	17.22	25.25	42.47	0	0.9	3.26	4.16	0	18.12	28.51	46.63
8	11	2	7	18	27	6.48	9.18	50.24	65.91	8.1	1.35	2.74	12.19	14.58	10.53	52.99	78.1
8	12	2	20	29	51	6.6	17.58	33.31	57.49	6.84	16.3	6.73	29.87	13.44	33.88	40.04	87.36
8	13	0	2	0	2	0	0	0	0	0	0.9	0	0.9	0	0.9	0	0.9
8	14	1	48	37	86	0.84	39.32	13.56	53.73	6.03	84.44	26.65	117.12	6.87	123.76	40.22	170.84
合計		33	381	771	1185	80.48	292.14	780.61	1153.24	108.31	210.53	213.21	532.05	188.79	502.67	993.82	1685.29

表-資 6.1(4) 漁法別活動漁船数 (単位：隻)

漁法 船種	引網	巾着網	刺し網	フック	その他	合計
鋼製漁船	16	14	3	0	0	33
沿岸漁船	14	126	230	4	0	374
カヌー	19	3	522	204	10	758
合計	49	143	755	208	10	1165

表-資 6.1(5) 水揚げ場所別活動漁船数 (単位：隻)

場所 船種	倉庫	オフィス	埠頭- 突堤	カヌー- 突堤	突堤-浜	浜	合計
鋼製漁船	30	1	1	0	0	0	32
沿岸漁船	14	163	2	86	55	52	372
カヌー	0	104	41	141	47	429	762
合計	44	268	44	227	102	481	1166

表-資 6.1(6) 水揚げ開始時間と水揚げ場所の関係 (単位: 隻)

水揚げ開始 時間	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	合計
水揚げ場所																
荷捌施設前	0	10	19	3	2	2	1	1	1	1	1	1	1	1	0	44
管理事務所前	0	1	14	40	51	46	52	20	15	12	9	4	2	2	0	268
既存岸壁 ~ カヌー突堤	0	0	6	10	10	7	3	5	1	0	2	0	0	0	0	44
カヌー突堤	0	1	44	40	35	49	15	10	11	6	7	6	2	1	0	227
カヌー突堤 ~ オールドビーチ	0	1	15	34	20	18	3	3	4	3	0	0	0	0	0	101
オールドビーチ	1	1	99	102	78	63	41	28	26	12	11	13	5	0	0	481
合計	1	14	197	229	196	185	115	67	58	34	30	24	10	4	0	1165

表-資 6.31(7) 水揚げ開始時間と船種の関係 (単位: 隻)

水揚げ開始 時間	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	合計
水揚げ場所																
鋼鉄漁船	0	10	21	2	0	0	0	0	0	0	0	0	0	0	0	33
沿岸漁船	0	1	51	74	63	57	45	27	21	13	13	9	3	3	0	381
カヌー	1	3	128	155	138	132	70	43	38	22	17	15	7	1	0	770
合計	1	14	200	231	201	189	115	70	59	35	30	24	10	4	0	1184

表-資 6.1(8) 船種別漁箱サイズ (単位：隻)

魚箱サイズ 船種	浮き魚			底魚				
	S	M	L	合計	S	M	L	合計
鋼鉄漁船	3	14	13	30	2	6	23	31
沿岸漁船	113	23	174	310	3	19	109	131
カヌー	192	193	249	634	104	189	136	429
合計	308	230	436	974	109	214	268	591

表-資 6.1(9) 船種別氷使用状況 (単位：隻)

氷の使用 船種	浮き魚			底魚		
	使用	非使用	合計	使用	非使用	合計
鋼鉄漁船	29	0	29	31	0	31
沿岸漁船	247	54	301	87	39	126
カヌー	380	239	619	313	102	415
合計	656	293	949	431	141	572

表-資 6.1(10) 水揚げ場別漁船待ち時間別頻度 (単位: 隻)

船待時間(分)	-10	-30	-60	-90	-120	-150	-180	180-	合計	平均
水揚げ場所										
荷捌施設前	0	1	7	4	1	3	1	27	44	203.73
管理事務所前	1	35	67	75	47	22	11	10	268	79.85
既存岸壁～ 力又ー突堤	6	13	16	6	0	1	1	1	44	41.59
力又ー突堤	52	109	43	6	5	1	1	10	227	42.38
力又ー突堤～オー ルドビーチ	42	40	18	2	0	0	0	0	102	18.66
オールドビーチ	11	273	148	41	7	1	0	0	481	34.46
合計	112	471	299	134	60	28	14	48	1166	51.71

表-資 6.1(11) 船種別漁船待ち時間別頻度 (単位: 隻)

魚船待時間(分)	-10	-30	-60	-90	-120	-150	-180	180-	合計	平均
水揚げ場所										
鋼鉄漁船	0	0	1	1	1	2	1	27	33	250.15
沿岸漁船	80	110	72	48	38	18	7	8	381	48.92
力又ー	32	370	232	86	22	8	8	13	771	44.52
合計	112	480	305	135	61	28	16	48	1185	51.66

表-資 6.1(12) 水揚げ場所別魚商待ち時間別頻度 (単位：人)

魚商待ち時間(分)	-10	-20	-30	-60	-90	-120	-150	-180	180-	合計	平均
水揚げ場所											
駐車場	28	37	29	95	78	2	1	1	7	278	51.01
エブロン	15	89	99	175	64	23	8	4	1	478	44.19
カヌー突堤	41	106	80	103	10	1	3	1	3	348	31.47
オールドビーチ	42	230	224	174	25	0	0	0	1	696	26.67
その他	2	4	5	8	6	3	1	0	0	29	50.1
合計	128	466	437	555	183	29	13	6	12	1829	36.23

表-資 6.1(13) 水揚げ場所別魚購入量別頻度 (単位：人)

購入量(ton)	-0.1	-0.3	-0.5	-1.0	-2.0	-3.0	3.0-	合計	平均(kg)
水揚げ場所									
駐車場	101	104	19	17	12	4	19	278	876.46
エブロン	8	57	86	167	88	37	20	478	1033.19
カヌー突堤	52	128	45	50	25	23	20	348	855.23
オールドビーチ	128	345	100	87	26	4	1	696	355.95
その他	7	8	2	4	3	2	3	29	912.83
合計	296	642	252	325	154	70	63	2001	713.68

表-資 6.1(14) 魚種別購入価格量別頻度 (単位：人)

購入価格(GHC/kg) 魚種	購入価格(GHC/kg)											合計	平均
	-1.0	-2.0	-3.0	-5.0	-10.0	-15.0	20.0	20.0-	20.0-	20.0-	20.0-		
浮き魚	538	484	328	129	38	2	3	3	3	3	3	1525	1.83
底魚	290	411	190	185	65	1	3	0	0	0	0	1145	2.07
合計	828	895	518	314	103	3	6	3	3	3	3	2670	1.93

表-資 5.2(15) 水揚げ場所別移動手段別頻度 (単位：人)

購入量(ton) 水揚げ場所	移動手段										合計
	保冷車	トラック	トラック	トラック	トラック	トラック	トラック	トラック	トラック	トラック	
駐車場	1	7	1	1	137	4	112	15	278		
エブロン	4	4	0	34	290	53	94	0	479		
カヌー突堤	0	2	0	72	107	5	140	22	348		
オールドビーチ	11	15	8	20	353	7	255	20	689		
その他	0	0	0	3	10	0	16	0	29		
合計	16	28	9	130	897	69	617	57	1823		

表-資 5.2(16) 漁船水揚げ量別余剰量頻度別頻度（浮き魚）（単位：隻）

漁船水揚げ量 (ton)	余剰量(ton)											平均(kg)
	なし	-0.1	-0.2	-0.3	-0.4	-0.5	1.0	1.0-	合計			
～ 0.1	79	1	0	0	0	0	0	0	80	0.63		
～ 0.3	213	46	7	1	0	0	0	0	267	15.45		
～ 0.5	111	24	11	6	0	0	0	0	152	33.78		
～ 1.0	116	22	17	7	3	1	5	0	171	65.67		
～ 1.5	54	5	4	1	3	3	16	0	86	182.67		
～ 2.0	31	1	5	3	3	2	5	0	50	151		
～ 3.0	26	2	3	0	0	1	10	1	43	230.47		
～ 5.0	11	0	0	0	0	5	6	6	28	643.93		
5.0 ～	27	0	1	2	0	2	3	12	47	926.81		
合計	668	101	48	20	9	14	45	19	924	124.78		

表-資 5.2(17) 漁船水揚げ量別余剰量頻度別頻度 (底魚) (単位: 隻)

漁船水揚げ量 (ton)	余剰量(ton)										合計	平均(kg)
	なし	-0.1	-0.2	-0.3	-0.4	-0.5	1.0	1.0-	合計	平均(kg)		
～ 0.1	66	6	0	0	0	0	0	0	0	0	72	3.75
～ 0.3	121	26	8	1	0	0	0	0	0	0	156	20.96
～ 0.5	47	26	13	6	1	0	0	0	0	0	93	60.7
～ 1.0	76	16	21	11	6	3	1	0	0	0	134	90.97
～ 1.5	25	0	2	5	0	1	1	0	0	0	34	85.59
～ 2.0	21	4	2	1	1	3	1	0	0	0	33	108.48
～ 3.0	10	1	0	0	2	1	6	0	0	0	20	296.5
～ 5.0	2	0	0	3	2	2	1	4	4	4	14	886.43
5.0 ～	7	0	0	1	1	0	4	8	8	8	21	1328.57
合計	375	79	46	28	13	10	14	12	12	12	577	128.43

表-資-6.1(18) セコンディ漁港における盛漁時の利用者の出入り調査 (2013年7月31日)

ゲート 職種	1			2			3			4			5			合計		
	男性	女性	合計	男性	女性	合計	男性	女性	合計	男性	女性	合計	男性	女性	合計	男性	女性	合計
	1	12	5	17	15	4	19	13	2	15	3	4	7	10	1	11	53	16
2	0	0	0	3	0	3	1	0	1	3	0	3	6	0	6	13	0	13
3	375	1	376	2411	1	2412	1183	7	1190	788	3	791	97	1	98	4854	13	4867
4	38	8	46	1	2	3	67	9	76	1	1	2	4	1	5	111	21	132
5	32	6	38	47	24	71	67	10	77	38	11	49	62	12	74	246	63	309
6	25	87	112	21	202	223	103	118	221	13	835	848	10	60	70	172	1302	1474
7	1	313	314	33	510	543	5	193	198	0	0	0	5	101	106	44	1117	1161
8	22	81	103	715	261	976	23	137	160	7	157	164	8	22	30	775	658	1433
9	0	15	15	0	198	198	6	151	157	0	0	0	1	3	4	7	367	374
10	33	2	35	0	67	67	28	67	95	0	1	1	4	5	9	65	142	207
11	54	0	54	105	0	105	175	6	181	3	0	3	23	0	23	360	6	366
12	3	0	3	7	0	7	10	34	44	0	0	0	5	4	9	25	38	63
13	11	21	32	36	57	93	45	93	138	2	56	58	5	8	13	99	235	334
14	49	146	195	307	909	1216	326	482	808	134	371	505	9	52	61	825	1960	2785
15	25	2	27	90	0	90	273	0	273	8	1	9	9	0	9	405	3	408
16	22	8	30	26	156	182	172	62	234	0	127	127	2	0	2	222	353	575
17	101	5	106	74	18	92	223	12	235	1	1	2	0	2	2	399	38	437
18	490	175	665	1739	523	2262	658	158	816	602	162	764	137	72	209	3626	1090	4716
19	332	3	335	0	0	0	1	0	1	0	0	0	36	0	36	369	3	372
20	46	0	46	0	0	0	0	0	0	0	0	0	7	1	8	53	1	54
21	84	3	87	0	0	0	2	0	2	0	0	0	7	8	15	93	11	104
22	60	0	60	1	0	1	0	0	0	0	0	0	6	1	7	67	1	68
合計	1815	881	2696	5631	2932	8563	3381	1541	4922	1603	1730	3333	453	354	807	12883	7438	20321