

Frame Survey of Tuna Fisheries in Indonesian Archipelagic Waters

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1 Introduction

Tuna fisheries are of major importance in Indonesian Archipelagic Waters (IAW), which include fisheries management areas (FMAs or "Wilayah Pengelolaan Perikanan") WPP 713, 714 and 715. This area is reported to produce more than half of all tuna landings in Indonesia [1]. The fisheries here include three majors oceanic species, yellowfin tuna or "madidihang" (*Thunnus albacares*), bigeye tuna or "tuna mata besar" (*T. obesus*), and skipjack tuna or cakalang (*Katsuwonus pelamis*), as well as a number of neritic (coastal) tuna species such as kawa-kawa or "tongkol" (*Euthynnus affinis*), frigate tuna or "tongkol krai" (*Auxis thazard*), bullet tuna or "tongkol lisong" (*A. rochei*) and longtail tuna or "tongkol abu-abu" (*T. tonggol*).

The Government of Indonesia (GoI) has issued Ministerial Regulation No. 8 2012 that manages the fisheries activities under four different levels of the fishing harbour, namely: Oceanic Fishing Port (OFP) (*Pelabuhan Perikanan Samudera*, PPS), Archipelagic Fishing Port (AFP) (*Pelabuhan Perikanan Nusantara*, PPN), Coastal Fishing Port (CFP) (*Pelabuhan Perikanan Pantai*, PPP), and Fish Landing Place (FLP) (*Pangkalan Pen-daratan Ikan*, PPI). However, the information on tuna effort and catch in terms of the fishing fleet, gears and landing locations the IAW are still highly fragmented and has a low resolution since many landing locations are have not covered and documented in the regulation. Since that complexity is of major importance when assessing selectivity, catchability and effort components of fishing activities, there is an urgent need to improve the information of tuna fisheries in the IAW and beyond.

The Nature Conservancy through its implementation partner Yayasan Konservasi Alam Nusantara has set out on a frame survey that covers all the fleet segments operating in the IAW. This report covers the results to date of the frame survey, describing the fleet, the home bases of all the boats, the fishing methods they use and the target species they are after. This description of the fisheries also includes the information on the total fleet by boat size category and gear type and feeds directly into the IFishdatabase that includes the total fleet. Some information on this report is derived into two other reports: species ID guide and a highly detailed guide on all types of fishing gear used in the tuna fisheries in Indonesian Archipelagic Waters All information provided ultimately are used for the consideration in applying Crew-Operated Data Recording System (CODRs) program on tuna fisheries.

2 Bali Province

2.1 Celukan Bawang and Banjar Villages, Buleleng

2.1.1 Background and Survey Practicalities

Background

Celukan Bawang and Banjar villages are located in Buleleng Regency - Bali, where both locations are adjacent. Our interview to the Provincial Fisheries Agency officer shows that the fishers are fishing in the Bali Sea and targeting small and large pelagic. Fishing fleet in the location is dominated by jukung or nano boat.

Survey team

The survey was done by Dimas Galang Fergiawan

Period visited

The survey was conducted on 8-10 February 2019

How to get there

From the Ngurah Rai airport, the location can be reached using car through the middle way of Tabanan Regency by 3-4 hours duration.

2.1.2 Fleet Description

Fishing fleet at both Celukan Bawang and Banjar Villages have the same characteristic. The fishers use handlines with diverse hook size. The length of the vessels ranges between 4 and 7 m, while the width is around 0.7 m. Our survey shows that there is a local fishers group (*Kelompok Nelayan*) namely, Karya Madu. The group has 70 fishers including 90 boats. Meanwhile, there are about 50 jukung boats at Banjar village. Some boats use net-based gear such as mini purse seine and gillnet. Following the categorization on the Gear ID Report, fishing gears used at both villages are classified below:

1. Trolling lines without kite one large hook with artificial lure
2. Trolling lines with kite one large hook with artificial lure
3. Trolling lines without kite multiple small hooks with artificial lure
4. Mini purse seine
5. Gillnets

In the trolling lines with an artificial lure, the artificial lure is made from feather or silk. For handline with multiple small hooks, the length of the fishing line ranges between 100 and 150 m where 15 to 100 hooks are tied up with the lures. The handline fishers usually have a one-day fishing trip. In their fishing trip, they are associated with FAD which is owned by local group fishers. Travel distance between port-base and the fishing ground is around 2-3 hours. In average, landed catch ranges between 50 and 100 kilos with catch composition of bullet tuna, mahi-mahi, squid and scads.

The artificial lure is made from feather or silk, length of the fishing line is 100 to 150 meters where 15 to 100 hooks are tied up with the lures. The fishing time is one-day

fishing trip where it is associated with the use of anchored fish aggregating device (FAD) owned by local group fisherman. The travel distance from the home base to the fishing ground is about 2-3 hours. The catch amount is around 50 - 100 kilograms with varied catch composition such as bullet tuna, mahi-mahi, squid and indian scads.

Table 2.1: Boat Information from Celukan Bawang and Banjar Villages, Buleleng

No	Program Site	Boat Name	GT Declared	GT Estimate	Fishing Gear	Fishing Area
1	Buleleng	Celukanbawang01	1.00	1.00	TrollMultipleSmallArtificial	713
2	Buleleng	Celukanbawang02	1.00	1.00	TrollMultipleSmallArtificial	713
3	Buleleng	Celukanbawang03	1.00	1.00	TrollMultipleSmallArtificial	713
4	Buleleng	Celukanbawang04	1.00	1.00	TrollMultipleSmallArtificial	713
5	Buleleng	Celukanbawang05	1.00	1.00	TrollMultipleSmallArtificial	713
6	Buleleng	Celukanbawang06	1.00	1.00	TrollMultipleSmallArtificial	713
7	Buleleng	Celukanbawang07	1.00	1.00	TrollMultipleSmallArtificial	713
8	Buleleng	Celukanbawang08	1.00	1.00	TrollMultipleSmallArtificial	713
9	Buleleng	Celukanbawang09	1.00	1.00	TrollMultipleSmallArtificial	713
10	Buleleng	Celukanbawang10	1.00	1.00	TrollMultipleSmallArtificial	713
11	Buleleng	Celukanbawang11	1.00	1.00	TrollMultipleSmallArtificial	713
12	Buleleng	Celukanbawang12	1.00	1.00	TrollMultipleSmallArtificial	713
13	Buleleng	Celukanbawang13	1.00	1.00	TrollMultipleSmallArtificial	713
14	Buleleng	Celukanbawang14	1.00	1.00	TrollMultipleSmallArtificial	713
15	Buleleng	Celukanbawang15	1.00	1.00	TrollMultipleSmallArtificial	713
16	Buleleng	Celukanbawang16	1.00	1.00	TrollMultipleSmallArtificial	713
17	Buleleng	Celukanbawang17	1.00	1.00	TrollMultipleSmallArtificial	713
18	Buleleng	Celukanbawang18	1.00	1.00	TrollMultipleSmallArtificial	713
19	Buleleng	Celukanbawang19	1.00	1.00	TrollMultipleSmallArtificial	713
20	Buleleng	Celukanbawang20	1.00	1.00	TrollMultipleSmallArtificial	713
21	Buleleng	Celukanbawang21	1.00	1.00	TrollMultipleSmallArtificial	713
22	Buleleng	Celukanbawang22	1.00	1.00	TrollMultipleSmallArtificial	713
23	Buleleng	Celukanbawang23	1.00	1.00	TrollMultipleSmallArtificial	713
24	Buleleng	Celukanbawang24	1.00	1.00	TrollMultipleSmallArtificial	713
25	Buleleng	Celukanbawang25	1.00	1.00	TrollMultipleSmallArtificial	713
26	Buleleng	Celukanbawang26	1.00	1.00	TrollMultipleSmallArtificial	713
27	Buleleng	Celukanbawang27	1.00	1.00	TrollMultipleSmallArtificial	713
28	Buleleng	Celukanbawang28	1.00	1.00	TrollMultipleSmallArtificial	713
29	Buleleng	Celukanbawang29	1.00	1.00	TrollMultipleSmallArtificial	713
30	Buleleng	Celukanbawang30	1.00	1.00	TrollMultipleSmallArtificial	713
31	Buleleng	Celukanbawang31	1.00	1.00	TrollMultipleSmallArtificial	713
32	Buleleng	Celukanbawang32	1.00	1.00	TrollMultipleSmallArtificial	713
33	Buleleng	Celukanbawang33	1.00	1.00	TrollMultipleSmallArtificial	713
34	Buleleng	Celukanbawang34	1.00	1.00	TrollMultipleSmallArtificial	713
35	Buleleng	Celukanbawang35	1.00	1.00	TrollMultipleSmallArtificial	713
36	Buleleng	Celukanbawang36	1.00	1.00	TrollMultipleSmallArtificial	713
37	Buleleng	Celukanbawang37	1.00	1.00	TrollMultipleSmallArtificial	713
38	Buleleng	Celukanbawang38	1.00	1.00	TrollMultipleSmallArtificial	713
39	Buleleng	Celukanbawang39	1.00	1.00	TrollMultipleSmallArtificial	713
40	Buleleng	Celukanbawang40	1.00	1.00	TrollMultipleSmallArtificial	713
41	Buleleng	Celukanbawang41	1.00	1.00	TrollMultipleSmallArtificial	713
42	Buleleng	Celukanbawang42	1.00	1.00	TrollMultipleSmallArtificial	713
43	Buleleng	Celukanbawang43	1.00	1.00	TrollMultipleSmallArtificial	713
44	Buleleng	Celukanbawang44	1.00	1.00	TrollMultipleSmallArtificial	713
45	Buleleng	Celukanbawang45	1.00	1.00	TrollMultipleSmallArtificial	713
46	Buleleng	Celukanbawang46	1.00	1.00	TrollMultipleSmallArtificial	713
47	Buleleng	Celukanbawang47	1.00	1.00	TrollMultipleSmallArtificial	713
48	Buleleng	Celukanbawang48	1.00	1.00	TrollMultipleSmallArtificial	713
49	Buleleng	Celukanbawang49	1.00	1.00	TrollMultipleSmallArtificial	713
50	Buleleng	Celukanbawang50	1.00	1.00	TrollMultipleSmallArtificial	713
51	Buleleng	Celukanbawang51	1.00	1.00	TrollMultipleSmallArtificial	713
52	Buleleng	Celukanbawang52	1.00	1.00	TrollMultipleSmallArtificial	713
53	Buleleng	Celukanbawang53	1.00	1.00	TrollMultipleSmallArtificial	713
54	Buleleng	Celukanbawang54	1.00	1.00	TrollMultipleSmallArtificial	713
55	Buleleng	Celukanbawang55	1.00	1.00	TrollMultipleSmallArtificial	713

Table 2.1: Boat Information from Celukan Bawang and Banjar Villages, Buleleng

No	Program Site	Boat Name	GT Declared	GT Estimate	Fishing Gear	Fishing Area
56	Buleleng	Celukanbawang56	1.00	1.00	TrollMultipleSmallArtificial	713
57	Buleleng	Celukanbawang57	1.00	1.00	TrollMultipleSmallArtificial	713
58	Buleleng	Celukanbawang58	1.00	1.00	TrollMultipleSmallArtificial	713
59	Buleleng	Celukanbawang59	1.00	1.00	TrollMultipleSmallArtificial	713
60	Buleleng	Celukanbawang60	1.00	1.00	TrollMultipleSmallArtificial	713
61	Buleleng	Celukanbawang61	1.00	1.00	TrollMultipleSmallArtificial	713
62	Buleleng	Celukanbawang62	1.00	1.00	TrollMultipleSmallArtificial	713
63	Buleleng	Celukanbawang63	1.00	1.00	TrollMultipleSmallArtificial	713
64	Buleleng	Celukanbawang64	1.00	1.00	TrollMultipleSmallArtificial	713
65	Buleleng	Celukanbawang65	1.00	1.00	TrollMultipleSmallArtificial	713
66	Buleleng	Celukanbawang66	1.00	1.00	TrollMultipleSmallArtificial	713
67	Buleleng	Celukanbawang67	1.00	1.00	TrollMultipleSmallArtificial	713
68	Buleleng	Celukanbawang68	1.00	1.00	TrollMultipleSmallArtificial	713
69	Buleleng	Celukanbawang69	1.00	1.00	TrollMultipleSmallArtificial	713
70	Buleleng	Celukanbawang70	1.00	1.00	TrollMultipleSmallArtificial	713
71	Buleleng	Celukanbawang71	1.00	1.00	TrollMultipleSmallArtificial	713
72	Buleleng	Celukanbawang72	1.00	1.00	TrollMultipleSmallArtificial	713
73	Buleleng	Celukanbawang73	1.00	1.00	TrollMultipleSmallArtificial	713
74	Buleleng	Celukanbawang74	1.00	1.00	TrollMultipleSmallArtificial	713
75	Buleleng	Celukanbawang75	1.00	1.00	TrollMultipleSmallArtificial	713
76	Buleleng	Celukanbawang76	1.00	1.00	TrollMultipleSmallArtificial	713
77	Buleleng	Celukanbawang77	1.00	1.00	TrollMultipleSmallArtificial	713
78	Buleleng	Celukanbawang78	1.00	1.00	TrollMultipleSmallArtificial	713
79	Buleleng	Celukanbawang79	1.00	1.00	TrollMultipleSmallArtificial	713
80	Buleleng	Celukanbawang80	1.00	1.00	TrollMultipleSmallArtificial	713
81	Buleleng	Banjar01	1.00	1.00	Gillnet	713
82	Buleleng	Banjar02	1.00	1.00	Gillnet	713
83	Buleleng	Banjar03	1.00	1.00	Gillnet	713
84	Buleleng	Banjar04	1.00	1.00	Gillnet	713
85	Buleleng	Banjar05	1.00	1.00	Gillnet	713
86	Buleleng	Banjar06	1.00	1.00	Gillnet	713
87	Buleleng	Banjar07	1.00	1.00	Gillnet	713
88	Buleleng	Banjar08	1.00	1.00	Gillnet	713
89	Buleleng	Banjar09	1.00	1.00	Gillnet	713
90	Buleleng	Banjar10	1.00	1.00	Gillnet	713
91	Buleleng	Banjar11	1.00	1.00	Gillnet	713
92	Buleleng	Banjar12	1.00	1.00	Gillnet	713
93	Buleleng	Banjar13	1.00	1.00	Gillnet	713
94	Buleleng	Banjar14	1.00	1.00	Gillnet	713
95	Buleleng	Banjar15	1.00	1.00	Gillnet	713
96	Buleleng	Banjar16	1.00	1.00	Gillnet	713
97	Buleleng	Banjar17	1.00	1.00	Gillnet	713
98	Buleleng	Banjar18	1.00	1.00	Gillnet	713
99	Buleleng	Banjar19	1.00	1.00	Gillnet	713
100	Buleleng	Banjar20	1.00	1.00	Gillnet	713
101	Buleleng	Banjar21	1.00	1.00	TrollMultipleSmallArtificial	713
102	Buleleng	Banjar22	1.00	1.00	TrollMultipleSmallArtificial	713
103	Buleleng	Banjar23	1.00	1.00	TrollMultipleSmallArtificial	713
104	Buleleng	Banjar24	1.00	1.00	TrollMultipleSmallArtificial	713
105	Buleleng	Banjar25	1.00	1.00	TrollMultipleSmallArtificial	713
106	Buleleng	Banjar26	1.00	1.00	TrollMultipleSmallArtificial	713
107	Buleleng	Banjar27	1.00	1.00	TrollMultipleSmallArtificial	713
108	Buleleng	Banjar28	1.00	1.00	TrollMultipleSmallArtificial	713
109	Buleleng	Banjar29	1.00	1.00	TrollMultipleSmallArtificial	713
110	Buleleng	Banjar30	1.00	1.00	TrollMultipleSmallArtificial	713
111	Buleleng	Banjar31	1.00	1.00	TrollMultipleSmallArtificial	713
112	Buleleng	Banjar32	1.00	1.00	TrollMultipleSmallArtificial	713
113	Buleleng	Banjar33	1.00	1.00	TrollMultipleSmallArtificial	713
114	Buleleng	Banjar34	1.00	1.00	TrollMultipleSmallArtificial	713
115	Buleleng	Banjar35	1.00	1.00	TrollMultipleSmallArtificial	713

Table 2.1: Boat Information from Celukan Bawang and Banjar Villages, Buleleng

No	Program Site	Boat Name	GT Declared	GT Estimate	Fishing Gear	Fishing Area
116	Buleleng	Banjar36	1.00	1.00	TrollMultipleSmallArtificial	713
117	Buleleng	Banjar37	1.00	1.00	TrollMultipleSmallArtificial	713
118	Buleleng	Banjar38	1.00	1.00	TrollMultipleSmallArtificial	713
119	Buleleng	Banjar39	1.00	1.00	TrollMultipleSmallArtificial	713
120	Buleleng	Banjar40	1.00	1.00	TrollMultipleSmallArtificial	713
121	Buleleng	Banjar41	1.00	1.00	TrollMultipleSmallArtificial	713
122	Buleleng	Banjar42	1.00	1.00	TrollMultipleSmallArtificial	713
123	Buleleng	Banjar43	1.00	1.00	TrollMultipleSmallArtificial	713
124	Buleleng	Banjar44	1.00	1.00	TrollMultipleSmallArtificial	713
125	Buleleng	Banjar45	1.00	1.00	TrollMultipleSmallArtificial	713
126	Buleleng	Banjar46	1.00	1.00	TrollMultipleSmallArtificial	713
127	Buleleng	Banjar47	1.00	1.00	TrollMultipleSmallArtificial	713
128	Buleleng	Banjar48	1.00	1.00	TrollMultipleSmallArtificial	713
129	Buleleng	Banjar49	1.00	1.00	TrollMultipleSmallArtificial	713
130	Buleleng	Banjar50	1.00	1.00	TrollMultipleSmallArtificial	713
131	Buleleng	Banjar51	1.00	1.00	TrollMultipleSmallArtificial	713
132	Buleleng	Banjar52	1.00	1.00	TrollMultipleSmallArtificial	713
133	Buleleng	Banjar53	1.00	1.00	TrollMultipleSmallArtificial	713
134	Buleleng	Banjar54	1.00	1.00	TrollMultipleSmallArtificial	713
135	Buleleng	Banjar55	1.00	1.00	TrollMultipleSmallArtificial	713
136	Buleleng	Banjar56	1.00	1.00	TrollMultipleSmallArtificial	713
137	Buleleng	Banjar57	1.00	1.00	TrollMultipleSmallArtificial	713
138	Buleleng	Banjar58	1.00	1.00	TrollMultipleSmallArtificial	713
139	Buleleng	Banjar59	1.00	1.00	TrollMultipleSmallArtificial	713
140	Buleleng	Banjar60	1.00	1.00	TrollMultipleSmallArtificial	713
141	Buleleng	Banjar61	1.00	1.00	TrollMultipleSmallArtificial	713
142	Buleleng	Banjar62	1.00	1.00	TrollMultipleSmallArtificial	713
143	Buleleng	Banjar63	1.00	1.00	TrollMultipleSmallArtificial	713
144	Buleleng	Banjar64	1.00	1.00	TrollMultipleSmallArtificial	713
145	Buleleng	Banjar65	1.00	1.00	TrollMultipleSmallArtificial	713
146	Buleleng	Banjar66	1.00	1.00	TrollMultipleSmallArtificial	713
147	Buleleng	Banjar67	1.00	1.00	TrollMultipleSmallArtificial	713
148	Buleleng	Banjar68	1.00	1.00	TrollMultipleSmallArtificial	713
149	Buleleng	Banjar69	1.00	1.00	TrollMultipleSmallArtificial	713
150	Buleleng	Banjar70	1.00	1.00	TrollMultipleSmallArtificial	713
151	Buleleng	Banjar71	1.00	1.00	TrollMultipleSmallArtificial	713
152	Buleleng	Banjar72	1.00	1.00	TrollMultipleSmallArtificial	713
153	Buleleng	Banjar73	1.00	1.00	TrollMultipleSmallArtificial	713
154	Buleleng	Banjar74	1.00	1.00	TrollMultipleSmallArtificial	713
155	Buleleng	Banjar75	1.00	1.00	TrollMultipleSmallArtificial	713
156	Buleleng	Banjar76	1.00	1.00	TrollMultipleSmallArtificial	713
157	Buleleng	Banjar77	1.00	1.00	TrollMultipleSmallArtificial	713
158	Buleleng	Banjar78	1.00	1.00	TrollMultipleSmallArtificial	713
159	Buleleng	Banjar79	1.00	1.00	TrollMultipleSmallArtificial	713
160	Buleleng	Banjar80	1.00	1.00	TrollMultipleSmallArtificial	713
161	Buleleng	Banjar81	1.00	1.00	TrollMultipleSmallArtificial	713
162	Buleleng	Banjar82	1.00	1.00	TrollMultipleSmallArtificial	713
163	Buleleng	Banjar83	1.00	1.00	TrollMultipleSmallArtificial	713
164	Buleleng	Banjar84	1.00	1.00	TrollMultipleSmallArtificial	713
165	Buleleng	Banjar85	1.00	1.00	TrollMultipleSmallArtificial	713
166	Buleleng	Banjar86	1.00	1.00	TrollMultipleSmallArtificial	713
167	Buleleng	Banjar87	1.00	1.00	TrollMultipleSmallArtificial	713
168	Buleleng	Banjar88	1.00	1.00	TrollMultipleSmallArtificial	713
169	Buleleng	Banjar89	1.00	1.00	TrollMultipleSmallArtificial	713
170	Buleleng	Banjar90	1.00	1.00	TrollMultipleSmallArtificial	713
171	Buleleng	Banjar91	1.00	1.00	TrollMultipleSmallArtificial	713
172	Buleleng	Banjar92	1.00	1.00	TrollMultipleSmallArtificial	713
173	Buleleng	Banjar93	1.00	1.00	TrollMultipleSmallArtificial	713
174	Buleleng	Banjar94	1.00	1.00	TrollMultipleSmallArtificial	713
175	Buleleng	Banjar95	1.00	1.00	TrollMultipleSmallArtificial	713

Table 2.1: Boat Information from Celukan Bawang and Banjar Villages, Buleleng

No	Program Site	Boat Name	GT Declared	GT Estimate	Fishing Gear	Fishing Area
176	Buleleng	Banjar96	1.00	1.00	TrollMultipleSmallArtificial	713
177	Buleleng	Banjar97	1.00	1.00	TrollMultipleSmallArtificial	713
178	Buleleng	Banjar98	1.00	1.00	TrollMultipleSmallArtificial	713
179	Buleleng	Banjar99	1.00	1.00	TrollMultipleSmallArtificial	713
180	Buleleng	Banjar100	1.00	1.00	TrollMultipleSmallArtificial	713

2.1.3 Follow-up

The location is not recommended to deploy CODRS program because vessels that are dedicated or targeting to catch tuna were not found.

2.1.4 Important Contact

Name : Bapak Saut
Affiliation : Member of Kelompok Nelayan Karya Madu, Celukan Bawang
Contact : -

2.1.5 References

2.1.6 Figures



Figure 2.1: Typical gill net at Celukan Bawang



Figure 2.2: Trolling lines without kite multiple small hooks with artificial lure at Celukan Bawang



Figure 2.3: Trolling lines without kite multiple small hooks with artificial lure at Banjar



Figure 2.4: Tembang fish (*Sardinella fimbriata*), the typical catch of gill net

2.2 Lovina beach, Buleleng

2.2.1 Background and Survey Practicalities

Background

Lovina beach is one of the tourist destinations in Buleleng Regency, northern Bali. Apart from the development of coastal tourism, Lovina is also a home base for fishermen using jukung boat to catch tuna, tongkol, skipjack and also some others small pelagic fish. There are many fishing fleets rest in the coastline from Lovina to the eastern region such as Anturan and Pamaron.

Survey team

The survey was done by Dimas Galang Fergiawan

Period visited

The survey was conducted on 8-10 February 2019

How to get there

From Ngurah Rai airport, the location can be reached using car through the middle way of Tabanan Regency by 3-4 hours duration.

2.2.2 Fleet Description

Fishing fleet at Lovina beach is concentrated at Kalibubuk village. Most of the fishing fleets are jukung boats with length 5-6meters and wide 0.7 m. Based on the field survey, there are around 100 jukung at the coastline of the village. However, the current interview showed that there were only 20-30 jukung active for fishing activities. The rest of the fleets are dedicated for dolphin watching tourism.

There is a LFG namely Cipta Karya Bakti Samudera consisted of 18 householders who are fulltime fishermen. They use fishing gear of traditional handline with traditional jiggging bait. This group use FADs with the distance travel 1-2 hours from the home base. The catch composition is tuna, tongkol, mahi-mahi that are sold to the middleman from Singaraja.

The other villages, Pamaron and Anturan are also the home base of tuna fisheries and other big pelagic. A LFG, Segara Gunung has 15 members. The fishermen use two types of fishing gears:

1. Traditional handline
2. Modern fishing rod equipped with the reel

On the handline gear, the fishing line is up to 200meters tied to plastic or jerry can as the reel. It uses artificial bait made from tyre rubber and feather. The bait is tethered to the handmade hook or metal jig with the weight around 100-200 grams. Meanwhile, the fishing rod uses a fishing line 100-200 meters tied to the metal jig as the bait. The use of both gears relies on the water condition around FADs and also the fish/schooling behaviour.

The catch composition consisted of small / baby tuna, large tuna, tongkol, skipjack, billfish and mahi-mahi. Those fish usually are weighted at the local fish auction and sold to the local middleman who brought it to the big buyer in Singaraja or Denpasar.

Table 2.2: Boat Information from Lovina beach, Buleleng

No	Program Site	Boat Name	GT Declared	GT Estimate	Fishing Gear	Fishing Area
1	Buleleng	Lovina01	1.00	1.00	DropOneSmallArtificial	713
2	Buleleng	Lovina02	1.00	1.00	DropOneSmallArtificial	713
3	Buleleng	Lovina03	1.00	1.00	DropOneSmallArtificial	713
4	Buleleng	Lovina04	1.00	1.00	DropOneSmallArtificial	713
5	Buleleng	Lovina05	1.00	1.00	DropOneSmallArtificial	713
6	Buleleng	Lovina06	1.00	1.00	DropOneSmallArtificial	713
7	Buleleng	Lovina07	1.00	1.00	DropOneSmallArtificial	713
8	Buleleng	Lovina08	1.00	1.00	DropOneSmallArtificial	713
9	Buleleng	Lovina09	1.00	1.00	DropOneSmallArtificial	713
10	Buleleng	Lovina10	1.00	1.00	DropOneSmallArtificial	713
11	Buleleng	Lovina11	1.00	1.00	DropOneSmallArtificial	713
12	Buleleng	Lovina12	1.00	1.00	DropOneSmallArtificial	713
13	Buleleng	Lovina13	1.00	1.00	DropOneSmallArtificial	713
14	Buleleng	Lovina14	1.00	1.00	DropOneSmallArtificial	713
15	Buleleng	Lovina15	1.00	1.00	DropOneSmallArtificial	713
16	Buleleng	Lovina16	1.00	1.00	DropOneSmallArtificial	713
17	Buleleng	Lovina17	1.00	1.00	DropOneSmallArtificial	713
18	Buleleng	Lovina18	1.00	1.00	DropOneSmallArtificial	713
19	Buleleng	Lovina19	1.00	1.00	DropOneSmallArtificial	713
20	Buleleng	Lovina20	1.00	1.00	DropOneSmallArtificial	713
21	Buleleng	Lovina21	1.00	1.00	DropOneSmallArtificial	713
22	Buleleng	Lovina22	1.00	1.00	DropOneSmallArtificial	713
23	Buleleng	Lovina23	1.00	1.00	DropOneSmallArtificial	713
24	Buleleng	Lovina24	1.00	1.00	DropOneSmallArtificial	713
25	Buleleng	Lovina25	1.00	1.00	DropOneSmallArtificial	713
26	Buleleng	Lovina26	1.00	1.00	DropOneSmallArtificial	713
27	Buleleng	Lovina27	1.00	1.00	DropOneSmallArtificial	713
28	Buleleng	Lovina28	1.00	1.00	DropOneSmallArtificial	713
29	Buleleng	Lovina29	1.00	1.00	DropOneSmallArtificial	713
30	Buleleng	Lovina30	1.00	1.00	DropOneSmallArtificial	713
31	Buleleng	Lovina31	1.00	1.00	DropOneSmallArtificial	713
32	Buleleng	Lovina32	1.00	1.00	DropOneSmallArtificial	713
33	Buleleng	Lovina33	1.00	1.00	DropOneSmallArtificial	713
34	Buleleng	Lovina34	1.00	1.00	DropOneSmallArtificial	713
35	Buleleng	Lovina35	1.00	1.00	DropOneSmallArtificial	713
36	Buleleng	Lovina36	1.00	1.00	DropOneSmallArtificial	713
37	Buleleng	Lovina37	1.00	1.00	DropOneSmallArtificial	713
38	Buleleng	Lovina38	1.00	1.00	DropOneSmallArtificial	713
39	Buleleng	Lovina39	1.00	1.00	DropOneSmallArtificial	713
40	Buleleng	Lovina40	1.00	1.00	DropOneSmallArtificial	713
41	Buleleng	Lovina41	1.00	1.00	DropOneSmallArtificial	713
42	Buleleng	Lovina42	1.00	1.00	DropOneSmallArtificial	713
43	Buleleng	Lovina43	1.00	1.00	DropOneSmallArtificial	713
44	Buleleng	Lovina44	1.00	1.00	DropOneSmallArtificial	713
45	Buleleng	Lovina45	1.00	1.00	DropOneSmallArtificial	713
46	Buleleng	Lovina46	1.00	1.00	DropOneSmallArtificial	713
47	Buleleng	Lovina47	1.00	1.00	DropOneSmallArtificial	713
48	Buleleng	Lovina48	1.00	1.00	DropOneSmallArtificial	713
49	Buleleng	Lovina49	1.00	1.00	DropOneSmallArtificial	713
50	Buleleng	Lovina50	1.00	1.00	DropOneSmallArtificial	713
51	Buleleng	Lovina51	1.00	1.00	DropOneSmallArtificial	713
52	Buleleng	Lovina52	1.00	1.00	DropOneSmallArtificial	713
53	Buleleng	Lovina53	1.00	1.00	DropOneSmallArtificial	713
54	Buleleng	Lovina54	1.00	1.00	DropOneSmallArtificial	713
55	Buleleng	Lovina55	1.00	1.00	DropOneSmallArtificial	713
56	Buleleng	Lovina56	1.00	1.00	DropOneSmallArtificial	713

Table 2.2: Boat Information from Lovina beach, Buleleng

No	Program Site	Boat Name	GT Declared	GT Estimate	Fishing Gear	Fishing Area
57	Buleleng	Lovina57	1.00	1.00	DropOneSmallArtificial	713
58	Buleleng	Lovina58	1.00	1.00	DropOneSmallArtificial	713
59	Buleleng	Lovina59	1.00	1.00	DropOneSmallArtificial	713
60	Buleleng	Lovina60	1.00	1.00	DropOneSmallArtificial	713
61	Buleleng	Lovina61	1.00	1.00	DropOneSmallArtificial	713
62	Buleleng	Lovina62	1.00	1.00	DropOneSmallArtificial	713
63	Buleleng	Lovina63	1.00	1.00	DropOneSmallArtificial	713
64	Buleleng	Lovina64	1.00	1.00	DropOneSmallArtificial	713
65	Buleleng	Lovina65	1.00	1.00	DropOneSmallArtificial	713
66	Buleleng	Lovina66	1.00	1.00	DropOneSmallArtificial	713
67	Buleleng	Lovina67	1.00	1.00	DropOneSmallArtificial	713
68	Buleleng	Lovina68	1.00	1.00	DropOneSmallArtificial	713
69	Buleleng	Lovina69	1.00	1.00	DropOneSmallArtificial	713
70	Buleleng	Lovina70	1.00	1.00	DropOneSmallArtificial	713
71	Buleleng	Lovina71	1.00	1.00	DropOneSmallArtificial	713
72	Buleleng	Lovina72	1.00	1.00	DropOneSmallArtificial	713
73	Buleleng	Lovina73	1.00	1.00	DropOneSmallArtificial	713
74	Buleleng	Lovina74	1.00	1.00	DropOneSmallArtificial	713
75	Buleleng	Lovina75	1.00	1.00	DropOneSmallArtificial	713
76	Buleleng	Lovina76	1.00	1.00	DropOneSmallArtificial	713
77	Buleleng	Lovina77	1.00	1.00	DropOneSmallArtificial	713
78	Buleleng	Lovina78	1.00	1.00	DropOneSmallArtificial	713
79	Buleleng	Lovina79	1.00	1.00	DropOneSmallArtificial	713
80	Buleleng	Lovina80	1.00	1.00	DropOneSmallArtificial	713

2.2.3 Important Contact

Name : Bapak Putu Tirta
 Affiliation : Member of LFG. Cipta Karya Bakti Samudera
 Contact : -

Name : Bapak Gede
 Affiliation : Sekretaris LFG. Segara Gunung, Pamaron
 Contact : 082247324338

2.2.4 References

2.2.5 Figures

20 NOVEMBER - 27 DESEMBER 2018
ND. SUCARSIWA

DATE	SEKELAS (KAW)	JUMLAH	HARGA/KG	RUMI
1/12	TUMPA	91	24.000	2.184.000
7/12	TUMPA	144	24.000	3.456.000
13/12	TUMPA	93	22.000	2.046.000
19/12	TUMPA	56	22.000	1.232.000
	TUMPA KECIL	57	20.000	1.140.000
26/12	TUMPA	20	22.000	440.000
	TUMPA KECIL	45	10.000	450.000
2/12	TUMPA	26	20.000	520.000
	TUMPA KECIL	70	16.000	1.120.000
9/12	TUMPA KECIL	23	16.000	368.000
	CACACANG	20	16.000	320.000
16/12	TUMPA	34	19.000	646.000
	TUMPA BELOH	70	16.000	1.120.000
23/12	CACACANG	9	15.000	135.000
30/12	TUMPA	71	10.000	710.000
	TUMPA KECIL	46	16.000	736.000
6/12	TUMPA	105 105	18.000	1.890.000
	TUMPA BELOH	38 38	18.000	684.000
13/12	TUMPA	129	18.000	2.322.000
	TUMPA KECIL	10	16.000	160.000
	TUMPA BELOH	9	10.000	90.000
20/12	TUMPA	54	22.000	1.188.000
27/12	TUMPA	67	22.000	1.474.000
			20.701	25.572.000
			1/12	222.000

Figure 2.5: Fishing logbook of LFG Segara Gunung, Pemaron



Figure 2.6: Fishing rod and reel of fishermen at Pemaron village



Figure 2.7: Artificial bait made from rubber (yellow-left) and wood material called as anteman



Figure 2.8: Metal Jig made from plastic for angling fishing.

2.3 FLP. Sangsit, Buleleng

2.3.1 Background and Survey Practicalities

Background

Pangkalan Pendaratan Ikan (PPI) / Fish Landing Port (FLP) Sangsit, Dauh Yeh is one of the main landing sites registered and managed by PFMA of Bali. It has some facilities such as jetty, fuel station and ice storage. There are some unmaintained facilities due to lack of attention from the local government such as harbour office and landing area. Most of the fisher belong to small scale using jukung boat. PPI Sangsit is used not only by Balinese fisher but also fisher from Java and Madura Island.

Survey team

The survey was done by Dimas Galang Fergiawan

Period visited

The survey was conducted on 8-10 February 2019

How to get there

Starting from Ngurah Rai airport, the location can be reached using car through middle way Tabanan Regency with 3-4 hours duration.

2.3.2 Fleet Description

The field survey at the coastal area of Sangsit, Dauh Yeh found 70 active jukung. One of the LFGs, Dunia Laut has the membership of 6 jukung fleets with the typical of length 5 meters and wide 0.7 meters. The target catch is small/baby tuna, large tuna, and also mahi-mahi. There are four different types of artificial bait that are used in handline fishing method namely

1. Feather (for night fishing)
2. Spoon (for day fishing)
3. Artificial lure made from plastic (for night fishing time)
4. Kite

Generally, the length of the fishing line is around 100-150 meters. fisher occasionally use the artificial bait of metal jig and also some modification of artificial baits. They fish around FADs and occasionally pursue the schooling of dolphin.

The fishing ground is located by travelling around 2-3 hours from the home base. The fisher do not have a specific time or season for fishing. It relies on the weather condition and the information on fish stock around FADs. They fish throughout the year although the fish is available seasonally.

Table 2.3: Boat Information from FLP. Sangsit, Buleleng

No	Program Site	Boat Name	GT Declared	GT Estimate	Fishing Gear	Fishing Area
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Table 2.3: Boat Information from FLP. Sangsit, Buleleng

No	Program Site	Boat Name	GT Declared	GT Estimate	Fishing Gear	Fishing Area
1	Buleleng	Sangsit01	1.00	0.62	DropOneSmallArtificial	713
2	Buleleng	Sangsit02	1.00	0.62	DropOneSmallArtificial	713
3	Buleleng	Sangsit03	1.00	0.62	DropOneSmallArtificial	713
4	Buleleng	Sangsit04	1.00	0.62	DropOneSmallArtificial	713
5	Buleleng	Sangsit05	1.00	0.62	DropOneSmallArtificial	713
6	Buleleng	Sangsit06	1.00	0.62	DropOneSmallArtificial	713
7	Buleleng	Sangsit07	1.00	0.62	DropOneSmallArtificial	713
8	Buleleng	Sangsit08	1.00	0.62	DropOneSmallArtificial	713
9	Buleleng	Sangsit09	1.00	0.62	DropOneSmallArtificial	713
10	Buleleng	Sangsit10	1.00	0.62	DropOneSmallArtificial	713
11	Buleleng	Sangsit11	1.00	0.62	DropOneSmallArtificial	713
12	Buleleng	Sangsit12	1.00	0.62	DropOneSmallArtificial	713
13	Buleleng	Sangsit13	1.00	0.62	DropOneSmallArtificial	713
14	Buleleng	Sangsit14	1.00	0.62	DropOneSmallArtificial	713
15	Buleleng	Sangsit15	1.00	0.62	DropOneSmallArtificial	713
16	Buleleng	Sangsit16	1.00	0.62	DropOneSmallArtificial	713
17	Buleleng	Sangsit17	1.00	0.62	DropOneSmallArtificial	713
18	Buleleng	Sangsit18	1.00	0.62	DropOneSmallArtificial	713
19	Buleleng	Sangsit19	1.00	0.62	DropOneSmallArtificial	713
20	Buleleng	Sangsit20	1.00	0.62	DropOneSmallArtificial	713
21	Buleleng	Sangsit21	1.00	0.62	DropOneSmallArtificial	713
22	Buleleng	Sangsit22	1.00	0.62	DropOneSmallArtificial	713
23	Buleleng	Sangsit23	1.00	0.62	DropOneSmallArtificial	713
24	Buleleng	Sangsit24	1.00	0.62	DropOneSmallArtificial	713
25	Buleleng	Sangsit25	1.00	0.62	DropOneSmallArtificial	713
26	Buleleng	Sangsit26	1.00	0.62	DropOneSmallArtificial	713
27	Buleleng	Sangsit27	1.00	0.62	DropOneSmallArtificial	713
28	Buleleng	Sangsit28	1.00	0.62	DropOneSmallArtificial	713
29	Buleleng	Sangsit29	1.00	0.62	DropOneSmallArtificial	713
30	Buleleng	Sangsit30	1.00	0.62	DropOneSmallArtificial	713
31	Buleleng	Sangsit31	1.00	0.62	DropOneSmallArtificial	713
32	Buleleng	Sangsit32	1.00	0.62	DropOneSmallArtificial	713
33	Buleleng	Sangsit33	1.00	0.62	DropOneSmallArtificial	713
34	Buleleng	Sangsit34	1.00	0.62	DropOneSmallArtificial	713
35	Buleleng	Sangsit35	1.00	0.62	DropOneSmallArtificial	713
36	Buleleng	Sangsit36	1.00	0.62	DropOneSmallArtificial	713
37	Buleleng	Sangsit37	1.00	0.62	DropOneSmallArtificial	713
38	Buleleng	Sangsit38	1.00	0.62	DropOneSmallArtificial	713
39	Buleleng	Sangsit39	1.00	0.62	DropOneSmallArtificial	713
40	Buleleng	Sangsit40	1.00	0.62	DropOneSmallArtificial	713
41	Buleleng	Sangsit41	1.00	0.62	DropOneSmallArtificial	713
42	Buleleng	Sangsit42	1.00	0.62	DropOneSmallArtificial	713
43	Buleleng	Sangsit43	1.00	0.62	DropOneSmallArtificial	713
44	Buleleng	Sangsit44	1.00	0.62	DropOneSmallArtificial	713
45	Buleleng	Sangsit45	1.00	0.62	DropOneSmallArtificial	713
46	Buleleng	Sangsit46	1.00	0.62	DropOneSmallArtificial	713
47	Buleleng	Sangsit47	1.00	0.62	DropOneSmallArtificial	713
48	Buleleng	Sangsit48	1.00	0.62	DropOneSmallArtificial	713
49	Buleleng	Sangsit49	1.00	0.62	DropOneSmallArtificial	713
50	Buleleng	Sangsit50	1.00	0.62	DropOneSmallArtificial	713

2.3.3 Follow-up

It is not possible to make CODRS contract since the uncertain catch relying on the season.

2.3.4 Important Contact

Name : Bapak Jaka
Affiliation : Member of LFG Dunia Laut
Contact : -

2.3.5 References

2.3.6 Figures



Figure 2.9: Typical fishing boat in PPI Sangsit



Figure 2.10: Jukung boat and white kite for handline fishing gear owned by LFG. Dunia Laut



Figure 2.11: Typical gear of trolling with kite, single large hook with artificial lure



Figure 2.12: Typical gear of weighted drop lines with single small hook with artificial bait (local name: Pancing Anteman)



Figure 2.13: Artificial bait made from stainless spoon



Figure 2.14: Artificial bait made from feather or silk

2.4 Les Village, Buleleng

2.4.1 Background and Survey Practicalities

Background

Based on the information provided by fishermen in the previous survey, there is a particular area that is a landing site particularly for tuna, skipjack, tongkol and other big pelagic fish. Less village is located in the eastern Buleleng Regency bordered with Tianyar, Kubu Karangasem.

Survey team

The survey was done by Dimas Galang Fergiawan

Period visited

The survey was conducted on 8-10 February 2019

How to get there

From Ngurah Rai airport, it takes 3-4 hours travelling by car via Tabanan Regency.

2.4.2 Fleet Description

There are six LFGs that actively fish associated with FADs. One of the selected groups LFG. Segara Gunung has 15 members of fishermen who use jukung with length 5-6 meters and wide 0.7 meters. In average, fisherman could catch 50-150 kg in one trip by single-day fishing. The target catch is small/baby tuna, large tuna, tongkol and mahi-mahi. The fishing gear is traditional handline using artificial bait such as metal jig, rubber and feather (in local name known as pancing pengajugan).

Metal jig bait is used for targeting medium and large tuna (>15kg). While rubber/feather bait is used specifically for catching small tuna although it is reported to catch some large tuna occasionally. LFG. Segara Gunung only has one anchored FAD that is located around 2 hours travelling using jukung boat from the home base. Most of the boats are powered by Honda machine GX Mega 390 13 PK.

LFG. Segara Gunung seems different from the other fisherman group because its members fish throughout the year except facing the bad weather. This pattern is proofed on their catch logbook showing that they land various size of tuna with an average 300kg from all members (15 people) in different periods. Their FAD was deployed in the beginning 2018. Their FAD has a specification of rope length 1100 meters (22 role of ropes). The attractor is around 25 meters depth made from coconut/palm leaves. The floater is a 'bungalow', a small house constructed from around 50 units of bamboo stick.

Table 2.4: Boat Information from Les Village, Buleleng

No	Program Site	Boat Name	GT Declared	GT Estimate	Fishing Gear	Fishing Area
1	Buleleng	KMN Dika	1.00	0.59	DropMultipleSmallArtificial	713
2	Buleleng	KMN Rocky	1.00	0.59	DropMultipleSmallArtificial	713
3	Buleleng	KMN Manik Segara	0.00	0.70	DropMultipleSmallArtificial	713
4	Buleleng	KMN Segara Gunung	0.00	0.70	DropMultipleSmallArtificial	713
5	Buleleng	Segara Gunung 03	1.00	1.00	DropMultipleSmallArtificial	713
6	Buleleng	Segara Gunung 04	1.00	0.59	DropMultipleSmallArtificial	713
7	Buleleng	Segara Gunung 05	1.00	0.59	DropMultipleSmallArtificial	713
8	Buleleng	Segara Gunung 06	1.00	0.59	DropMultipleSmallArtificial	713

Table 2.4: Boat Information from Les Village, Buleleng

No	Program Site	Boat Name	GT Declared	GT Estimate	Fishing Gear	Fishing Area
9	Buleleng	Segara Gunung 07	1.00	0.59	DropMultipleSmallArtificial	713
10	Buleleng	Segara Gunung 08	1.00	0.59	DropMultipleSmallArtificial	713
11	Buleleng	Segara Gunung 09	1.00	0.59	DropMultipleSmallArtificial	713
12	Buleleng	Segara Gunung 10	1.00	0.59	DropMultipleSmallArtificial	713
13	Buleleng	Segara Gunung 11	1.00	0.59	DropMultipleSmallArtificial	713
14	Buleleng	Segara Gunung 12	1.00	0.59	DropMultipleSmallArtificial	713
15	Buleleng	Segara Gunung 13	1.00	0.59	DropMultipleSmallArtificial	713
16	Buleleng	Segara Gunung 14	1.00	0.59	DropMultipleSmallArtificial	713
17	Buleleng	Segara Gunung 15	1.00	0.59	DropMultipleSmallArtificial	713
18	Buleleng	Segara Gunung 16	1.00	0.59	DropMultipleSmallArtificial	713
19	Buleleng	Segara Gunung 17	1.00	0.59	DropMultipleSmallArtificial	713
20	Buleleng	Segara Gunung 18	1.00	0.59	DropMultipleSmallArtificial	713
21	Buleleng	Segara Gunung 19	1.00	0.59	DropMultipleSmallArtificial	713
22	Buleleng	Segara Gunung 20	1.00	0.59	DropMultipleSmallArtificial	713
23	Buleleng	Les 01	1.00	0.59	DropMultipleSmallArtificial	713
24	Buleleng	Les 02	1.00	0.59	DropMultipleSmallArtificial	713
25	Buleleng	Les 03	1.00	0.59	DropMultipleSmallArtificial	713
26	Buleleng	Les 04	1.00	0.59	DropMultipleSmallArtificial	713
27	Buleleng	Les 05	1.00	0.59	DropMultipleSmallArtificial	713
28	Buleleng	Les 06	1.00	0.59	DropMultipleSmallArtificial	713
29	Buleleng	Les 07	1.00	0.59	DropMultipleSmallArtificial	713
30	Buleleng	Les 08	1.00	0.59	DropMultipleSmallArtificial	713
31	Buleleng	Les 09	1.00	0.59	DropMultipleSmallArtificial	713
32	Buleleng	Les 10	1.00	0.59	DropMultipleSmallArtificial	713
33	Buleleng	Les 11	1.00	0.59	DropMultipleSmallArtificial	713
34	Buleleng	Les 12	1.00	0.59	DropMultipleSmallArtificial	713
35	Buleleng	Les 13	1.00	0.59	DropMultipleSmallArtificial	713
36	Buleleng	Les 14	1.00	0.59	DropMultipleSmallArtificial	713
37	Buleleng	Les 15	1.00	0.59	DropMultipleSmallArtificial	713
38	Buleleng	Les 16	1.00	0.59	DropMultipleSmallArtificial	713
39	Buleleng	Les 17	1.00	0.59	DropMultipleSmallArtificial	713
40	Buleleng	Les 18	1.00	0.59	DropMultipleSmallArtificial	713
41	Buleleng	Les 19	1.00	0.59	DropMultipleSmallArtificial	713
42	Buleleng	Les 20	1.00	0.59	DropMultipleSmallArtificial	713
43	Buleleng	Les 21	1.00	0.59	DropMultipleSmallArtificial	713
44	Buleleng	Les 22	1.00	0.59	DropMultipleSmallArtificial	713
45	Buleleng	Les 23	1.00	0.59	DropMultipleSmallArtificial	713
46	Buleleng	Les 24	1.00	0.59	DropMultipleSmallArtificial	713
47	Buleleng	Les 25	1.00	0.59	DropMultipleSmallArtificial	713
48	Buleleng	Les 26	1.00	0.59	DropMultipleSmallArtificial	713
49	Buleleng	Les 27	1.00	0.59	DropMultipleSmallArtificial	713
50	Buleleng	Les 28	1.00	0.59	DropMultipleSmallArtificial	713
51	Buleleng	Les 29	1.00	0.59	DropMultipleSmallArtificial	713
52	Buleleng	Les 30	1.00	0.59	DropMultipleSmallArtificial	713
53	Buleleng	Les 31	1.00	0.59	DropMultipleSmallArtificial	713
54	Buleleng	Les 32	1.00	0.59	DropMultipleSmallArtificial	713
55	Buleleng	Les 33	1.00	0.59	DropMultipleSmallArtificial	713
56	Buleleng	Les 34	1.00	0.59	DropMultipleSmallArtificial	713
57	Buleleng	Les 35	1.00	0.59	DropMultipleSmallArtificial	713
58	Buleleng	Les 36	1.00	0.59	DropMultipleSmallArtificial	713
59	Buleleng	Les 37	1.00	0.59	DropMultipleSmallArtificial	713
60	Buleleng	Les 38	1.00	0.59	DropMultipleSmallArtificial	713
61	Buleleng	Les 39	1.00	0.59	DropMultipleSmallArtificial	713
62	Buleleng	Les 40	1.00	0.59	DropMultipleSmallArtificial	713
63	Buleleng	Les 41	1.00	0.59	DropMultipleSmallArtificial	713
64	Buleleng	Les 42	1.00	0.59	DropMultipleSmallArtificial	713
65	Buleleng	Les 43	1.00	0.59	DropMultipleSmallArtificial	713
66	Buleleng	Les 44	1.00	0.59	DropMultipleSmallArtificial	713
67	Buleleng	Les 45	1.00	0.59	DropMultipleSmallArtificial	713
68	Buleleng	Les 46	1.00	0.59	DropMultipleSmallArtificial	713

Table 2.4: Boat Information from Les Village, Buleleng

No	Program Site	Boat Name	GT Declared	GT Estimate	Fishing Gear	Fishing Area
69	Buleleng	Les 47	1.00	0.59	DropMultipleSmallArtificial	713
70	Buleleng	Les 48	1.00	0.59	DropMultipleSmallArtificial	713
71	Buleleng	Les 49	1.00	0.59	DropMultipleSmallArtificial	713
72	Buleleng	Les 50	1.00	0.59	DropMultipleSmallArtificial	713
73	Buleleng	Les 51	1.00	0.59	DropMultipleSmallArtificial	713
74	Buleleng	Les 52	1.00	0.59	DropMultipleSmallArtificial	713
75	Buleleng	Les 53	1.00	0.59	DropMultipleSmallArtificial	713
76	Buleleng	Les 54	1.00	0.59	DropMultipleSmallArtificial	713
77	Buleleng	Les 55	1.00	0.59	DropMultipleSmallArtificial	713
78	Buleleng	Les 56	1.00	0.59	DropMultipleSmallArtificial	713
79	Buleleng	Les 57	1.00	0.59	DropMultipleSmallArtificial	713
80	Buleleng	Les 58	1.00	0.59	DropMultipleSmallArtificial	713
81	Buleleng	Les 59	1.00	0.59	DropMultipleSmallArtificial	713
82	Buleleng	Les 60	1.00	0.59	DropMultipleSmallArtificial	713
83	Buleleng	Les 61	1.00	0.59	DropMultipleSmallArtificial	713
84	Buleleng	Les 62	1.00	0.59	DropMultipleSmallArtificial	713
85	Buleleng	Les 63	1.00	0.59	DropMultipleSmallArtificial	713
86	Buleleng	Les 64	1.00	0.59	DropMultipleSmallArtificial	713
87	Buleleng	Les 65	1.00	0.59	DropMultipleSmallArtificial	713
88	Buleleng	Les 66	1.00	0.59	DropMultipleSmallArtificial	713
89	Buleleng	Les 67	1.00	0.59	DropMultipleSmallArtificial	713
90	Buleleng	Les 68	1.00	0.59	DropMultipleSmallArtificial	713
91	Buleleng	Les 69	1.00	0.59	DropMultipleSmallArtificial	713
92	Buleleng	Les 70	1.00	0.59	DropMultipleSmallArtificial	713
93	Buleleng	Les 71	1.00	0.59	DropMultipleSmallArtificial	713
94	Buleleng	Les 72	1.00	0.59	DropMultipleSmallArtificial	713
95	Buleleng	Les 73	1.00	0.59	DropMultipleSmallArtificial	713
96	Buleleng	Les 74	1.00	0.59	DropMultipleSmallArtificial	713
97	Buleleng	Les 75	1.00	0.59	DropMultipleSmallArtificial	713
98	Buleleng	Les 76	1.00	0.59	DropMultipleSmallArtificial	713
99	Buleleng	Les 77	1.00	0.59	DropMultipleSmallArtificial	713
100	Buleleng	Les 78	1.00	0.59	DropMultipleSmallArtificial	713
101	Buleleng	Les 79	1.00	0.59	DropMultipleSmallArtificial	713
102	Buleleng	Les 80	1.00	0.59	DropMultipleSmallArtificial	713

2.4.3 Follow-up

It is considered to make CODRS contract at Less Village since the catch composition is match with the program. The CODRS will enhance the data from FMA 713.

2.4.4 Important Contact

Name : Bapak Ketut Kartasa
Affiliation : Sekretaris LFG. Segara Gunung
Contact : 085238150060

2.4.5 References

2.4.6 Figures



Figure 2.15: The office and fish storage of LFG. Segara Gunung



Figure 2.16: Typical jukung boat at Less village.



Figure 2.17: Frozen fish at fish storage of LFG Segara Gunung



Figure 2.18: Typical catch of medium tuna at LFG Segara Gunung)



Figure 2.19: Artificial bait made from stainless spoon



Figure 2.20: Artificial bait made from feather or silk



Figure 2.21: Typical rope used for anchored FAD

1/11 2018	
1/11 Cumi	67kg x 25 = 1.675
Tonkol	560 x 4.000 = 2.24
Tuna	1350 x 2.3000 = 3.105
→ 5.004	
2/11	
Cumi	40kg x 25.000 = 1.000
Tonkol	2280 x 8.000 = 1.824
awan	5290 x 4.000 = 2.116
Tuna Baby	1210 x 2.3000 = 2.783
→ 7.723	
3/11	
Cumi	520 x 25.000 = 1.300
awan	4060 x 4.000 = 1.624
Tonkol k	5700 x 7.000 = 3.97
-11- 2P	1400 x 10.000 = 1.400
→ 3.421	
4/11	
Cumi	43 x 25 = 1.075
awan	465 x 4 = 1.860
Tonkol kel	122 x 7 = 854
-11- 2P	25 x 9 = 225
Sud	19 x 12 = 228
Tuna	30 x 20 = 600
→ 4.842	

Figure 2.22: Catch recapitulation owned by LFG. Segara Gunung



Figure 2.23: Cement concrete for anchoring FAD



Figure 2.24: Plastic rope used for attractor

2.5 Port of Benoa, Denpasar

2.5.1 Background and Survey Practicalities

Background

Benoa port is one of the oldest ports in Indonesia. It was built during the colonization regime in 1924. The total area of Benoa port is 58km² where all facilities are dedicated for supporting various sector such as tourism, ferry, cargo, oil and gas and also fisheries. This port has an important role in tuna fisheries since it is adjacent to Indian Ocean. Moreover, Benoa is known as the centre of tuna long line in which the head office of tuna long line association exist in this port. This port also has a role in the history of tuna fisheries cooperation between Indonesia and Japan known as Banda Sea Agreement in 1970s-1980s. There are many tuna fishing and processing companies in this port. One of the companies owned by the Indonesian government is PT Perikanan Nusantara that is built in 2005. This company is the merger of four different companies, namely: PT Perikani, PT Tirta Raya Mina, (Persero), PT Perikanan Samodra Besar (Persero) ke dalam PT Usaha Mina Hasil Penggabungan.

Currently, after the moratorium of the use of foreign vessel and collecting vessel regulation was applied in Indonesia in 2015, there was a decline in tuna production in this port. As consequence, there were many tuna fishing vessels were converted into squid jigging vessels.

Survey team

The survey was done by Dimas Galang Fergiawan and Widhya Nugroho Satrioajie

Period visited

The survey was conducted on April 23, 2019

How to get there

Benoa port is located around 10km from the Ngurah Rai Airport. It can be reach by land transportation by around 15 minutes.

2.5.2 Fleet Description

The most dominant fishing vessel is long line by around 100 vessels. It is followed by purse seine vessels around 20 vessels. The other fishing vessels such as collecting boat and squid jigging are estimated around 50 vessels. All fishing fleets are located on the west part of the port. The east side of the port is used for ferry and also tourism such as cruise ship. There are five big fishing companies exist in this port, namely: PT. Perikanan Nusantara, Pt. Intimas Surya, PT. Sari Segar Laut Indonesia, PT. Hatindo Makmur, and PT. Sari Segara Utama. Most of the catch are distributed directly to the company. Long line vessels are targeting yellowfin, big eye, skipjack, and southern blue fin tuna. The main product of those companies is fresh and frozen tuna. The high-quality product is directly exported to the several countries such as Japan and United Stated. Most of the long line vessel are operated in Indian Ocean although some vessels also have the fishing permit in FMA 714 such as the Banda Sea.

Table 2.5: Informasi kapal dari Port of Benoa, Denpasar

No	Lokasi	Nama Kapal	GT (Tertulis)	GT (Estimasi)	Alat Tangkap	WPP
1	Kota Ambon	KM. FMJ Satu Raya	99.00	71.70	PurseSeine	714
2	Denpasar	KM Naga Mas Perkasa - 18	63.00	38.29	LongMultipleLargeNatural	714
3	Denpasar	KM. NAGA MAS PERKASA - XI	55.00	49.08	LongMultipleLargeNatural	714
4	Denpasar	Alam Indah	28.00	24.84	LongMultipleLargeNatural	713
5	Denpasar	Alam Prima	29.00	24.92	LongMultipleLargeNatural	713
6	Denpasar	Alam Sutera	30.00	24.99	LongMultipleLargeNatural	713
7	Denpasar	Amanda	29.00	24.92	LongMultipleLargeNatural	713
8	Denpasar	Amanda 222	30.00	24.99	LongMultipleLargeNatural	713
9	Denpasar	Anugerah Cahaya	27.00	23.38	LongMultipleLargeNatural	713
10	Denpasar	Anugerah Cahaya - 02	27.00	23.38	LongMultipleLargeNatural	713
11	Denpasar	Anugrah - 70	29.00	23.24	DropOneLargeNatural	713
12	Denpasar	Anugrah - 82	15.00	14.28	DropOneLargeNatural	713
13	Denpasar	Anugrah - 88	29.00	23.85	DropOneLargeNatural	713
14	Denpasar	Bahari Nusantara 1	30.00	24.99	LongMultipleLargeNatural	713
15	Denpasar	Bandar Nelayan - I	30.00	24.99	LongMultipleLargeNatural	713
16	Denpasar	Bintang Bahagia I	29.00	24.92	LongMultipleLargeNatural	713
17	Denpasar	Bintang Bahari	29.00	24.92	LongMultipleLargeNatural	713
18	Denpasar	Bintang Kejora No. 2	23.00	22.40	LongMultipleLargeNatural	713
19	Denpasar	Bintang Mutiara - 6	29.00	24.92	LongMultipleLargeNatural	713
20	Denpasar	Bintang Mutiara - II	52.00	36.58	LongMultipleLargeNatural	713
21	Denpasar	Citra Nusantara - V	60.00	43.75	LongMultipleLargeNatural	713
22	Denpasar	Damarina - 101	16.00	13.44	DropOneLargeNatural	713
23	Denpasar	Hen - 6	29.00	24.92	LongMultipleLargeNatural	713
24	Denpasar	Intan Laut - VI	19.00	21.00	LongMultipleLargeNatural	713
25	Denpasar	Ipin	28.00	25.81	DropOneLargeNatural	713
26	Denpasar	Jalasena - 22	26.00	23.38	LongMultipleLargeNatural	713
27	Denpasar	Jaya Wijaya	69.00	59.77	PurseSeine	713
28	Denpasar	Jolo Tundo - II	45.00	37.80	LongMultipleLargeNatural	713
29	Denpasar	Kasih Kurnia Makmur	28.00	24.84	LongMultipleLargeNatural	713
30	Denpasar	Kerinci Indah - 2	27.00	23.38	LongMultipleLargeNatural	713
31	Denpasar	Kerinci Indah - 7	30.00	24.99	LongMultipleLargeNatural	713
32	Denpasar	Kusuma Jaya	27.00	23.38	LongMultipleLargeNatural	713
33	Denpasar	Layari Nusantara	29.00	24.92	LongMultipleLargeNatural	713
34	Denpasar	Linggar Petak 89	29.00	24.92	LongMultipleLargeNatural	713
35	Denpasar	Linggar Petak 98	29.00	24.92	LongMultipleLargeNatural	713
36	Denpasar	Millenium Jaya - 8	30.00	24.99	LongMultipleLargeNatural	713
37	Denpasar	Mitra Jaya Bersama - I	30.00	24.99	LongMultipleLargeNatural	713
38	Denpasar	Mitra Jaya Bersama - V	27.00	23.38	LongMultipleLargeNatural	713
39	Denpasar	Mulia	29.00	24.92	LongMultipleLargeNatural	713
40	Denpasar	Naga Mas Perkasa - 17	30.00	24.99	LongMultipleLargeNatural	713
41	Denpasar	Naga Mas Perkasa - 21	28.00	24.84	LongMultipleLargeNatural	713
42	Denpasar	Naga Mas Perkasa - 26	30.00	24.99	LongMultipleLargeNatural	713
43	Denpasar	Naga Mas Perkasa - 57	30.00	24.99	LongMultipleLargeNatural	713
44	Denpasar	Naga Mas Perkasa - 8	30.00	24.99	LongMultipleLargeNatural	713
45	Denpasar	Naga Mas Perkasa - II	30.00	24.99	LongMultipleLargeNatural	713
46	Denpasar	Naga Mas Perkasa - III	30.00	24.99	LongMultipleLargeNatural	713
47	Denpasar	Naga mas perkasa - IX	30.00	24.99	LongMultipleLargeNatural	713
48	Denpasar	Naga Mas perkasa - IX	30.00	24.99	LongMultipleLargeNatural	713
49	Denpasar	Naga Mas Perkasa - V	29.00	24.92	LongMultipleLargeNatural	713
50	Denpasar	Naga mas Perkasa -21	28.00	24.84	LongMultipleLargeNatural	713
51	Denpasar	Naga Mas Perkasa V	29.00	24.92	LongMultipleLargeNatural	713
52	Denpasar	Naga Mas Perkasa XI	55.00	38.50	LongMultipleLargeNatural	713
53	Denpasar	Naga Mas Perkasa XII	30.00	24.99	LongMultipleLargeNatural	713
54	Denpasar	Nikita	28.00	24.84	LongMultipleLargeNatural	713
55	Denpasar	Nusantara - 268	29.00	24.92	LongMultipleLargeNatural	713
56	Denpasar	Nusantara 168	29.00	24.92	LongMultipleLargeNatural	713
57	Denpasar	Nusantara 368	29.00	24.92	LongMultipleLargeNatural	713
58	Denpasar	Nusantara 868	19.00	21.00	LongMultipleLargeNatural	713
59	Denpasar	Nusantara Indah - 01	28.00	24.84	LongMultipleLargeNatural	713
60	Denpasar	Nusantara Indah - 02A	27.00	23.38	LongMultipleLargeNatural	713

Table 2.5: Informasi kapal dari Port of Benoa, Denpasar

No	Lokasi	Nama Kapal	GT (Tertulis)	GT (Estimasi)	Alat Tangkap	WPP
61	Denpasar	Omega Jaya	29.00	24.92	LongMultipleLargeNatural	713
62	Denpasar	Parisudha - 810	30.00	24.99	LongMultipleLargeNatural	713
63	Denpasar	Parisudha - 815	30.00	24.99	LongMultipleLargeNatural	713
64	Denpasar	Pelangi	41.00	36.12	LongMultipleLargeNatural	713
65	Denpasar	Perintis Jaya - 12	28.00	24.84	LongMultipleLargeNatural	713
66	Denpasar	Perintis jaya - 27	28.00	24.84	LongMultipleLargeNatural	713
67	Denpasar	Perintis jaya - 47	56.00	38.50	LongMultipleLargeNatural	713
68	Denpasar	Perintis Jaya - 98	29.00	24.92	LongMultipleLargeNatural	713
69	Denpasar	Perintis Jaya - 99	90.00	60.38	LongMultipleLargeNatural	713
70	Denpasar	Perintis Jaya 20	26.00	23.38	LongMultipleLargeNatural	713
71	Denpasar	Perintis Jaya 202	29.00	24.92	LongMultipleLargeNatural	713
72	Denpasar	Prima Utama Jaya - II	28.00	24.84	LongMultipleLargeNatural	713
73	Denpasar	Primus Indah	29.00	24.92	LongMultipleLargeNatural	713
74	Denpasar	Primus Jaya II	30.00	24.99	LongMultipleLargeNatural	713
75	Denpasar	Putra Harapan	49.00	37.80	LongMultipleLargeNatural	713
76	Denpasar	Rejeki Terang - I	45.00	37.80	LongMultipleLargeNatural	713
77	Denpasar	Rejeki Terang A	46.00	39.90	LongMultipleLargeNatural	713
78	Denpasar	Samaru 05	22.00	19.97	DropOneLargeNatural	713
79	Denpasar	Sari Dewata - I	29.00	24.92	LongMultipleLargeNatural	713
80	Denpasar	Sari Segara - 30	25.00	22.40	LongMultipleLargeNatural	713
81	Denpasar	Sari Segara 58	26.00	23.38	LongMultipleLargeNatural	713
82	Denpasar	Sawu Jaya	22.00	16.66	DropOneLargeNatural	713
83	Denpasar	Segara Putra 868	27.00	23.83	DropOneLargeNatural	713
84	Denpasar	Sejahtera - 02	16.00	13.44	DropOneLargeNatural	713
85	Denpasar	Sejahtera - 03	16.00	13.44	DropOneLargeNatural	713
86	Denpasar	Sejahtera - 05	14.00	12.03	DropOneLargeNatural	713
87	Denpasar	Sejahtera - 6	16.00	13.44	DropOneLargeNatural	713
88	Denpasar	Sejahtera 05	14.00	12.18	DropOneLargeNatural	713
89	Denpasar	Sentra Nelayan - III	51.00	34.65	LongMultipleLargeNatural	713
90	Denpasar	Serba Prima 12	29.00	24.92	LongMultipleLargeNatural	713
91	Denpasar	Sumber Rejeki	29.00	24.92	LongMultipleLargeNatural	713
92	Denpasar	Tanjung Permai - I	27.00	23.38	LongMultipleLargeNatural	713
93	Denpasar	Tuna Segar - 18	28.00	24.84	LongMultipleLargeNatural	713
94	Denpasar	Tuna Segar - 8	30.00	24.99	LongMultipleLargeNatural	713
95	Denpasar	Tuna Segar 88	29.00	24.92	LongMultipleLargeNatural	713
96	Denpasar	Upin	28.00	24.32	DropOneLargeNatural	713
97	Denpasar	Usaha Jaya	28.00	24.84	LongMultipleLargeNatural	713
98	Denpasar	Utama Maju	30.00	24.99	LongMultipleLargeNatural	713
99	Denpasar	Willson Jaya - 28	30.00	24.99	LongMultipleLargeNatural	713
100	Denpasar	Zulfana Jaya Baru	48.00	39.90	LongMultipleLargeNatural	713
101	Denpasar	Alam Indah	28.00	24.80	LongMultipleLargeNatural	573
102	Denpasar	Alam Prima	29.00	24.90	LongMultipleLargeNatural	573
103	Denpasar	Alam Sutera	30.00	25.00	LongMultipleLargeNatural	573
104	Denpasar	Amanda	29.00	24.90	LongMultipleLargeNatural	573
105	Denpasar	Amanda 222	30.00	25.00	LongMultipleLargeNatural	573
106	Denpasar	Anugerah Cahaya	27.00	23.40	LongMultipleLargeNatural	573
107	Denpasar	Anugerah Cahaya - 02	27.00	23.40	LongMultipleLargeNatural	573
108	Denpasar	Bahari Nusantara 1	30.00	25.00	LongMultipleLargeNatural	573
109	Denpasar	Bandar Nelayan - I	30.00	25.00	LongMultipleLargeNatural	573
110	Denpasar	Bintang Bahagia I	29.00	24.90	LongMultipleLargeNatural	573
111	Denpasar	Bintang Bahari	29.00	24.90	LongMultipleLargeNatural	573
112	Denpasar	Bintang Kejora No. 2	23.00	22.40	LongMultipleLargeNatural	573
113	Denpasar	Bintang Mutiara - 6	29.00	24.90	LongMultipleLargeNatural	573
114	Denpasar	Bintang Mutiara - II	52.00	36.60	LongMultipleLargeNatural	573
115	Denpasar	Citra Nusantara - V	60.00	43.80	LongMultipleLargeNatural	573
116	Denpasar	Hen - 6	29.00	24.90	LongMultipleLargeNatural	573
117	Denpasar	Intan Laut - VI	19.00	21.00	LongMultipleLargeNatural	573
118	Denpasar	Jalasena - 22	26.00	23.40	LongMultipleLargeNatural	573
119	Denpasar	Jolo Tundo - II	45.00	37.80	LongMultipleLargeNatural	573
120	Denpasar	Kasih Kurnia Makmur	28.00	24.80	LongMultipleLargeNatural	573

Table 2.5: Informasi kapal dari Port of Benoa, Denpasar

No	Lokasi	Nama Kapal	GT (Tertulis)	GT (Estimasi)	Alat Tangkap	WPP
121	Denpasar	Kerinci Indah - 2	27.00	23.40	LongMultipleLargeNatural	573
122	Denpasar	Kerinci Indah - 7	30.00	25.00	LongMultipleLargeNatural	573
123	Denpasar	Kusuma Jaya	27.00	23.40	LongMultipleLargeNatural	573
124	Denpasar	Layari Nusantara	29.00	24.90	LongMultipleLargeNatural	573
125	Denpasar	Linggar Petak 89	29.00	24.90	LongMultipleLargeNatural	573
126	Denpasar	Linggar Petak 98	29.00	24.90	LongMultipleLargeNatural	573
127	Denpasar	Millenium Jaya - 8	30.00	25.00	LongMultipleLargeNatural	573
128	Denpasar	Mitra Jaya Bersama - I	30.00	25.00	LongMultipleLargeNatural	573
129	Denpasar	Mitra Jaya Bersama - V	27.00	23.40	LongMultipleLargeNatural	573
130	Denpasar	Mulia	29.00	24.90	LongMultipleLargeNatural	573
131	Denpasar	Naga Mas Perkasa - 17	30.00	25.00	LongMultipleLargeNatural	573
132	Denpasar	Naga Mas Perkasa - 21	28.00	24.80	LongMultipleLargeNatural	573
133	Denpasar	Naga Mas Perkasa - 26	30.00	25.00	LongMultipleLargeNatural	573
134	Denpasar	Naga Mas Perkasa - 57	30.00	25.00	LongMultipleLargeNatural	573
135	Denpasar	Naga Mas Perkasa - 8	30.00	25.00	LongMultipleLargeNatural	573
136	Denpasar	Naga Mas Perkasa - II	30.00	25.00	LongMultipleLargeNatural	573
137	Denpasar	Naga Mas Perkasa - III	30.00	25.00	LongMultipleLargeNatural	573
138	Denpasar	Naga mas perkasa - IX	30.00	25.00	LongMultipleLargeNatural	573
139	Denpasar	Naga Mas Perkasa - V	29.00	24.90	LongMultipleLargeNatural	573
140	Denpasar	Naga Mas Perkasa XII	30.00	25.00	LongMultipleLargeNatural	573
141	Denpasar	Nikita	28.00	24.80	LongMultipleLargeNatural	573
142	Denpasar	Nusantara 168	29.00	24.90	LongMultipleLargeNatural	573
143	Denpasar	Nusantara - 268	29.00	24.90	LongMultipleLargeNatural	573
144	Denpasar	Nusantara 368	29.00	24.90	LongMultipleLargeNatural	573
145	Denpasar	Nusantara 868	19.00	21.00	LongMultipleLargeNatural	573
146	Denpasar	Nusantara Indah - 01	28.00	24.80	LongMultipleLargeNatural	573
147	Denpasar	Nusantara Indah - 02A	27.00	23.40	LongMultipleLargeNatural	573
148	Denpasar	Omega Jaya	29.00	24.90	LongMultipleLargeNatural	573
149	Denpasar	Parisudha - 810	30.00	25.00	LongMultipleLargeNatural	573
150	Denpasar	Parisudha - 815	30.00	25.00	LongMultipleLargeNatural	573
151	Denpasar	Pelangi	41.00	36.10	LongMultipleLargeNatural	573
152	Denpasar	Perintis Jaya - 12	28.00	24.80	LongMultipleLargeNatural	573
153	Denpasar	Perintis Jaya 202	29.00	24.90	LongMultipleLargeNatural	573
154	Denpasar	Perintis jaya - 27	28.00	24.80	LongMultipleLargeNatural	573
155	Denpasar	Perintis jaya - 47	56.00	38.50	LongMultipleLargeNatural	573
156	Denpasar	Perintis Jaya - 98	29.00	24.90	LongMultipleLargeNatural	573
157	Denpasar	Prima Utama Jaya - II	28.00	24.80	LongMultipleLargeNatural	573
158	Denpasar	Primus Indah	29.00	24.90	LongMultipleLargeNatural	573
159	Denpasar	Primus Jaya II	30.00	25.00	LongMultipleLargeNatural	573
160	Denpasar	Putra Harapan	49.00	37.80	LongMultipleLargeNatural	573
161	Denpasar	Rejeki Terang - I	45.00	37.80	LongMultipleLargeNatural	573
162	Denpasar	Sari Dewata - I	29.00	24.90	LongMultipleLargeNatural	573
163	Denpasar	Sari Segara 58	26.00	23.40	LongMultipleLargeNatural	573
164	Denpasar	Sentra Nelayan - III	51.00	34.70	LongMultipleLargeNatural	573
165	Denpasar	Serba Prima 12	29.00	24.90	LongMultipleLargeNatural	573
166	Denpasar	Sumber Rejeki	29.00	24.90	LongMultipleLargeNatural	573
167	Denpasar	Tanjung Permai - I	27.00	23.40	LongMultipleLargeNatural	573
168	Denpasar	Tuna Segar - 18	28.00	24.80	LongMultipleLargeNatural	573
169	Denpasar	Tuna Segar - 8	30.00	25.00	LongMultipleLargeNatural	573
170	Denpasar	Tuna Segar 88	29.00	24.90	LongMultipleLargeNatural	573
171	Denpasar	Usaha Jaya	28.00	24.80	LongMultipleLargeNatural	573
172	Denpasar	Utama Maju	30.00	25.00	LongMultipleLargeNatural	573
173	Denpasar	Willson Jaya - 28	30.00	25.00	LongMultipleLargeNatural	573
174	Denpasar	KM Naga Mas Perkasa - 18	63.00	38.30	LongMultipleLargeNatural	573
175	Denpasar	KM. NAGA MAS PERKASA - XI	55.00	49.10	LongMultipleLargeNatural	573
176	Denpasar	Perintis Jaya 20	26.00	23.40	LongMultipleLargeNatural	573
177	Denpasar	Perintis Jaya - 99	90.00	60.40	LongMultipleLargeNatural	573
178	Denpasar	Rejeki Terang A	46.00	39.90	LongMultipleLargeNatural	573
179	Denpasar	Sari Segara - 30	25.00	22.40	LongMultipleLargeNatural	573
180	Denpasar	Zulfana Jaya Baru	48.00	39.90	LongMultipleLargeNatural	573

Table 2.5: Informasi kapal dari Port of Benoa, Denpasar

No	Lokasi	Nama Kapal	GT (Tertulis)	GT (Estimasi)	Alat Tangkap	WPP
181	Denpasar	Citera Surya Nusantara - V	60.00	42.00	LongMultipleLargeNatural	573
182	Denpasar	Citra Nusantara - III	56.00	38.50	LongMultipleLargeNatural	573
183	Denpasar	Ervin Jaya	49.00	39.90	LongMultipleLargeNatural	573
184	Denpasar	Henry Jaya	46.00	39.90	LongMultipleLargeNatural	573
185	Denpasar	INTAN 09	20.00	21.00	LongMultipleLargeNatural	573
186	Denpasar	Maya Mandiri 118	58.00	38.50	LongMultipleLargeNatural	573
187	Denpasar	Muara Tuna Raya	16.00	19.60	LongMultipleLargeNatural	573
188	Denpasar	Perintis Jaya 10	30.00	25.00	LongMultipleLargeNatural	573
189	Denpasar	Perintis Jaya - 11	14.00	19.60	LongMultipleLargeNatural	573
190	Denpasar	Perintis Jaya - 16	28.00	24.80	LongMultipleLargeNatural	573
191	Denpasar	Perintis Jaya - 17	56.00	38.50	LongMultipleLargeNatural	573
192	Denpasar	Perintis Jaya 201	28.00	24.80	LongMultipleLargeNatural	573
193	Denpasar	Perintis Jaya 21	28.00	24.80	LongMultipleLargeNatural	573
194	Denpasar	Perintis Jaya 22	27.00	23.40	LongMultipleLargeNatural	573
195	Denpasar	Perintis Jaya 23	29.00	24.90	LongMultipleLargeNatural	573
196	Denpasar	Perintis Jaya 25	28.00	24.80	LongMultipleLargeNatural	573
197	Denpasar	Perintis Jaya - 26	28.00	24.80	LongMultipleLargeNatural	573
198	Denpasar	Perintis Jaya 273	29.00	24.90	LongMultipleLargeNatural	573
199	Denpasar	Perintis Jaya 28	28.00	24.80	LongMultipleLargeNatural	573
200	Denpasar	Perintis Jaya 29	27.00	23.40	LongMultipleLargeNatural	573
201	Denpasar	Perintis Jaya - 38	29.00	24.90	LongMultipleLargeNatural	573
202	Denpasar	Perintis Jaya 66	58.00	38.50	LongMultipleLargeNatural	573
203	Denpasar	Perintis Jaya - 9	23.00	22.40	LongMultipleLargeNatural	573
204	Denpasar	Putra Harapan - 2	29.00	24.90	LongMultipleLargeNatural	573
205	Denpasar	PUTRA HARAPAN - 3	25.00	22.40	LongMultipleLargeNatural	573
206	Denpasar	Sari Segara Utama - 25	30.00	25.00	LongMultipleLargeNatural	573
207	Denpasar	Satria - 8	29.00	24.90	LongMultipleLargeNatural	573
208	Denpasar	Slamet Rahayu	58.00	38.50	LongMultipleLargeNatural	573
209	Denpasar	Tanjung Sari VI	29.00	24.90	LongMultipleLargeNatural	573

2.5.3 Follow-up

This location is potential for implementing CODRS tuna program particularly to target the long line vessel that operates in IAW (Banda Sea). However, it needs further survey to obtain this information since there many vessels operate in Indian Ocean.

2.5.4 Important Contact

Name : Yogi
Affiliation : Head of Monitoring and Surveillance act of PSDKP Benoa
Contact : +6281314229976

Name : Nyoman
Affiliation : Secretary of Tuna Long Line Association (ATLI) in Denpasar
Contact : +62 822-3608-8187

2.5.5 References

Haluan F.F.P.P. 2010. Analisis Optimasi Sistem Produksi pada Industri Perikanan Tuna (Studi Kasus di PT Perikanan Nusantara Cabang Benoa, Bali), Skripsi. IPB - Bogor.

105p. [10]

2.5.6 Figures



Figure 2.25: Benoa Port fisheries activity

3 South Kalimantan Province

3.1 FP. Kotabaru

3.1.1 Background and Survey Practicalities

Background

South Kalimantan has a total waters area of 1.404.808 ha covering up to 12 nautical miles from the land known as provincial jurisdiction. This area belongs to Makassar Strait, Java Sea, Laut Strait and Subuk Strait. Kotabaru is one of the centres of fisheries in the province with 45.000 ha of marine waters. The potential of marine resources of this city is estimated 59.565 tons per year [2]). The production of both marine and inland waters in 2007 was 39.644,14 tons valuing Rp. 310.722.100.000.

In general, fishing gears existed in Kotabaru consisted of traditional and modern gears. The gears used in Pulau Laut Barat-Selatan and Pulau Sembilan are payang (seine net), drifting gill net, circle gill net, trammel net, fix gill net, lift net, fix or bottom long line, traps (sero/belat), jermal net (julu/ stow net), bottom lampara (seine net without purse lines), hooks and line, trolling line, and other fishing gears [3].

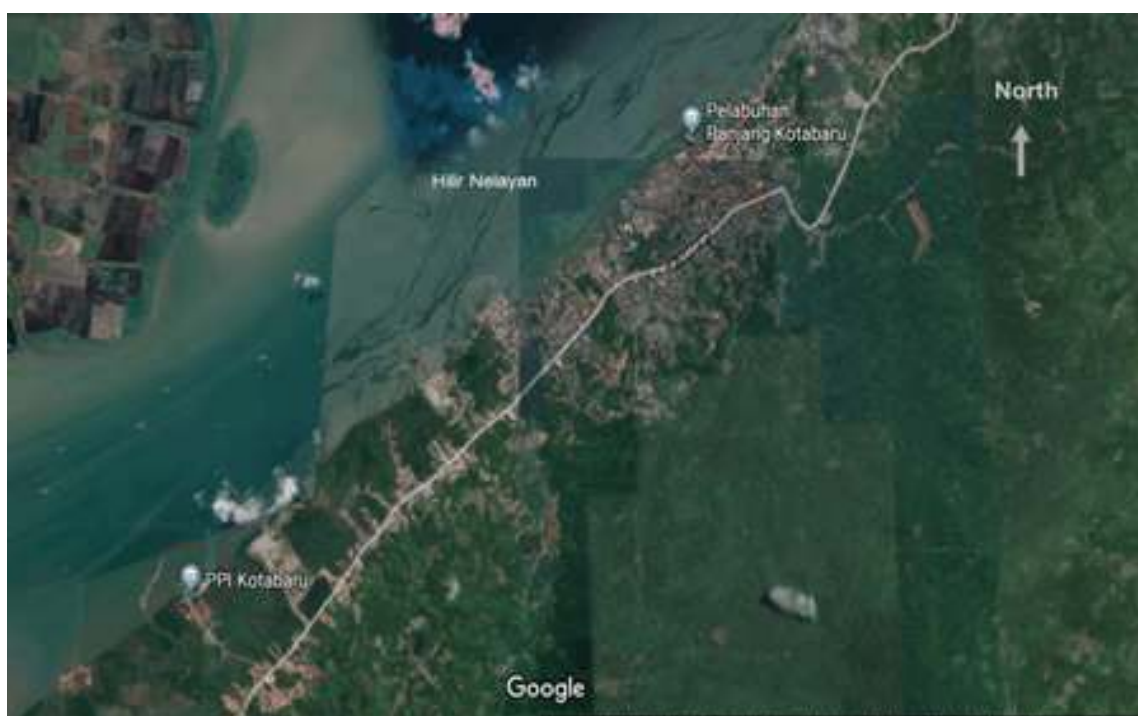


Figure 3.1

Survey team

Survey was done by Dimas Galang Fergiawan

Period visited

Survey was conducted on 18-23 March 2019

How to get there

The location can be reached by car. Starting from Batulicin Airport, it continues to ferry harbour of Lengadai. The travel duration from Lengadai to PPI Kotabaru is around 30

minutes by ferry. The fishermen homebase is located at Hilir Nelayan which is located around 10 minutes from FP. Kotabaru.

3.1.2 Fleet Description

Field survey found the dominant fishing fleets are small and medium-size boats consisted of handline/trolling large), *lampara* (mini trawl), and purse sine vessels. Handline and lampara are ranging 5-10GT, purse seine 20-40GT. The main target of handline/trolling is wahoo/tenggiri (*Acanthocybium solandri*). The fishing trip takes 3-5 days with the catch amount 200-500kg. Meanwhile the target catch of purse seine is tongkol (*Euthynnus sp* or *Auxis sp*), selar bentong (scads), and longtail tuna. The fishing trip is longer 4-5 days depending on the weather condition and the catch number is varied 500-2000 kg. After landing the catch in FP. Kotabaru, most of the fishermen return to their home base located Hilir Nelayan area or around Pelabuhan Panjang.

Table 3.1: Boat Information from FP. Kotabaru

No	Program Site	Boat Name	GT Declared	GT Estimate	Fishing Gear	Fishing Area
1	Tanah Bumbu	Bangun Polea	30.00	20.79	PurseSeine	713
2	Tanah Bumbu	Berkah Hikmah 03	6.00	5.31	Gillnet	713
3	Tanah Bumbu	Berkat sahabat Baru I	6.00	4.80	PurseSeine	713
4	Tanah Bumbu	Citra Remaja 01	24.00	14.75	PurseSeine	713
5	Tanah Bumbu	Harapan Baru	21.00	14.75	PurseSeine	713
6	Tanah Bumbu	Harapan Baru-II	25.00	14.75	PurseSeine	713
7	Tanah Bumbu	Harapan Baru VIII	27.00	14.75	PurseSeine	713
8	Tanah Bumbu	Harapan Baru IX	29.00	20.79	PurseSeine	713
9	Tanah Bumbu	Hartati - 01	13.00	10.11	PurseSeine	713
10	Tanah Bumbu	Hasil Hikmah 01	5.00	3.50	Gillnet	713
11	Tanah Bumbu	Hasil Hikmah 02	5.00	3.50	Gillnet	713
12	Tanah Bumbu	Hidup Bersama 02	23.00	14.75	PurseSeine	713
13	Tanah Bumbu	Inka Mina 426	30.00	20.79	PurseSeine	713
14	Tanah Bumbu	Mahdah	2.00	2.26	Gillnet	713
15	Tanah Bumbu	Mekar Bersama	6.00	4.80	PurseSeine	713
16	Tanah Bumbu	Mekar Buana 5	6.00	4.80	PurseSeine	713
17	Tanah Bumbu	Nur Arfina 04	6.00	5.31	Gillnet	713
18	Tanah Bumbu	Nur Arfina 09	6.00	5.31	Gillnet	713
19	Tanah Bumbu	Nur Aulia	29.00	20.79	PurseSeine	713
20	Tanah Bumbu	Putra Makassar	30.00	20.79	PurseSeine	713
21	Tanah Bumbu	Putra Warga 02	29.00	20.79	PurseSeine	713
22	Tanah Bumbu	Sahril Jaya	16.00	10.11	PurseSeine	713
23	Tanah Bumbu	Terang Bulan 09	26.00	17.96	PurseSeine	713
24	Tanah Bumbu	Usaha Baru "	22.00	14.75	PurseSeine	713
25	Tanah Bumbu	Warna Muda 02	23.00	14.75	PurseSeine	713
26	Tanah Bumbu	Warna Muda 03	29.00	20.79	PurseSeine	713
27	Tanah Bumbu	Tunas Muda 02	57.00	51.00	PurseSeine	713
28	Tanah Bumbu	Rusdi Putra	23.00	14.75	PurseSeine	713

3.1.3 Follow-up

It is not recommended to do CODRS contract in PPI Kotabaru since tuna is not the main target of the fishermen. .

3.1.4 Important Contact

Name : Sudiono
Affiliation : PPI Kotabaru
Contact : 081649778014

Name : Suminto
Affiliation : PPI Kotabaru
Contact : 081349641000

Name : Gazali
Affiliation : Boat owner handline (tengiri)
Contact : 085249323401

3.1.5 References

Anonim, 2019. Kajian Pengelolaan Perikanan Tangkap di Kabupaten Kotabaru Kalimantan Selatan. IPB [2]

DJPRL, KKP. 2019.
<http://kkji.kp3k.kkp.go.id/index.php/basisdata-kawasan-konservasi/details/1/91> [3]

3.1.6 Figures



Figure 3.2: The jetty at PPI Kotabaru



Figure 3.3: Typical handline boat at PPI Kotabaru



Figure 3.4: Trolling line large hook with artificial lure targeting Tenggiri



Figure 3.5: Trolling line large hook with artificial lure targeting Tenggiri



Figure 3.6: Wahoo caught by handline



Figure 3.7: Purse seine vessel at PPI Kotabaru

3.2 FP. Batulicin, Tanah Bumbu

3.2.1 Background and Survey Practicalities

Background

PPI Batulicin is located in Tanah Bumbu regency, a region that has a big potency of its coastal and marine resources. This regency is a result of splitting of Kotabaru Regency covering $2^{\circ}52'$ - $115^{\circ}15'S$ and $115^{\circ}15'$ - $116^{\circ}04'$ E. Geographically, Tanah Bumbu borders with sub-district of Kelumpang Hulu Kabupaten Kotabaru in the north, Java Sea in the south, sub-district Kabupaten Tanah Laut, sub-district Aranio Kabupaten in the west Banjar and sub-district Pulau Laut Barat Kabupaten Kotabaru in the east. PPI Batulicin is on the active fisheries centre in South Kalimantan with the dominant catch of tongkol (*auxis sp.*), layang (*decapterus/scad*), and others small pelagic fish that are distributed to some areas in Kalimantan.



Figure 3.8

Survey team

Survey was done by Dimas Galang Fergiawan

Period visited

Survey was conducted on March 19-20, 2019

How to get there

From Batulicin airport, FP. Batulicin can be reached by car within 20 minutes.

3.2.2 Fleet Description

Field survey found that PPI Batulicin has a potency for both small and big pelagic fisheries such as longtail tuna, kawa-kawa, frigate tuna, and scads. Fishing fleet was dominated by purse seine vessels with size 20-50 GT that spread up to Pagatan village (30 minutes from PPI Batulicin) that is also home base of the fishermen. There are also some vessels use surface gillnet and lampara (small trawl) targeting small pelagic fish.

Purse seine vessel has 12-15 crews with the fishing trip is between 10-15 days relying on the moonlight and weather. Catch composition is dominated by longtail tuna and kawa-kawa. The mesh size of the gear is 1.5-1.75 inches the length is 90 meters and the depth is up to 40 meters. Most purse seine vessels unload their catch at the sea by using collecting vessels (local name: *pengais*). They land their catch at the local harbour occasionally particularly in the last days of the fishing trip. In average, they can catch 500-1000kg of fish in one hauling.

Table 3.2: Boat Information from FP. Batulicin, Tanah Bumbu

No	Program Site	Boat Name	GT Declared	GT Estimate	Fishing Gear	Fishing Area
1	Tanah Bumbu	KM Rusdi Putra 04	29.00	22.72	PurseSeine	713
2	Tanah Bumbu	KM Rusdi Putra 05	21.00	15.91	PurseSeine	713
3	Tanah Bumbu	Berkat Bintang- 02	29.00	18.90	PurseSeine	713
4	Banjarmasin	Citra Indah - 02	18.00	12.50	PurseSeine	713

3.2.3 Follow-up

The main problem during the field trip was there was no purse seine vessels found in FP. Batulicin since most of them were in the sea. Therefore, the survey was continued to Pagatan village as the home base of the fishermen.

3.2.4 Important Contact

Name : Nondang
Affiliation : Bagian lapang PPI Batulicin
Contact : 082150112671

3.2.5 References

Anonim, 2019. Kajian Pengelolaan Perikanan Tangkap di Kabupaten Kotabaru Kalimantan Selatan. IPB [2]

3.2.6 Figures



Figure 3.9: Situation of PPI Batulicin



Figure 3.10: Longtail tuna (*T. tonggol*) Longtail tuna, target catch of purse seine vessel



Figure 3.11: Layang fish (*D. macarelus*) target catch of purse seine vessel



Figure 3.12: Kawa-kawa (*E. affinis*) , target catch of purse seine vessel

3.3 Pagatan Village, Tanah Bumbu

3.3.1 Background and Survey Practicalities

Background

Pagatan village, Tanah Bumbu Regency is one of the villages that is situated on the river bank thus it benefits to the fishermen as the area to shelter the boat from the high wave. Based on the information obtained in the FP. Batulicin, this village is the fisherman home base who operate in the FP. Batulicin. They fish around the area of 12 miles from Tanah Bumbu.



Figure 3.13: Maps of Pagatan Village

Survey team

Survey was done by Dimas Galang Fergiawan

Period visited

Survey was conducted on 19-20 March 2019

How to get there

Starting from FP. Batulicin, Pagatan village is located in the south by traveling around 45 minutes by car. There is a river that is the main area to lean various fishing vessels such as purse seine, handline and *lampara* (mini trawl).

3.3.2 Fleet Description

During the field survey, there were around 20 purse seine vessels found in Pagatan. The size ranging from 15-50GT. Based on the interview result, the catch composition consisted

of tongkol (*auxis spp*, *euthynus sp*), longtail tuna, and scads. Fishing ground covers provincial area 12 miles from the land in Makassar Strait. In one hauling, they could catch around 500-1000 kg of fish. After the fishing event, the collecting boat (*pengais*) would come to buy the fish. Therefore, most of them are unloading the catch at the sea with the purpose to keep the quality of the fish.

3.3.3 Follow-up

Pagatan village is very strategic to be targeted area of CODRS contract since the longtail tuna and kawa-kawa are massively found on the catch of purse seine vessels that operates in FMA 713.

3.3.4 Important Contact

Name : Abbas
Affiliation : Captain of KM Rusdi Putra 04
Contact : 085251121161

Name : Suminto
Affiliation : PPI Kotabaru
Contact : 081349641000

3.3.5 References

3.3.6 Figures



Figure 3.14: Typical purse seine vessel in Pagatan



Figure 3.15: Typical purse seine net

4 East Kalimantan Province

4.1 FLP. Manggar Baru, Balikpapan

4.1.1 Background and Survey Practicalities

Background

FLP Manggar is one of main locations for loading and unloading activities in Balikpapan. The fishing port has facilities such as fuel station, ice company, fish auction and other supporting facilities. The fishing fleet is dominated by mini trawl (lampara), handline, purse seine and lift net.

Survey team

Survey was done by Dimas Galang Fergiawan

Period visited

Survey was conducted on March 20 -22, 2019.

How to get there

FLP Manggar can be accessed by car for about 20 minutes from Sepingan Airport of Balikpapan.

4.1.2 Fleet Description

Our survey showed that fishing fleet in FLP Manggar is dominated by mini trawl (lampara), and followed by handline (penongkol), purse seine and lift net (bagan apung). Around 50 handline vessels between 8GT and 20GT were landed at Selili village (north side of FLP Manggar). Those handliners are often associated with FADs and targeting large pelagic fish in their fishing operation. The average of fishing trip is between 7 and 10 days with 2 or 3 people on boat. Fishers in FLP Manggar Baru use diverse fishing gears such as

1. Purse Seine
2. TrollOneLargeArtificial
3. TrollMultipleSmallArtificial
4. DropOneLargeArtificial

The landed catch of those gears consists of baby tuna, large tuna, skipjack and small tunas, billfish and mahi-mahi. The landed catch ranges between 200kg and 1500 kg per trip. The fishing ground is Makassar Strait and surroundings or about 20-40 nautical miles from the location. Usually, some fishers shift their fishing target to demersal fish due to weather condition in particular season.

Purse seiners of small pelagic are usually targeting *Decapterus* sp., small tunas and big eye scad (local name: katombong). The average days at sea of the purse seiners is between 3 and 7 days per trip. Our survey showed that there were 5 purse seiners around 30 GT in the location.

Table 4.1: Boat Information from FLP. Manggar Baru, Balikpapan

No	Program Site	Boat Name	GT Declared	GT Estimate	Fishing Gear	Fishing Area
1	Balikpapan	KMN Armada Jaya	6.00	6.50	KiteMultipleSmallArtificial	713
2	Balikpapan	KMN Satria 1A	5.00	5.80	KiteMultipleSmallArtificial	713
3	Balikpapan	PUTRA TANETE - 03	6.00	6.50	PurseSeine	713

4.1.3 Follow-up

FLP Manggar is a highly recommended location to deploy CODRS program because there are many vessels which were dedicated to catch large tuna.

4.1.4 Important Contact

Name : Muhammad
Affiliation : Captain KM Ahmad
Contact : 081236086236

Name : Romy
Affiliation : Captain KM Nang Bahari 01
Contact : 082149824924

4.1.5 References

4.1.6 Figures



Figure 4.1: Penongkol vessel KM. Nang Bahari 02



Figure 4.2: Trolling one large hook with artificial lure gear for fishing medium-large tuna



Figure 4.3: Trolling multiple small hooks gear for baby tuna



Figure 4.4: Drop single large hook artificial bait



Figure 4.5: Trolling with kite multiple large hooks



Figure 4.6: Drift line with buoy, single large hooks



Figure 4.7: Mini trawl boat with otter boat (lihat tanda)



Figure 4.8: Purse seine at Manggar Baru Balikpapan

4.2 FLP. Selili, Samarinda

4.2.1 Background and Survey Practicalities

Background

Samarinda City is one of fisheries centers in East Kalimantan. The city has Mahakam River which is used by fishers to do loading and unloading activities because the river is wide and it has a good water discharge. One of the locations is PPI Selili which is located at the riverside of Mahakam. The loading and unloading activities are carried on in the early evening and/until morning.

Survey team

Survey was done by Dimas Galang Fergiawan

Period visited

Survey was conducted on March 21, 2019

How to get there

FLP Selili can be accessed by car for about 3 hours from Sepinggan Airport, Balikpapan.

4.2.2 Fleet Description

Dominant fleet in FLP Selili is purse seine. The landed catch from the purse seiners are scads and occasionally small tunas. Our survey showed that there were several handliners (kapal penangkol) from West Sulawesi which were fishing in Makassar Strait and Sulawesi Sea. The fishers use fishing gears trolling one large hook with/without kite, droplines one large hook, trolling multiple small hook, and drift line one large hook.

4.2.3 Follow-up

PPI Selili is not a recommended location to deploy CODRS program because the dominant fleet and the landed catch are not suitable with the program targets.

4.2.4 Important Contact

Name : Tommy
Affiliation : ABK KM. Piala Citra 06 (GT 16)
Contact : 082271448391

4.2.5 References

4.2.6 Figures



Figure 4.9: Situation of the PPI Selili



Figure 4.10: KM. Piala Citra 04 and KM. Piala Citra 02

4.3 FLP. Tanjung Limau, Bontang

4.3.1 Background and Survey Practicalities

Background

FLP Tanjung Limau is one of the fish auction areas and also the main area of 'outsider' fishing vessels (*andon*). Located near to the city centre making FLP Tanjung Limau becomes important in supplying fish in local market in Bontang. There is a mangrove area beside FLP Tanjung Limau. Some fishermen make use of this situation to lean their boat since it is safe from the high wave.

Survey team

Survey was done by Dimas Galang Fergiawan

Period visited

Survey was conducted on 21 March, 2019.

How to get there

FLP Tanjung Limau can reached by car for about 6 hours from Balikpapan.

4.3.2 Fleet Description

Fishing fleet is dominated by purse seine 20-50GT. It is followed by some small boats (jukung) of bottom gillnet. Our survey showed that some purse seines were landed in the harbour. Most of those vessels are originated from Donggala and some regions in Sulawesi. The average fishing trips range between 4 and 7 days with landed catch between 1-3 ton per trip. Catch composition consists of baby tuna, skipjack, scads, and mackerel tunas. Our survey shows that the landed catch in FLP Tanjung Limau was dominated by small pelagic fish.

Table 4.2: Boat Information from FLP. Tanjung Limau, Bontang

No	Program Site	Boat Name	GT Declared	GT Estimate	Fishing Gear	Fishing Area
1	Bontang	KM Lestari 08	19.00	12.80	PurseSeine	713
2	Bontang	DZKY 379	2.00	2.40	PurseSeine	713
3	Bontang	NUR ALIF	2.00	2.40	TrollOneLargeArtificial	713

4.3.3 Follow-up

Our survey showed that the location is a recommended location to deploy CODRS program.

4.3.4 Important Contact

Name : Urwan
Affiliation : Pengepul kecil FLP Tj Limau
Contact : -

4.3.5 References

4.3.6 Figures



Figure 4.11: Situation of PPI Tanjung Limau



Figure 4.12: Typical purse seine in Tanjung Limau



Figure 4.13: Scads from purse seine catch



Figure 4.14: Skipjack from purse seine catch



Figure 4.15: Baby tuna caught by purse seine

4.4 Tanjung Laut Village and Berbas Village

4.4.1 Background and Survey Practicalities

Background

Tanjung Laut and Berbas villages are landing centers in Bontang which are located face-to-face. We combine those locations into one frame survey because of the similar situation in those villages. Many middle-men (local name: juragan/pengepul) live in those areas. They are both financing the fisher's fishing trip and buy their landed catch.

Survey team

Survey was done by Dimas Galang Fergiawan

Period visited

Survey was conducted on 21 Mach, 2019

How to get there

Tanjung Laut and Berbas villages can be accessed by car for about 6 hours from Balikpapan airport.

4.4.2 Fleet Description

During our interview to fishers, they mentioned that there is a company or tuna processing exists in Tanjung Laut village. The company buys all high-grade landed tuna (yellowfin tuna and bigeye tuna) to distribute to Jakarta.

Fishing fleet in Tanjung Laut and Berbas villages have similar characteristics. The fishing fleet is dominated by handline vessels from Mandar (fishers from Polewali Mandar, Sulawesi), and followed by purse seines and small boats (jukung) which the latter is targeting demersal fish and crabs. The handliners from Mandar in the those locations are around 30 vessels which are using trolling one large hook artificial/natural, trolling multiple small hook artificial, dropline one large hook, and drift line one large hook natural bait. The fishing trip is between 10 and 14 days with 6-10 crews on-boat. Their fishing ground is Sulawesi Sea and surroundings. Total catch ranges between 500 and 2000kg per trip. Catch composition consists of baby tuna, large tuna, skipjack, mahi-mahi and mackerel tunas.

Purse seiners in Tanjung Laut and Berbas villages vary between 30-40GT. It employs around 20 crews on-boat. The dimension of the gear is 900 m in length and 50 m in depth. The floating is made from styrofoam, while the sinker is made from lead. The maximum catch is 2000 kg with catch composition of scads, skipjack, mackerel tunas and baby tuna. The fishing ground is from Makassar Strait to the provincial border area.

4.4.3 Follow-up

The location is considered to do CODRS contract with some captains of handline vessel or purse seine since they are dedicated to catch tuna, tongkol and skipjack.

4.4.4 Important Contact

Name : Asmar
Affiliation : Pengepul Miniplan tuna Tanjung Laut
Contact : 081350581225

4.4.5 References

4.4.6 Figures



Figure 4.16: Some Purse Seine in Tanjung Laut



Figure 4.17: KM. Inka Mina unloads the catch



Figure 4.18: Typical catch from purse seine



Figure 4.19: Type of Handline Mandar



Figure 4.20: Trolling one hook artificial (without kite)



Figure 4.21: Trolling multiple small hooks artificial



Figure 4.22: Trolling one large hook natural bait



Figure 4.23: Dropline one large hook



Figure 4.24: Process in the Miniplan of Tanjung Laut



Figure 4.25: Catch of medium-large tuna in Tanjung Laut



Figure 4.26: Catch of baby tuna in Tanjung Laut

4.5 FLP. Sangatta, Bontang

4.5.1 Background and Survey Practicalities

Background

Sangatta is located in the northern of east Kalimantan belonging to Kutai Timur District (*Kabupaten*). It has a big potency of the fisheries however the number of fishing vessels and also the facilities for unloading catch are still lacking including the facility for selling the fish. In the sub-district Sangatta Selatan, the potency of Pepetek (*Leiognathus sp*) is the highest with 185.13kg/km², followed by Beloso (*Sillago sp*), 31.23kg/km². In general, the potency total of the fishery in this sub-district is 362.20 kg/km². The potency of exported shrimp is around 5.6kg/km² and squid is 7.5 kg/km² [4].

Survey team

Survey was done by Dimas Galang Fergiawan

Period visited

Survey was conducted on 21 Mach, 2019

How to get there

From Sepingan Balikpapan Airport travelled by car is around 8 hour to Sangatta.

4.5.2 Fleet Description

Based on the field survey, there were around 10 fishing vessels targeting demersal fish such as grouper and snapper. The size is around 15GT. This boat use dropline fishing gear and operates in Kutai Timur waters. The interview with the fishermen informed that there were not fishing fleet dedicated for tuna. Most vessels prefer to fish in Bontang since it easier to be accessed and easy to sell the fish as well.

Table 4.3: Boat Information from FLP. Sangatta, Bontang

No	Program Site	Boat Name	GT Declared	GT Estimate	Fishing Gear	Fishing Area
1	Bontang	KM Cahaya Latimojong	21.00	12.50	PurseSeine	713

4.5.3 Follow-up

Our survey showed that the location is dominated by demersal fisheries. The location is not recommended to deploy CODRS program.

4.5.4 Important Contact

4.5.5 References

Juliani. 2013. The Potency Estimations of Fish Resources at Teluk Pandan, South Sangatta, North Sangatta and Bengalon District Waters East Kutai Regency. Jurnal Ilmu Perikanan Tropis Vol. 18. No. 2. Universitas Mulawarman [4]

4.5.6 Figures



Figure 4.27: Situation of FLP Sangatta



Figure 4.28: Dropline Snapper vessel in Sangatta

4.6 FLP. Kota Bangun, Samarinda

PPIKotaBangunSamarinda.Rnw

4.7 FLP. Api-api, Samarinda

PPIApi-apiSamarinda.Rnw

5 North Sulawesi Province

5.1 OFP. Bitung

5.1.1 Background and Survey Practicalities

Background

Oceanic Fishing Port (OFP) Bitung is one of the largest fishing ports in Indonesia. Facilities in the fishing port are cold storage, ice company, hygienic fish auction, etc. Fishing fleet is dominated by handline vessels 5- >40GT (weighted dropline single large hook), and followed by purse seine vessels 3- >30GT, and pole and line vessels >80GT. In their fishing operation, those vessels are targeting large tuna, skipjack and bullet tuna, and skipjack and baby tuna respectively.



Figure 5.1: OFP Bitung

Survey team

Survey was done by Yeremia Apridianto and Dwaitd Kolibongso

Period visited

This survey was conducted on January 29 - February 3, 2018

How to get there

OFP Bitung can be reached by car or public transportation for about 1-2 hours from Sam Ratulangi International Airport in Manado.

5.1.2 Fleet Description

Data from Monitoring and Surveillance Agency (PSDKP) Bitung showed that there are 260 weighted dropline single large hook vessels between 3GT and >40GT which are targeting large tuna (yellowfin and bigeye) and billfish. The duration of fishing trip is 14-20 days and the average catch is around 2 ton per trip.

There are 17 pole and line vessels (*huhate*) based in OFP. Bitung. The duration of fishing

trip is 3-7 days. The main target catch are skipjack, baby tuna and dolphin fish. The average of total catch per trip is 10-15 tons.

There are 116 purse seine vessels registered in the harbour. The trip duration is between 3-7 days. This vessel targeting skipjack, bullet tuna and mackerel scad.

Table 5.1: Boat Information from OFF. Bitung

No	Program Site	Boat Name	GT Declared	GT Estimate	Fishing Gear	Fishing
1	Bitung	KM. Dioskuri 09	87.00	40.00	PoleAndLine	7
2	Bitung	KMN NOAH	6.00	6.00	DropOneLargeNatural	7
3	Bitung	KMN DEWI BAHARI	5.00	6.80	DropOneLargeNatural	7
4	Bitung	KMN. Feronika	5.00	8.00	DropOneLargeNatural	7
5	Bitung	KM. Inka Mina 713	30.00	22.90	DropOneLargeNatural	7
6	Bitung	Venio	81.00	52.80	PoleAndLine	7
7	Bitung	KM. Nelayan 2017-953	25.00	19.00	DropOneLargeNatural	7
8	Bitung	KM. Nusantara Jaya 8	87.00	60.00	PoleAndLine	7
9	Bitung	KM. FISH GATE 1	28.00	22.60	DropOneLargeNatural	7
10	Bitung	KM. OMEGA STAR 88	48.00	39.80	PurseSeine	7
11	Bitung	KM. Jaya Bali Bersaudara 10	90.00	57.00	PurseSeine	7
12	Bitung	DEWI TUNA	27.00	18.50	DropOneLargeNatural	7
13	Bitung	KM. Bitung Tuna Jaya 88	10.00	8.30	DropOneLargeNatural	7
14	Bitung	KM. Sinar Perdana 2	30.00	23.50	LongMultipleLargeNatural	7
15	Bitung	Fauziah	6.00	5.86	DriftOneLargeNatural	7
16	Bitung	LA GRACIA 4	72.00	56.22	PurseSeine	7
17	Bitung	KM. Gabungan Jaya Mina	86.00	76.80	PurseSeine	7
18	Bitung	A.S. BERKAT - 01	6.00	5.80	DropOneLargeNatural	7
19	Bitung	ABELAVA	5.00	4.67	DropOneLargeNatural	7
20	Bitung	ADITYA - 02	14.00	10.16	DropOneLargeNatural	7
21	Bitung	ADONAI 153	29.00	23.48	DropOneLargeNatural	7
22	Bitung	AFLI - 02	6.00	5.14	DropOneLargeNatural	7
23	Bitung	AL FALAQ - 03	20.00	14.99	DropOneLargeNatural	7
24	Bitung	AL FALAQ 04	23.00	21.29	DropOneLargeNatural	7
25	Bitung	AL JIKRA	6.00	4.64	DropOneLargeNatural	7
26	Bitung	ALBERKI 012	22.00	18.71	DropOneLargeNatural	7
27	Bitung	ALDIRA 27	6.00	5.41	DropOneLargeNatural	7
28	Bitung	ALTA DURI	1.00	1.53	DropOneLargeNatural	7
29	Bitung	ALTIKA	4.00	2.97	DropOneLargeNatural	7
30	Bitung	ALUNA - 01	6.00	5.02	DropOneLargeNatural	7
31	Bitung	ANAM	5.00	4.83	DropOneLargeNatural	7
32	Bitung	ANDREAS	19.00	15.45	DropOneLargeNatural	7
33	Bitung	ANGELLANE	1.00	1.51	DropOneLargeNatural	7
34	Bitung	ANGELLANE - 2	4.00	2.91	DropOneLargeNatural	7
35	Bitung	ANINDYA	1.00	1.36	DropOneLargeNatural	7
36	Bitung	ANUGERAH 01	2.00	1.77	DropOneLargeNatural	7
37	Bitung	ANUGERAH BAHARI	5.00	5.72	DropOneLargeNatural	7
38	Bitung	ANUGRAH RIZKY - 05	5.00	4.56	DropOneLargeNatural	7
39	Bitung	ARTA PRIMA - 02	6.00	5.49	DropOneLargeNatural	7
40	Bitung	ARVINA MAJO	21.00	16.37	DropOneLargeNatural	7
41	Bitung	ASIANA	26.00	20.82	DropOneLargeNatural	7
42	Bitung	ATHARI ZQI	30.00	22.88	DropOneLargeNatural	7
43	Bitung	AYURA MANDIRI	20.00	15.27	DropOneLargeNatural	7
44	Bitung	BAHARI 00	24.00	17.93	DropOneLargeNatural	7
45	Bitung	BAHTERARAIN	2.00	1.13	DropOneLargeNatural	7
46	Bitung	BAITANI	30.00	21.67	DropOneLargeNatural	7
47	Bitung	BAITANI 02	30.00	24.08	DropOneLargeNatural	7
48	Bitung	BAITANI-03	28.00	20.82	DropOneLargeNatural	7
49	Bitung	BAROKAH 90	19.00	13.80	DropOneLargeNatural	7
50	Bitung	BERKAT ABADI 08	30.00	27.45	DropOneLargeNatural	7
51	Bitung	BERKAT DELTA	30.00	26.49	DropOneLargeNatural	7
52	Bitung	BERKAT DOA	1.00	1.25	DropOneLargeNatural	7
53	Bitung	BERKAT JUMBO	5.00	5.78	DropOneLargeNatural	7
54	Bitung	BERKAT MULIA - 18	6.00	4.64	DropOneLargeNatural	7

Table 5.1: Boat Information from OFP. Bitung

No	Program Site	Boat Name	GT Declared	GT Estimate	Fishing Gear	Fishing
55	Bitung	BERKAT NELAYAN	5.00	4.47	DropOneLargeNatural	7
56	Bitung	BERKAT RIZKY 04	5.00	5.35	DropOneLargeNatural	7
57	Bitung	BERKATI	4.00	4.41	DropOneLargeNatural	7
58	Bitung	BERSAMA SEJATI 02	21.00	15.64	DropOneLargeNatural	7
59	Bitung	BERSUJUD	6.00	5.41	DropOneLargeNatural	7
60	Bitung	BINTANG RIZKY 02	5.00	5.26	DropOneLargeNatural	7
61	Bitung	BOANERGES - 01	4.00	3.78	DropOneLargeNatural	7
62	Bitung	BURUNG LAUT 053	25.00	19.05	DropOneLargeNatural	7
63	Bitung	CAHAYA ARAFAH - 55	24.00	19.39	DropOneLargeNatural	7
64	Bitung	CAKALANG	30.00	21.67	DropOneLargeNatural	7
65	Bitung	CALISTA STAR	19.00	14.81	DropOneLargeNatural	7
66	Bitung	CANCER - 78	30.00	24.68	DropOneLargeNatural	7
67	Bitung	CANCER 58	30.00	24.44	DropOneLargeNatural	7
68	Bitung	CAREN STAR	23.00	21.60	DropOneLargeNatural	7
69	Bitung	CARIN PUTRI	10.00	10.11	DropOneLargeNatural	7
70	Bitung	CENDRAWASIH - 22	5.00	4.47	DropOneLargeNatural	7
71	Bitung	CHAMPIONS	3.00	1.77	DropOneLargeNatural	7
72	Bitung	CHARTHENZ	22.00	21.29	DropOneLargeNatural	7
73	Bitung	CM 12	27.00	20.72	DropOneLargeNatural	7
74	Bitung	DAMAI 88	19.00	16.56	DropOneLargeNatural	7
75	Bitung	DEALISA	3.00	1.89	DropOneLargeNatural	7
76	Bitung	DIALESTARI	10.00	11.28	DropOneLargeNatural	7
77	Bitung	DIMANUSRYA - 01	5.00	5.39	DropOneLargeNatural	7
78	Bitung	DONUM	27.00	16.02	DropOneLargeNatural	7
79	Bitung	EBEN HEAZER - 12	2.00	1.75	DropOneLargeNatural	7
80	Bitung	DARLI KUNUSA	6.00	5.65	DropOneLargeNatural	7
81	Bitung	EDEN NORTH	4.00	4.15	DropOneLargeNatural	7
82	Bitung	EKA SARI	56.00	46.95	DropOneLargeNatural	7
83	Bitung	ELBETHEL - 1	24.00	21.51	DropOneLargeNatural	7
84	Bitung	ELELYON 708	10.00	11.21	DropOneLargeNatural	7
85	Bitung	ELHANAN	4.00	3.54	DropOneLargeNatural	7
86	Bitung	ELISABETH GT. 2	2.00	1.49	DropOneLargeNatural	7
87	Bitung	ELLIANA	22.00	18.04	DropOneLargeNatural	7
88	Bitung	EMERALDA	22.00	19.83	DropOneLargeNatural	7
89	Bitung	EMITIAN	14.00	10.58	DropOneLargeNatural	7
90	Bitung	EMITIAN 02	23.00	20.73	DropOneLargeNatural	7
91	Bitung	EBEN HEAZER 01	6.00	5.22	DropOneLargeNatural	7
92	Bitung	ETHAN GOFIR 02	27.00	16.12	DropOneLargeNatural	7
93	Bitung	FAJAR - 03	21.00	16.56	DropOneLargeNatural	7
94	Bitung	FAJAR 11	5.00	5.22	DropOneLargeNatural	7
95	Bitung	FAJAR INDAH - 03	19.00	14.44	DropOneLargeNatural	7
96	Bitung	FAJAR KEMULIAN	30.00	27.69	DropOneLargeNatural	7
97	Bitung	FATIMAH AZ	21.00	14.26	DropOneLargeNatural	7
98	Bitung	EPHA - 03	6.00	4.87	DropOneLargeNatural	7
99	Bitung	FIRDAUS 03	24.00	19.39	DropOneLargeNatural	7
100	Bitung	FISH GATE - 1	28.00	20.52	DropOneLargeNatural	7
101	Bitung	GABRIEL CIO	15.00	12.06	DropOneLargeNatural	7
102	Bitung	GALILEA	23.00	23.57	DropOneLargeNatural	7
103	Bitung	GENEZARET STAR	24.00	19.39	DropOneLargeNatural	7
104	Bitung	GODBLESS G.G	5.00	4.78	DropOneLargeNatural	7
105	Bitung	GOLDEN BOY	3.00	1.67	DropOneLargeNatural	7
106	Bitung	GRASIA	24.00	20.51	DropOneLargeNatural	7
107	Bitung	GRATIA 01	18.00	13.52	DropOneLargeNatural	7
108	Bitung	GRAZIE	4.00	3.57	DropOneLargeNatural	7
109	Bitung	GRESIA	4.00	4.47	DropOneLargeNatural	7
110	Bitung	GUINEVERE	5.00	4.35	DropOneLargeNatural	7
111	Bitung	HALELUYA GT.3	3.00	1.78	DropOneLargeNatural	7
112	Bitung	HELJE	4.00	4.32	DropOneLargeNatural	7
113	Bitung	IAN ION	1.00	1.25	DropOneLargeNatural	7
114	Bitung	IDAMAN 01	15.00	10.30	DropOneLargeNatural	7

Table 5.1: Boat Information from OFP. Bitung

No	Program Site	Boat Name	GT Declared	GT Estimate	Fishing Gear	Fishing
115	Bitung	GLORIYA	6.00	6.16	DropOneLargeNatural	7
116	Bitung	IMANUEL JEY 09	29.00	23.15	DropOneLargeNatural	7
117	Bitung	INDO MARINA - 11	30.00	19.99	DropOneLargeNatural	7
118	Bitung	INDO MARINA - 9	30.00	19.26	DropOneLargeNatural	7
119	Bitung	INDO MARINA 10	30.00	19.26	DropOneLargeNatural	7
120	Bitung	INDO MARINA 8	30.00	21.31	DropOneLargeNatural	7
121	Bitung	INKA MINA 211	37.00	34.80	DropOneLargeNatural	7
122	Bitung	INKA MINA 461	30.00	25.52	DropOneLargeNatural	7
123	Bitung	INKAMINA 453	29.00	22.27	DropOneLargeNatural	7
124	Bitung	INKAMINA -713	30.00	22.88	DropOneLargeNatural	7
125	Bitung	INTI WAHANA	16.00	12.88	DropOneLargeNatural	7
126	Bitung	ISRAEL - 79	30.00	23.96	DropOneLargeNatural	7
127	Bitung	JAN SHANE	3.00	1.78	DropOneLargeNatural	7
128	Bitung	JAVIER	5.00	5.22	DropOneLargeNatural	7
129	Bitung	JAY JHON - 02	2.00	1.63	DropOneLargeNatural	7
130	Bitung	JEBAL CRIS	3.00	2.05	DropOneLargeNatural	7
131	Bitung	JELURI	28.00	19.42	DropOneLargeNatural	7
132	Bitung	IMANUEL - 18	6.00	4.16	DropOneLargeNatural	7
133	Bitung	JEZLYN	2.00	1.71	DropOneLargeNatural	7
134	Bitung	JILBERT (5 GT)	5.00	5.15	DropOneLargeNatural	7
135	Bitung	JITU 01	22.00	19.16	DropOneLargeNatural	7
136	Bitung	JOELBAN	3.00	2.05	DropOneLargeNatural	7
137	Bitung	JORDAN STAR	5.00	5.22	DropOneLargeNatural	7
138	Bitung	JUPITER STAR	23.00	19.27	DropOneLargeNatural	7
139	Bitung	KAKI DIAN	4.00	3.60	DropOneLargeNatural	7
140	Bitung	KASIH MULIA	5.00	4.56	DropOneLargeNatural	7
141	Bitung	IMANUEL JEY - 11	6.00	5.36	DropOneLargeNatural	7
142	Bitung	LAUT PELITA	30.00	22.27	DropOneLargeNatural	7
143	Bitung	LAUTAN BANGKIT JAYA 8	14.00	8.18	DropOneLargeNatural	7
144	Bitung	LAYLA MARINA III	29.00	18.42	DropOneLargeNatural	7
145	Bitung	LEO GREIZ	5.00	4.77	DropOneLargeNatural	7
146	Bitung	LIONEL MAKMUR 68	29.00	19.26	DropOneLargeNatural	7
147	Bitung	LIONEL MAKMUR 78	29.00	19.99	DropOneLargeNatural	7
148	Bitung	LIONEL MAKMUR 88	30.00	20.47	DropOneLargeNatural	7
149	Bitung	LOVELY MARIA	3.00	1.96	DropOneLargeNatural	7
150	Bitung	LOVIA	2.00	1.22	DropOneLargeNatural	7
151	Bitung	LUVENIA	30.00	25.89	DropOneLargeNatural	7
152	Bitung	MAGDALENA 011	30.00	23.96	DropOneLargeNatural	7
153	Bitung	MAGIC AIDEN	26.00	18.72	DropOneLargeNatural	7
154	Bitung	MAJU JAYA BERSAMA - 88	5.00	4.56	DropOneLargeNatural	7
155	Bitung	MARFEL	4.00	4.32	DropOneLargeNatural	7
156	Bitung	MARVELLA	5.00	3.94	DropOneLargeNatural	7
157	Bitung	MATAHARI 01	56.00	51.60	DropOneLargeNatural	7
158	Bitung	MEGIC SKY	29.00	25.52	DropOneLargeNatural	7
159	Bitung	MEKAR USAHA	18.00	14.90	DropOneLargeNatural	7
160	Bitung	MENEHE 1	28.00	20.73	DropOneLargeNatural	7
161	Bitung	MERCIPUL	4.00	4.03	DropOneLargeNatural	7
162	Bitung	MERCIPUL - II	5.00	4.02	DropOneLargeNatural	7
163	Bitung	METANOIA	29.00	26.01	DropOneLargeNatural	7
164	Bitung	MILABOY	2.00	1.49	DropOneLargeNatural	7
165	Bitung	MINA BAHTERA	17.00	13.71	DropOneLargeNatural	7
166	Bitung	MIRACLE (GT.5)	5.00	4.25	DropOneLargeNatural	7
167	Bitung	MIRACLE JOY	3.00	1.22	DropOneLargeNatural	7
168	Bitung	MONARA	2.00	1.53	DropOneLargeNatural	7
169	Bitung	MUJUR JAYA 02	21.00	20.95	DropOneLargeNatural	7
170	Bitung	NABAWI FORTUNA	16.00	14.53	DropOneLargeNatural	7
171	Bitung	NAZARETH - 05	10.00	6.93	DropOneLargeNatural	7
172	Bitung	NELAYAN 2016 51	26.00	16.02	DropOneLargeNatural	7
173	Bitung	NELAYAN 2017 - 609	5.00	3.90	DropOneLargeNatural	7
174	Bitung	NELAYAN 2017 - 610	5.00	3.90	DropOneLargeNatural	7

Table 5.1: Boat Information from OFP. Bitung

No	Program Site	Boat Name	GT Declared	GT Estimate	Fishing Gear	Fishing
175	Bitung	NELAYAN 2017 - 675	5.00	3.90	DropOneLargeNatural	7
176	Bitung	NELAYAN 2017 - 679	5.00	3.90	DropOneLargeNatural	7
177	Bitung	NELAYAN 2017 885	13.00	9.45	DropOneLargeNatural	7
178	Bitung	NENGGALA - 3	30.00	22.88	DropOneLargeNatural	7
179	Bitung	NUR JAYA ADI - 01	15.00	11.64	DropOneLargeNatural	7
180	Bitung	NURJAYA ADI -05	30.00	23.12	DropOneLargeNatural	7
181	Bitung	NUTRINDO PM 1	29.00	20.35	DropOneLargeNatural	7
182	Bitung	NUTRINDO PM 4	29.00	18.06	DropOneLargeNatural	7
183	Bitung	NUTRINDO PM-10	58.00	54.65	DropOneLargeNatural	7
184	Bitung	ORA ET LABORA	5.00	4.44	DropOneLargeNatural	7
185	Bitung	PALOPO STAR - 05	27.00	21.32	DropOneLargeNatural	7
186	Bitung	PASU PASU 01	2.00	1.70	DropOneLargeNatural	7
187	Bitung	KATHLEEN	6.00	4.73	DropOneLargeNatural	7
188	Bitung	LYODRA	6.00	5.65	DropOneLargeNatural	7
189	Bitung	PELANGI - 18	35.00	32.25	DropOneLargeNatural	7
190	Bitung	PERMATA	21.00	16.14	DropOneLargeNatural	7
191	Bitung	PERSUASI	4.00	3.81	DropOneLargeNatural	7
192	Bitung	POSEIDON GT.16	16.00	14.62	DropOneLargeNatural	7
193	Bitung	MANDIST	6.00	5.22	DropOneLargeNatural	7
194	Bitung	PUTRI KABUT	1.00	1.04	DropOneLargeNatural	7
195	Bitung	MITRA ANUGERAH JAYA	6.00	6.61	DropOneLargeNatural	7
196	Bitung	RAHAYU JAYA 08	21.00	17.03	DropOneLargeNatural	7
197	Bitung	RAHMITA 02	18.00	14.72	DropOneLargeNatural	7
198	Bitung	RATOCS INDAH	28.00	22.93	DropOneLargeNatural	7
199	Bitung	REJEKI 88	30.00	17.94	DropOneLargeNatural	7
200	Bitung	REVELITO - 02	5.00	4.74	DropOneLargeNatural	7
201	Bitung	REVELITO - 03	3.00	3.37	DropOneLargeNatural	7
202	Bitung	REVELITO - 04	3.00	3.37	DropOneLargeNatural	7
203	Bitung	RICHEL BLESSING	3.00	2.72	DropOneLargeNatural	7
204	Bitung	RIZKY JAYA - 03	5.00	5.41	DropOneLargeNatural	7
205	Bitung	SAINT ELMO	16.00	15.29	DropOneLargeNatural	7
206	Bitung	SAINT LUCIA	28.00	20.95	DropOneLargeNatural	7
207	Bitung	SALENDANG	19.00	13.80	DropOneLargeNatural	7
208	Bitung	SAMER	5.00	4.64	DropOneLargeNatural	7
209	Bitung	SAMSUNG	4.00	4.47	DropOneLargeNatural	7
210	Bitung	SAMUDERA ATLANTIK	28.00	22.60	DropOneLargeNatural	7
211	Bitung	SAMUDERA PASIFIK	26.00	19.62	DropOneLargeNatural	7
212	Bitung	PATER NOSTER	6.00	5.65	DropOneLargeNatural	7
213	Bitung	SAMUDRA INDAH	5.00	5.26	DropOneLargeNatural	7
214	Bitung	SAMUEL 02	32.00	31.32	DropOneLargeNatural	7
215	Bitung	SANTA CLARA	29.00	21.02	DropOneLargeNatural	7
216	Bitung	SANTO NINO	3.00	1.22	DropOneLargeNatural	7
217	Bitung	SEAN 3	30.00	25.89	DropOneLargeNatural	7
218	Bitung	SELLY 02	1.00	1.34	DropOneLargeNatural	7
219	Bitung	SHILOH	5.00	5.49	DropOneLargeNatural	7
220	Bitung	SHOFA MARWA	29.00	24.32	DropOneLargeNatural	7
221	Bitung	SINAR LAUT	80.00	66.91	DropOneLargeNatural	7
222	Bitung	SOLAGRATIA	2.00	1.49	DropOneLargeNatural	7
223	Bitung	SRI PENDOWO	12.00	7.05	DropOneLargeNatural	7
224	Bitung	ST. ANDREAS 01	14.00	10.58	DropOneLargeNatural	7
225	Bitung	SUKA MAJU	58.00	49.31	DropOneLargeNatural	7
226	Bitung	PRAYING	6.00	5.35	DropOneLargeNatural	7
227	Bitung	TARSIUS PM - 24	30.00	19.38	DropOneLargeNatural	7
228	Bitung	TARSIUS PM-12	56.00	51.98	DropOneLargeNatural	7
229	Bitung	TARSIUS PM-13	58.00	54.65	DropOneLargeNatural	7
230	Bitung	TARSIUS PM-25	33.00	28.03	DropOneLargeNatural	7
231	Bitung	TARSIUS PM-26	32.00	29.20	DropOneLargeNatural	7
232	Bitung	TEGUH JAYA 6	42.00	37.53	DropOneLargeNatural	7
233	Bitung	TENGGIRI - 12	38.00	35.74	DropOneLargeNatural	7
234	Bitung	TENGGIRI - 6	35.00	34.77	DropOneLargeNatural	7

Table 5.1: Boat Information from OFP. Bitung

No	Program Site	Boat Name	GT Declared	GT Estimate	Fishing Gear	Fishing
235	Bitung	TIARA - 02	1.00	1.70	DropOneLargeNatural	7
236	Bitung	PUTRI REYUELL	6.00	5.65	DropOneLargeNatural	7
237	Bitung	TRISITA	1.00	1.49	DropOneLargeNatural	7
238	Bitung	TRIZA	3.00	2.45	DropOneLargeNatural	7
239	Bitung	TUNA BERKAH	5.00	3.86	DropOneLargeNatural	7
240	Bitung	TUNA LESTARI - 16	8.00	6.35	DropOneLargeNatural	7
241	Bitung	RAHMAT ILAHI - 01	6.00	5.80	DropOneLargeNatural	7
242	Bitung	TUNA SAMUDRA	25.00	16.42	DropOneLargeNatural	7
243	Bitung	TUNAS MADIDIR	4.00	4.32	DropOneLargeNatural	7
244	Bitung	TUNAS MADIDIR GT.4	4.00	3.82	DropOneLargeNatural	7
245	Bitung	SAMUDRA CINTA	6.00	5.65	DropOneLargeNatural	7
246	Bitung	SINAR JAYA 02	6.00	6.22	DropOneLargeNatural	7
247	Bitung	VERNIYA 01	26.00	16.02	DropOneLargeNatural	7
248	Bitung	SUMBER BERKAH BERSAUDARA	6.00	5.65	DropOneLargeNatural	7
249	Bitung	WIRA 03	27.00	20.72	DropOneLargeNatural	7
250	Bitung	WISANG GENI - 018	5.00	5.02	DropOneLargeNatural	7
251	Bitung	YAHUKIMO	29.00	22.88	DropOneLargeNatural	7
252	Bitung	YAPAN STAR - 02	5.00	4.06	DropOneLargeNatural	7
253	Bitung	YEHUDA	28.00	21.72	DropOneLargeNatural	7
254	Bitung	YEMIMA	30.00	26.97	DropOneLargeNatural	7
255	Bitung	YERUSALEM	1.00	1.26	DropOneLargeNatural	7
256	Bitung	YHWH JIREH	25.00	19.72	DropOneLargeNatural	7
257	Bitung	ZACKARYA	3.00	1.94	DropOneLargeNatural	7
258	Bitung	KUDA LAUT 888	30.00	29.68	PoleAndLine	7
259	Bitung	BINTANG LAUT 888	28.00	21.26	PoleAndLine	7
260	Bitung	ARVINA MAJO - 02	20.00	18.74	PoleAndLine	7
261	Bitung	ALDIRAH 36	52.00	44.00	PoleAndLine	7
262	Bitung	BERKAT NAFIRI	92.00	60.02	PurseSeine	7
263	Bitung	GABUNGAN JAYA MINA	86.00	61.00	PurseSeine	7
264	Bitung	LAUT TEBERAU 02	60.00	64.38	PurseSeine	7
265	Bitung	PUTRY VITA 04	27.00	20.22	PurseSeine	7
266	Bitung	SAKINAH 03	30.00	29.85	PurseSeine	7
267	Bitung	KARUNIA 82	30.00	30.80	PurseSeine	7
268	Bitung	LHYANA PUTRI	30.00	30.38	PurseSeine	7
269	Bitung	MEYLICIA	60.00	58.42	PurseSeine	7
270	Bitung	NAZILA 01	30.00	30.80	PurseSeine	7
271	Bitung	WINDRI - 01	22.00	20.85	PurseSeine	7
272	Bitung	AL ANSHAR 03	30.00	24.36	PurseSeine	7
273	Bitung	GALATIA	26.00	23.39	PurseSeine	7
274	Bitung	GOD BLESS 08	83.00	67.16	PurseSeine	7
275	Bitung	JEHOVAH YIREI	29.00	27.23	PurseSeine	7
276	Bitung	LAUT TEBERAU 05	57.00	56.05	PurseSeine	7
277	Bitung	MARANATHA 04	29.00	28.41	PurseSeine	7
278	Bitung	MARCOPOLO 02	21.00	19.25	PurseSeine	7
279	Bitung	METRO - 07	30.00	30.10	PurseSeine	7
280	Bitung	SAGITARIUS JAYA	28.00	26.57	PurseSeine	7
281	Bitung	SARI SEGARA - 288	98.00	57.12	PurseSeine	7
282	Bitung	SARI USAHA 07	86.00	72.38	PurseSeine	7
283	Bitung	BIMA SEJAHTERA 01	29.00	25.39	PurseSeine	7
284	Bitung	KALVARI I	30.00	30.71	PurseSeine	7
285	Bitung	MIKAYLA	30.00	29.79	PurseSeine	7
286	Bitung	NUR SYABANI - 08	30.00	28.00	PurseSeine	7
287	Bitung	SENAR 08	30.00	29.40	PurseSeine	7
288	Bitung	BAHTERA ALDUS	30.00	29.93	PurseSeine	7
289	Bitung	GOD BLESS 09	52.00	48.14	PurseSeine	7
290	Bitung	HASKITA	30.00	29.70	PurseSeine	7
291	Bitung	USAHA BAHARI 010	30.00	31.50	PurseSeine	7
292	Bitung	BERKAT ADONAI 01	27.00	25.69	PurseSeine	7
293	Bitung	BITUNG RAYA	85.00	67.69	PurseSeine	7
294	Bitung	TIBERIAS 09	6.00	5.91	DropOneLargeNatural	7

Table 5.1: Boat Information from OFP. Bitung

No	Program Site	Boat Name	GT Declared	GT Estimate	Fishing Gear	Fishing
295	Bitung	KELVIN I	30.00	29.39	PurseSeine	7
296	Bitung	SAMUDERA JAYA RAYA 1	96.00	58.31	PurseSeine	7
297	Bitung	SMIRNA - 03	30.00	29.40	PurseSeine	7
298	Bitung	TRIMAR 01	30.00	29.69	PurseSeine	7
299	Bitung	VICTORIA	29.00	26.18	PurseSeine	7
300	Bitung	AMAZIA 02	29.00	27.62	PurseSeine	7
301	Bitung	TUNA MAKMUR	6.00	5.22	DropOneLargeNatural	7
302	Bitung	TYBERIAS	6.00	5.22	DropOneLargeNatural	7
303	Bitung	RORO - 01	28.00	24.44	PurseSeine	7
304	Bitung	NABAWI 07	28.00	24.20	PurseSeine	7
305	Bitung	BERKAT ALDUS	30.00	31.57	PurseSeine	7
306	Bitung	GEO KRISTABELA	29.00	25.79	PurseSeine	7
307	Bitung	SENAR 010	29.00	28.80	PurseSeine	7
308	Bitung	GLORIA 01	48.00	44.01	PurseSeine	7
309	Bitung	REFINAY 02	59.00	58.91	PurseSeine	7
310	Bitung	VENIO JAYA	30.00	27.98	PurseSeine	7
311	Bitung	EL SHADAI 08	27.00	22.71	PurseSeine	7
312	Bitung	BINTANG MARIYOS 04	54.00	50.34	PurseSeine	7
313	Bitung	RORO - 02	30.00	32.20	PurseSeine	7
314	Bitung	JABIMA 888	60.00	47.72	PurseSeine	7
315	Bitung	JOYFUL 88	30.00	30.66	PurseSeine	7
316	Bitung	TERUS MAJU JAYA	90.00	55.76	PurseSeine	7
317	Bitung	HAFARA - 09	30.00	32.76	PurseSeine	7
318	Bitung	ANUGERAH SUMBER LAUT 88	53.00	50.50	PurseSeine	7
319	Bitung	VIERY	30.00	30.80	PurseSeine	7
320	Bitung	TUAMA LEOS	30.00	28.00	PurseSeine	7
321	Bitung	MARINDO - 00	39.00	39.66	PurseSeine	7
322	Bitung	FATAHILAH 02	30.00	29.99	PurseSeine	7
323	Bitung	SENAR - 09	30.00	30.14	PurseSeine	7
324	Bitung	POF - 19	88.00	61.88	PurseSeine	7
325	Bitung	SENTOSA - II	88.00	60.17	PurseSeine	7
326	Bitung	SENAR 03	58.00	66.64	PurseSeine	7
327	Bitung	MITRA JAYA SAMUDERA	30.00	29.56	PurseSeine	7
328	Bitung	SAGITARIUS RIK RIF	28.00	24.91	PurseSeine	7
329	Bitung	SUMBER ANUGERAH - IV	87.00	53.60	PurseSeine	7
330	Bitung	REDJEKI-07	79.00	58.31	PurseSeine	7
331	Bitung	MARANATHA 03	30.00	31.64	PurseSeine	7
332	Bitung	HALELUYA 09	29.00	27.36	PurseSeine	7
333	Bitung	MANNA	60.00	57.20	PurseSeine	7
334	Bitung	VENETIAN	6.00	5.65	DropOneLargeNatural	7
335	Bitung	BINTANG MARIYOS-03	29.00	26.18	PurseSeine	7
336	Bitung	RSB 05	30.00	30.14	PurseSeine	7
337	Bitung	OMEGA STAR 99	50.00	41.33	PurseSeine	7
338	Bitung	BALI PERMAI MAKMUR	96.00	61.36	PurseSeine	7
339	Bitung	SENTOSA - 20	99.00	70.57	PurseSeine	7
340	Bitung	KAIROS	30.00	29.42	PurseSeine	7
341	Bitung	CAHAYA BERLIAN 03	30.00	28.84	PurseSeine	7
342	Bitung	FAK FAK JAYA - 08	90.00	56.31	PurseSeine	7
343	Bitung	BINTANG JAYA MAKMUR	98.00	57.79	PurseSeine	7
344	Bitung	FAK FAK JAYA - 188	89.00	61.64	PurseSeine	7
345	Bitung	MAHANAIM - 01	47.00	44.89	PurseSeine	7
346	Bitung	LINGMEI	56.00	43.85	PurseSeine	7
347	Bitung	SERENA 01	25.00	23.73	PurseSeine	7
348	Bitung	PRINCE BLESSING	30.00	30.14	PurseSeine	7
349	Bitung	MULIA JAYA - 6	67.00	56.53	PurseSeine	7
350	Bitung	USAHA BAHARI - 03	48.00	45.68	PurseSeine	7
351	Bitung	ALDIRA 45	25.00	18.90	PurseSeine	7
352	Bitung	IMANUEL 1	17.00	14.70	PurseSeine	7
353	Bitung	PULAU PERMATA - V	85.00	57.12	PurseSeine	7
354	Bitung	AMAZIA 03	29.00	27.49	PurseSeine	7

Table 5.1: Boat Information from OFP. Bitung

No	Program Site	Boat Name	GT Declared	GT Estimate	Fishing Gear	Fishing
355	Bitung	REFINAY	25.00	24.81	PurseSeine	7
356	Bitung	FAK - FAK JAYA - 18	83.00	61.17	PurseSeine	7
357	Bitung	SENTOSA - I	62.00	53.69	PurseSeine	7
358	Bitung	POF - 06	58.00	54.98	PurseSeine	7
359	Bitung	PULAU PERMATA - I	59.00	58.91	PurseSeine	7
360	Bitung	ANUGERAH SUMBER LAUT 89	55.00	50.50	PurseSeine	7
361	Bitung	GOSYEN 1	60.00	55.27	PurseSeine	7
362	Bitung	ANAI AH	30.00	31.36	PurseSeine	7
363	Bitung	FRIMA MANDIRI 01	29.00	25.00	PurseSeine	7
364	Bitung	BOLANGO LAUT	26.00	23.03	PurseSeine	7
365	Bitung	KEMILAU ABADI - III	150.00	137.56	PurseSeine	7
366	Bitung	SINAR MESTIKA	198.00	138.80	PurseSeine	7
367	Bitung	KARUNIA 888	154.00	142.19	PurseSeine	7
368	Bitung	MINA KENCANA - 08	143.00	130.53	PurseSeine	7
369	Bitung	SINAR MESTIKA PASIFIK	149.00	138.50	PurseSeine	7
370	Bitung	SENTOSA - IV	157.00	143.04	PurseSeine	7
371	Bitung	MINA KENCANA - 09	116.00	100.03	PurseSeine	7
372	Bitung	CIPTA FRIMA JAYA 02	28.00	23.03	DropOneLargeNatural	7
373	Bitung	HALELUYA	28.00	23.03	DropOneLargeNatural	7
374	Bitung	JADE	27.00	22.71	DropOneLargeNatural	7
375	Bitung	KEIRA	27.00	22.71	DropOneLargeNatural	7
376	Bitung	MUTIARA INDAH	26.00	23.00	DropOneLargeNatural	7
377	Bitung	A G R	2.00	1.00	DropOneLargeNatural	7
378	Bitung	ABIGAIL 01	6.00	5.00	DropOneLargeNatural	7
379	Bitung	ADI KUSUMA A	89.00	89.00	PurseSeine	7
380	Bitung	ADNAN 01	6.00	5.00	DropOneLargeNatural	7
381	Bitung	ADRIEL 07	19.00	13.00	DropOneLargeNatural	7
382	Bitung	AFLI 01	2.00	1.00	DropOneLargeNatural	7
383	Bitung	AL ANSAR	29.00	23.00	PurseSeine	7
384	Bitung	AL ANSHAR 01	13.00	13.00	DropOneLargeNatural	7
385	Bitung	AL ANSHAR 02	30.00	23.00	PurseSeine	7
386	Bitung	ALBERKI	29.00	23.00	DropOneLargeNatural	7
387	Bitung	ALBERKI 011	5.00	5.00	PurseSeine	7
388	Bitung	ALBERKI 04	5.00	5.00	PurseSeine	7
389	Bitung	ALDUS	29.00	23.00	DropOneLargeNatural	7
390	Bitung	ALDUS STAR	29.00	23.00	PurseSeine	7
391	Bitung	ALMEERA	5.00	5.00	DropOneLargeNatural	7
392	Bitung	ALTRI 89	2.00	1.00	DropOneLargeNatural	7
393	Bitung	ANGELIA	5.00	5.00	DropOneLargeNatural	7
394	Bitung	ANUGERAH	6.00	6.00	PurseSeine	7
395	Bitung	ANUGERAH 62	29.00	29.00	PurseSeine	7
396	Bitung	ANUGERAH BAHAGIA	29.00	23.00	DropOneLargeNatural	7
397	Bitung	ANUGERAH BAHARI_BITUNG	4.00	4.00	DropOneLargeNatural	7
398	Bitung	ARDILA	29.00	23.00	PurseSeine	7
399	Bitung	ARDILAH 03	30.00	23.00	PurseSeine	7
400	Bitung	ARDILAH 04	29.00	23.00	PurseSeine	7
401	Bitung	AYURAH 02	27.00	19.00	DropOneLargeNatural	7
402	Bitung	BAHTERA NUH	17.00	13.00	DropOneLargeNatural	7
403	Bitung	BAKU SAYANG 02	89.00	53.00	PoleAndLine	7
404	Bitung	BAROKAH 01	6.00	5.00	DropOneLargeNatural	7
405	Bitung	BAROKAH 09	6.00	5.00	DropOneLargeNatural	7
406	Bitung	BAROKAH 27	16.00	13.00	DropOneLargeNatural	7
407	Bitung	BARU TERBIT	29.00	23.00	PurseSeine	7
408	Bitung	BELICIA	29.00	29.00	PurseSeine	7
409	Bitung	BENEDICTA	6.00	5.00	DropOneLargeNatural	7
410	Bitung	BERDOA	1.00	1.00	DropOneLargeNatural	7
411	Bitung	BERKAT_BITUNG	5.00	5.00	PurseSeine	7
412	Bitung	BERKAT ABADI	4.00	4.00	DropOneLargeNatural	7
413	Bitung	BERKAT HERMON	27.00	19.00	DropOneLargeNatural	7
414	Bitung	BERKAT MULIA	28.00	28.00	PurseSeine	7

Table 5.1: Boat Information from OFP. Bitung

No	Program Site	Boat Name	GT Declared	GT Estimate	Fishing Gear	Fishing
415	Bitung	BERKAT RIZKY	6.00	5.00	DropOneLargeNatural	7
416	Bitung	BERKAT SAHABAT	6.00	5.00	DropOneLargeNatural	7
417	Bitung	BERTU 01	5.00	5.00	DropOneLargeNatural	7
418	Bitung	BETANIA JAYA	24.00	24.00	PurseSeine	7
419	Bitung	BETANIA SEJAHTERA	29.00	23.00	PurseSeine	7
420	Bitung	BINTANG ARISKA	24.00	24.00	PurseSeine	7
421	Bitung	BINTANG ARISKA 3	28.00	28.00	PurseSeine	7
422	Bitung	BINTANG LAUT	6.00	5.00	DropOneLargeNatural	7
423	Bitung	BINTANG MARIYOS	6.00	5.00	DropOneLargeNatural	7
424	Bitung	BINTANG TERANG	18.00	23.00	PurseSeine	7
425	Bitung	BINTANG TERANG 01	28.00	23.00	PurseSeine	7
426	Bitung	BINTANG TIMUR_BITUNG	6.00	5.00	DropOneLargeNatural	7
427	Bitung	BITUNG RAYA 03	89.00	53.00	PoleAndLine	7
428	Bitung	BITUNG TUNA JAYA 89	13.00	10.80	DropOneLargeNatural	7
429	Bitung	BLESSING NJ	10.00	10.00	DropOneLargeNatural	7
430	Bitung	BLUE VIN 04	6.00	5.00	DropOneLargeNatural	7
431	Bitung	BLUE VIN 05	6.00	5.00	DropOneLargeNatural	7
432	Bitung	BURUNG LAUT	6.00	5.00	DropOneLargeNatural	7
433	Bitung	BURUNG LAUT 02	6.00	5.00	DropOneLargeNatural	7
434	Bitung	BURUNG LAUT 03	6.00	5.00	DropOneLargeNatural	7
435	Bitung	CAHAYA ARAFAH 02	5.00	5.00	DropOneLargeNatural	7
436	Bitung	CAHAYA BINTANG SAMUDRA	5.00	5.00	DropOneLargeNatural	7
437	Bitung	CAHAYA DAULINSA	29.00	23.00	PoleAndLine	7
438	Bitung	CAHAYA PANGKEP	29.00	23.00	DropOneLargeNatural	7
439	Bitung	CAKRAWALA 06	5.00	5.00	DropOneLargeNatural	7
440	Bitung	CANCER	5.00	5.00	DropOneLargeNatural	7
441	Bitung	CANCER 01	30.00	18.00	LongMultipleLargeNatural	7
442	Bitung	CANCER 06	5.00	5.00	DropOneLargeNatural	7
443	Bitung	CEMERLANG BAHARI 01	5.00	5.00	DropOneLargeNatural	7
444	Bitung	CEMPAKA 03	5.00	5.00	PurseSeine	7
445	Bitung	CHARLIE JAYA 1	5.00	5.00	DropOneLargeNatural	7
446	Bitung	CHESTER 02	6.00	5.00	DropOneLargeNatural	7
447	Bitung	CHRISTI	6.00	5.00	DropOneLargeNatural	7
448	Bitung	CINTA DAMAI	6.00	5.00	DropOneLargeNatural	7
449	Bitung	CLIFVANSKO 01	6.00	5.00	DropOneLargeNatural	7
450	Bitung	COELACANTH	6.00	6.00	LongMultipleLargeNatural	7
451	Bitung	COELACANTH 05	6.00	6.00	LongMultipleLargeNatural	7
452	Bitung	DAHLIA 06	6.00	5.00	DropOneLargeNatural	7
453	Bitung	DALMA 01	6.00	5.00	DropOneLargeNatural	7
454	Bitung	DAVE 01	6.00	5.00	DropOneLargeNatural	7
455	Bitung	DEVI 02	6.00	5.00	DropOneLargeNatural	7
456	Bitung	DEVI 03	6.00	5.00	DropOneLargeNatural	7
457	Bitung	DEVILA	30.00	23.00	PurseSeine	7
458	Bitung	DEWA BARUNA	6.00	5.00	DropOneLargeNatural	7
459	Bitung	DIOSKURI 8	89.00	40.00	PoleAndLine	7
460	Bitung	DOLPHIN STAR	6.00	5.00	DropOneLargeNatural	7
461	Bitung	DUA SUDARA	6.00	5.00	DropOneLargeNatural	7
462	Bitung	DUNYA BULAT	6.00	6.00	PurseSeine	7
463	Bitung	EFRAT	6.00	5.00	DropOneLargeNatural	7
464	Bitung	EL BETHEL	6.00	6.00	PurseSeine	7
465	Bitung	EL ROI	6.00	5.00	DropOneLargeNatural	7
466	Bitung	EL SHADAI	6.00	5.00	DropOneLargeNatural	7
467	Bitung	EL SHADDAI	6.00	5.00	DropOneLargeNatural	7
468	Bitung	EL SHADDAI 01	6.00	6.00	PurseSeine	7
469	Bitung	ELANG JAYA 01	6.00	5.00	DropOneLargeNatural	7
470	Bitung	ELISABET 01	6.00	5.00	DropOneLargeNatural	7
471	Bitung	ELISABETH 02	6.00	5.00	DropOneLargeNatural	7
472	Bitung	ELISABETH 03	6.00	5.00	DropOneLargeNatural	7
473	Bitung	ELKANA	6.00	5.00	DropOneLargeNatural	7
474	Bitung	ELKANAH	6.00	5.00	DropOneLargeNatural	7

Table 5.1: Boat Information from OFP. Bitung

No	Program Site	Boat Name	GT Declared	GT Estimate	Fishing Gear	Fishing
475	Bitung	ELSA 01	6.00	5.00	DropOneLargeNatural	7
476	Bitung	ENDRY JAYA	6.00	5.00	DropOneLargeNatural	7
477	Bitung	ERICRISTINE 08	6.00	5.00	DropOneLargeNatural	7
478	Bitung	ETHAN GOFIR	6.00	5.00	DropOneLargeNatural	7
479	Bitung	EUNZO	6.00	6.00	PurseSeine	7
480	Bitung	EXODUS	6.00	5.00	DropOneLargeNatural	7
481	Bitung	FAK FAK JAYA 189	6.00	6.00	PurseSeine	7
482	Bitung	FELICIA	6.00	5.00	DropOneLargeNatural	7
483	Bitung	FERDYANTO	6.00	5.00	DropOneLargeNatural	7
484	Bitung	FERDYANTO 02	6.00	5.00	DropOneLargeNatural	7
485	Bitung	FERONIKA	6.00	5.00	DropOneLargeNatural	7
486	Bitung	FERYAN STAR	6.00	6.00	PurseSeine	7
487	Bitung	FINAY ABADI	28.00	23.00	PurseSeine	7
488	Bitung	FITRIKA 07	6.00	6.00	PoleAndLine	7
489	Bitung	FORTUNER 737	6.00	5.00	DropOneLargeNatural	7
490	Bitung	GABRIEL	6.00	5.00	DropOneLargeNatural	7
491	Bitung	GABRIEL 03	6.00	5.00	DropOneLargeNatural	7
492	Bitung	GARUDA 08	21.00	23.00	PurseSeine	7
493	Bitung	GEMINI 77	12.00	12.00	PurseSeine	7
494	Bitung	GENESARET 1	12.00	12.00	DropOneLargeNatural	7
495	Bitung	GENESARET 2	30.00	23.00	PurseSeine	7
496	Bitung	GENESARET 3	30.00	23.00	PurseSeine	7
497	Bitung	GENESARET STAR	13.00	13.00	DropOneLargeNatural	7
498	Bitung	GLORY 09	13.00	13.00	DropOneLargeNatural	7
499	Bitung	GLORY 27	13.00	13.00	DropOneLargeNatural	7
500	Bitung	GLORY 36	14.00	14.00	DropOneLargeNatural	7
501	Bitung	GOD BLESS 02	64.00	53.00	PoleAndLine	7
502	Kota Manado	GOSYEN	14.00	14.00	PurseSeine	7
503	Bitung	GREEN EMERALD	15.00	15.00	PurseSeine	7
504	Bitung	HALELUYA	15.00	15.00	PurseSeine	7
505	Bitung	HALELUYA 03	30.00	23.00	PurseSeine	7
506	Bitung	HARAPAN JAYA 4	29.00	23.00	PurseSeine	7
507	Bitung	HELSINKI	16.00	16.00	PurseSeine	7
508	Bitung	HENDRY 02	16.00	13.00	DropOneLargeNatural	7
509	Bitung	HOLLYWOOD 70	17.00	13.00	DropOneLargeNatural	7
510	Bitung	HOSANA	17.00	13.00	DropOneLargeNatural	7
511	Kepulauan Sitaro	IMANUEL JEY	17.00	17.00	DropOneLargeNatural	7
512	Bitung	IMMANUEL 14	17.00	13.00	DropOneLargeNatural	7
513	Bitung	INDO LAUTAN SAKTI 6	17.00	13.00	DropOneLargeNatural	7
514	Bitung	INDOTUNA 168	98.00	57.00	PurseSeine	7
515	Bitung	INDOTUNA 268	128.00	57.00	PurseSeine	7
516	Bitung	INKA MINA 782	18.00	13.00	DropOneLargeNatural	7
517	Bitung	JADE	18.00	18.00	PurseSeine	7
518	Bitung	JAY JHON	18.00	13.00	DropOneLargeNatural	7
519	Bitung	JAYA BALI BERSAUDARA 10	18.00	18.00	PurseSeine	7
520	Bitung	JAYA BITUNG 88	25.00	23.00	PurseSeine	7
521	Bitung	JAYA BITUNG 89	87.00	53.00	PoleAndLine	7
522	Bitung	JEAN MARC	18.00	13.00	DropOneLargeNatural	7
523	Bitung	JERIKHO	19.00	19.00	PurseSeine	7
524	Bitung	JEVAL CRES	19.00	13.00	DropOneLargeNatural	7
525	Bitung	JITU	19.00	13.00	DropOneLargeNatural	7
526	Bitung	JOELBAN III	19.00	13.00	DropOneLargeNatural	7
527	Bitung	JOVAN 02	20.00	19.40	PurseSeine	7
528	Bitung	JUAN 02	20.00	13.00	DropOneLargeNatural	7
529	Bitung	JUNIOR	20.00	13.00	DropOneLargeNatural	7
530	Bitung	JUPITER JAYA	20.00	13.00	DropOneLargeNatural	7
531	Bitung	KARIANGKAMANG	20.00	13.00	DropOneLargeNatural	7
532	Bitung	KARIZANTIKA	20.00	13.00	DropOneLargeNatural	7
533	Bitung	KARTIKA 09	20.00	13.00	DropOneLargeNatural	7
534	Bitung	KARUNIAKU	19.00	23.00	PurseSeine	7

Table 5.1: Boat Information from OFP. Bitung

No	Program Site	Boat Name	GT Declared	GT Estimate	Fishing Gear	Fishing
535	Bitung	KEIRA	20.00	20.00	PurseSeine	7
536	Bitung	KEMILAU ABADI	20.00	20.00	PurseSeine	7
537	Bitung	KEMILAU ABADI I	83.00	57.00	PurseSeine	7
538	Bitung	KENJI	21.00	19.00	DropOneLargeNatural	7
539	Bitung	KENJI 03	21.00	19.00	DropOneLargeNatural	7
540	Bitung	KENNETH JHON	21.00	19.00	DropOneLargeNatural	7
541	Bitung	KHARISMA	21.00	21.00	PurseSeine	7
542	Bitung	KING ALIF	18.00	23.00	PurseSeine	7
543	Bitung	KITAI MEGUMI	21.00	19.00	DropOneLargeNatural	7
544	Bitung	KUPANG JAYA 89	22.00	19.00	DropOneLargeNatural	7
545	Bitung	LA GRACIA	30.00	23.00	PurseSeine	7
546	Bitung	LA GRACIA 4	72.00	57.00	PurseSeine	7
547	Bitung	LA GRACIA 5	97.00	57.00	PurseSeine	7
548	Bitung	LAHAI ROY	22.00	19.00	DropOneLargeNatural	7
549	Bitung	LAHAI ROY 02	22.00	19.00	DropOneLargeNatural	7
550	Bitung	LAHAI ROY 03	22.00	19.00	DropOneLargeNatural	7
551	Bitung	LAMBELU 02	23.00	23.00	PurseSeine	7
552	Bitung	LAUT TIGRIS	24.00	24.00	PurseSeine	7
553	Bitung	LJ BLUE	24.00	19.00	DropOneLargeNatural	7
554	Bitung	LOUISE	24.00	19.00	DropOneLargeNatural	7
555	Bitung	LUCKY 08	24.00	19.00	DropOneLargeNatural	7
556	Bitung	LUCKY 88	24.00	19.00	DropOneLargeNatural	7
557	Bitung	MADIDIHANG	24.00	19.00	DropOneLargeNatural	7
558	Bitung	MADUMA	30.00	23.00	PurseSeine	7
559	Bitung	MALBERS 00	28.00	23.00	PurseSeine	7
560	Bitung	MALBERS 02	30.00	23.00	PurseSeine	7
561	Bitung	MANDIRI 03	24.00	19.00	DropOneLargeNatural	7
562	Bitung	MARANATHA	24.00	24.00	PurseSeine	7
563	Bitung	MARK JUNLIE 02	24.00	19.00	DropOneLargeNatural	7
564	Bitung	MARLIN	24.00	19.00	DropOneLargeNatural	7
565	Bitung	MASA INDAH	24.00	19.00	DropOneLargeNatural	7
566	Bitung	MEGA 207	24.00	24.00	PurseSeine	7
567	Bitung	MEGA 707	24.00	24.00	PurseSeine	7
568	Bitung	MEGA 802	24.00	19.00	DropOneLargeNatural	7
569	Bitung	MEGA 803	24.00	19.00	DropOneLargeNatural	7
570	Bitung	MEGAHAHGO	24.00	24.00	PurseSeine	7
571	Bitung	MEKA STAR	24.00	19.00	DropOneLargeNatural	7
572	Bitung	MEKAR SAMUDRA	25.00	25.00	PurseSeine	7
573	Bitung	MELATI 06	25.00	19.00	DropOneLargeNatural	7
574	Bitung	MELATI 08	25.00	19.00	DropOneLargeNatural	7
575	Bitung	MELATI 09	25.00	19.00	DropOneLargeNatural	7
576	Bitung	MELATI 18	25.00	19.00	DropOneLargeNatural	7
577	Bitung	MELATI 27	25.00	19.00	DropOneLargeNatural	7
578	Bitung	MERPATI 88	22.00	23.00	PurseSeine	7
579	Bitung	METRO JAYA 02	26.00	19.00	DropOneLargeNatural	7
580	Bitung	MICKEY 107	26.00	26.00	PurseSeine	7
581	Bitung	MILENIUM	27.00	19.00	DropOneLargeNatural	7
582	Bitung	MINA MARITIM 039	27.00	27.00	PurseSeine	7
583	Bitung	MINA MARITIM 88	27.00	19.00	DropOneLargeNatural	7
584	Bitung	MITRA NAFIRI	27.00	27.00	PurseSeine	7
585	Bitung	MUJUR JAYA 01	28.00	23.00	DropOneLargeNatural	7
586	Bitung	MUTIARA INDAH	26.00	23.00	PurseSeine	7
587	Bitung	MUTIARA SELATAN	28.00	23.00	DropOneLargeNatural	7
588	Bitung	MUTIARA SENTOSA	20.00	18.00	LongMultipleLargeNatural	7
589	Bitung	NAFIRI 02	28.00	28.00	PurseSeine	7
590	Bitung	NAFIRI 04	28.00	23.00	DropOneLargeNatural	7
591	Bitung	NAFIRI 05	28.00	23.00	DropOneLargeNatural	7
592	Bitung	NAFIRI 06	28.00	23.00	DropOneLargeNatural	7
593	Bitung	NAFIRI 07	28.00	23.00	DropOneLargeNatural	7
594	Bitung	NAFIRI JAYA	28.00	27.80	PurseSeine	7

Table 5.1: Boat Information from OFP. Bitung

No	Program Site	Boat Name	GT Declared	GT Estimate	Fishing Gear	Fishing
595	Bitung	NAZARET	28.00	23.00	DropOneLargeNatural	7
596	Bitung	NAZARET 02	28.00	23.00	DropOneLargeNatural	7
597	Bitung	NELAYAN 2016-119	28.00	23.00	DropOneLargeNatural	7
598	Bitung	NELAYAN 2016-120	28.00	23.00	DropOneLargeNatural	7
599	Bitung	NELAYAN JAYA 168	28.00	28.00	PurseSeine	7
600	Bitung	NELAYAN JAYA 169	89.00	57.00	PurseSeine	7
601	Bitung	NOAH	28.00	23.00	DropOneLargeNatural	7
602	Bitung	NURJAYA ADI 05	28.00	28.00	PurseSeine	7
603	Bitung	NURMALA	28.00	23.00	DropOneLargeNatural	7
604	Bitung	NUSANTARA	28.00	23.00	DropOneLargeNatural	7
605	Bitung	NUSANTARA 88	28.00	28.00	PurseSeine	7
606	Bitung	NUSANTARA JAYA 88	28.00	28.00	PurseSeine	7
607	Bitung	OMEGA STAR 88	28.00	28.00	PurseSeine	7
608	Bitung	ORIME	28.00	23.00	DropOneLargeNatural	7
609	Bitung	PANCARAN BERKAT	28.00	23.00	DropOneLargeNatural	7
610	Bitung	PANDU 07	28.00	23.00	DropOneLargeNatural	7
611	Bitung	PELANGI_BITUNG	28.00	23.00	DropOneLargeNatural	7
612	Bitung	PEPATO INDAH	28.00	23.00	DropOneLargeNatural	7
613	Bitung	PERINDO MAJU 2	28.00	28.00	PurseSeine	7
614	Bitung	PLUTO	83.00	53.00	PoleAndLine	7
615	Bitung	PLUTO 03	57.00	57.00	PurseSeine	7
616	Bitung	POF 18	28.00	28.00	PurseSeine	7
617	Bitung	POHON CINTA	28.00	23.00	DropOneLargeNatural	7
618	Bitung	PORSEA	28.00	23.00	DropOneLargeNatural	7
619	Bitung	POSEIDON	28.00	23.00	DropOneLargeNatural	7
620	Bitung	PRECHRIS	28.00	23.00	DropOneLargeNatural	7
621	Bitung	PUTRA BAHARI	28.00	28.00	PurseSeine	7
622	Bitung	PUTRA JAYA_BITUNG	29.00	23.00	DropOneLargeNatural	7
623	Bitung	PUTRI KHANSA	28.00	23.00	PurseSeine	7
624	Bitung	PUTRI LAUT 01	29.00	29.00	PurseSeine	7
625	Bitung	PUTRI LAUT 02	29.00	29.00	PurseSeine	7
626	Bitung	PUTRI LAUT 03	29.00	29.00	PurseSeine	7
627	Bitung	PUTRI LAUT 04	29.00	29.00	PurseSeine	7
628	Bitung	PUTRI LAUT 05	29.00	27.80	PurseSeine	7
629	Bitung	PUTRI LAUT 07	28.00	23.00	PurseSeine	7
630	Bitung	PUTRI LELABI	29.00	23.00	DropOneLargeNatural	7
631	Bitung	PUTRI VITA	29.00	23.00	PurseSeine	7
632	Bitung	PUTRI VITA 02	29.00	23.00	PurseSeine	7
633	Bitung	RAFAEL 02	30.00	23.00	DropOneLargeNatural	7
634	Bitung	RAHAYU JAYA 1	30.00	23.00	DropOneLargeNatural	7
635	Bitung	RAHMAD ILLAHI	30.00	23.00	DropOneLargeNatural	7
636	Bitung	RAHMATULLAH	30.00	23.00	DropOneLargeNatural	7
637	Bitung	RAHMATULLAH 02	30.00	23.00	DropOneLargeNatural	7
638	Bitung	RAHMATULLAH 03	30.00	23.00	DropOneLargeNatural	7
639	Bitung	RAJAWALI	30.00	27.80	PurseSeine	7
640	Bitung	RAKSATAMA 01	30.00	23.00	DropOneLargeNatural	7
641	Bitung	RATU ROSARI 1	28.00	23.00	PurseSeine	7
642	Bitung	REGITA 01	30.00	23.00	DropOneLargeNatural	7
643	Bitung	REINBOW	30.00	23.00	DropOneLargeNatural	7
644	Bitung	REYVILIA	30.00	23.00	DropOneLargeNatural	7
645	Bitung	RITSEL 2	30.00	23.00	DropOneLargeNatural	7
646	Bitung	RIVA THEM STAR	30.00	23.00	DropOneLargeNatural	7
647	Bitung	RIYAN	30.00	23.00	DropOneLargeNatural	7
648	Bitung	ROLAN 04	30.00	23.00	PurseSeine	7
649	Bitung	ROXAN 01	33.00	23.00	DropOneLargeNatural	7
650	Bitung	SAKINAH	42.00	40.00	DropOneLargeNatural	7
651	Bitung	SAMARIA	45.00	40.00	DropOneLargeNatural	7
652	Bitung	SAMARU 06	24.00	18.00	LongMultipleLargeNatural	7
653	Bitung	SAMARU 10	46.00	46.00	LongMultipleLargeNatural	7
654	Bitung	SAMUDERA JAYA RAYA 3	48.00	48.00	PurseSeine	7

Table 5.1: Boat Information from OFP. Bitung

No	Program Site	Boat Name	GT Declared	GT Estimate	Fishing Gear	Fishing
655	Bitung	SAMUDERA JAYA RAYA I	48.00	48.00	PurseSeine	7
656	Bitung	SARI CAKALANG	27.00	23.00	PurseSeine	7
657	Bitung	SARI CAKALANG 03	54.00	54.00	PurseSeine	7
658	Bitung	SARI CAKALANG 11	56.00	56.00	PurseSeine	7
659	Bitung	SARI USAHA 02	56.00	56.00	PurseSeine	7
660	Bitung	SARI USAHA 07	86.00	57.00	PurseSeine	7
661	Bitung	SARI USAHA 08	82.00	53.00	PoleAndLine	7
662	Bitung	SARI USAHA 09	58.00	58.00	PoleAndLine	7
663	Bitung	SASMONI	62.00	53.00	DropOneLargeNatural	7
664	Bitung	SATUHUK 01	64.00	53.00	DropOneLargeNatural	7
665	Bitung	SEKAN STAR	64.00	53.00	DropOneLargeNatural	7
666	Bitung	SELAR 01	64.00	53.00	DropOneLargeNatural	7
667	Bitung	SELAT LEMBEH	67.00	53.00	DropOneLargeNatural	7
668	Bitung	SENTOSA 20	70.00	70.00	PurseSeine	7
669	Bitung	SENTOSA V	77.00	77.00	PurseSeine	7
670	Bitung	SENTOSA VII	78.00	57.00	DropOneLargeNatural	7
671	Bitung	SERUNAI	78.00	57.00	DropOneLargeNatural	7
672	Bitung	SHALOM	78.00	57.00	DropOneLargeNatural	7
673	Bitung	SHINEDO	78.00	57.00	DropOneLargeNatural	7
674	Bitung	SILOAM 01	80.00	57.00	DropOneLargeNatural	7
675	Bitung	SINAR 16	81.00	57.00	DropOneLargeNatural	7
676	Bitung	SINAR 2	81.00	57.00	DropOneLargeNatural	7
677	Bitung	SINAR BAHARI 02	89.00	53.00	PoleAndLine	7
678	Bitung	SINAR BAHARI 07	82.00	82.00	PurseSeine	7
679	Bitung	SINAR MAULANA 061	83.00	57.00	DropOneLargeNatural	7
680	Bitung	SINGKANAUNG 08	83.00	57.00	DropOneLargeNatural	7
681	Bitung	SINSAN	83.00	57.00	DropOneLargeNatural	7
682	Bitung	SOLA GRATIA	83.00	57.00	DropOneLargeNatural	7
683	Bitung	SOLAFIDE EXPRES	86.00	57.00	DropOneLargeNatural	7
684	Bitung	STELA	86.00	57.00	DropOneLargeNatural	7
685	Bitung	STELLA MARIS	87.00	57.00	DropOneLargeNatural	7
686	Bitung	STEVEN 02	87.00	57.00	DropOneLargeNatural	7
687	Bitung	SUMBER BERKAT	87.00	57.00	DropOneLargeNatural	7
688	Bitung	SYAHIRA	87.00	57.00	DropOneLargeNatural	7
689	Bitung	TABITA 02	39.00	57.00	PurseSeine	7
690	Bitung	TEGUH JAYA	89.00	57.00	DropOneLargeNatural	7
691	Bitung	TENGGIRI 16	89.00	57.00	DropOneLargeNatural	7
692	Bitung	TENGGIRI 2	89.00	57.00	DropOneLargeNatural	7
693	Bitung	TEODORA	89.00	57.00	DropOneLargeNatural	7
694	Bitung	THERESA	90.00	57.00	DropOneLargeNatural	7
695	Bitung	THIPHILIA	92.00	57.00	DropOneLargeNatural	7
696	Bitung	TIBERIAS	96.00	57.00	DropOneLargeNatural	7
697	Bitung	TIBERIAS 02	96.00	57.00	DropOneLargeNatural	7
698	Bitung	TIGA PUTRA	97.00	57.00	DropOneLargeNatural	7
699	Bitung	TIP 102	99.00	57.00	PurseSeine	7
700	Bitung	TORAJA GREEN	99.00	57.00	DropOneLargeNatural	7
701	Bitung	TRI TUNGGAL 03	99.00	57.00	DropOneLargeNatural	7
702	Bitung	TRIHAN	99.00	57.00	DropOneLargeNatural	7
703	Bitung	TRIPLE D 00	99.00	57.00	DropOneLargeNatural	7
704	Bitung	TUNA KING	22.00	18.00	LongMultipleLargeNatural	7
705	Bitung	TUNA LESTARI 35	99.00	57.00	DropOneLargeNatural	7
706	Bitung	TUNA QUEEN	100.00	57.00	DropOneLargeNatural	7
707	Bitung	TUNA RIZKY	107.00	57.00	DropOneLargeNatural	7
708	Bitung	TUNA SUPER	107.00	57.00	DropOneLargeNatural	7
709	Bitung	TUNAS JAYA 06	128.00	57.00	DropOneLargeNatural	7
710	Bitung	Tunas Jaya D 07	128.00	57.00	DropOneLargeNatural	7
711	Bitung	VANIA	128.00	57.00	DropOneLargeNatural	7
712	Bitung	VENIO 03	78.00	53.00	PoleAndLine	7
713	Bitung	VENIO 07	80.00	53.00	PoleAndLine	7
714	Bitung	VENUS JAYA	149.00	57.00	DropOneLargeNatural	7

Table 5.1: Boat Information from OFP. Bitung

No	Program Site	Boat Name	GT Declared	GT Estimate	Fishing Gear	Fishing
715	Bitung	VIOLA 01	26.00	23.00	PurseSeine	7
716	Bitung	WAHYU	1.00	1.00	DropOneLargeNatural	7
717	Bitung	WAHYUDIN	1.00	1.00	DropOneLargeNatural	7
718	Bitung	WIRA	1.00	1.00	DropOneLargeNatural	7
719	Bitung	WIRA 02	1.00	1.00	DropOneLargeNatural	7
720	Bitung	YAPAN STAR 05	29.00	23.00	PurseSeine	7
721	Bitung	YASIN 01	0.00	2.00	PurseSeine	7
722	Bitung	YELLOW FIN 05	1.00	1.00	DropOneLargeNatural	7
723	Bitung	YUDIA STAR 02	0.00	2.00	PurseSeine	7
724	Bitung	YUFPRYL	1.00	1.00	DropOneLargeNatural	7
725	Bitung	YUSFITA JAYA	1.00	1.00	DropOneLargeNatural	7
726	Bitung	ZAHWA ZACKY 01	1.00	1.00	DropOneLargeNatural	7
727	Bitung	ZAHWA ZACKY 03	1.00	1.00	DropOneLargeNatural	7
728	Bitung	ZAIDAN	1.00	1.00	DropOneLargeNatural	7
729	Bitung	ZULFAQAR 02	0.00	2.00	PurseSeine	7
730	Bitung	SINAR - 02	70.00	53.10	PoleAndLine	7
731	Bitung	BAKU SAYANG - 01	90.00	53.10	PoleAndLine	7
732	Bitung	BITUNG RAYA 1	79.00	53.10	PoleAndLine	7
733	Bitung	SINAR BAHARI	85.00	53.10	PoleAndLine	7
734	Bitung	MITRA SEJATI	133.00	57.00	PurseSeine	7
735	Bitung	FAK FAK JAYA II	144.00	57.00	PurseSeine	7
736	Bitung	MINA KENCANA 09	116.00	57.00	PurseSeine	7
737	Bitung	NUSANTARA JAYA 02	127.00	57.00	PurseSeine	7
738	Bitung	MENTARI 888	120.00	57.00	PurseSeine	7
739	Bitung	NUSANTARA II	89.00	57.00	PurseSeine	7
740	Bitung	NUSANTARA V	126.00	57.00	PurseSeine	7
741	Bitung	KANAAN STAR 01	37.00	57.00	PurseSeine	7
742	Bitung	MINA KENCANA 15	100.00	57.00	PurseSeine	7
743	Bitung	USAHA BAHARI 02	38.00	57.00	PurseSeine	7
744	Bitung	INDOTUNA 368	78.00	57.00	PurseSeine	7
745	Bitung	MINA HASLINDO	96.00	57.00	PurseSeine	7
746	Bitung	FAK FAK JAYA - 18	83.00	57.00	PurseSeine	7
747	Bitung	ALDUS STAR 01	66.00	57.00	PurseSeine	7
748	Bitung	MARANATHA 02	39.00	57.00	PurseSeine	7
749	Bitung	SARI USAHA 01	56.00	57.00	PurseSeine	7
750	Bitung	SAGITA RI 4	30.00	23.00	PurseSeine	7
751	Bitung	AMAZIA 01	29.00	23.00	PurseSeine	7
752	Bitung	RAJAWALI A	60.00	57.00	PurseSeine	7
753	Bitung	FARLEN 1	29.00	23.00	PurseSeine	7
754	Bitung	MATTOANGING 01	30.00	23.00	PurseSeine	7
755	Bitung	INKAMINA 916	40.00	57.00	PurseSeine	7
756	Bitung	MITRA 04	29.00	23.00	PurseSeine	7
757	Bitung	MUTIARA LAUT 01	59.00	57.00	PurseSeine	7
758	Bitung	NAZWA 01	29.00	23.00	PurseSeine	7
759	Bitung	MARCOPOLO INDAH	28.00	23.00	PurseSeine	7
760	Bitung	EFRATA	29.00	23.00	PurseSeine	7
761	Bitung	BAHARI STAR	30.00	23.00	PurseSeine	7
762	Bitung	FATAHILLAH	30.00	23.00	PurseSeine	7
763	Bitung	TELUK KAHAWUNGAN	28.00	23.00	PurseSeine	7
764	Bitung	RATU BALGIS	29.00	23.00	PurseSeine	7
765	Bitung	YAPAN STAR - 01	27.00	23.00	PurseSeine	7
766	Bitung	ZAMARETNA 01	30.00	23.00	PurseSeine	7
767	Bitung	MARCOPOLO - 02	28.00	23.00	PurseSeine	7
768	Bitung	KARUNIA	30.00	23.00	PurseSeine	7
769	Bitung	CIPTA FRIMA JAYA 02	28.00	23.00	PurseSeine	7
770	Bitung	IMANUEL JEY 08	28.00	23.00	PurseSeine	7
771	Bitung	MITRA USAHA - 22	29.00	23.00	PurseSeine	7
772	Bitung	SAMUDRA KHANSA	30.00	23.00	PurseSeine	7
773	Bitung	ATLANTIC SENTOSA NO. 06	152.00	41.00	LongMultipleLargeNatural	7
774	Bitung	SARI DEWATA I	29.00	18.50	LongMultipleLargeNatural	7

Table 5.1: Boat Information from OFP. Bitung

No	Program Site	Boat Name	GT Declared	GT Estimate	Fishing Gear	Fishing
775	Bitung	SURYA BAHAGIA	28.00	18.50	LongMultipleLargeNatural	7
776	Bitung	PRIMA UTAMA	29.00	18.50	LongMultipleLargeNatural	7
777	Bitung	SWARNA JAYA - 3	25.00	18.50	LongMultipleLargeNatural	7
778	Bitung	PULAU DEWATA	28.00	18.50	LongMultipleLargeNatural	7
779	Bitung	BAGAN BERSAUDARA	27.00	18.50	LongMultipleLargeNatural	7
780	Bitung	BINTANG MAS 5	27.00	18.50	LongMultipleLargeNatural	7
781	Bitung	INTAN 07	30.00	18.50	LongMultipleLargeNatural	7
782	Bitung	POF 53	17.00	12.60	DropOneLargeNatural	7
783	Bitung	SIMAMPALU 3	56.00	53.10	DropOneLargeNatural	7
784	Bitung	SINGKANAUNG 10	32.00	22.90	DropOneLargeNatural	7
785	Bitung	KAYLA	3.00	1.00	DropOneLargeNatural	7
786	Bitung	RIZKY	1.00	1.00	DropOneLargeNatural	7
787	Bitung	NAFIRI 03	28.00	22.60	DropOneLargeNatural	7
788	Bitung	KIV 01	1.00	1.00	DropOneLargeNatural	7
789	Bitung	TARSIUS PM 22	19.00	12.60	DropOneLargeNatural	7
790	Bitung	INKA MINA 720	29.00	22.90	DropOneLargeNatural	7
791	Bitung	MANALAGI 01	18.00	12.60	DropOneLargeNatural	7
792	Bitung	FIODORA	1.00	1.00	DropOneLargeNatural	7
793	Bitung	JILBERT	2.00	1.00	DropOneLargeNatural	7
794	Bitung	ABENWIN	5.00	5.50	DropOneLargeNatural	7
795	Bitung	ALFA STAR	1.00	1.00	DropOneLargeNatural	7
796	Bitung	SOLA SCRIPTURA	2.00	1.00	DropOneLargeNatural	7
797	Bitung	KARTIKA 88	3.00	1.00	DropOneLargeNatural	7
798	Bitung	KUPANG PERMAI I	47.00	40.20	DropOneLargeNatural	7
799	Bitung	STEVEN 01	1.00	1.00	DropOneLargeNatural	7
800	Bitung	INKA MINA 914	30.00	22.90	DropOneLargeNatural	7
801	Bitung	JECKY 888	1.00	1.00	DropOneLargeNatural	7
802	Bitung	SYALOM	3.00	1.00	DropOneLargeNatural	7
803	Bitung	INKA MINA 460	30.00	22.90	DropOneLargeNatural	7
804	Bitung	AIR LAUT 2	2.00	1.00	DropOneLargeNatural	7
805	Bitung	SURYA LAIPUU 02	5.00	5.50	DropOneLargeNatural	7
806	Bitung	TIGA SUDARA	2.00	1.00	DropOneLargeNatural	7
807	Bitung	JOY QUEENDA	3.00	1.00	DropOneLargeNatural	7
808	Bitung	HAWILA	2.00	1.00	DropOneLargeNatural	7
809	Bitung	GOD BLESS 01	16.00	12.60	DropOneLargeNatural	7
810	Bitung	INKA MINA 925	32.00	22.90	DropOneLargeNatural	7
811	Bitung	INKA MINA 715	30.00	22.90	DropOneLargeNatural	7
812	Bitung	MARKHEIT 06	54.00	53.10	DropOneLargeNatural	7
813	Bitung	GLINKA	2.00	1.00	DropOneLargeNatural	7
814	Bitung	EFRATA 03	3.00	1.00	DropOneLargeNatural	7
815	Bitung	SUMBER KASIH	2.00	1.00	DropOneLargeNatural	7
816	Bitung	POF 07	45.00	40.20	DropOneLargeNatural	7
817	Bitung	CAR	1.00	1.00	DropOneLargeNatural	7
818	Bitung	RUMBI II	28.00	22.60	DropOneLargeNatural	7
819	Bitung	ANGEL 02	13.00	10.80	DropOneLargeNatural	7
820	Bitung	CAKRAWALA 04	1.00	1.00	DropOneLargeNatural	7
821	Bitung	TRINAD JAYA	2.00	1.00	DropOneLargeNatural	7
822	Bitung	BINTANG MARIYOS	6.00	5.50	DropOneLargeNatural	7
823	Bitung	AGR	3.00	1.00	DropOneLargeNatural	7
824	Bitung	INKA MINA 454	30.00	22.90	DropOneLargeNatural	7
825	Bitung	INKAMINA 913	30.00	22.90	DropOneLargeNatural	7
826	Bitung	ZEFANYA 01	6.00	5.50	DropOneLargeNatural	7
827	Bitung	LEROY	6.00	5.50	DropOneLargeNatural	7
828	Bitung	SURYA LAIPUU	5.00	5.50	DropOneLargeNatural	7
829	Bitung	LANGGENG SETIA	28.00	22.60	DropOneLargeNatural	7
830	Bitung	CHANG FI RON	2.00	1.00	DropOneLargeNatural	7
831	Bitung	REGITA - 01	16.00	12.60	DropOneLargeNatural	7
832	Bitung	HASIHOLAN	13.00	10.80	DropOneLargeNatural	7
833	Bitung	NAFIRI	10.00	7.00	DropOneLargeNatural	7
834	Bitung	ESTHER 04	17.00	12.60	DropOneLargeNatural	7

Table 5.1: Boat Information from OFP. Bitung

No	Program Site	Boat Name	GT Declared	GT Estimate	Fishing Gear	Fishing
835	Bitung	MM 23	4.00	4.30	DropOneLargeNatural	7
836	Bitung	KING FISHER	16.00	12.60	DropOneLargeNatural	7
837	Bitung	THEODORA 01	6.00	5.50	DropOneLargeNatural	7
838	Bitung	HASANA	23.00	19.00	DropOneLargeNatural	7
839	Bitung	TEMBOAN	4.00	4.30	DropOneLargeNatural	7
840	Bitung	NELAYAN 2017 - 639	5.00	5.50	DropOneLargeNatural	7
841	Bitung	YASIN 08	21.00	19.00	DropOneLargeNatural	7
842	Bitung	SOLI DEO GLORIA	5.00	5.50	DropOneLargeNatural	7
843	Bitung	SLAMET MULYO TAMBAH REJEKI	26.00	18.50	DropOneLargeNatural	7
844	Bitung	NADINE 01	3.00	1.00	DropOneLargeNatural	7
845	Bitung	FEBIOLA	1.00	1.00	DropOneLargeNatural	7
846	Bitung	NELAYAN 2017 - 608	5.00	5.50	DropOneLargeNatural	7
847	Bitung	MINA MARITIM 89	27.00	18.50	DropOneLargeNatural	7
848	Bitung	CHRISTANIA	1.00	1.00	DropOneLargeNatural	7
849	Bitung	BULU SARAUNG I	9.00	7.00	DropOneLargeNatural	7
850	Bitung	KENNETH	5.00	5.50	DropOneLargeNatural	7
851	Bitung	KUPA KUPA INDAH	3.00	1.00	DropOneLargeNatural	7
852	Bitung	TUNA LESTARI - 19	17.00	12.60	DropOneLargeNatural	7
853	Bitung	IMANUEL	2.00	1.00	DropOneLargeNatural	7
854	Bitung	KARTIKA - 45	6.00	5.50	DropOneLargeNatural	7
855	Bitung	GLORY - 27	14.00	10.80	DropOneLargeNatural	7
856	Bitung	EL-BETHEL	17.00	12.60	DropOneLargeNatural	7
857	Bitung	SILIAM	1.00	1.00	DropOneLargeNatural	7
858	Bitung	INKAMINA 720	29.00	22.90	DropOneLargeNatural	7
859	Bitung	JAYA SAMUDERA - 05A	21.00	19.00	DropOneLargeNatural	7
860	Bitung	SURYA PERKASA - 07	15.00	10.80	DropOneLargeNatural	7
861	Bitung	ALJON	2.00	1.00	DropOneLargeNatural	7
862	Bitung	PUTRA LELABY	2.00	1.00	DropOneLargeNatural	7
863	Bitung	TRI TUNGGAL - 01	1.00	1.00	DropOneLargeNatural	7
864	Bitung	BERKAT MANDIRI 00	30.00	22.90	DropOneLargeNatural	7
865	Bitung	CAR 26	1.00	1.00	DropOneLargeNatural	7
866	Bitung	YELLOVIN - 01	6.00	5.50	DropOneLargeNatural	7
867	Bitung	FIRDAUS - 02	29.00	22.90	DropOneLargeNatural	7
868	Bitung	TARSIOUS PM 23	13.00	10.80	DropOneLargeNatural	7
869	Bitung	SUMBER PELITA - 02	5.00	5.50	DropOneLargeNatural	7
870	Bitung	FAJAR 10	6.00	5.50	DropOneLargeNatural	7
871	Bitung	YRENE	1.00	1.00	DropOneLargeNatural	7
872	Bitung	CHARITY	2.00	1.00	DropOneLargeNatural	7
873	Bitung	MELATI 36	6.00	5.50	DropOneLargeNatural	7
874	Bitung	MELATI 45	6.00	5.50	DropOneLargeNatural	7
875	Bitung	GABRIEL 9	2.00	1.00	DropOneLargeNatural	7
876	Bitung	ELGIBOR	4.00	4.30	DropOneLargeNatural	7
877	Bitung	DIMANUSRYA	2.00	1.00	DropOneLargeNatural	7
878	Bitung	SINAR GORONTALO	8.00	7.00	DropOneLargeNatural	7
879	Bitung	SAMUDRA	28.00	22.60	DropOneLargeNatural	7
880	Bitung	TUNA LESTARI - 20	10.00	7.00	DropOneLargeNatural	7
881	Bitung	KIM SELLY 02	1.00	1.00	DropOneLargeNatural	7
882	Bitung	KARYA MANDIRI	1.00	1.00	DropOneLargeNatural	7
883	Bitung	KAKENDAGE	18.00	12.60	DropOneLargeNatural	7
884	Bitung	MIGUEL JOHN	6.00	5.50	DropOneLargeNatural	7
885	Bitung	SYAFIQ	3.00	1.00	DropOneLargeNatural	7
886	Bitung	BERKAT USAHA	3.00	1.00	DropOneLargeNatural	7
887	Bitung	NELAYAN 2016 - 58	26.00	18.50	DropOneLargeNatural	7
888	Bitung	NUTRINDO PM - 6	23.00	19.00	DropOneLargeNatural	7
889	Bitung	ESTHER I	1.00	1.00	DropOneLargeNatural	7
890	Bitung	CANCER 08	30.00	22.90	DropOneLargeNatural	7
891	Bitung	SAGITARIUS RIK-RIF	28.00	22.60	DropOneLargeNatural	7
892	Bitung	AL AQSA 01	5.00	5.50	DropOneLargeNatural	7
893	Bitung	YUSFITA STAR	5.00	5.50	DropOneLargeNatural	7
894	Bitung	PETARUNG	6.00	5.50	DropOneLargeNatural	7

Table 5.1: Boat Information from OFP. Bitung

No	Program Site	Boat Name	GT Declared	GT Estimate	Fishing Gear	Fishing
895	Bitung	INKAMINA 914	30.00	22.90	DropOneLargeNatural	7
896	Bitung	ANUGERAH BAHARI 18	5.00	5.50	DropOneLargeNatural	7
897	Bitung	KAHURIPAN 3	26.00	18.50	DropOneLargeNatural	7
898	Bitung	YULOVIN 04	6.00	5.50	DropOneLargeNatural	7
899	Bitung	BINTANG TIMUR 33	15.00	10.80	DropOneLargeNatural	7
900	Bitung	MANADO PERMAI - II	27.00	18.50	DropOneLargeNatural	7
901	Bitung	HARAPAN INDAH	22.00	19.00	DropOneLargeNatural	7
902	Bitung	RAHMATULLAH - 01	12.00	10.80	DropOneLargeNatural	7
903	Bitung	SANGKAKALA	6.00	5.50	DropOneLargeNatural	7
904	Bitung	AULIA 02	1.00	1.00	DropOneLargeNatural	7
905	Bitung	AMAZIA 04	21.00	19.00	DropOneLargeNatural	7
906	Bitung	PERMATA BUNDA - 02	14.00	10.80	DropOneLargeNatural	7
907	Bitung	ZEN 01	2.00	1.00	DropOneLargeNatural	7
908	Bitung	NELAYAN 2017 - 854	13.00	10.80	DropOneLargeNatural	7
909	Bitung	DUA PUTRA	5.00	5.50	DropOneLargeNatural	7
910	Bitung	ELSA 02	27.00	18.50	DropOneLargeNatural	7
911	Bitung	ERICHARISTINE 77	6.00	5.50	DropOneLargeNatural	7
912	Bitung	TUJUH BINTANG	6.00	5.50	DropOneLargeNatural	7
913	Bitung	CHOCTAW	12.00	10.80	DropOneLargeNatural	7
914	Bitung	BERTUH	17.00	12.60	DropOneLargeNatural	7
915	Bitung	SINAR BERKAT	28.00	22.60	DropOneLargeNatural	7
916	Bitung	KHANSA PRATAMA	30.00	22.90	DropOneLargeNatural	7
917	Bitung	MARTIAS JAYA	5.00	5.50	DropOneLargeNatural	7
918	Bitung	SARI USAHA 03	23.00	19.00	DropOneLargeNatural	7
919	Bitung	BERKAT BAHARI - 01	14.00	10.80	DropOneLargeNatural	7
920	Bitung	RIVER	28.00	22.60	DropOneLargeNatural	7
921	Bitung	INKAMINA 454	30.00	22.90	DropOneLargeNatural	7
922	Bitung	ANUGRAH	5.00	5.50	DropOneLargeNatural	7
923	Bitung	OSEANA	30.00	22.90	DropOneLargeNatural	7
924	Bitung	GUTOA	1.00	1.00	DropOneLargeNatural	7
925	Bitung	HOSIANIA	3.00	1.00	DropOneLargeNatural	7
926	Bitung	ALBAKOR	6.00	5.50	DropOneLargeNatural	7
927	Bitung	RIYAN 02	3.00	1.00	DropOneLargeNatural	7
928	Bitung	JACK SPARROW	3.00	1.00	DropOneLargeNatural	7
929	Bitung	NELAYAN 2017 - 607	5.00	5.50	DropOneLargeNatural	7
930	Bitung	NELAYAN 2017 - 931	13.00	10.80	DropOneLargeNatural	7
931	Bitung	POSEIDON 01	20.00	12.60	DropOneLargeNatural	7
932	Bitung	KORINA JAYA	18.00	12.60	DropOneLargeNatural	7
933	Bitung	MEKA STAR 09	6.00	5.50	DropOneLargeNatural	7
934	Bitung	SEFINA	30.00	22.90	DropOneLargeNatural	7
935	Bitung	BERKAT KARUNIA - 3	23.00	19.00	DropOneLargeNatural	7
936	Bitung	PUTRA JAYA	4.00	4.30	DropOneLargeNatural	7
937	Bitung	NELAYAN 2017 - 797	6.00	5.50	DropOneLargeNatural	7
938	Bitung	FENESIA 01	30.00	22.90	DropOneLargeNatural	7
939	Bitung	JUVITA INDAH	20.00	12.60	DropOneLargeNatural	7
940	Bitung	DELTANIL	16.00	12.60	DropOneLargeNatural	7
941	Bitung	MULIN - 11	19.00	12.60	DropOneLargeNatural	7
942	Bitung	NELAYAN 2017 - 796	6.00	5.50	DropOneLargeNatural	7
943	Bitung	SAMSONI	5.00	5.50	DropOneLargeNatural	7
944	Bitung	APOLLO - 02	20.00	12.60	DropOneLargeNatural	7
945	Bitung	ANUGRAH LAUT	6.00	5.50	DropOneLargeNatural	7
946	Bitung	NELAYAN 2017 - 680	5.00	5.50	DropOneLargeNatural	7
947	Bitung	NELAYAN 2017 - 856	13.00	10.80	DropOneLargeNatural	7
948	Bitung	ERICAHIRSTINE 07	13.00	10.80	DropOneLargeNatural	7
949	Bitung	MIRDIANI - 03	6.00	5.50	DropOneLargeNatural	7
950	Bitung	NELAYAN 2016 - 38	20.00	12.60	DropOneLargeNatural	7
951	Bitung	ETHANGOFIR - 01	15.00	10.80	DropOneLargeNatural	7
952	Bitung	DESIFER	5.00	5.50	DropOneLargeNatural	7
953	Bitung	NUTRINDO PM - 2	29.00	22.90	DropOneLargeNatural	7
954	Bitung	BARU PERCAYA - 2	25.00	19.00	DropOneLargeNatural	7

Table 5.1: Boat Information from OFP. Bitung

No	Program Site	Boat Name	GT Declared	GT Estimate	Fishing Gear	Fishing
955	Bitung	JASUMA 01	3.00	1.00	DropOneLargeNatural	7
956	Bitung	BELLVRYL JAYA	17.00	12.60	DropOneLargeNatural	7
957	Bitung	BERKAT	5.00	5.50	DropOneLargeNatural	7
958	Bitung	CAKRAWALA - 05	2.00	1.00	DropOneLargeNatural	7
959	Bitung	CAHAYA ARAFAH 99	5.00	5.50	DropOneLargeNatural	7
960	Bitung	DAVEHARDSON	5.00	5.50	DropOneLargeNatural	7
961	Bitung	ARIEL - 04	14.00	10.80	DropOneLargeNatural	7
962	Bitung	ANUGRAH ILAHI	25.00	19.00	DropOneLargeNatural	7
963	Bitung	ELIKA	5.00	5.50	DropOneLargeNatural	7
964	Bitung	PUTRI VITA - 04	27.00	18.50	DropOneLargeNatural	7
965	Bitung	YASIN - 01	28.00	22.60	DropOneLargeNatural	7
966	Bitung	AN - NUR 01	12.00	10.80	DropOneLargeNatural	7
967	Bitung	ERIK	4.00	4.30	DropOneLargeNatural	7
968	Bitung	AIRA STAR	6.00	5.50	DropOneLargeNatural	7
969	Bitung	WANDA 01	2.00	1.00	DropOneLargeNatural	7
970	Bitung	TARSIUS PM 18	20.00	12.60	DropOneLargeNatural	7
971	Bitung	TARSIUS PM 19	20.00	12.60	DropOneLargeNatural	7
972	Bitung	TARSIUS PM 20	17.00	12.60	DropOneLargeNatural	7
973	Bitung	KAHURIPAN 1	28.00	22.60	DropOneLargeNatural	7
974	Bitung	TIGRIS	5.00	5.50	DropOneLargeNatural	7
975	Bitung	ANDALAN 01	14.00	10.80	DropOneLargeNatural	7
976	Bitung	YOSUA	4.00	4.30	DropOneLargeNatural	7
977	Bitung	SINAR NUSANTARA	6.00	5.50	DropOneLargeNatural	7
978	Bitung	DUNIA BARU I	3.00	1.00	DropOneLargeNatural	7
979	Bitung	KARSILA INDAH	5.00	5.50	DropOneLargeNatural	7
980	Bitung	AL VIKRAN	3.00	1.00	DropOneLargeNatural	7
981	Bitung	AR - RAZAQ	5.00	5.50	DropOneLargeNatural	7
982	Bitung	GENESIS - 68	6.00	5.50	DropOneLargeNatural	7
983	Bitung	SARI SEGARA 286	25.00	19.00	DropOneLargeNatural	7
984	Bitung	SINAR JAYA	6.00	5.50	DropOneLargeNatural	7
985	Bitung	GLORY - 18	14.00	10.80	DropOneLargeNatural	7
986	Bitung	METRO JAYA - 09	30.00	22.90	DropOneLargeNatural	7
987	Bitung	PUTERI BAHARI	30.00	22.90	DropOneLargeNatural	7
988	Bitung	CAHAYA ARAFAH	30.00	22.90	DropOneLargeNatural	7
989	Bitung	EL SHADAI 02	2.00	1.00	DropOneLargeNatural	7
990	Bitung	DEWI BAHARI	4.00	4.30	DropOneLargeNatural	7
991	Bitung	NELAYAN 2017 - 853	13.00	10.80	DropOneLargeNatural	7
992	Bitung	ALDIN 01	6.00	5.50	DropOneLargeNatural	7
993	Bitung	NAFIRI 09	14.00	10.80	DropOneLargeNatural	7
994	Bitung	BETESDA	1.00	1.00	DropOneLargeNatural	7
995	Bitung	MANADO PERMAI - I	39.00	22.90	DropOneLargeNatural	7
996	Bitung	MAB	2.00	1.00	DropOneLargeNatural	7
997	Bitung	REDJEKI - 02	48.00	40.20	DropOneLargeNatural	7
998	Bitung	MAJESTY	5.00	5.50	DropOneLargeNatural	7
999	Bitung	SENGKANAUNG	3.00	1.00	DropOneLargeNatural	7
1000	Bitung	TAFFY	6.00	5.50	DropOneLargeNatural	7
1001	Bitung	CANCER 68	29.00	22.90	DropOneLargeNatural	7
1002	Bitung	SANGKAKALA - 01	6.00	5.50	DropOneLargeNatural	7
1003	Bitung	CAHAYA TUNA	18.00	12.60	DropOneLargeNatural	7
1004	Bitung	HALELUYA 05	15.00	10.80	DropOneLargeNatural	7
1005	Bitung	MORO SENENG - 00	6.00	5.50	DropOneLargeNatural	7
1006	Bitung	MINAESA 01	18.00	12.60	DropOneLargeNatural	7
1007	Bitung	GABRIEL 73	6.00	5.50	DropOneLargeNatural	7
1008	Bitung	AMPIBI	5.00	5.50	DropOneLargeNatural	7
1009	Bitung	TARSIUS PM 17	20.00	12.60	DropOneLargeNatural	7
1010	Bitung	NUTRINDO PM - 5	23.00	19.00	DropOneLargeNatural	7
1011	Bitung	NAFIRI 08	12.00	10.80	DropOneLargeNatural	7
1012	Bitung	ANUGERAH ALAM	26.00	18.50	DropOneLargeNatural	7
1013	Bitung	JORDAN FISH	18.00	12.60	DropOneLargeNatural	7
1014	Bitung	RAHMAD ILLAHI 08	5.00	5.50	DropOneLargeNatural	7

Table 5.1: Boat Information from OFP. Bitung

No	Program Site	Boat Name	GT Declared	GT Estimate	Fishing Gear	Fishing
1015	Bitung	ALMIRA 01	1.00	1.00	DropOneLargeNatural	7
1016	Bitung	MINA MARITIM 029	35.00	22.90	DropOneLargeNatural	7
1017	Bitung	GABRIEL 53	5.00	5.50	DropOneLargeNatural	7
1018	Bitung	NURJAYA ADI - 02	17.00	12.60	DropOneLargeNatural	7
1019	Bitung	NURJAYA ADI - 06	6.00	5.50	DropOneLargeNatural	7
1020	Bitung	BENEDICT	30.00	22.90	DropOneLargeNatural	7
1021	Bitung	ARTA PRIMA	2.00	1.00	DropOneLargeNatural	7
1022	Bitung	ANUGERAH 00	5.00	5.50	DropOneLargeNatural	7
1023	Bitung	PUTRY VITA STAR	6.00	6.50	DropOneLargeNatural	7
1024	Bitung	PUTRA TURATEA	5.00	5.50	DropOneLargeNatural	7
1025	Bitung	MELATI 54	6.00	5.50	DropOneLargeNatural	7
1026	Bitung	INKAMINA 925	32.00	22.90	DropOneLargeNatural	7
1027	Bitung	BARU PERCAYA - 3	25.00	19.00	DropOneLargeNatural	7
1028	Bitung	ARIEL	18.00	12.60	DropOneLargeNatural	7
1029	Bitung	KJTM84	22.00	19.00	DropOneLargeNatural	7
1030	Bitung	NELAYAN 2017 - 850	13.00	10.80	DropOneLargeNatural	7
1031	Bitung	KAHURIPAN 2	27.00	18.50	DropOneLargeNatural	7
1032	Bitung	NUTRINDO PM - 7	22.00	19.00	DropOneLargeNatural	7
1033	Bitung	ARHAPAN	6.00	5.50	DropOneLargeNatural	7
1034	Bitung	BINTANG JAYA - 02	18.00	12.60	DropOneLargeNatural	7
1035	Bitung	TRITON	28.00	22.60	DropOneLargeNatural	7
1036	Bitung	RELEVANT	4.00	4.30	DropOneLargeNatural	7
1037	Bitung	ALWAN STAR	6.00	7.00	DropOneLargeNatural	7
1038	Bitung	ALWAN	6.00	5.50	DropOneLargeNatural	7
1039	Bitung	SHOPIE 01	20.00	12.60	DropOneLargeNatural	7
1040	Bitung	NELAYAN 2016 - 57	26.00	18.50	DropOneLargeNatural	7
1041	Bitung	CANCER 168	30.00	22.90	DropOneLargeNatural	7
1042	Bitung	ALBERKI - 011	5.00	5.50	DropOneLargeNatural	7
1043	Bitung	IMANUEL 88	5.00	5.50	DropOneLargeNatural	7
1044	Bitung	ELOHIM - 708	27.00	18.50	DropOneLargeNatural	7
1045	Bitung	TALENTA 51	20.00	12.60	DropOneLargeNatural	7
1046	Bitung	FIKRI 76	21.00	19.00	DropOneLargeNatural	7
1047	Bitung	TUWOKONA	23.00	19.00	DropOneLargeNatural	7
1048	Bitung	GARETH STAR	5.00	5.50	DropOneLargeNatural	7
1049	Bitung	HOSANA - 18	27.00	18.50	DropOneLargeNatural	7

5.1.3 Follow-up

PPS Bitung location is recommended for CODRS contract because there are many dedicated vessels for tuna fisheries. Many skippers are willing to join CODRS program.

5.1.4 Important Contact

Name : Yan Nurcholis
Affiliation : Boat owner and boat captain of KM. Nelayan 2017-953
Contact : 081356930333

Name : Marcel
Affiliation : PT. Jaya Bitung Mandiri
Contact : 081340128760

Name : Anderson Maluenseng
Affiliation : Boat captain of KM. Dioskuri 09
Contact : 081298896138

5.1.5 References

5.1.6 Figures



Figure 5.2: Catch from weighted dropline single large hook vessels in OFP. Bitung



Figure 5.3: Catch from pole and line vessel



Figure 5.4: Weighted dropline single large hook vessels or Known as pumpboat



Figure 5.5: Pole and line vessel Dioskuri 09 (89GT) PT. Jaya Bitung Mandiri port



Figure 5.6: Typical C-hook used by weighted dropline single large hook targeting large tuna

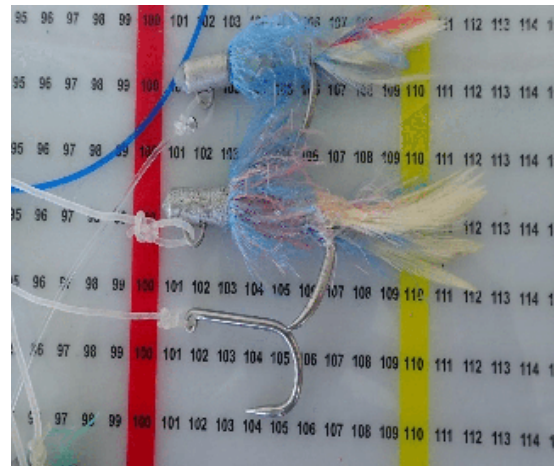


Figure 5.7: Handmade hook used by pole and line vessels

5.2 FLP. Kema, Minahasa Utara

PPI. Kema

Table 5.2: Boat Information from FLP. Kema, Minahasa Utara

No	Program Site	Boat Name	GT Declared	GT Estimate	Fishing Gear	Fishing Area
1	Minahasa Utara	KM. Ledy Star 01	27.00	24.10	DropOneLargeNatural	715
2	Bitung	QUBAIS	14.00	11.60	DropOneLargeNatural	715

5.3 FP. Belang, Minahasa Tenggara

PP. Belang, Minahasa Tenggara

Table 5.3: Boat Information from FP. Belang, Minahasa Tenggara

No	Program Site	Boat Name	GT Declared	GT Estimate	Fishing Gear	Fishing Area
1	Bitung	KM. Melstesye	28.00	23.00	PurseSeine	715
2	Minahasa Tenggara	ARVINA 03	13.00	13.00	DropOneLargeNatural	715
3	Minahasa Tenggara	HENDRY	16.00	16.00	DropOneLargeNatural	715
4	Minahasa Tenggara	JAYA SAMUDERAKU	18.00	18.00	DropOneLargeNatural	715
5	Minahasa Tenggara	JEHOVAH YIREY	19.00	19.00	PurseSeine	715
6	Minahasa Tenggara	JEY LOVE	19.00	19.00	DropOneLargeNatural	715
7	Minahasa Tenggara	NELAYAN JAYA 88	28.00	28.00	DropOneLargeNatural	715
8	Minahasa Tenggara	POF 06	28.00	28.00	PurseSeine	715

6 Gorontalo Province

6.1 FP. Kwandang, North Gorontalo

6.1.1 Background and Survey Practicalities

Background

Pelabuhan Perikanan (PP) / Fishing Port (FP) Kwandang is one of the main landing in Gorontalo province integrated with fish auction area. Fishing fleet in this harbour is dominated by Mandar vessels (25 - >30GT) targeting small pelagic fish, skipjack and tuna. PP Kwandang is. The gear types are trolling without kite multiple small hook, single hook driftline, dropline weighted multiple small hook with artificial bait, and dropline weighted single large hook. There are also many snapper and grouper vessels based in this harbour. The harbour activities are concentrated in the (early) morning and in the evening depending on the time of fisherman land their catch.



Figure 6.1: Location of FP. Kwandang (take from Google Map)

Survey team

Survey was done by Yeremia Apridianto and Dwaitd Kolibongso

Period visited

This survey was conducted on 7-8 September 2018

How to get there

FP. Kwandang is located in northern-side of the Gorontalo province. The travel time from Jalaluddin International Airport to Gorontalo City takes around 1.5-2 hours using car or public transportation.

6.1.2 Fleet Description

Only found one offloading vessel using the fishing gear of weighted dropline single large hook. Mandar boat has size 15GT with fishing trip duration between 10-14 days. Main

fishing ground is in Sangihe and surrounded area (WPP 716). Total catch is around 1.500 kg. The dominant catch is yellowfin tuna and skipjack. Most of the catch are sold to the local market, restaurants. Only good quality tuna is brought to the processing company in Bitung

Table 6.1: Boat Information from FP. Kwandang, North Gorontalo

No	Program Site	Boat Name	GT Declared	GT Estimate	Fishing Gear	Fishing Area
1	Gorontalo Utara	ARIEL 04	14.00	14.00	DropOneLargeNatural	715

6.1.3 Follow-up

This location is not recommended for CODRS program because almost of the Mandar fishermen could not speak bahasa. Therefore, it will be difficult to communicate and train the fishermen.

6.1.4 Important Contact

6.1.5 References

6.1.6 Figures



Figure 6.2: Mandar boat in FP. Kwandang



Figure 6.3: Catch from Mandar boat in FP. Kwandang

6.2 FP. Tenda, Gorontalo

6.2.1 Background and Survey Practicalities

Background

FP. Tenda is a fishing port integrated with fish auction area. Fishing fleet consisted of mix gears mini purse seine and weighted dropline single large hook vessels (25 - >30 GT) targeting small pelagic fish, skipjack and large tuna.



Figure 6.4: Location of FP. Tenda, Gorontalo city

Survey team

Survey was done by Yeremia Apridianto and Duitd Kolibongso

Period visited

This survey was conducted on 9-11 September 2018.

How to get there

FP. Tenda is located in the southern Gorontalo City. It can be reached by car or public transportation from Jalaluddin International Airport Gorontalo by traveling around 1.5-2 hours or 15 minutes from the city centre by using ojek or bentor.

6.2.2 Fleet Description

Two fishing vessels that are dominant are mixgear mini purse seine and weighted dropline single large hook vessels (25 - >30 GT). The target catch is small pelagic fish, skipjack and large tuna. FP. Tenda is one of the landing port for pelagic fish in Gorontalo City.

Table 6.2: Boat Information from FP. Tenda, Gorontalo

No	Program Site	Boat Name	GT Declared	GT Estimate	Fishing Gear	Fishing Area
1	Kota Gorontalo	KM. Frima Jaya	17.00	13.50	PurseSeine	715
2	Kota Gorontalo	Agape	6.00	6.50	PurseSeine	715
3	Kota Gorontalo	Al- Rahman	18.00	13.50	PurseSeine	715
4	Kota Gorontalo	Albar Star	7.00	6.70	PurseSeine	715

Table 6.2: Boat Information from FP. Tenda, Gorontalo

No	Program Site	Boat Name	GT Declared	GT Estimate	Fishing Gear	Fishing Area
5	Kota Gorontalo	Alesia - 01	22.00	21.30	PurseSeine	715
6	Kota Gorontalo	An nur- 01	12.00	11.90	DropOneLargeNatural	715
7	Kota Gorontalo	Andika Star	6.00	6.50	PurseSeine	715
8	Kota Gorontalo	Anugrah 2015	8.00	6.70	PurseSeine	715
9	Kota Gorontalo	Ariel_Gorontalo	18.00	13.50	DropOneLargeNatural	715
10	Kota Gorontalo	Ariel 04	14.00	11.90	DropOneLargeNatural	715
11	Kota Gorontalo	Aries 00	5.00	5.80	DropOneLargeNatural	715
12	Kota Gorontalo	Armina	20.00	21.30	PurseSeine	715
13	Kota Gorontalo	Armina Jaya	23.00	24.50	PurseSeine	715
14	Kota Gorontalo	Beringin Jaya	21.00	21.30	PurseSeine	715
15	Kota Gorontalo	Berjuang	6.00	6.50	PurseSeine	715
16	Kota Gorontalo	Berjuang 03	23.00	24.50	PurseSeine	715
17	Kota Gorontalo	Bone Jaya Lestari	18.00	13.50	DropOneLargeNatural	715
18	Kota Gorontalo	Bone Prima	6.00	6.50	DropOneLargeNatural	715
19	Kota Gorontalo	Bulls Indo Raya 01	21.00	21.30	DropOneLargeNatural	715
20	Kota Gorontalo	Cipta Frima Jaya	30.00	24.50	PurseSeine	715
21	Kota Gorontalo	F3-02	18.00	13.50	PurseSeine	715
22	Kota Gorontalo	Fajar 01	6.00	6.50	DropOneLargeNatural	715
23	Kota Gorontalo	Fajar 03	21.00	21.30	DropOneLargeNatural	715
24	Kota Gorontalo	Fajar 04	18.00	13.50	DropOneLargeNatural	715
25	Kota Gorontalo	Fajar 05	30.00	24.50	PurseSeine	715
26	Kota Gorontalo	Fajar 09	26.00	24.50	PurseSeine	715
27	Kota Gorontalo	Fasifik	6.00	6.50	DropOneLargeNatural	715
28	Kota Gorontalo	Fitra	4.00	4.50	PurseSeine	715
29	Kota Gorontalo	Fitrika 05	26.00	24.50	PurseSeine	715
30	Kota Gorontalo	Frima 07	18.00	13.50	PurseSeine	715
31	Kota Gorontalo	Frima Jaya	17.00	13.50	PurseSeine	715
32	Kota Gorontalo	Frima Mandiri 01	29.00	24.50	PurseSeine	715
33	Kota Gorontalo	Frima Mandiri 02	23.00	24.50	PurseSeine	715
34	Kota Gorontalo	Frima Surya Bahari	26.00	24.50	PurseSeine	715
35	Kota Gorontalo	Garuda Mas	6.00	6.50	PurseSeine	715
36	Kota Gorontalo	Inka Mina 213	32.00	24.50	DropOneLargeNatural	715
37	Kota Gorontalo	Inka Mina 215	32.00	24.50	DropOneLargeNatural	715
38	Kota Gorontalo	Inka Mina 216	32.00	24.50	PoleAndLine	715
39	Kota Gorontalo	Inka Mina 218	32.00	24.50	PurseSeine	715
40	Kota Gorontalo	Inka Mina 465	32.00	24.50	PurseSeine	715
41	Kota Gorontalo	Inka Mina 466	32.00	24.50	DropOneLargeNatural	715
42	Kota Gorontalo	Inka Mina 469	32.00	24.50	DropOneLargeNatural	715
43	Kota Gorontalo	Inka Mina 721	32.00	24.50	PurseSeine	715
44	Kota Gorontalo	Inka Mina 723	32.00	24.50	DropOneLargeNatural	715
45	Kota Gorontalo	Inka Mina 725	32.00	24.50	PurseSeine	715
46	Kota Gorontalo	Inka Mina 726	32.00	24.50	PurseSeine	715
47	Kota Gorontalo	Inka Mina 727	32.00	24.50	PurseSeine	715
48	Kota Gorontalo	Inka Mina 731	32.00	24.50	DropOneLargeNatural	715
49	Kota Gorontalo	Inka Mina 918	32.00	24.50	PurseSeine	715
50	Kota Gorontalo	Inka Mina 921	32.00	24.50	DropOneLargeNatural	715
51	Kota Gorontalo	Inka Mina 923	32.00	24.50	PurseSeine	715
52	Kota Gorontalo	Inka Mina 924	32.00	24.50	PurseSeine	715
53	Kota Gorontalo	Inka Mina 953	32.00	24.50	PurseSeine	715
54	Kota Gorontalo	Inter Harapan	21.00	21.30	PurseSeine	715
55	Kota Gorontalo	Lajang Pasir 02	4.00	4.50	PurseSeine	715
56	Kota Gorontalo	Link Expres	5.00	5.80	DropOneLargeNatural	715
57	Kota Gorontalo	LS 002	5.00	5.80	DropOneLargeNatural	715
58	Kota Gorontalo	LS 003	5.00	5.80	DropOneLargeNatural	715
59	Kota Gorontalo	LS 006	5.00	5.80	DropOneLargeNatural	715
60	Kota Gorontalo	LS 009	5.00	5.80	DropOneLargeNatural	715
61	Kota Gorontalo	LS 020	5.00	5.80	DropOneLargeNatural	715
62	Kota Gorontalo	LS 024	5.00	5.80	DropOneLargeNatural	715
63	Kota Gorontalo	LS 025	5.00	5.80	DropOneLargeNatural	715
64	Kota Gorontalo	LS 027	5.00	5.80	DropOneLargeNatural	715

Table 6.2: Boat Information from FP. Tenda, Gorontalo

No	Program Site	Boat Name	GT Declared	GT Estimate	Fishing Gear	Fishing Area
65	Kota Gorontalo	LS 032	5.00	5.80	DropOneLargeNatural	715
66	Kota Gorontalo	LS 035	5.00	5.80	DropOneLargeNatural	715
67	Kota Gorontalo	LS 041	5.00	5.80	DropOneLargeNatural	715
68	Kota Gorontalo	LS 044	5.00	5.80	DropOneLargeNatural	715
69	Kota Gorontalo	LS 045	5.00	5.80	DropOneLargeNatural	715
70	Kota Gorontalo	LS 052	5.00	5.80	DropOneLargeNatural	715
71	Kota Gorontalo	LS 053	5.00	5.80	DropOneLargeNatural	715
72	Kota Gorontalo	LS 054	5.00	5.80	DropOneLargeNatural	715
73	Kota Gorontalo	LS 055	5.00	5.80	DropOneLargeNatural	715
74	Kota Gorontalo	LS 057	5.00	5.80	DropOneLargeNatural	715
75	Kota Gorontalo	LS 058	5.00	5.80	DropOneLargeNatural	715
76	Kota Gorontalo	LS 068	5.00	5.80	DropOneLargeNatural	715
77	Kota Gorontalo	LU 002	5.00	5.80	DropOneLargeNatural	715
78	Kota Gorontalo	LU 003	5.00	5.80	DropOneLargeNatural	715
79	Kota Gorontalo	LU 004	5.00	5.80	DropOneLargeNatural	715
80	Kota Gorontalo	LU 007	5.00	5.80	DropOneLargeNatural	715
81	Kota Gorontalo	Manggung Jaya 03	18.00	13.50	PurseSeine	715
82	Kota Gorontalo	Manggung Jaya 04	26.00	24.50	PurseSeine	715
83	Kota Gorontalo	Marina Express	6.00	6.50	DropOneLargeNatural	715
84	Kota Gorontalo	Merpati 02	21.00	21.30	PurseSeine	715
85	Kota Gorontalo	Merpati 03	29.00	21.30	PurseSeine	715
86	Kota Gorontalo	Mina Karya	6.00	6.50	DropOneLargeNatural	715
87	Kota Gorontalo	Mina Maritim 139	35.00	24.50	PurseSeine	715
88	Kota Gorontalo	Mina Maritim 94	20.00	21.30	DropOneLargeNatural	715
89	Kota Gorontalo	Nelayan 2016 - 1	38.00	24.50	PurseSeine	715
90	Kota Gorontalo	Nelayan 2016- 8	32.00	24.50	PurseSeine	715
91	Kota Gorontalo	Nelayan 2016- 9	32.00	24.50	PurseSeine	715
92	Kota Gorontalo	Nelayan 2016-115	13.00	11.90	DropOneLargeNatural	715
93	Kota Gorontalo	Nelayan 2016-116	13.00	11.90	DropOneLargeNatural	715
94	Kota Gorontalo	Nelayan 2016-119	13.00	11.90	DropOneLargeNatural	715
95	Kota Gorontalo	Nelayan 2017-879	13.00	11.90	DropOneLargeNatural	715
96	Kota Gorontalo	Nelayan 2017-880	13.00	11.90	DropOneLargeNatural	715
97	Kota Gorontalo	Nelayan 2017-882	13.00	11.90	DropOneLargeNatural	715
98	Kota Gorontalo	Nelayan 2017-885	13.00	11.90	DropOneLargeNatural	715
99	Kota Gorontalo	Nelayan 2017-886	13.00	11.90	DropOneLargeNatural	715
100	Kota Gorontalo	Nelayan 2017-887	13.00	11.90	DropOneLargeNatural	715
101	Kota Gorontalo	Nelayan 2017-956	21.00	21.30	DropOneLargeNatural	715
102	Kota Gorontalo	Niaga Multi Prima	28.00	24.50	PurseSeine	715
103	Kota Gorontalo	Nur Nusantara 03	18.00	13.50	DropOneLargeNatural	715
104	Kota Gorontalo	Nur Nusantara 04	14.00	11.90	DropOneLargeNatural	715
105	Kota Gorontalo	Nur Nusantara 05	25.00	24.50	PurseSeine	715
106	Kota Gorontalo	Nur Nusantara 06	15.00	13.00	DropOneLargeNatural	715
107	Kota Gorontalo	Pandi Star	12.00	11.90	DropOneLargeNatural	715
108	Kota Gorontalo	Panglima	6.00	6.50	PurseSeine	715
109	Kota Gorontalo	Pantai Indah	6.00	6.50	PurseSeine	715
110	Kota Gorontalo	Putra Laut Lestari	26.00	24.50	PurseSeine	715
111	Kota Gorontalo	Putri Kembar 04	26.00	24.50	PurseSeine	715
112	Kota Gorontalo	Rahmat	7.00	6.70	PurseSeine	715
113	Kota Gorontalo	Rajawali 01	14.00	11.90	DropOneLargeNatural	715
114	Kota Gorontalo	Ratu 01	6.00	6.50	DropOneLargeNatural	715
115	Kota Gorontalo	Sinar Beringin Jaya	18.00	13.50	PurseSeine	715
116	Kota Gorontalo	Sinar Pelangi	6.00	6.50	PurseSeine	715
117	Kota Gorontalo	Sinar Surya	20.00	21.30	PurseSeine	715
118	Kota Gorontalo	Sinar Usaha	19.00	21.30	PurseSeine	715
119	Kota Gorontalo	TJ 006	5.00	5.80	DropOneLargeNatural	715
120	Kota Gorontalo	TJ 073	5.00	5.80	DropOneLargeNatural	715
121	Kota Gorontalo	TJ 080	5.00	5.80	DropOneLargeNatural	715
122	Kota Gorontalo	TJ 24	5.00	5.80	DropOneLargeNatural	715
123	Kota Gorontalo	TJ 30	5.00	5.80	DropOneLargeNatural	715
124	Kota Gorontalo	TJ 32	5.00	5.80	DropOneLargeNatural	715

Table 6.2: Boat Information from FP. Tenda, Gorontalo

No	Program Site	Boat Name	GT Declared	GT Estimate	Fishing Gear	Fishing Area
125	Kota Gorontalo	TJ 43	5.00	5.80	DropOneLargeNatural	715
126	Kota Gorontalo	TJ 47	5.00	5.80	DropOneLargeNatural	715
127	Kota Gorontalo	TMB Tenda 02	9.00	8.20	DropOneLargeNatural	715
128	Kota Gorontalo	TMB Tongo - 01	9.00	8.20	DropOneLargeNatural	715
129	Kota Gorontalo	Wahid 01	3.00	2.80	DropOneLargeNatural	715
130	Kota Gorontalo	Wajo Raya 01	6.00	6.50	DropOneLargeNatural	715
131	Kota Gorontalo	Wajo Raya 03	6.00	6.50	DropOneLargeNatural	715
132	Majene	Beru-Beru	5.00	5.80	DropOneLargeNatural	713

6.2.3 Follow-up

This location is potential for CODRS program because there are many dedicated mini purse seine vessels targeting tuna. There are many of skippers willing to join CODRS program although most of them could not speak Bahasa fluently. An intensive communication is needed to make sure that they can handle the CODRS tools.

6.2.4 Important Contact

Name : Pak Ungke
Affiliation : Boats owner and Head of Fisher association in Gorontalo City
Contact : 081244346663

Name : Pak Harris
Affiliation : Fisher association in Gorontalo City
Contact : 081218597173

Name : Rivail Mantu
Affiliation : Captain of INKA MINA 928
Contact : 085342308776

6.2.5 References

6.2.6 Figures



Figure 6.5: Typical landed tuna from purse seine vessels in FP. Tenda Gorontalo



Figure 6.6: Catch from purse seine vessel in FP. Tenda Gorontalo



Figure 6.7: Mini purse seine vessels in FP. Tenda



Figure 6.8: Situation in FP. Tenda

6.3 FLP. Tilamuta, Gorontalo

6.3.1 Background and Survey Practicalities

Background

FLP Tilamuta is located in Boalemo regency, Gorontalo Province. It is integrated with fish auction. Dominant fleet in FLP Tilamuta is mini purse seine (25 - >30 GT) targeting small pelagic fish, skipjack and large tuna. Besides that, we found handline boats using the weighted dropline single large hook. There are many vessels with crew originated from Bajo village, which is targeting snapper and grouper in their fishing trip.



Figure 6.9: Location of FLP. Tilamuta in Boalemo regency (taken from Google Map)

Survey team

Survey was done by Yeremia Apridianto and Dwaitd Kolibongso

Period visited

This survey was conducted on 8 September 2018.

How to get there

From Jalaludin International Airport, Boalemo regency the FLP Tilamuta can be reached in 3-4 hours by car. It is located in the western Boalemo or 20 minutes from the city center.

6.3.2 Fleet Description

The dominant fishing fleet is purse seine >30GT. The fishing ground is located in Tomini Bay. The duration of a fishing trip is 3-5 days with target catch bullet tuna, mackerel scad, skipjack, baby tuna, and large tuna. Our interview with captains shows that catch is 2 ton per day on average. The catch is sold at fish auction, local markets and distributed to Gorontalo and surroundings

6.3.3 Follow-up

This location is not considered for CODRS program because most of the fishing vessels have the same characteristic with fishing vessels in FLP. Tenda, Gorontalo.

6.3.4 Important Contact

Name : Pak Ferry
Affiliation : Boat owner and Fishers Association committee
Contact : 085256692070

6.3.5 References

6.3.6 Figures



Figure 6.10: Typical fish landed from mini purse seine vessel FLP. Tilamuta



Figure 6.11: Mini purse seine vessel in FLP. Talamuta



Figure 6.12: The harbour office in FLP. Talamuta

6.4 FP. Inengo, Bone Bolango

6.4.1 Background and Survey Practicalities

Background

Fishing Port Inengo is integrated with the fish auction. The fishing fleet is dominated by purse seiners range between 15 GT and 40 GT (estimated). Targeted catches are small pelagic fish, skipjack, and baby tuna. Loading and unloading activities start from 06 am to 01 pm (central Indonesian time). Most of these vessels apply a one-day fishing trip.

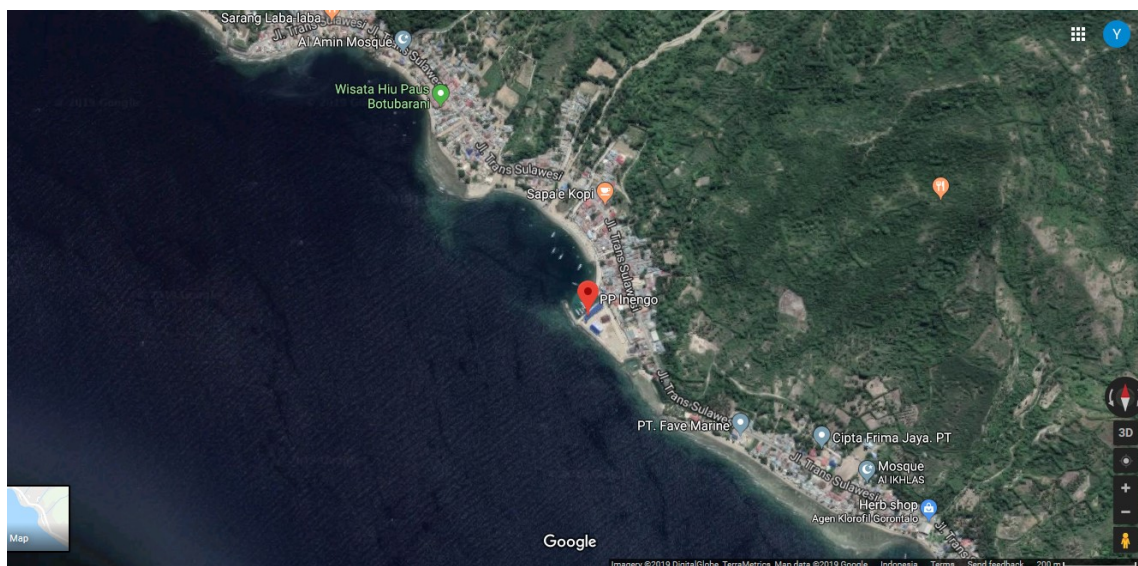


Figure 6.13: Location of FP. Inengogo

Survey team

The survey was done by Yeremia Apridianto.

Period visited

The survey was held between 28 and 31 May 2019.

How to get there

From the Jalaludin International Airport, it takes about 1-2 hours travel to Gorontalo City by using a car or motorbike and then continue to PP Inengo for about 30-45 minutes.

6.4.2 Fleet Description

Fishing fleet in PP Inengo is dominated by purse seine range between 15 GT and 30 GT (estimated). The fishing ground is in Tomini Bay (FMA 715) and surroundings. These vessels apply a one-day fishing trip. Main target catch is bullet tuna, mackerel scads, skipjack, and juvenile tuna. The vessels are leaving for the fishing ground in the evening. They do setting once and then go back to the fishing port at dawn to unload the catch. It takes about 3-4 hours to go to the fishing ground from the port-base. Total catch is 400 kg on average. The catch is distributed to the local market and surroundings, and only a small amount of the catch that delivered to the company because of limited space in the cold storage.

Table 6.3: Boat Information from FP. Inengo, Bone Bolango

No	Program Site	Boat Name	GT Declared	GT Estimate	Fishing Gear	Fishing Area
1	Bone Bolango	KM. INKA MINA 928	28.00	30.00	PurseSeine	715
2	Bone Bolango	KM. Frima Expres	29.00	21.30	PurseSeine	715
3	Bone Bolango	KM Nelayan 2017 959	25.00	20.50	PurseSeine	715
4	Kota Gorontalo	Air Zam-Zam	5.00	5.80	DropOneLargeNatural	715
5	Bone Bolango	Burung Laut	23.00	24.50	PurseSeine	715
6	Bone Bolango	Dikatutuan 02	9.00	8.20	PurseSeine	715
7	Bone Bolango	Inka Mina 214	32.00	24.50	PurseSeine	715
8	Bone Bolango	Inka Mina 919	32.00	24.50	PurseSeine	715
9	Bone Bolango	Inka Mina 920	32.00	24.50	DropOneLargeNatural	715
10	Bone Bolango	Inka Mina 922	32.00	24.50	PurseSeine	715
11	Bone Bolango	Manggung Jaya 05	29.00	21.30	PurseSeine	715
12	Bone Bolango	Nurman	6.00	6.50	PurseSeine	715
13	Bone Bolango	Putra Laut MX	20.00	21.30	PurseSeine	715
14	Bone Bolango	Putri Kembar	18.00	13.50	PurseSeine	715
15	Bone Bolango	Putri Kembar 05	28.00	24.50	PurseSeine	715
16	Bone Bolango	Senter Max 02	15.00	13.00	PurseSeine	715
17	Bone Bolango	Senter Max 03	18.00	13.50	PurseSeine	715
18	Bone Bolango	Sinar Laut	23.00	24.50	PurseSeine	715
19	Bone Bolango	Sinar Mega mas	28.00	24.50	PurseSeine	715
20	Bone Bolango	Sinar Naga mas	21.00	21.30	PurseSeine	715
21	Bone Bolango	amanda expres	25.00	23.00	PurseSeine	715
22	Bone Bolango	narafah jaya	28.00	26.60	PurseSeine	715
23	Bone Bolango	nelayan 2017-957	25.00	23.00	PurseSeine	715
24	Bone Bolango	nelayan 2017-983	36.00	30.60	PurseSeine	715
25	Bone Bolango	pioner max	21.00	24.20	PurseSeine	715
26	Bone Bolango	sinar bintang mas	20.00	18.20	PurseSeine	715

6.4.3 Follow-up

FP. Inengo is a recommended site to deploy CODRS program because many vessels are dedicated to catch tuna. Many captains were interested in joining the program. The location can be a substitute for FP. Tenda since the CODRS deployment in FP. Tenda was underperforming.

6.4.4 Important Contact

Name : Pemin Muhammad
Affiliation : Kapten kapal KM. Prima Jaya
Contact : 082328144415

Name : Rahman
Affiliation : Kapten kapal KM. Express
Contact : 085256597006

Name : Jamaludin Rahman
Affiliation : Kapten kapal KM. Cipta Frima Jaya
Contact : 085340100321

6.4.5 References

6.4.6 Figures



Figure 6.14: One of jetty in FP Inengo



Figure 6.15: Purse Seine at FP Inengo



Figure 6.16: Landed catch by purse seiners at FP Inengo



Figure 6.17: Landed catch by purse seiners at FP Inengo

7 Central Sulawesi Province

7.1 FLP. Donggala

7.1.1 Background and Survey Practicalities

Background

FLP Donggala is located on Jalan Tongkol, at the corner of Palu Bay, bordering the Makassar Strait in the west part, which is a strategic place for fishing tuna in Indonesia. FLP Donggala is one of the main fish landing centers, especially for small and large pelagic fish in Central Sulawesi. FLP Donggala has facilities such as piers for trawlers and other fishing boats, fish auction, fishing service office, ice factories, and some buildings for fishers to repair their nets.

Survey team

The survey was done by Dimas Galang Fergiawan and Widhya Nugroho Satrioajie.

Period visited

The survey was held in July 2019.

How to get there

It takes about 1.5 hours travel from the airport SIS AlJufri Palu to go to FLP Donggala.

7.1.2 Fleet Description

Fishing fleet in FLP Donggala is dominated by hardliners and small pelagic mini purse seiners. Most of the handliners originated from West Sulawesi with white characteristic on the mother boat which is carrying small boats. A total number of mandar-handliners is about 60 vessels. The average size of the boat is 11-14 m in length, 1-1.3 m in height and 4-6 GT in size. The duration of their fishing trip is 3-7 days. The average catch is 500-2000 kg per trip with catch composition is large tuna, small tuna, skipjack, bullet tuna and sometimes billfish. In the hygienic fish auction of FLP Donggala, the fish is graded and then distributed to the companies. There are 2 companies who buy fish from fishers: CV. Prima Indo Tuna and PT. Prima Global Sukses.

Purse seiners at FLP Donggala range between 6 and 30 GT. This fleet is dominated by small pelagic purse seiners. These purse seiners are associated with FADs in their fishing operation which is located around 30-100 mile from Donggala. The main catches are scads (*Decapterus sp.*), bullet tuna (*Auriss sp.*) and small tuna. The purse seine gear has 900 m in length, 150 - 180 m in height, and diameter for about 200 m. Total catch reaches almost 500-1000 kg per trip and sometimes 3000 kg in the peak season. Duration of fishing days is 2-5 days per trip. A total number of purse seiners in FLP Donggala is 50 vessels. However, the number was reduced in 2018 because of the tsunami disaster at that time.

Table 7.1: Boat Information from FLP. Donggala

No	Program Site	Boat Name	GT Declared	GT Estimate	Fishing Gear	Fishing Area
1	Donggala	KMN Setia Amal	3.00	2.80	DropOneLargeArtificial	713
2	Donggala	KMN Cici Umrah	4.00	5.40	DropOneLargeArtificial	713
3	Donggala	KM Sinar Samudra 07	30.00	26.60	PurseSeine	713
4	Donggala	KM Lintas Samudra 212	30.00	26.40	PurseSeine	713

Table 7.1: Boat Information from FLP. Donggala

No	Program Site	Boat Name	GT Declared	GT Estimate	Fishing Gear	Fishing Area
5	Donggala	KMN Cici Umrah	4.00	11.64	DropMultipleSmallArtificial	713
6	Donggala	KMN. Lintas Samudra 212	30.00	26.40	PurseSeine	713
7	Donggala	karya utama	2.00	2.40	DropOneLargeNatural	713
8	Donggala	Nun Alahissalam	2.00	2.40	DropOneLargeNatural	713
9	Donggala	Setia damai	2.00	2.40	DropOneLargeNatural	713
10	Donggala	Cahaya ka'ba	4.00	4.50	DropOneLargeNatural	713
11	Donggala	Hajratul aswad	4.00	4.50	DropOneLargeNatural	713
12	Donggala	Fitrah indah	3.00	2.80	DropOneLargeNatural	713
13	Donggala	Pelita rahman	4.00	4.50	DropOneLargeNatural	713
14	Donggala	Jabal rahma 02	4.00	4.50	DropOneLargeNatural	713
15	Donggala	Pelita alam	4.00	4.50	DropOneLargeNatural	713
16	Donggala	Rahmat Ilahi 04	3.00	2.80	DropOneLargeNatural	713
17	Donggala	Teluk mandar	3.00	2.80	DropOneLargeNatural	713
18	Donggala	Nalon	3.00	2.80	DropOneLargeNatural	713
19	Donggala	Nur Alam LB	4.00	4.50	DropOneLargeNatural	713
20	Donggala	Jabal Rahma 01	4.00	4.50	DropOneLargeNatural	713
21	Donggala	Lapan - lapan	3.00	2.80	DropOneLargeNatural	713
22	Donggala	Cahaya akbar	4.00	4.50	DropOneLargeNatural	713
23	Donggala	Miftahul khair	4.00	4.50	DropOneLargeNatural	713
24	Donggala	Cahaya nur 02	4.00	4.50	DropOneLargeNatural	713
25	Donggala	Ar Rahman Lia Alfa 007	4.00	4.50	DropOneLargeNatural	713
26	Donggala	Ar Rahman	2.00	2.40	DropOneLargeNatural	713
27	Donggala	Cahaya biru	2.00	2.40	DropOneLargeNatural	713
28	Donggala	Sipasaro	4.00	4.50	DropOneLargeNatural	713
29	Donggala	Nur amanah	3.00	2.80	DropOneLargeNatural	713
30	Donggala	Cahaya abadi 03	4.00	4.50	DropOneLargeNatural	713
31	Donggala	Raodatussamad	3.00	2.80	DropOneLargeNatural	713
32	Donggala	Raoda	4.00	4.50	DropOneLargeNatural	713
33	Donggala	Jabal Nur 83	3.00	2.80	DropOneLargeNatural	713
34	Donggala	Cahaya rahma	4.00	4.50	DropOneLargeNatural	713
35	Donggala	Cahaya surga	3.00	2.80	DropOneLargeNatural	713
36	Donggala	Gajah mada_Donggala	3.00	2.80	DropOneLargeNatural	713
37	Donggala	Sinar ilahi	3.00	2.80	DropOneLargeNatural	713
38	Donggala	Cahaya mulia	4.00	4.50	DropOneLargeNatural	713
39	Donggala	Jawahir bihar	3.00	2.80	DropOneLargeNatural	713
40	Donggala	Nurul	3.00	2.80	DropOneLargeNatural	713
41	Donggala	Ruapiolo	4.00	4.50	DropOneLargeNatural	713
42	Donggala	Sumber nelayan	2.00	2.40	DropOneLargeNatural	713
43	Donggala	Buana 02	4.00	4.50	DropOneLargeNatural	713
44	Donggala	Cahaya dunia	3.00	2.80	DropOneLargeNatural	713
45	Donggala	Teko laba	4.00	4.50	DropOneLargeNatural	713
46	Donggala	Pamase puang	4.00	4.50	DropOneLargeNatural	713
47	Donggala	Darul Arkam	5.00	5.80	DropOneLargeNatural	713
48	Donggala	Cahaya madina	4.00	4.50	DropOneLargeNatural	713
49	Donggala	Purnama Mariana	5.00	5.80	DropOneLargeNatural	713
50	Donggala	Purnama Nurliati	2.00	2.40	DropOneLargeNatural	713
51	Donggala	Nur hidayatullah	4.00	4.50	DropOneLargeNatural	713
52	Donggala	Sumber riski	3.00	2.80	DropOneLargeNatural	713
53	Donggala	Nur garinsan	5.00	5.80	DropOneLargeNatural	713
54	Donggala	Sumber ayam	4.00	4.50	DropOneLargeNatural	713
55	Donggala	Satria mulia	3.00	2.80	DropOneLargeNatural	713
56	Donggala	Baitul makdis	4.00	4.50	DropOneLargeNatural	713
57	Donggala	Sartika	2.00	2.40	DropOneLargeNatural	713
58	Donggala	Nur alif	2.00	2.40	DropOneLargeNatural	713
59	Donggala	Mas baru	3.00	2.80	DropOneLargeNatural	713
60	Donggala	Bura mandar	3.00	2.80	DropOneLargeNatural	713
61	Donggala	Cahaya abadi 01	3.00	2.80	DropOneLargeNatural	713
62	Donggala	Marhaban	3.00	2.80	DropOneLargeNatural	713
63	Donggala	Sukma indah	3.00	2.80	DropOneLargeNatural	713
64	Donggala	Indah ibadah	3.00	2.80	DropOneLargeNatural	713

Table 7.1: Boat Information from FLP. Donggala

No	Program Site	Boat Name	GT Declared	GT Estimate	Fishing Gear	Fishing Area
65	Donggala	Pasir putih	3.00	2.80	DropOneLargeNatural	713
66	Donggala	Cahaya indah 01	3.00	2.80	DropOneLargeNatural	713
67	Donggala	Cahaya indah 02	3.00	2.80	DropOneLargeNatural	713
68	Donggala	KM Rosita	29.00	26.70	PurseSeine	713
69	Donggala	FATIMAH	29.00	26.60	PurseSeine	713
70	Donggala	DAMAI	30.00	26.60	PurseSeine	713
71	Donggala	GALAXI	30.00	26.60	PurseSeine	713
72	Donggala	MACOA	30.00	26.60	PurseSeine	713
73	Donggala	PUTRA DONGGALA 01	29.00	26.60	PurseSeine	713
74	Donggala	PUTRA DONGGALA 03	28.00	26.60	PurseSeine	713
75	Donggala	PUTRA DONGGALA 05	29.00	26.60	PurseSeine	713
76	Donggala	INKA MINA 735	30.00	26.60	PurseSeine	713
77	Donggala	MITRA ABADI	29.00	26.60	PurseSeine	713
78	Donggala	MITRA DONGGALA	27.00	24.20	PurseSeine	713
79	Donggala	ADINDA 01	24.00	24.20	PurseSeine	713
80	Donggala	ADINDA 02	30.00	26.60	PurseSeine	713
81	Donggala	REHOBOT 01	29.00	26.60	PurseSeine	713
82	Donggala	REHOBOT 02	29.00	26.60	PurseSeine	713
83	Donggala	CAHAYA MADINAH	29.00	26.60	PurseSeine	713
84	Donggala	NUR MADINAH	29.00	26.60	PurseSeine	713
85	Donggala	SELEBES 01	30.00	26.60	PurseSeine	713
86	Donggala	ALAM RAYA 07	27.00	24.20	PurseSeine	713
87	Donggala	INKA MINA 734	30.00	26.60	PurseSeine	713
88	Donggala	MINA PUTRA	29.00	26.60	PurseSeine	713
89	Donggala	MINA PUTRA 02	30.00	26.60	PurseSeine	713
90	Donggala	INKA MINA 220	30.00	26.60	PurseSeine	713
91	Donggala	AULYA	30.00	26.60	PurseSeine	713
92	Donggala	SINAR HARAPAN X	30.00	26.60	PurseSeine	713
93	Donggala	BINTANG HARAPAN 05	30.00	26.60	PurseSeine	713
94	Donggala	SINAR LAUT 03	30.00	26.60	PurseSeine	713
95	Donggala	INKA MINA 933	30.00	26.60	PurseSeine	713
96	Donggala	BINTANG REMAJA 01	30.00	26.60	PurseSeine	713
97	Donggala	MEGA BUANA	30.00	26.60	PurseSeine	713
98	Donggala	MITRA BERSAMA 02	21.00	24.20	PurseSeine	713
99	Donggala	AL ATAQA	26.00	24.20	PurseSeine	713
100	Donggala	SIRIP BIRU	22.00	24.20	PurseSeine	713
101	Donggala	CAHAYA BUANA 01	19.00	24.20	PurseSeine	713
102	Donggala	CIPTA KARYA 01	27.00	24.20	PurseSeine	713
103	Donggala	SIPATUO 01	22.00	24.20	PurseSeine	713
104	Donggala	BARSAONA 022	28.00	26.60	PurseSeine	713
105	Donggala	SINAR SAMUDRA 07	30.00	26.60	PurseSeine	713
106	Donggala	PASIR PUTIH	6.00	6.50	PurseSeine	713
107	Donggala	ARDIAN	30.00	26.60	PurseSeine	713
108	Donggala	ARDIAN 03	30.00	26.60	PurseSeine	713
109	Donggala	BINTANG SELATAN 02	30.00	26.60	PurseSeine	713
110	Donggala	SINAR BAHARI 77	22.00	24.20	PurseSeine	713
111	Donggala	CAHAYA RAHMA 01	30.00	26.60	PurseSeine	713
112	Donggala	USAHA BERSAMA 06	15.00	13.00	PurseSeine	713
113	Donggala	MITRA NELAYAN 05	26.00	24.20	PurseSeine	713
114	Donggala	MITRA NELAYAN 01	29.00	26.60	PurseSeine	713
115	Donggala	AIR BERKAH	22.00	24.20	PurseSeine	713
116	Donggala	CAHAYA SIDRAP 01	30.00	26.60	PurseSeine	713
117	Donggala	RIZIQ	30.00	26.60	PurseSeine	713

7.1.3 Follow-up

The location is recommended to deploy CODRS program on handliners and purse seiners. Furthermore, we found strong support from the local stakeholder for the deployment of CODRS program.

7.1.4 Important Contact

Name : Abdul Rasyid, M.Si
Affiliation : Head of FLP Donggala
Contact : 085341493322

Name : Sutriyo
Affiliation : Vessel owner at Donggala
Contact : 085257574777

7.1.5 References

7.1.6 Figures



Figure 7.1: Handliners at FLP Donggala



Figure 7.2: Unloading activities at FLP Donggala

7.2 Boneoge Village, Banawa

7.2.1 Background and Survey Practicalities

Background

Boneoge is a village in Banawa district, Donggala Regency. Most of male people in Boneoge are fishers. Boneoge is located at the beach adjacent to Makassar Strait. Since Boneoge has a long coastline, there are many small vessels landing on that location. Our survey shows that there are several dockyards producing small vessels with 10-13 meter in length. Head of Division of Capture Fisheries in Boneoge said that Boneoge has potential at tuna and tuna-like fisheries. Most fishers in Boneoge do fishing in the FADs around Donggala - Selat Makassar.

Survey team

Survey was done by Dimas Fergiawan and Widhya Nugroho Satrioajie.

Period visited

Survey was held on July 2019.

How to get there

Boneoge beach can be accessed by car for about 10 minutes from FLP Donggala.

7.2.2 Fleet Description

There were about 400 fishing vessels which were registered in Agency of Marine and Fisheries of Boneoge. However, our interview with fishers showed that some fishers did not register their vessels. Vessels size in Boneoge range between 10 and 13 m in length, 1 and 1.2 m in width, and 0.8 and 1.2 m in height. The fishers use handline, specifically on KiteOneLargeArtificial, TrollOneLargeArtificial, DropOneLargeNatural/Artificial, DropMultipleSmallArtificial, and DriftOneLargeNatural. In a trip, the fishers usually fishing about 2-3 days and fishing at FADs which were deployed by Purse Seine fishers or companies. In every vessel, usually there are 2-3 fishers. They do fishing at day and night. The main catch are Auxis sp, small to large tuna, and sometimes marlin. They often targeting Auxis sp because it can be caught and sold easily. Baby tuna, tuna-like, and skipjack were sold to the middle-man to distribute to Palu City. If the fishers caught tuna in medium size, the catch is sold to the middle-man at FLP Donggala.

Table 7.2: Boat Information from Boneoge Village, Banawa

No	Program Site	Boat Name	GT Declared	GT Estimate	Fishing Gear	Fishing Area
1	Donggala	KMN Mantap	0.00	2.40	DropMultipleSmallArtificial	713
2	Donggala	KM SADEWA	4.00	4.00	DropMultipleSmallArtificial	713
3	Donggala	KM SADEWA 2	4.00	4.00	DropMultipleSmallArtificial	713
4	Donggala	KM AGUNG	4.00	4.00	DropMultipleSmallArtificial	713
5	Donggala	KM SARCI	4.00	4.00	DropMultipleSmallArtificial	713
6	Donggala	KM PATI	4.00	4.00	DropMultipleSmallArtificial	713
7	Donggala	KM DAMAI CINTA	4.00	4.00	DropMultipleSmallArtificial	713
8	Donggala	KM TIGER	4.00	4.00	DropMultipleSmallArtificial	713
9	Donggala	KM OZIL II	4.00	4.00	DropMultipleSmallArtificial	713
10	Donggala	KM HONDA	4.00	4.00	DropMultipleSmallArtificial	713
11	Donggala	KM PUTRA 2	4.00	4.00	DropMultipleSmallArtificial	713
12	Donggala	KM ALIF	4.00	4.00	DropMultipleSmallArtificial	713
13	Donggala	KM TORA	4.00	4.00	DropMultipleSmallArtificial	713

Table 7.2: Boat Information from Boneoge Village, Banawa

No	Program Site	Boat Name	GT Declared	GT Estimate	Fishing Gear	Fishing Area
14	Donggala	KM SONIA	4.00	4.00	DropMultipleSmallArtificial	713
15	Donggala	KM. F & F	4.00	4.00	DropMultipleSmallArtificial	713
16	Donggala	KM. GARUDA	4.00	4.00	DropMultipleSmallArtificial	713
17	Donggala	KM. INTAN	4.00	4.00	DropMultipleSmallArtificial	713
18	Donggala	KM. OZIL	4.00	4.00	DropMultipleSmallArtificial	713
19	Donggala	KM. AMANAT	4.00	4.00	DropMultipleSmallArtificial	713
20	Donggala	KM. MUS	4.00	4.00	DropMultipleSmallArtificial	713
21	Donggala	KM. MUS 2	4.00	4.00	DropMultipleSmallArtificial	713
22	Donggala	KM. ROY DAFINDA	4.00	4.00	DropMultipleSmallArtificial	713
23	Donggala	KM. C KIRANA	4.00	4.00	DropMultipleSmallArtificial	713
24	Donggala	KM. NUR FAIZA	4.00	4.00	DropMultipleSmallArtificial	713
25	Donggala	KM. PRIHATIN	4.00	4.00	DropMultipleSmallArtificial	713
26	Donggala	KM. ANUGRAH 1	4.00	4.00	DropMultipleSmallArtificial	713
27	Donggala	KM. ELISA	4.00	4.00	DropMultipleSmallArtificial	713
28	Donggala	KM. BAHTIAR	4.00	4.00	DropMultipleSmallArtificial	713
29	Donggala	KM. ANUGRAH 2	4.00	4.00	DropMultipleSmallArtificial	713
30	Donggala	BPK	4.00	4.00	DropMultipleSmallArtificial	713
31	Donggala	KM. MUARA	4.00	4.00	DropMultipleSmallArtificial	713
32	Donggala	KM. GALFIN	4.00	4.00	DropMultipleSmallArtificial	713
33	Donggala	SURYA_Donggala	4.00	4.00	DropMultipleSmallArtificial	713
34	Donggala	KM. KANAMARIA	4.00	4.00	DropMultipleSmallArtificial	713
35	Donggala	KM. ICHA	4.00	4.00	DropMultipleSmallArtificial	713
36	Donggala	KM. ROSA	4.00	4.00	DropMultipleSmallArtificial	713
37	Donggala	KM. CARI JODOH	4.00	4.00	DropMultipleSmallArtificial	713
38	Donggala	KM. ZULFAR	4.00	4.00	DropMultipleSmallArtificial	713
39	Donggala	CARI BERKAH	4.00	4.00	DropMultipleSmallArtificial	713
40	Donggala	KM. SIBOLANG	4.00	4.00	DropMultipleSmallArtificial	713
41	Donggala	KM. RAFKA	4.00	4.00	DropMultipleSmallArtificial	713
42	Donggala	KM. CNI	4.00	4.00	DropMultipleSmallArtificial	713
43	Donggala	KM. JUPITER	4.00	4.00	DropMultipleSmallArtificial	713
44	Donggala	KM. AZURA II	4.00	4.00	DropMultipleSmallArtificial	713
45	Donggala	KM. AZURA	4.00	4.00	DropMultipleSmallArtificial	713
46	Donggala	KM RISKI	4.00	4.00	DropMultipleSmallArtificial	713
47	Donggala	KM. AYUNI	4.00	4.00	DropMultipleSmallArtificial	713
48	Donggala	KM. GARUDA I	4.00	4.00	DropMultipleSmallArtificial	713
49	Donggala	KM. NUSANTARA	4.00	4.00	DropMultipleSmallArtificial	713
50	Donggala	KM PUYTRA SAHRA	4.00	4.00	DropMultipleSmallArtificial	713
51	Donggala	KM. NABILA	4.00	4.00	DropMultipleSmallArtificial	713
52	Donggala	KM. ALDA I	4.00	4.00	DropMultipleSmallArtificial	713
53	Donggala	L. SORY	4.00	4.00	DropMultipleSmallArtificial	713
54	Donggala	SALIMAR	4.00	4.00	DropMultipleSmallArtificial	713
55	Donggala	KM. TOPETOPO	4.00	4.00	DropMultipleSmallArtificial	713
56	Donggala	KK. ALDA	4.00	4.00	DropMultipleSmallArtificial	713
57	Donggala	KM. ALIF I.II.III	4.00	4.00	DropMultipleSmallArtificial	713
58	Donggala	MIKO	4.00	4.00	DropMultipleSmallArtificial	713
59	Donggala	KM. NADIA	4.00	4.00	DropMultipleSmallArtificial	713
60	Donggala	KM. ZEBRA	4.00	4.00	DropMultipleSmallArtificial	713
61	Donggala	KM. MARADONA	4.00	4.00	DropMultipleSmallArtificial	713
62	Donggala	KM. ECE	4.00	4.00	DropMultipleSmallArtificial	713
63	Donggala	KM. LISRIADI	4.00	4.00	DropMultipleSmallArtificial	713
64	Donggala	KM. HIDAYAT	4.00	4.00	DropMultipleSmallArtificial	713
65	Donggala	KM TEGA	4.00	4.00	DropMultipleSmallArtificial	713
66	Donggala	KM. SEMBILU	4.00	4.00	DropMultipleSmallArtificial	713
67	Donggala	KM. GARUDA_Donggala	4.00	4.00	DropMultipleSmallArtificial	713
68	Donggala	KM. WANA	4.00	4.00	DropMultipleSmallArtificial	713
69	Donggala	KM. INDAH	4.00	4.00	DropMultipleSmallArtificial	713
70	Donggala	KM. REFORMASI	4.00	4.00	DropMultipleSmallArtificial	713
71	Donggala	KM. ABADI	4.00	4.00	DropMultipleSmallArtificial	713
72	Donggala	KM. SEDERHANA	4.00	4.00	DropMultipleSmallArtificial	713
73	Donggala	KM. KAILI I.II	4.00	4.00	DropMultipleSmallArtificial	713

Table 7.2: Boat Information from Boneoge Village, Banawa

No	Program Site	Boat Name	GT Declared	GT Estimate	Fishing Gear	Fishing Area
74	Donggala	KM. BIBIR MERAH	4.00	4.00	DropMultipleSmallArtificial	713
75	Donggala	KM. MEGA BUANA	4.00	4.00	DropMultipleSmallArtificial	713
76	Donggala	KM. BINA BR	4.00	4.00	DropMultipleSmallArtificial	713
77	Donggala	JUWITA	4.00	4.00	DropMultipleSmallArtificial	713
78	Donggala	KM. SUPERHERO	4.00	4.00	DropMultipleSmallArtificial	713
79	Donggala	KM. SUPER HERO II	4.00	4.00	DropMultipleSmallArtificial	713
80	Donggala	KM. BINA BERSAMA	4.00	4.00	DropMultipleSmallArtificial	713
81	Donggala	BALO CENING	4.00	4.00	DropMultipleSmallArtificial	713
82	Donggala	KM. ISABELA	4.00	4.00	DropMultipleSmallArtificial	713
83	Donggala	KM. NURMADINA	4.00	4.00	DropMultipleSmallArtificial	713
84	Donggala	BINA BERSAMA	4.00	4.00	DropMultipleSmallArtificial	713
85	Donggala	PUTRA SEJATI	4.00	4.00	DropMultipleSmallArtificial	713
86	Donggala	KM. BERKAH	4.00	4.00	DropMultipleSmallArtificial	713
87	Donggala	KM ALWAN	4.00	4.00	DropMultipleSmallArtificial	713
88	Donggala	BURUNG CAMAR	4.00	4.00	DropMultipleSmallArtificial	713
89	Donggala	TORA YAKU	4.00	4.00	DropMultipleSmallArtificial	713
90	Donggala	LEPA-LEPA	4.00	4.00	DropMultipleSmallArtificial	713
91	Donggala	KM. SIER SERAN	4.00	4.00	DropMultipleSmallArtificial	713
92	Donggala	KM. PUTRA	4.00	4.00	DropMultipleSmallArtificial	713
93	Donggala	KM. SINAR HATI	4.00	4.00	DropMultipleSmallArtificial	713
94	Donggala	KM SELEBES	4.00	4.00	DropMultipleSmallArtificial	713
95	Donggala	KM. SINAR H	4.00	4.00	DropMultipleSmallArtificial	713
96	Donggala	KM. DIRA	4.00	4.00	DropMultipleSmallArtificial	713
97	Donggala	KM. SEMPURNA	4.00	4.00	DropMultipleSmallArtificial	713
98	Donggala	KM. NADIA_Donggala	4.00	4.00	DropMultipleSmallArtificial	713
99	Donggala	KM. NIKEN	4.00	4.00	DropMultipleSmallArtificial	713
100	Donggala	KM. PLANET	4.00	4.00	DropMultipleSmallArtificial	713
101	Donggala	KM. DOA IBU	4.00	4.00	DropMultipleSmallArtificial	713
102	Donggala	KM NURJALAL	4.00	4.00	DropMultipleSmallArtificial	713
103	Donggala	KM. MATA AIR	4.00	4.00	DropMultipleSmallArtificial	713
104	Donggala	KM. SELEBER	4.00	4.00	DropMultipleSmallArtificial	713
105	Donggala	KM. MIMPI MANIS	4.00	4.00	DropMultipleSmallArtificial	713
106	Donggala	ILHAM SEJAHTERA	4.00	4.00	DropMultipleSmallArtificial	713
107	Donggala	TUNAS ABADI	4.00	4.00	DropMultipleSmallArtificial	713
108	Donggala	KM SANTANA	4.00	4.00	DropMultipleSmallArtificial	713
109	Donggala	DULHANIA	4.00	4.00	DropMultipleSmallArtificial	713
110	Donggala	FABIOLA	4.00	4.00	DropMultipleSmallArtificial	713
111	Donggala	KM KABELOTA	4.00	4.00	DropMultipleSmallArtificial	713
112	Donggala	KM IRIAN	4.00	4.00	DropMultipleSmallArtificial	713
113	Donggala	KM KHAIRAT	4.00	4.00	DropMultipleSmallArtificial	713
114	Donggala	SETIA SELALU	4.00	4.00	DropMultipleSmallArtificial	713
115	Donggala	BAHARI MANDIRI	4.00	4.00	DropMultipleSmallArtificial	713
116	Donggala	AWAL MULA	4.00	4.00	DropMultipleSmallArtificial	713
117	Donggala	PEDDINA ATIKU	4.00	4.00	DropMultipleSmallArtificial	713
118	Donggala	TOPO RAI	4.00	4.00	DropMultipleSmallArtificial	713
119	Donggala	FAJAR	4.00	4.00	DropMultipleSmallArtificial	713
120	Donggala	KM HAMPAR	4.00	4.00	DropMultipleSmallArtificial	713
121	Donggala	SAMUDRA_Donggala	4.00	4.00	DropMultipleSmallArtificial	713
122	Donggala	BONEOGE JAYA	4.00	4.00	DropMultipleSmallArtificial	713
123	Donggala	SAMUDRA 2	4.00	4.00	DropMultipleSmallArtificial	713
124	Donggala	HL Boneoge 1	4.00	4.00	DropMultipleSmallArtificial	713
125	Donggala	HL Boneoge 2	4.00	4.00	DropMultipleSmallArtificial	713
126	Donggala	HL Boneoge 3	4.00	4.00	DropMultipleSmallArtificial	713
127	Donggala	HL Boneoge 4	4.00	4.00	DropMultipleSmallArtificial	713
128	Donggala	HL Boneoge 5	4.00	4.00	DropMultipleSmallArtificial	713
129	Donggala	HL Boneoge 6	4.00	4.00	DropMultipleSmallArtificial	713
130	Donggala	HL Boneoge 7	4.00	4.00	DropMultipleSmallArtificial	713
131	Donggala	HL Boneoge 8	4.00	4.00	DropMultipleSmallArtificial	713
132	Donggala	HL Boneoge 9	4.00	4.00	DropMultipleSmallArtificial	713
133	Donggala	HL Boneoge 10	4.00	4.00	DropMultipleSmallArtificial	713

Table 7.2: Boat Information from Boneoge Village, Banawa

No	Program Site	Boat Name	GT Declared	GT Estimate	Fishing Gear	Fishing Area
134	Donggala	HL Boneoge 11	4.00	4.00	DropMultipleSmallArtificial	713
135	Donggala	HL Boneoge 12	4.00	4.00	DropMultipleSmallArtificial	713
136	Donggala	HL Boneoge 13	4.00	4.00	DropMultipleSmallArtificial	713
137	Donggala	HL Boneoge 14	4.00	4.00	DropMultipleSmallArtificial	713
138	Donggala	HL Boneoge 15	4.00	4.00	DropMultipleSmallArtificial	713
139	Donggala	HL Boneoge 16	4.00	4.00	DropMultipleSmallArtificial	713
140	Donggala	HL Boneoge 17	4.00	4.00	DropMultipleSmallArtificial	713
141	Donggala	HL Boneoge 18	4.00	4.00	DropMultipleSmallArtificial	713
142	Donggala	HL Boneoge 19	4.00	4.00	DropMultipleSmallArtificial	713
143	Donggala	HL Boneoge 20	4.00	4.00	DropMultipleSmallArtificial	713
144	Donggala	HL Boneoge 21	4.00	4.00	DropMultipleSmallArtificial	713
145	Donggala	HL Boneoge 22	4.00	4.00	DropMultipleSmallArtificial	713
146	Donggala	HL Boneoge 23	4.00	4.00	DropMultipleSmallArtificial	713
147	Donggala	HL Boneoge 24	4.00	4.00	DropMultipleSmallArtificial	713
148	Donggala	HL Boneoge 25	4.00	4.00	DropMultipleSmallArtificial	713
149	Donggala	HL Boneoge 26	4.00	4.00	DropMultipleSmallArtificial	713
150	Donggala	HL Boneoge 27	4.00	4.00	DropMultipleSmallArtificial	713
151	Donggala	HL Boneoge 28	4.00	4.00	DropMultipleSmallArtificial	713
152	Donggala	HL Boneoge 29	4.00	4.00	DropMultipleSmallArtificial	713
153	Donggala	HL Boneoge 30	4.00	4.00	DropMultipleSmallArtificial	713
154	Donggala	HL Boneoge 31	4.00	4.00	DropMultipleSmallArtificial	713
155	Donggala	HL Boneoge 32	4.00	4.00	DropMultipleSmallArtificial	713
156	Donggala	HL Boneoge 33	4.00	4.00	DropMultipleSmallArtificial	713
157	Donggala	HL Boneoge 34	4.00	4.00	DropMultipleSmallArtificial	713
158	Donggala	HL Boneoge 35	4.00	4.00	DropMultipleSmallArtificial	713
159	Donggala	HL Boneoge 36	4.00	4.00	DropMultipleSmallArtificial	713
160	Donggala	HL Boneoge 37	4.00	4.00	DropMultipleSmallArtificial	713
161	Donggala	HL Boneoge 38	4.00	4.00	DropMultipleSmallArtificial	713
162	Donggala	HL Boneoge 39	4.00	4.00	DropMultipleSmallArtificial	713
163	Donggala	HL Boneoge 40	4.00	4.00	DropMultipleSmallArtificial	713
164	Donggala	HL Boneoge 41	4.00	4.00	DropMultipleSmallArtificial	713
165	Donggala	HL Boneoge 42	4.00	4.00	DropMultipleSmallArtificial	713
166	Donggala	HL Boneoge 43	4.00	4.00	DropMultipleSmallArtificial	713
167	Donggala	HL Boneoge 44	4.00	4.00	DropMultipleSmallArtificial	713
168	Donggala	HL Boneoge 45	4.00	4.00	DropMultipleSmallArtificial	713
169	Donggala	HL Boneoge 46	4.00	4.00	DropMultipleSmallArtificial	713
170	Donggala	HL Boneoge 47	4.00	4.00	DropMultipleSmallArtificial	713
171	Donggala	HL Boneoge 48	4.00	4.00	DropMultipleSmallArtificial	713
172	Donggala	HL Boneoge 49	4.00	4.00	DropMultipleSmallArtificial	713
173	Donggala	HL Boneoge 50	4.00	4.00	DropMultipleSmallArtificial	713
174	Donggala	HL Boneoge 51	4.00	4.00	DropMultipleSmallArtificial	713
175	Donggala	HL Boneoge 52	4.00	4.00	DropMultipleSmallArtificial	713
176	Donggala	HL Boneoge 53	4.00	4.00	DropMultipleSmallArtificial	713
177	Donggala	HL Boneoge 54	4.00	4.00	DropMultipleSmallArtificial	713
178	Donggala	HL Boneoge 55	4.00	4.00	DropMultipleSmallArtificial	713
179	Donggala	HL Boneoge 56	4.00	4.00	DropMultipleSmallArtificial	713
180	Donggala	HL Boneoge 57	4.00	4.00	DropMultipleSmallArtificial	713
181	Donggala	HL Boneoge 58	4.00	4.00	DropMultipleSmallArtificial	713
182	Donggala	HL Boneoge 59	4.00	4.00	DropMultipleSmallArtificial	713
183	Donggala	HL Boneoge 60	4.00	4.00	DropMultipleSmallArtificial	713
184	Donggala	HL Boneoge 61	4.00	4.00	DropMultipleSmallArtificial	713
185	Donggala	HL Boneoge 62	4.00	4.00	DropMultipleSmallArtificial	713
186	Donggala	HL Boneoge 63	4.00	4.00	DropMultipleSmallArtificial	713
187	Donggala	HL Boneoge 64	4.00	4.00	DropMultipleSmallArtificial	713
188	Donggala	HL Boneoge 65	4.00	4.00	DropMultipleSmallArtificial	713
189	Donggala	HL Boneoge 66	4.00	4.00	DropMultipleSmallArtificial	713
190	Donggala	HL Boneoge 67	4.00	4.00	DropMultipleSmallArtificial	713
191	Donggala	HL Boneoge 68	4.00	4.00	DropMultipleSmallArtificial	713
192	Donggala	HL Boneoge 69	4.00	4.00	DropMultipleSmallArtificial	713
193	Donggala	HL Boneoge 70	4.00	4.00	DropMultipleSmallArtificial	713

Table 7.2: Boat Information from Boneoge Village, Banawa

No	Program Site	Boat Name	GT Declared	GT Estimate	Fishing Gear	Fishing Area
194	Donggala	HL Boneoge 71	4.00	4.00	DropMultipleSmallArtificial	713
195	Donggala	HL Boneoge 72	4.00	4.00	DropMultipleSmallArtificial	713
196	Donggala	HL Boneoge 73	4.00	4.00	DropMultipleSmallArtificial	713
197	Donggala	HL Boneoge 74	4.00	4.00	DropMultipleSmallArtificial	713
198	Donggala	HL Boneoge 75	4.00	4.00	DropMultipleSmallArtificial	713
199	Donggala	HL Boneoge 76	4.00	4.00	DropMultipleSmallArtificial	713
200	Donggala	HL Boneoge 77	4.00	4.00	DropMultipleSmallArtificial	713
201	Donggala	HL Boneoge 78	4.00	4.00	DropMultipleSmallArtificial	713
202	Donggala	HL Boneoge 79	4.00	4.00	DropMultipleSmallArtificial	713
203	Donggala	HL Boneoge 80	4.00	4.00	DropMultipleSmallArtificial	713
204	Donggala	HL Boneoge 81	4.00	4.00	DropMultipleSmallArtificial	713
205	Donggala	HL Boneoge 82	4.00	4.00	DropMultipleSmallArtificial	713
206	Donggala	HL Boneoge 83	4.00	4.00	DropMultipleSmallArtificial	713
207	Donggala	HL Boneoge 84	4.00	4.00	DropMultipleSmallArtificial	713
208	Donggala	HL Boneoge 85	4.00	4.00	DropMultipleSmallArtificial	713
209	Donggala	HL Boneoge 86	4.00	4.00	DropMultipleSmallArtificial	713
210	Donggala	HL Boneoge 87	4.00	4.00	DropMultipleSmallArtificial	713
211	Donggala	HL Boneoge 88	4.00	4.00	DropMultipleSmallArtificial	713
212	Donggala	HL Boneoge 89	4.00	4.00	DropMultipleSmallArtificial	713
213	Donggala	HL Boneoge 90	4.00	4.00	DropMultipleSmallArtificial	713
214	Donggala	HL Boneoge 91	4.00	4.00	DropMultipleSmallArtificial	713
215	Donggala	HL Boneoge 92	4.00	4.00	DropMultipleSmallArtificial	713
216	Donggala	HL Boneoge 93	4.00	4.00	DropMultipleSmallArtificial	713
217	Donggala	HL Boneoge 94	4.00	4.00	DropMultipleSmallArtificial	713
218	Donggala	HL Boneoge 95	4.00	4.00	DropMultipleSmallArtificial	713
219	Donggala	HL Boneoge 96	4.00	4.00	DropMultipleSmallArtificial	713
220	Donggala	HL Boneoge 97	4.00	4.00	DropMultipleSmallArtificial	713
221	Donggala	HL Boneoge 98	4.00	4.00	DropMultipleSmallArtificial	713
222	Donggala	HL Boneoge 99	4.00	4.00	DropMultipleSmallArtificial	713
223	Donggala	HL Boneoge 100	4.00	4.00	DropMultipleSmallArtificial	713
224	Donggala	HL Boneoge 101	4.00	4.00	DropMultipleSmallArtificial	713
225	Donggala	HL Boneoge 102	4.00	4.00	DropMultipleSmallArtificial	713
226	Donggala	HL Boneoge 103	4.00	4.00	DropMultipleSmallArtificial	713
227	Donggala	HL Boneoge 104	4.00	4.00	DropMultipleSmallArtificial	713
228	Donggala	HL Boneoge 105	4.00	4.00	DropMultipleSmallArtificial	713
229	Donggala	HL Boneoge 106	4.00	4.00	DropMultipleSmallArtificial	713
230	Donggala	HL Boneoge 107	4.00	4.00	DropMultipleSmallArtificial	713
231	Donggala	HL Boneoge 108	4.00	4.00	DropMultipleSmallArtificial	713
232	Donggala	HL Boneoge 109	4.00	4.00	DropMultipleSmallArtificial	713
233	Donggala	HL Boneoge 110	4.00	4.00	DropMultipleSmallArtificial	713
234	Donggala	HL Boneoge 111	4.00	4.00	DropMultipleSmallArtificial	713
235	Donggala	HL Boneoge 112	4.00	4.00	DropMultipleSmallArtificial	713
236	Donggala	HL Boneoge 113	4.00	4.00	DropMultipleSmallArtificial	713
237	Donggala	HL Boneoge 114	4.00	4.00	DropMultipleSmallArtificial	713
238	Donggala	HL Boneoge 115	4.00	4.00	DropMultipleSmallArtificial	713
239	Donggala	HL Boneoge 116	4.00	4.00	DropMultipleSmallArtificial	713
240	Donggala	HL Boneoge 117	4.00	4.00	DropMultipleSmallArtificial	713
241	Donggala	HL Boneoge 118	4.00	4.00	DropMultipleSmallArtificial	713
242	Donggala	HL Boneoge 119	4.00	4.00	DropMultipleSmallArtificial	713
243	Donggala	HL Boneoge 120	4.00	4.00	DropMultipleSmallArtificial	713
244	Donggala	HL Boneoge 121	4.00	4.00	DropMultipleSmallArtificial	713
245	Donggala	HL Boneoge 122	4.00	4.00	DropMultipleSmallArtificial	713
246	Donggala	HL Boneoge 123	4.00	4.00	DropMultipleSmallArtificial	713
247	Donggala	HL Boneoge 124	4.00	4.00	DropMultipleSmallArtificial	713
248	Donggala	HL Boneoge 125	4.00	4.00	DropMultipleSmallArtificial	713
249	Donggala	HL Boneoge 126	4.00	4.00	DropMultipleSmallArtificial	713
250	Donggala	HL Boneoge 127	4.00	4.00	DropMultipleSmallArtificial	713
251	Donggala	HL Boneoge 128	4.00	4.00	DropMultipleSmallArtificial	713
252	Donggala	HL Boneoge 129	4.00	4.00	DropMultipleSmallArtificial	713
253	Donggala	HL Boneoge 130	4.00	4.00	DropMultipleSmallArtificial	713

Table 7.2: Boat Information from Boneoge Village, Banawa

No	Program Site	Boat Name	GT Declared	GT Estimate	Fishing Gear	Fishing Area
374	Donggala	HL Boneoge 251	4.00	4.00	DropMultipleSmallArtificial	713
375	Donggala	HL Boneoge 252	4.00	4.00	DropMultipleSmallArtificial	713
376	Donggala	HL Boneoge 253	4.00	4.00	DropMultipleSmallArtificial	713
377	Donggala	HL Boneoge 254	4.00	4.00	DropMultipleSmallArtificial	713
378	Donggala	HL Boneoge 255	4.00	4.00	DropMultipleSmallArtificial	713
379	Donggala	HL Boneoge 256	4.00	4.00	DropMultipleSmallArtificial	713
380	Donggala	HL Boneoge 257	4.00	4.00	DropMultipleSmallArtificial	713
381	Donggala	HL Boneoge 258	4.00	4.00	DropMultipleSmallArtificial	713
382	Donggala	HL Boneoge 259	4.00	4.00	DropMultipleSmallArtificial	713
383	Donggala	HL Boneoge 260	4.00	4.00	DropMultipleSmallArtificial	713
384	Donggala	HL Boneoge 261	4.00	4.00	DropMultipleSmallArtificial	713
385	Donggala	HL Boneoge 262	4.00	4.00	DropMultipleSmallArtificial	713
386	Donggala	HL Boneoge 263	4.00	4.00	DropMultipleSmallArtificial	713
387	Donggala	HL Boneoge 264	4.00	4.00	DropMultipleSmallArtificial	713
388	Donggala	HL Boneoge 265	4.00	4.00	DropMultipleSmallArtificial	713
389	Donggala	HL Boneoge 266	4.00	4.00	DropMultipleSmallArtificial	713
390	Donggala	HL Boneoge 267	4.00	4.00	DropMultipleSmallArtificial	713
391	Donggala	HL Boneoge 268	4.00	4.00	DropMultipleSmallArtificial	713
392	Donggala	HL Boneoge 269	4.00	4.00	DropMultipleSmallArtificial	713
393	Donggala	HL Boneoge 270	4.00	4.00	DropMultipleSmallArtificial	713
394	Donggala	HL Boneoge 271	4.00	4.00	DropMultipleSmallArtificial	713
395	Donggala	HL Boneoge 272	4.00	4.00	DropMultipleSmallArtificial	713
396	Donggala	HL Boneoge 273	4.00	4.00	DropMultipleSmallArtificial	713

7.2.3 Follow-up

Boneoge is a potential location for deploying CODRS because our survey showed that many fishers who are dedicated on tuna and tuna-like fisheries.

7.2.4 Important Contact

Name : Indra
Affiliation : Fisher at Boneoge (KMN Nusan)
Contact : 081299574409

7.2.5 References

7.2.6 Figures

7.3 Pelawa Village, Parigi Moutong

Pelawa Village, Parigi Moutong

8 West Sulawesi Province

8.1 FLP. Banggae, Mamuju

PPIBanggaeMamuju.Rnw

8.2 FLP. Lantora, Majene

PPILantoraMajene.Rnw

9 South Sulawesi Province

9.1 FLP. Lonrae, Bone

9.1.1 Background and Survey Practicalities

Background

FLP Lonrae is one of the busiest fishing harbour and becomes the fish auction area for the fishermen from Bone and its surrounding. The auction activity starts in the early morning, breaks in the day. It continues in the afternoon and finish in the evening time. This harbour is integrated with cold storage with 60 tonnes capacity, ice company and fish powder company.

The main commodity is large pelagic fish such as tuna, skipjack, tongkol and some small pelagic such as scads and others economically fish such as mahi-mahi, demersal fish, squid, shrimp, crabs, octopus etc.

There are various type and size of fishing vessels depending on the main target fish. Based on the information obtained from Fisheries and Marine Agency Bone (DKP Bone), there are at least 4369 fishing fleet in which 2599 are non-motorized boat (sampan/canoe-like). There are 370 motorized fishing fleet registered in the agency however not all of them are active vessels. Some vessels are inactive due to broken, or have been sold and moved to other owner and places.

The size range of motorized fishing vessel is between 5-30GT. The average of total volume of production of PPI Lonrae is >30000 tonnes/year in which 2000 tonnes come from pelagic fish (both small and large) (DKP Bone, 2018). Since the big potency of its fisheries, FLP Lonrae is managed by provincial level South Sulawesi. There are two big suppliers for tuna commodity, namelu UD. Arjuna 89 with 30 fishing vessels and UD. Potlot with 50 fishing vessels. Both suppliers are key players for local market and only sell the fish to individual buyer up to big processing companies in Makassar without export. The main product is whole tuna and it is sold in frozen condition. The companies in Makassar will process the fish into 'loin' and other forms following to the requirement of the export market. Two main processing companies are PT. Prima Bahari Inti Lestari and PT. BMI.

The products are in the form of 'tuna' logs or sold in the form of frozen whole. Usually buyer companies in Makassar will do loin and so on according to export market demand. Some of them are PT Prima Bahari Inti Lestari and PT BMI.

Survey team

Survey was done by Duaitd Kolibonso

Period visited

Survey was conducted on 9-10 May, 2019

How to get there

FLP Lonrae can be accessed by 5-6 hours traveling by car from Makassar.

9.1.2 Fleet Description

There is some type of fishing vessels exist in FLP Lonrae. Purse seine has the number of 31 vessels with size 20-30GT. The main target catch is small pelagic, scads, tongkol, skipjack, baby tuna, medium tuna and mahi-mahi. The fishing trip takes 1-3 days with the average catch 2-4tonnes/trip. Trolling line vessels counts to be 48 vessels with size 5-10 GT. This vessel is targeting large tuna, medium tuna, skipjack, baby tuna, tongkol, and mahi-mahi. The duration of the fishing trip is 7-10 days with the average of total catch is 800kg - 1 ton/trip. There are 289 handline (dropline) fishing vessels sizing 5-20 GT. The target catch is large tuna, billfish, and skipjack. The fishing trip duration is 10-20 days with the catch amount is 1-2 ton/trip.

Trolling and handline vessels fish rely on the season of tuna in which it starts from April until September (east season). They will break between October until March (west season) and shift to fish demersal fish without using the same boat. The type of boat used for fishing demersal fish is small-motorized boat (mesin tempel) attached to bottom longline. There are some andon vessels (mobile boat) that land their catch only in particular time (seasonal). There are 2 pole and line vessels size 15 GT but they do not active. The rest of the fishing fleet are 544 vessels <5GT (one day fishing) with the average total catch is 50-100 kg/trip targeting all fish. The main fishing ground of fishing fleet based in Lonrae is FMA 713 covering Selayar waters, Taka Bonerate waters and Flores Sea.

9.1.3 Follow-up

This location is potential to be deployed CODRS contract. However, due to most of tuna fishermen are in seasonal fishing, it is not recommended to conduct CODRS program. There is also an NGO, MDPI already existed doing the data collection.

9.1.4 Important Contact

Name : Andi Sukiman
Affiliation : Coordinator of Fishermen Affairs of DKP Kab. Bone
Contact : 082343406890

Name : Harsan
Affiliation : Fisher
Contact : -

Name : Syahril
Affiliation : Enumerator of MDPI Bone
Contact : 082396222102

9.1.5 References

9.1.6 Figures



Figure 9.1: Typical purse seine in Bone



Figure 9.2: The vessels originated from Bone



Figure 9.3: Mandar boat originated from Poliwali Mandar



Figure 9.4: Medium-size of tuna in PPI Lonrae caught by Mandar boat



Figure 9.5: Large tuna caught by handline (dropline)



Figure 9.6: Typical small boat used to fish demersal fish



Figure 9.7: Catch of demersal fish by tuna fisherman



Figure 9.8: Typical dropline gear Surface
One Large Live used to fish large tuna



Figure 9.9: Typical bottom longline to fish demersal fish

9.2 FLP. Lappa, Sinjai

9.2.1 Background and Survey Practicalities

Background

FLP Lappa in Sinjai is one of the centres of landing site and fish trading in eastern coastal region of South Sulawesi Province. This harbour is located in the river bank of Tangka. The fishing fleet in the harbour is not only dominated by SINjai vessels but also from surrounded area such as Sembilan Island, Bone, Bulukumba and Selayar Island.

The fish auction activity starts at 16.00 WITA until the next day in the morning. The main commodity is small and pelagic fish including tuna, scads, bawal, sardines, tongkol, skipjack, wahoo, tgiant travelly, rainbow runner and also some demersal fish such as snapper, and grouper, octopus, shrimp, crab etc.

The fishing fleets vary at sizes, gears and function (catcher and collecting boat). The collecting boat collect the fish from surrounded island such as Sembilan and Selayar Island and bring it to FLP Lappa. Based on the data obtained from fisheries and marine agency of Sinjai (DKP Sinjai), there are 440 fishing vessels registered and have an active fishing license (SIPI). Total volume of production in FLP Lappa is 4109 tonnes/year in which 280,61 tonnes comes from tuna, skipjack and tongkol (DKP SINjai, 2017).

All suppliers in FLP Lappa are local people with the product allocation for both local market and export. Export products are mainly demersal fish such as snapper and grouper, shrimp, squid and octopus. The main destination is Malaysia and Singapore. One of the suppliers is UD. Dedi Lestari that focuses on commercial fish products. Meanwhile, the supplier of tuna, skipjack and tongkol send the product such frozen fish to the companies based in Makassar. Particularly on large tuna, one of the suppliers UD. Ryan sells the product of whole body of tuna. This supplier employs 20 fishing vessels. Two main buyers in Makassar are PT. Prima Bahari and PT. BMI.

Survey team

Survey was done by Duaitd Kolibonso

Period visited

Survey was conducted on 11 Mei 2019

How to get there

PPI Lappa can be reached by land transportation using car around 4-5 hours from Makassar.

9.2.2 Fleet Description

A total of 440 registered fishing vessels have a size range 4-42GT. Trolling vessel (pancing tonda/penongkol) is the highest number by 396 vessels (3-29GT). However, almost 60 percent of those vessels do not unload their catch in PPI Lappa. Most of them have 'andon' fishing license that make them possible to highly mobile to fish and land their catch in another area. Some top destinations of andon fishing fleet are Lombok (PPI Labuhan Lombok, PP Labuhan Haji), KupanG (PPI Oeba, PPI Tenau), Ambon (Galala), Bali (Benoa port), Malang (PPI Pondok Dadap), Kendari (Pasar Lapulu, PPI Sodoha),

Paolo (PPI Pontap), Takalar (PPI Beba), Makassar (PPN Untia), Banjarmasin (PPI Batulicin) and Pacitan (PPI Tamperan).

The target catch of trolling vessel is baby tuna, medium tuna, large tuna, skipjack, tongkol, mahi-mahi, rainbow runner, and billfish with the average catch amount is 1-2 tonnes/trip. Fishing trip is between 10-12 days/trip by employing 4-6 crews.

Pole and line vessel known in local as ‘paipai’ boat has the number of 8 vessels with size range 27-42GT. These vessels unload their catch not only in PPI Lappa but also in surrounded harbours such as PPI Pontap and PPI Balambang in Palopo. The main target of this vessel is skipjack, baby tuna, medium tuna and tongkol with the average catch is 2-3tonnes/trip. The fishing trip of pole and line is around 3-7 days/trip with the number of crew is 14-26 people. Purse seine vessel known as ‘pelingkar’ boat has the number of 36 vessels with size range 14-30GT. Purse seine vessels occasionally land their catch in neighbouring harbour such as PPI Lonrae (Bone), PPI Untia (Makassar), PPI Beba (Takalar) and PPI Kayuadi (Selayar Island). The main target of purse seine vessel is pelagic fish such as scads, tongkol, rainbow runner, baby tuna, medium tuna, mahi-mahi etc with the average catch 1-3tonnes/trip. The number of fishing crew of purse seine is between 9-30 people/boat.

Table 9.1: Boat Information from FLP. Lappa, Sinjai

No	Program Site	Boat Name	GT Declared	GT Estimate	Fishing Gear	Fishing Area
1	Sinjai	KMN Kurnia Ilahi	25.00	20.30	TrollMultipleSmallArtificial	573
2	Sinjai	KMN Asnawi	22.00	19.40	TrollOneLargeArtificial	713
3	Sinjai	KMN CH Hatijah	17.00	15.70	DropOneLargeArtificial	713
4	Sinjai	KMN Salawati 02	27.00	25.70	TrollOneLargeArtificial	713
5	Sinjai	KMN Salawati 03	26.00	24.10	TrollOneLargeArtificial	713
6	Sinjai	KM Terbitlah Terang	24.00	22.60	TrollMultipleSmallArtificial	713
7	Sinjai	KMN Salawati 03	26.00	24.10	DriftOneLargeNatural	713
8	Sinjai	AE2:L8dhy Mandiri 02	18.00	18.00	TrollOneLargeArtificial	713
9	Sinjai	Adi Jaya 01	15.00	15.00	TrollOneLargeArtificial	713
10	Sinjai	Adi Jaya 05	24.00	24.00	TrollOneLargeArtificial	713
11	Sinjai	KMN Adi Jaya 06	24.00	22.20	TrollOneLargeArtificial	713
12	Sinjai	Adi Jaya BB 02	20.00	20.00	TrollOneLargeArtificial	713
13	Sinjai	Adi Jaya BB 03	19.00	19.00	TrollOneLargeArtificial	713
14	Sinjai	Adi Jaya BB 04	21.00	21.00	TrollOneLargeArtificial	713
15	Sinjai	Adia 02	23.00	23.00	TrollOneLargeArtificial	713
16	Sinjai	Adia 03	22.00	22.00	TrollOneLargeArtificial	713
17	Sinjai	Adia 04	24.00	24.00	TrollOneLargeArtificial	713
18	Sinjai	Adia 08	24.00	24.00	TrollOneLargeArtificial	713
19	Sinjai	Adia 09	26.00	26.00	TrollOneLargeArtificial	713
20	Sinjai	Adia 10	25.00	25.00	TrollOneLargeArtificial	713
21	Sinjai	Agri Karya 02	20.00	20.00	TrollOneLargeArtificial	713
22	Sinjai	Ahmad Fauzi 01	29.00	29.00	PurseSeine	713
23	Sinjai	Air manis 01	24.00	24.00	TrollOneLargeArtificial	713
24	Sinjai	Air manis 03	22.00	22.00	TrollOneLargeArtificial	713
25	Sinjai	Air manis 04	28.00	28.00	TrollOneLargeArtificial	713
26	Sinjai	Aira 01	13.00	13.00	TrollOneLargeArtificial	713
27	Sinjai	Aira 02	14.00	14.00	TrollOneLargeArtificial	713
28	Sinjai	Aisah 02	0.00	2.00	TrollOneLargeArtificial	713
29	Sinjai	Aisah 06	21.00	21.00	TrollOneLargeArtificial	713
30	Sinjai	Aisah 10	20.00	17.00	TrollOneLargeArtificial	713
31	Sinjai	Aisah 11	19.00	22.00	TrollOneLargeArtificial	713
32	Sinjai	Aisah 16	20.00	28.00	TrollOneLargeArtificial	713
33	Sinjai	Aisah 17	21.00	23.00	TrollOneLargeArtificial	713
34	Sinjai	Aisah 18	17.00	17.00	TrollOneLargeArtificial	713
35	Sinjai	Aisah 19	22.00	16.61	TrollOneLargeArtificial	713
36	Sinjai	Aisah 20	21.00	13.80	TrollOneLargeArtificial	713

Table 9.1: Boat Information from FLP. Lappa, Sinjai

No	Program Site	Boat Name	GT Declared	GT Estimate	Fishing Gear	Fishing Area
37	Sinjai	Aisah 21	20.00	13.14	TrollOneLargeArtificial	713
38	Sinjai	Aisah 23	21.00	14.15	TrollOneLargeArtificial	713
39	Sinjai	Aisah 24	22.00	22.00	TrollOneLargeArtificial	713
40	Sinjai	Aisah 25	28.00	28.00	TrollOneLargeArtificial	713
41	Sinjai	Aisah 26	23.00	23.00	TrollOneLargeArtificial	713
42	Sinjai	Aisah 27	21.00	17.00	TrollOneLargeArtificial	713
43	Sinjai	Aisah 28	23.00	20.45	TrollOneLargeArtificial	713
44	Sinjai	Aisah 29	20.00	22.38	TrollOneLargeArtificial	713
45	Sinjai	Aisah 30	25.00	24.44	TrollOneLargeArtificial	713
46	Sinjai	Aisah 31	23.00	22.19	TrollOneLargeArtificial	713
47	Sinjai	Aisah 32	25.00	28.59	TrollOneLargeArtificial	713
48	Sinjai	Aisah 33	22.00	22.40	TrollOneLargeArtificial	713
49	Sinjai	Aisah 34	22.00	20.20	TrollOneLargeArtificial	713
50	Sinjai	Aisah 35	22.00	15.45	TrollOneLargeArtificial	713
51	Sinjai	Aisah 38	24.00	25.09	TrollOneLargeArtificial	713
52	Sinjai	Aisah 39	22.00	19.57	TrollOneLargeArtificial	713
53	Sinjai	Aisah 40	26.00	22.07	TrollOneLargeArtificial	713
54	Sinjai	Aisah 41	26.00	22.05	TrollOneLargeArtificial	713
55	Sinjai	Aisah 42	24.00	15.38	TrollOneLargeArtificial	713
56	Sinjai	Aisah 43	22.00	15.83	TrollOneLargeArtificial	713
57	Sinjai	Akarni Jaya 06	25.00	16.33	TrollOneLargeArtificial	713
58	Sinjai	Akarni Jaya 08	25.00	26.31	TrollOneLargeArtificial	713
59	Sinjai	Alam Nirwana SM 02	27.00	16.30	TrollOneLargeArtificial	713
60	Sinjai	Aldira 07_Sinjai	30.00	19.46	PurseSeine	713
61	Sinjai	Alga Jalil 01	16.00	21.30	TrollOneLargeArtificial	713
62	Sinjai	Alif Jaya 01	15.00	25.07	TrollOneLargeArtificial	713
63	Sinjai	Alif Jaya 02	22.00	19.18	TrollOneLargeArtificial	713
64	Sinjai	Alif Jaya 03	23.00	18.70	TrollOneLargeArtificial	713
65	Sinjai	Aliyah 01	5.00	26.33	DropOneLargeArtificial	713
66	Sinjai	Almutasam 01	15.00	17.15	TrollOneLargeArtificial	713
67	Sinjai	Alni Jaya	3.00	22.14	DropOneLargeArtificial	713
68	Sinjai	Amal Jaya 03_Sinjai	26.00	12.34	PurseSeine	713
69	Sinjai	Amira Jaya	17.00	15.77	TrollOneLargeArtificial	713
70	Sinjai	Amira Jaya 01	19.00	20.63	PurseSeine	713
71	Sinjai	Andika BL	6.00	18.14	TrollOneLargeArtificial	713
72	Sinjai	Andika Jaya 01	26.00	24.11	PurseSeine	713
73	Sinjai	Anita 02	17.00	25.38	TrollOneLargeArtificial	713
74	Sinjai	Anugrah AS 03	29.00	17.83	PurseSeine	713
75	Sinjai	Anugrah Indah 01	30.00	18.03	PurseSeine	713
76	Sinjai	Ardiansyah 01	20.00	22.30	TrollOneLargeArtificial	713
77	Sinjai	Ardiansyah 02	24.00	13.29	TrollOneLargeArtificial	713
78	Sinjai	Ardiasya 01	20.00	21.71	TrollOneLargeArtificial	713
79	Sinjai	Arga Falah 01	18.00	20.36	TrollOneLargeArtificial	713
80	Sinjai	Arga Falah 02	17.00	18.87	TrollOneLargeArtificial	713
81	Sinjai	Arisma Jaya 01	20.00	14.71	PurseSeine	713
82	Sinjai	Arliza SJ 01	25.00	20.52	TrollOneLargeArtificial	713
83	Sinjai	Armada AGP 01	22.00	19.94	TrollOneLargeArtificial	713
84	Sinjai	Armada AGP 03	23.00	17.59	TrollOneLargeArtificial	713
85	Sinjai	Armada Jaya	21.00	13.65	TrollOneLargeArtificial	713
86	Sinjai	Arwan Jaya 01_Sinjai	30.00	17.33	PurseSeine	713
87	Sinjai	Asri Jaya 01	18.00	19.34	TrollOneLargeArtificial	713
88	Sinjai	Asri Jaya 02	21.00	17.87	TrollOneLargeArtificial	713
89	Sinjai	Asri Jaya 03	23.00	15.99	TrollOneLargeArtificial	713
90	Sinjai	Asri Jaya 04	25.00	17.64	TrollOneLargeArtificial	713
91	Sinjai	Astri Jaya 01	23.00	15.19	TrollOneLargeArtificial	713
92	Sinjai	Asyahwwa	23.00	23.00	TrollOneLargeArtificial	713
93	Sinjai	Azan Jaya 01	13.00	17.00	TrollOneLargeArtificial	713
94	Sinjai	Azan Jaya 02	18.00	17.27	TrollOneLargeArtificial	713
95	Sinjai	Bahari 03_Sinjai	26.00	15.62	TrollOneLargeArtificial	713
96	Sinjai	Barcelona_Sinjai	25.00	24.54	TrollOneLargeArtificial	713

Table 9.1: Boat Information from FLP. Lappa, Sinjai

No	Program Site	Boat Name	GT Declared	GT Estimate	Fishing Gear	Fishing Area
97	Sinjai	Berkah alam MS 05	25.00	13.36	TrollOneLargeArtificial	713
98	Sinjai	Berkah alam MS 06	23.00	13.26	TrollOneLargeArtificial	713
99	Sinjai	Berkah alam MS 07	25.00	13.41	TrollOneLargeArtificial	713
100	Sinjai	Berkah alam MS 08	27.00	14.92	TrollOneLargeArtificial	713
101	Sinjai	Berkah alam MS 09	27.00	25.30	TrollOneLargeArtificial	713
102	Sinjai	Berkah dunia	17.00	17.00	TrollOneLargeArtificial	713
103	Sinjai	Berkah hidayat	19.00	15.00	TrollOneLargeArtificial	713
104	Sinjai	Berkat usaha 03	22.00	20.00	TrollOneLargeArtificial	713
105	Sinjai	Berkat usah BBN	20.00	19.73	TrollOneLargeArtificial	713
106	Sinjai	Berkat usaha MFI	20.00	18.34	TrollOneLargeArtificial	713
107	Sinjai	Bintang Adi Putra 01	5.00	7.05	DropOneLargeArtificial	713
108	Sinjai	Bintang Adi Putra 02	4.00	4.03	DropOneLargeArtificial	713
109	Sinjai	Bintang Kejora 10	6.00	9.19	TrollOneLargeArtificial	713
110	Sinjai	Bintang Kejora HD 02	15.00	14.64	TrollOneLargeArtificial	713
111	Sinjai	Bintang Kejora ND 02	17.00	17.00	TrollOneLargeArtificial	713
112	Sinjai	Bonging Tanre	15.00	15.00	DropOneLargeArtificial	713
113	Sinjai	Bonita 01	14.00	14.00	TrollOneLargeArtificial	713
114	Sinjai	Borneo RFK 01	15.00	15.00	TrollOneLargeArtificial	713
115	Sinjai	Brasil IC 05	20.00	19.73	TrollOneLargeArtificial	713
116	Sinjai	Brasil JM 01	25.00	24.54	TrollOneLargeArtificial	713
117	Sinjai	Bulu Kamase 02	18.00	18.00	TrollOneLargeArtificial	713
118	Sinjai	Bulu Kamase 03	24.00	24.00	DropOneLargeArtificial	713
119	Sinjai	Bulu Kamase Berlayar 03	22.00	22.00	TrollOneLargeArtificial	713
120	Sinjai	Bulu Kamase Berlayar 04	25.00	25.00	TrollOneLargeArtificial	713
121	Sinjai	Bulu Kamase Berlayar 05	27.00	27.00	TrollOneLargeArtificial	713
122	Sinjai	Bunga Mawar 01	25.00	25.00	PurseSeine	713
123	Sinjai	Bunga Mawar 03_Sinjai	30.00	30.00	PurseSeine	713
124	Sinjai	Cahaya Ayu_Sinjai	28.00	28.00	PurseSeine	713
125	Sinjai	Cahaya Bulukamase 01	22.00	22.00	TrollOneLargeArtificial	713
126	Sinjai	Cahaya Kejora 02	16.00	16.00	TrollOneLargeArtificial	713
127	Sinjai	Cahaya Lapawawoi 01	30.00	30.00	PoleAndLine	713
128	Sinjai	Cahaya Lapawawoi 02	29.00	29.00	PoleAndLine	713
129	Sinjai	Cahaya Madina YH 99	24.00	24.00	TrollOneLargeArtificial	713
130	Sinjai	Cahaya Malise 03	24.00	24.00	TrollOneLargeArtificial	713
131	Sinjai	Cahaya Mulia Baru 03	24.00	24.00	TrollOneLargeArtificial	713
132	Sinjai	Cahaya Sukma 01	17.00	17.00	TrollOneLargeArtificial	713
133	Sinjai	Cakrawala SJ 01	18.00	18.00	TrollOneLargeArtificial	713
134	Sinjai	Cari Untung	30.00	30.00	PurseSeine	713
135	Sinjai	Cinta Mekkah 03	19.00	19.00	TrollOneLargeArtificial	713
136	Sinjai	Cinta Mekkah 04	16.00	16.00	TrollOneLargeArtificial	713
137	Sinjai	Cinta Mekkah 05	23.00	23.00	TrollOneLargeArtificial	713
138	Sinjai	Cinta Mekkah 06	27.00	27.00	TrollOneLargeArtificial	713
139	Sinjai	Citra Bahari 03	21.00	21.00	TrollOneLargeArtificial	713
140	Sinjai	Citra Buana 06	21.00	21.00	TrollOneLargeArtificial	713
141	Sinjai	Citra Buana MU	29.00	29.00	TrollOneLargeArtificial	713
142	Sinjai	Danil Jaya 01	18.00	18.00	TrollOneLargeArtificial	713
143	Sinjai	Dian Abadi 02	24.00	24.00	TrollOneLargeArtificial	713
144	Sinjai	Djayyul HAQ	13.00	13.00	TrollOneLargeArtificial	713
145	Sinjai	Doa Ibunda	17.00	17.00	TrollOneLargeArtificial	713
146	Sinjai	Doa Suci Syawal 01	22.00	22.00	TrollOneLargeArtificial	713
147	Sinjai	Dua Putra Baccara 01	20.00	20.00	TrollOneLargeArtificial	713
148	Sinjai	Dua Putra Baccara 02	26.00	26.00	TrollOneLargeArtificial	713
149	Sinjai	Empat Putra ST	27.00	27.00	TrollOneLargeArtificial	713
150	Sinjai	Erna Mandiri 002	18.00	18.00	TrollOneLargeArtificial	713
151	Sinjai	Erna Mandiri 07	18.00	18.00	TrollOneLargeArtificial	713
152	Sinjai	Erwin RS 01	27.00	27.00	TrollOneLargeArtificial	713
153	Sinjai	Fadli Jaya 01	14.00	14.00	TrollOneLargeArtificial	713
154	Sinjai	Faiq 01	23.00	23.00	TrollOneLargeArtificial	713
155	Sinjai	Faiq 02	22.00	22.00	TrollOneLargeArtificial	713
156	Sinjai	Faiq 03	20.00	20.00	TrollOneLargeArtificial	713

Table 9.1: Boat Information from FLP. Lappa, Sinjai

No	Program Site	Boat Name	GT Declared	GT Estimate	Fishing Gear	Fishing Area
157	Sinjai	Faisal Jaya 01	16.00	16.00	TrollOneLargeArtificial	713
158	Sinjai	Faisal Jaya 02	22.00	22.00	TrollOneLargeArtificial	713
159	Sinjai	Faiza RMJ 02	18.00	18.00	TrollOneLargeArtificial	713
160	Sinjai	Faiza RMJ 03	19.00	19.00	TrollOneLargeArtificial	713
161	Sinjai	Faizul Aswad	15.00	15.00	TrollOneLargeArtificial	713
162	Sinjai	Farid Jaya 01	19.00	19.00	TrollOneLargeArtificial	713
163	Sinjai	Fitriani 03	20.00	20.00	TrollOneLargeArtificial	713
164	Sinjai	Fuad Rezki 01	19.00	19.00	TrollOneLargeArtificial	713
165	Sinjai	Gairah Kembali 02	17.00	17.00	TrollOneLargeArtificial	713
166	Sinjai	Gelora Laut	18.00	18.00	TrollOneLargeArtificial	713
167	Sinjai	Gelora Laut 03	16.00	16.00	TrollOneLargeArtificial	713
168	Sinjai	Haeril	0.00	2.00	DropOneLargeArtificial	713
169	Sinjai	Haerul Samudra 01	15.00	15.00	TrollOneLargeArtificial	713
170	Sinjai	Haerul Samudra 02	17.00	17.00	TrollOneLargeArtificial	713
171	Sinjai	Haerul Samudra 05	17.00	17.00	TrollOneLargeArtificial	713
172	Sinjai	Halilintar Ariqah 06	20.00	20.00	TrollOneLargeArtificial	713
173	Sinjai	Halilintar Ariqah 09	14.00	14.00	TrollOneLargeArtificial	713
174	Sinjai	Halilintar Ariqah 22	15.00	15.00	TrollOneLargeArtificial	713
175	Sinjai	Halilintar Ariqah 23	15.00	15.00	TrollOneLargeArtificial	713
176	Sinjai	Halilintar Ariqah 24	16.00	16.00	TrollOneLargeArtificial	713
177	Sinjai	Harapan Baru	4.00	4.00	TrollOneLargeArtificial	713
178	Sinjai	Harapan City 87	16.00	15.45	TrollOneLargeArtificial	713
179	Sinjai	Harapan City 88	20.00	20.00	TrollOneLargeArtificial	713
180	Sinjai	Harapan City 89	23.00	23.00	TrollOneLargeArtificial	713
181	Sinjai	Harapan Jaya	3.00	3.00	DropOneLargeArtificial	713
182	Sinjai	Hardiani 02	15.00	15.00	TrollOneLargeArtificial	713
183	Sinjai	Hardiani 04	19.00	19.00	TrollOneLargeArtificial	713
184	Sinjai	Hariska 02	19.00	19.00	TrollOneLargeArtificial	713
185	Sinjai	Hasil Karya	3.00	3.00	TrollMultipleSmallArtificial	713
186	Sinjai	Hassunah 01	15.00	15.00	TrollOneLargeArtificial	713
187	Sinjai	Heriani 02	29.00	29.00	PurseSeine	713
188	Sinjai	Herni Jaya 05_Sinjai	30.00	30.00	PurseSeine	713
189	Sinjai	Hidup Baru 05	15.00	15.00	TrollOneLargeArtificial	713
190	Sinjai	Hidup Baru 06	13.00	13.00	TrollOneLargeArtificial	713
191	Sinjai	Hikma Kurnia	29.00	29.00	PoleAndLine	713
192	Sinjai	Hikma Kurnia 01	29.00	29.00	PoleAndLine	713
193	Sinjai	Ikar Jaya 01	23.00	23.00	PurseSeine	713
194	Sinjai	Ikar Jaya 03	30.00	30.00	PurseSeine	713
195	Sinjai	Ilham 99	14.00	14.00	TrollOneLargeArtificial	713
196	Sinjai	Ilham Jaya MR 01	24.00	24.00	TrollOneLargeArtificial	713
197	Sinjai	Indar Yani	23.00	23.00	PurseSeine	713
198	Sinjai	Indri Jaya 02	20.00	20.00	TrollOneLargeArtificial	713
199	Sinjai	Indriani 01	26.00	26.00	TrollOneLargeArtificial	713
200	Sinjai	Indriani 03	20.00	20.00	TrollOneLargeArtificial	713
201	Sinjai	Indriani 04	24.00	24.00	TrollOneLargeArtificial	713
202	Sinjai	Indriani 05	24.00	24.00	TrollOneLargeArtificial	713
203	Sinjai	Irwandani 02	21.00	21.00	PurseSeine	713
204	Sinjai	Istijarah	17.00	17.00	TrollOneLargeArtificial	713
205	Sinjai	Jawa Baru 03	12.00	12.00	TrollOneLargeArtificial	713
206	Sinjai	Jawa Baru Raya 02	16.00	16.00	TrollOneLargeArtificial	713
207	Sinjai	Kartika SJ 02	22.00	22.00	TrollOneLargeArtificial	713
208	Sinjai	Kartika SJ 05	18.00	18.00	TrollOneLargeArtificial	713
209	Sinjai	Kartika SJ 07	19.00	19.00	TrollOneLargeArtificial	713
210	Sinjai	KUB Sinar Fadillah	21.00	21.00	TrollOneLargeArtificial	713
211	Sinjai	Kurnia Ilahi 03	19.00	19.00	TrollOneLargeArtificial	713
212	Sinjai	Kurnia Ilahi 04	16.00	16.00	TrollOneLargeArtificial	713
213	Sinjai	Kurnia Ilahi 05	21.00	21.00	TrollOneLargeArtificial	713
214	Sinjai	Kurnia Ilahi BL 01	25.00	25.00	TrollOneLargeArtificial	713
215	Sinjai	Lappa Mas 05	23.00	22.32	TrollOneLargeArtificial	713
216	Sinjai	Lappa Mas 06	25.00	24.91	TrollOneLargeArtificial	713

Table 9.1: Boat Information from FLP. Lappa, Sinjai

No	Program Site	Boat Name	GT Declared	GT Estimate	Fishing Gear	Fishing Area
217	Sinjai	Lappa Mas 07	27.00	25.65	TrollOneLargeArtificial	713
218	Sinjai	KMN Larosa 02	24.00	22.10	DropOneLargeArtificial	713
219	Sinjai	Larosa 03	23.00	22.32	TrollOneLargeArtificial	713
220	Sinjai	Larosa 04	25.00	22.73	TrollOneLargeArtificial	713
221	Sinjai	Lerina 02	16.00	14.76	TrollOneLargeArtificial	713
222	Sinjai	Lestari 999	18.00	17.24	TrollOneLargeArtificial	713
223	Sinjai	Lima Putra MR 02	16.00	14.65	TrollOneLargeArtificial	713
224	Sinjai	Lisna Indah 337	29.00	24.22	PurseSeine	713
225	Sinjai	Lisna Indah 339	29.00	21.25	PurseSeine	713
226	Sinjai	Madani 78	24.00	22.94	TrollOneLargeArtificial	713
227	Sinjai	Madani 79	25.00	23.27	TrollOneLargeArtificial	713
228	Sinjai	Mahkota Kamil 12	16.00	15.07	TrollOneLargeArtificial	713
229	Sinjai	Makmur Jaya	4.00	3.08	TrollOneLargeArtificial	713
230	Sinjai	Mandiri Adzzam 01	17.00	16.32	TrollOneLargeArtificial	713
231	Sinjai	Mandiri Alal Falah 01	19.00	17.40	TrollOneLargeArtificial	713
232	Sinjai	Mandiri Alal Falah 02	21.00	19.92	TrollOneLargeArtificial	713
233	Sinjai	Mandiri Alal Falah 03	16.00	15.24	TrollOneLargeArtificial	713
234	Sinjai	Manggaraya 03_Sinjai	28.00	19.52	PurseSeine	713
235	Sinjai	Maroanging Jaya	18.00	16.40	TrollOneLargeArtificial	713
236	Sinjai	Maroanginta HM01	14.00	13.07	TrollOneLargeArtificial	713
237	Sinjai	Masagenae Riska 01	26.00	24.18	TrollOneLargeArtificial	713
238	Sinjai	Masagenae Riska 02	22.00	20.75	TrollOneLargeArtificial	713
239	Sinjai	Masagenae Riska 06	28.00	25.75	TrollOneLargeArtificial	713
240	Sinjai	Masria 01	24.00	22.50	TrollOneLargeArtificial	713
241	Sinjai	Mayana 01	21.00	20.19	TrollOneLargeArtificial	713
242	Sinjai	Mega Buana 001	15.00	14.49	TrollOneLargeArtificial	713
243	Sinjai	Mega Buana DMP 03	24.00	22.84	DropOneLargeArtificial	713
244	Sinjai	Mega Buana DMP 02	24.00	18.12	DropOneLargeArtificial	713
245	Sinjai	Mega Indah 001	15.00	14.54	TrollOneLargeArtificial	713
246	Sinjai	Mega Nusa 03	22.00	20.14	TrollOneLargeArtificial	713
247	Sinjai	Miftahul Jaya 1	29.00	30.15	PoleAndLine	713
248	Sinjai	Musafir Kelana_Sinjai	29.00	29.24	PurseSeine	713
249	Sinjai	Mutazima	14.00	12.89	TrollOneLargeArtificial	713
250	Sinjai	Mutiara Burung Loe 03	22.00	20.36	TrollOneLargeArtificial	713
251	Sinjai	Mutiara TM 05	28.00	25.27	TrollOneLargeArtificial	713
252	Sinjai	Nabila AN. Nuur	25.00	23.21	TrollOneLargeArtificial	713
253	Sinjai	Naila Jaya	0.00	2.00	DropOneLargeArtificial	713
254	Sinjai	Najwa 01	12.00	11.95	TrollOneLargeArtificial	713
255	Sinjai	Natasya 01	23.00	21.92	TrollOneLargeArtificial	713
256	Sinjai	Natasya 02	21.00	19.62	TrollOneLargeArtificial	713
257	Sinjai	Natasya 03	21.00	19.54	TrollOneLargeArtificial	713
258	Sinjai	Natasya 04	24.00	22.46	TrollOneLargeArtificial	713
259	Sinjai	Natasya 05	12.00	10.87	TrollOneLargeArtificial	713
260	Sinjai	Natasya 06	27.00	25.55	TrollOneLargeArtificial	713
261	Sinjai	Nelayan 2016 193	11.00	7.07	DropOneLargeArtificial	713
262	Sinjai	Nelayan 2016 50	24.00	19.28	PoleAndLine	713
263	Sinjai	Nirwana Indah 02_Sinjai	29.00	25.37	PurseSeine	713
264	Sinjai	Nirwana Indah 03	30.00	30.79	PurseSeine	713
265	Sinjai	Nirwana Indah 04	30.00	30.17	PurseSeine	713
266	Sinjai	Novianti Jaya	5.00	3.36	DropOneLargeArtificial	713
267	Sinjai	Nur Aisyah	19.00	18.14	TrollOneLargeArtificial	713
268	Sinjai	Nurfadillah Fajar	24.00	23.78	TrollOneLargeArtificial	713
269	Sinjai	Nirfadillah Fajar 02	24.00	21.88	TrollOneLargeArtificial	713
270	Sinjai	Nurlaela 04	27.00	25.63	TrollOneLargeArtificial	713
271	Sinjai	Nurlia Jaya NS	18.00	17.08	TrollOneLargeArtificial	713
272	Sinjai	Nurlina BL 02	23.00	21.23	TrollOneLargeArtificial	713
273	Sinjai	Nusa Indah BL 01	24.00	22.66	TrollOneLargeArtificial	713
274	Sinjai	Palapa 05	20.00	18.16	TrollOneLargeArtificial	713
275	Sinjai	Pandan Loloe	23.00	16.64	PurseSeine	713
276	Sinjai	Panter Laut 01	21.00	20.18	TrollOneLargeArtificial	713

Table 9.1: Boat Information from FLP. Lappa, Sinjai

No	Program Site	Boat Name	GT Declared	GT Estimate	Fishing Gear	Fishing Area
277	Sinjai	Pelita Laut 01	17.00	15.25	TrollOneLargeArtificial	713
278	Sinjai	Penjuru Bintang	13.00	12.82	TrollOneLargeArtificial	713
279	Sinjai	Penjuru Bintang 02	17.00	15.27	TrollOneLargeArtificial	713
280	Sinjai	Penjuru Bintang 04	17.00	15.39	TrollOneLargeArtificial	713
281	Sinjai	Penjuru Bintang 05	19.00	17.29	TrollOneLargeArtificial	713
282	Sinjai	Permata Sari 79	15.00	12.76	TrollOneLargeArtificial	713
283	Sinjai	Permata Sari 80	11.00	10.74	TrollOneLargeArtificial	713
284	Sinjai	Pipos 77	22.00	20.01	TrollOneLargeArtificial	713
285	Sinjai	Poin 887	20.00	18.94	TrollOneLargeArtificial	713
286	Sinjai	Poin 888	20.00	18.23	TrollOneLargeArtificial	713
287	Sinjai	Puncak Jaya ST 01	16.00	15.74	TrollOneLargeArtificial	713
288	Sinjai	Putra Kembar	14.00	13.07	TrollOneLargeArtificial	713
289	Sinjai	Putra Kembar BL 01	23.00	21.65	TrollOneLargeArtificial	713
290	Sinjai	Putra Kembar BL 02	24.00	22.29	TrollOneLargeArtificial	713
291	Sinjai	Putra Kembar BL 04	23.00	22.10	TrollOneLargeArtificial	713
292	Sinjai	Putra Kembar BL 06	24.00	22.61	TrollOneLargeArtificial	713
293	Sinjai	Putra Kembar SK	14.00	13.07	TrollOneLargeArtificial	713
294	Sinjai	Putri 01	19.00	17.52	TrollOneLargeArtificial	713
295	Sinjai	Putri Dua 02	25.00	18.34	TrollOneLargeArtificial	713
296	Sinjai	Putri Dua 03	23.00	21.40	TrollOneLargeArtificial	713
297	Sinjai	Putri Indah	4.00	3.36	DropOneLargeArtificial	713
298	Sinjai	Putri Tunggal 03	17.00	15.84	TrollOneLargeArtificial	713
299	Sinjai	Rahman Jaya 02	14.00	13.01	TrollOneLargeArtificial	713
300	Sinjai	Rahman Jaya 03	13.00	12.46	TrollOneLargeArtificial	713
301	Sinjai	Rahman Jaya 04	19.00	18.02	TrollOneLargeArtificial	713
302	Sinjai	Raihan Jaya	30.00	22.83	PurseSeine	713
303	Sinjai	Raja Timur	20.00	18.29	TrollOneLargeArtificial	713
304	Sinjai	Raja Timur 02	22.00	20.05	TrollOneLargeArtificial	713
305	Sinjai	Rajawali 02	27.00	24.50	PoleAndLine	713
306	Sinjai	Rama Jaya 001	17.00	15.94	TrollOneLargeArtificial	713
307	Sinjai	Ratna Jaya 01	14.00	12.77	TrollOneLargeArtificial	713
308	Sinjai	Ratna Jaya 02	15.00	14.28	TrollOneLargeArtificial	713
309	Sinjai	Ratna RR	24.00	22.44	TrollOneLargeArtificial	713
310	Sinjai	Rehan	14.00	12.56	PurseSeine	713
311	Sinjai	Reski Amanda 03	17.00	16.37	TrollOneLargeArtificial	713
312	Sinjai	Reski Amanda AF 01	15.00	14.61	TrollOneLargeArtificial	713
313	Sinjai	Reski Amanda AF 02	16.00	15.38	TrollOneLargeArtificial	713
314	Sinjai	Reski Ayu 01	30.00	25.22	PurseSeine	713
315	Sinjai	Reski Darul Hikma 01	19.00	17.83	TrollOneLargeArtificial	713
316	Sinjai	Reski Darul Hikma 02	18.00	16.64	TrollOneLargeArtificial	713
317	Sinjai	Reski HMD	23.00	21.19	TrollOneLargeArtificial	713
318	Sinjai	Reza 777	29.00	25.32	PurseSeine	713
319	Sinjai	Rezki Jaya MR 02	25.00	23.04	TrollOneLargeArtificial	713
320	Sinjai	Rezky Kumala 02	25.00	22.91	TrollOneLargeArtificial	713
321	Sinjai	RH Jaya	19.00	17.72	TrollOneLargeArtificial	713
322	Sinjai	Risal Hidayat	22.00	20.87	TrollOneLargeArtificial	713
323	Sinjai	Riski Jaya 03	29.00	26.35	TrollOneLargeArtificial	713
324	Sinjai	Risma Jaya 01 SJ	14.00	13.31	TrollOneLargeArtificial	713
325	Sinjai	Rival Jaya	24.00	22.62	TrollOneLargeArtificial	713
326	Sinjai	Rofina LP 01	20.00	18.56	TrollOneLargeArtificial	713
327	Sinjai	Romantika Jaya 01	17.00	13.34	PurseSeine	713
328	Sinjai	Romantika Jaya 03	28.00	20.87	PurseSeine	713
329	Sinjai	Ryang	21.00	19.13	TrollOneLargeArtificial	713
330	Sinjai	Ryang 01	18.00	16.87	TrollOneLargeArtificial	713
331	Sinjai	Ryang 02	19.00	17.69	TrollOneLargeArtificial	713
332	Sinjai	Ryang 03	21.00	20.17	TrollOneLargeArtificial	713
333	Sinjai	Ryang 05	22.00	20.30	TrollOneLargeArtificial	713
334	Sinjai	Ryang 06	21.00	19.13	TrollOneLargeArtificial	713
335	Sinjai	Ryang 07	20.00	19.51	TrollOneLargeArtificial	713
336	Sinjai	Ryang 10	22.00	20.01	TrollOneLargeArtificial	713

Table 9.1: Boat Information from FLP. Lappa, Sinjai

No	Program Site	Boat Name	GT Declared	GT Estimate	Fishing Gear	Fishing Area
337	Sinjai	Ryang 11	24.00	22.09	TrollOneLargeArtificial	713
338	Sinjai	Ryang 12	23.00	22.09	TrollOneLargeArtificial	713
339	Sinjai	Ryang 13	25.00	23.17	TrollOneLargeArtificial	713
340	Sinjai	Ryang 14	25.00	23.68	TrollOneLargeArtificial	713
341	Sinjai	Ryang 17	26.00	23.62	TrollOneLargeArtificial	713
342	Sinjai	Ryang 18	13.00	13.18	TrollOneLargeArtificial	713
343	Sinjai	Salsabila BL 01	27.00	24.92	TrollOneLargeArtificial	713
344	Sinjai	Samudra Indah 033	16.00	15.36	TrollOneLargeArtificial	713
345	Sinjai	Samudra Indah 044	15.00	13.86	TrollOneLargeArtificial	713
346	Sinjai	Samudra Indah 088	19.00	17.58	TrollOneLargeArtificial	713
347	Sinjai	Samudra Jaya 01	19.00	17.69	TrollOneLargeArtificial	713
348	Sinjai	Samudra Jaya 022	19.00	17.87	TrollOneLargeArtificial	713
349	Sinjai	Sang Surya 04	21.00	19.67	TrollOneLargeArtificial	713
350	Sinjai	Sari Jaya LM 03	21.00	19.42	TrollOneLargeArtificial	713
351	Sinjai	Sarina 01	14.00	13.27	TrollOneLargeArtificial	713
352	Sinjai	Sarina 02	19.00	17.66	TrollOneLargeArtificial	713
353	Sinjai	Sarina 03	18.00	17.13	TrollOneLargeArtificial	713
354	Sinjai	Sarina 04	19.00	17.80	TrollOneLargeArtificial	713
355	Sinjai	Sarina 05	23.00	21.36	TrollOneLargeArtificial	713
356	Sinjai	Sarina 06	17.00	16.35	TrollOneLargeArtificial	713
357	Sinjai	Sarina ISM 02	17.00	16.01	TrollOneLargeArtificial	713
358	Sinjai	Sarina ISM 03	12.00	11.00	TrollOneLargeArtificial	713
359	Sinjai	Sarina ISM 05	14.00	13.24	TrollOneLargeArtificial	713
360	Sinjai	Sarina ISM 06	18.00	17.15	TrollOneLargeArtificial	713
361	Sinjai	Sarina Jaya 01	24.00	21.98	TrollOneLargeArtificial	713
362	Sinjai	Saro Mase 04	18.00	16.25	TrollOneLargeArtificial	713
363	Sinjai	Saro Mase 05	18.00	17.17	TrollOneLargeArtificial	713
364	Sinjai	Saro Mase 07	19.00	17.49	TrollOneLargeArtificial	713
365	Sinjai	Saro Mase 08	19.00	17.14	TrollOneLargeArtificial	713
366	Sinjai	Saro Mase 10	27.00	25.42	TrollOneLargeArtificial	713
367	Sinjai	Saro Mase 11	29.00	26.04	TrollOneLargeArtificial	713
368	Sinjai	Setia Bahari 68	23.00	21.78	TrollOneLargeArtificial	713
369	Sinjai	Setia Jaya ST 02	25.00	23.47	TrollOneLargeArtificial	713
370	Sinjai	Setia Jaya ST 03	25.00	23.28	TrollOneLargeArtificial	713
371	Sinjai	Siamasei 01	17.00	15.81	TrollOneLargeArtificial	713
372	Sinjai	Silfa Jaya 01	20.00	19.23	TrollOneLargeArtificial	713
373	Sinjai	Sinar Aqila 01	12.00	11.66	TrollOneLargeArtificial	713
374	Sinjai	Sinar Aqila 02	15.00	13.44	TrollOneLargeArtificial	713
375	Sinjai	Sinar Bakti 77 02	18.00	16.60	TrollOneLargeArtificial	713
376	Sinjai	Sinar Bakti 77 03	25.00	23.64	TrollOneLargeArtificial	713
377	Sinjai	Sinar Baru 77	20.00	18.75	TrollOneLargeArtificial	713
378	Sinjai	Sinar Baru MR 02	20.00	18.95	TrollOneLargeArtificial	713
379	Sinjai	Sinar Indah 09_Sinjai	30.00	25.46	PurseSeine	713
380	Sinjai	Sinar Mentari 03	14.00	12.44	TrollOneLargeArtificial	713
381	Sinjai	Sinar Mentari 05	24.00	22.03	TrollOneLargeArtificial	713
382	Sinjai	Sinar Mulia NH 04	22.00	19.89	TrollOneLargeArtificial	713
383	Sinjai	Sinar Mulia NH 05	25.00	23.62	TrollOneLargeArtificial	713
384	Sinjai	Sinar Pulau Sembilan	22.00	20.52	TrollOneLargeArtificial	713
385	Sinjai	Star Mild 02	20.00	12.62	TrollOneLargeArtificial	713
386	Sinjai	Star Mild 04	24.00	22.20	TrollOneLargeArtificial	713
387	Sinjai	Star Mild 05	22.00	19.34	TrollOneLargeArtificial	713
388	Sinjai	Star Mild 07	26.00	24.43	TrollOneLargeArtificial	713
389	Sinjai	Star Mild 09	22.00	19.90	TrollOneLargeArtificial	713
390	Sinjai	Star Mild 10	26.00	21.92	TrollOneLargeArtificial	713
391	Sinjai	Star Mild 12	27.00	24.51	TrollOneLargeArtificial	713
392	Sinjai	Sudi SH 02	13.00	12.20	TrollOneLargeArtificial	713
393	Sinjai	Sumber Bahari 02	29.00	23.97	PoleAndLine	713
394	Sinjai	Sumber Bahari 2	29.00	23.91	TrollOneLargeArtificial	713
395	Sinjai	Sumber Riski 01	19.00	18.16	TrollOneLargeArtificial	713
396	Sinjai	Sumber Riski 02	14.00	13.30	TrollOneLargeArtificial	713

Table 9.1: Boat Information from FLP. Lappa, Sinjai

No	Program Site	Boat Name	GT Declared	GT Estimate	Fishing Gear	Fishing Area
397	Sinjai	Sumber Riski 03	16.00	15.09	TrollOneLargeArtificial	713
398	Sinjai	Sumber Riski 04	19.00	17.67	TrollOneLargeArtificial	713
399	Sinjai	Sumber Riski 05	19.00	17.35	TrollOneLargeArtificial	713
400	Sinjai	Sumber Riski 06	22.00	21.22	TrollOneLargeArtificial	713
401	Sinjai	Sumber Riski 07	19.00	17.95	TrollOneLargeArtificial	713
402	Sinjai	Sumber Riski 08	24.00	22.74	TrollOneLargeArtificial	713
403	Sinjai	Sumber Riski 09	19.00	17.90	TrollOneLargeArtificial	713
404	Sinjai	Sumber Riski 10	19.00	17.66	TrollOneLargeArtificial	713
405	Sinjai	Sumber Reski Alam 77	14.00	13.19	TrollOneLargeArtificial	713
406	Sinjai	Sumber Reski Alam 99_Sinjai	17.00	16.00	TrollOneLargeArtificial	713
407	Sinjai	Takbir Ilahi 02	15.00	13.94	TrollOneLargeArtificial	713
408	Sinjai	Tanjung Harapan 01	19.00	17.77	TrollOneLargeArtificial	713
409	Sinjai	Teluk Bone 05	16.00	15.53	TrollOneLargeArtificial	713
410	Sinjai	Teluk Bone 10	15.00	14.13	TrollOneLargeArtificial	713
411	Sinjai	Tribun Timur 02	17.00	16.32	TrollOneLargeArtificial	713
412	Sinjai	Tribun Timur 04	14.00	13.25	TrollOneLargeArtificial	713
413	Sinjai	Tribun Timur 08	15.00	13.94	TrollOneLargeArtificial	713
414	Sinjai	Tujuh Walie 01	0.00	2.00	TrollOneLargeArtificial	713
415	Sinjai	Tujuh Walie 02	16.00	15.49	TrollOneLargeArtificial	713
416	Sinjai	Tujuh Walie 03	14.00	12.63	TrollOneLargeArtificial	713
417	Sinjai	Tunas Inti	29.00	22.05	PurseSeine	713
418	Sinjai	Usaha Abadi IRW 01	17.00	15.58	TrollOneLargeArtificial	713
419	Sinjai	Usaha Abadi IRW 03	16.00	14.79	TrollOneLargeArtificial	713
420	Sinjai	Usaha Abadi IRW 04	18.00	17.44	TrollOneLargeArtificial	713
421	Sinjai	Usaha Abadi IRW 05	29.00	13.40	TrollOneLargeArtificial	713
422	Sinjai	Usaha Abadi IRW 06	28.00	26.33	TrollOneLargeArtificial	713
423	Sinjai	Usaha Baru 77	23.00	21.34	TrollOneLargeArtificial	713
424	Sinjai	Usaha Berdikari 88	24.00	22.43	TrollOneLargeArtificial	713
425	Sinjai	Usaha Bersama 05	25.00	23.54	TrollOneLargeArtificial	713
426	Sinjai	Usaha Bersama 11	18.00	17.11	TrollOneLargeArtificial	713
427	Sinjai	Usaha Bersama 33	25.00	23.00	TrollOneLargeArtificial	713
428	Sinjai	Usaha Mandiri 01	20.00	18.67	TrollOneLargeArtificial	713
429	Sinjai	Wafid Azizah 01	17.00	15.23	TrollOneLargeArtificial	713
430	Sinjai	Wafid Azizah 02	11.00	10.85	TrollOneLargeArtificial	713
431	Sinjai	Wafid Azizah 03	18.00	17.07	TrollOneLargeArtificial	713
432	Sinjai	Wahyu Reski 01	21.00	20.00	TrollOneLargeArtificial	713
433	Sinjai	Wahyudi 01	15.00	13.97	TrollOneLargeArtificial	713
434	Sinjai	Warda 01	15.00	14.60	TrollOneLargeArtificial	713
435	Sinjai	Warda 02	23.00	22.02	TrollOneLargeArtificial	713
436	Sinjai	Wawan	15.00	15.11	TrollOneLargeArtificial	713
437	Sinjai	Wulan Purnama	28.00	24.35	PurseSeine	713
438	Sinjai	X Mild 04	23.00	21.28	TrollOneLargeArtificial	713
439	Sinjai	Yasmin 01	17.00	16.14	TrollOneLargeArtificial	713
440	Sinjai	Yasmin 02	19.00	17.89	TrollOneLargeArtificial	713
441	Sinjai	Yasmin 03	17.00	16.29	TrollOneLargeArtificial	713
442	Sinjai	Yasmin 04	14.00	12.89	TrollOneLargeArtificial	713
443	Denpasar	Aidil Hidayah 01	23.00	19.42	DropOneLargeNatural	713
444	Denpasar	Anggiritani 02	22.00	19.97	DropOneLargeNatural	713
445	Denpasar	Anugerah Ichsan - 02	15.00	12.99	DropOneLargeNatural	713
446	Denpasar	Anugrah Ichsan 07	20.00	18.21	DropOneLargeNatural	713
447	Denpasar	Armada AGP - 01	22.00	19.97	DropOneLargeNatural	713
448	Denpasar	Bahari - 03	26.00	23.96	DropOneLargeNatural	713
449	Denpasar	Berkah Dunia	17.00	13.40	DropOneLargeNatural	713
450	Denpasar	Bikeru Jaya 01	18.00	14.20	DropOneLargeNatural	713
451	Denpasar	Cahaya Malise - 02	23.00	20.96	DropOneLargeNatural	713
452	Denpasar	Cahaya Malise -03	24.00	21.42	DropOneLargeNatural	713
453	Denpasar	Doa Suci Syawal 02	22.00	19.97	DropOneLargeNatural	713
454	Denpasar	Haerul Samudra 05	17.00	13.94	DropOneLargeNatural	713
455	Denpasar	Hairul Samudra 01	17.00	13.94	DropOneLargeNatural	713
456	Denpasar	Harapan City - 89	23.00	20.96	DropOneLargeNatural	713

Table 9.1: Boat Information from FLP. Lappa, Sinjai

No	Program Site	Boat Name	GT Declared	GT Estimate	Fishing Gear	Fishing Area
457	Denpasar	Harapan HR 01	17.00	13.94	DropOneLargeNatural	713
458	Denpasar	Mahkota Kamil 15	17.00	13.94	DropOneLargeNatural	713
459	Denpasar	Nur Fadillah Fajar 02	23.00	20.96	DropOneLargeNatural	713
460	Denpasar	Pipos - 77	22.00	19.97	DropOneLargeNatural	713
461	Denpasar	Putra Kembar BL 08	19.00	14.11	DropOneLargeNatural	713
462	Denpasar	Rezki Abadi 03	18.00	14.20	DropOneLargeNatural	713
463	Denpasar	Riski Jaya 01	22.00	19.97	DropOneLargeNatural	713
464	Denpasar	Risky Jaya 02	22.00	19.97	DropOneLargeNatural	713
465	Denpasar	Risky jaya 03	29.00	24.45	DropOneLargeNatural	713
466	Denpasar	Ryang - 10	26.00	23.96	DropOneLargeNatural	713
467	Denpasar	Salawati 01	27.00	23.96	DropOneLargeNatural	713
468	Denpasar	Setia Jaya St - 01	23.00	20.96	DropOneLargeNatural	713
469	Denpasar	Setia Jaya St - 02	25.00	21.42	DropOneLargeNatural	713
470	Denpasar	setia Jaya St - 03	25.00	21.42	DropOneLargeNatural	713
471	Denpasar	Setia Jaya ST 01	23.00	20.96	DropOneLargeNatural	713
472	Denpasar	Setia Jaya ST- 03	25.00	21.42	DropOneLargeNatural	713
473	Denpasar	Silfa Jaya - 01	20.00	18.21	DropOneLargeNatural	713
474	Denpasar	Star Mild	28.00	22.45	DropOneLargeNatural	713
475	Denpasar	Star Mild - 04	24.00	22.10	DropOneLargeNatural	713
476	Denpasar	Star Mild - 05	22.00	21.31	DropOneLargeNatural	713
477	Denpasar	Star Mild - 07	26.00	21.50	DropOneLargeNatural	713
478	Denpasar	Star Mild - 09	22.00	19.97	DropOneLargeNatural	713
479	Denpasar	Star Mild - 10	26.00	22.11	DropOneLargeNatural	713
480	Denpasar	Star Mild 08	22.00	20.88	DropOneLargeNatural	713
481	Denpasar	Takbir Ilahi - 02	15.00	14.28	DropOneLargeNatural	713
482	Denpasar	Takbir Ilahi 01	14.00	12.18	DropOneLargeNatural	713
483	Sinjai	ADI JAYA 06	24.00	23.00	TrollOneLargeArtificial	713
484	Sinjai	ADI JAYA BB 07	26.00	25.10	TrollOneLargeArtificial	713
485	Sinjai	ADIA BALI 27	28.00	27.30	TrollOneLargeArtificial	713
486	Sinjai	AGUNG 77	30.00	28.00	PurseSeine	713
487	Sinjai	AIR MANIS 05	23.00	22.30	TrollOneLargeArtificial	714
488	Sinjai	AISAH 22	24.00	23.00	TrollOneLargeArtificial	713
489	Sinjai	AISAH 36	26.00	25.10	TrollOneLargeArtificial	713
490	Sinjai	AISAH 45	23.00	22.30	TrollOneLargeArtificial	713
491	Sinjai	ALAM NIRWANA SM 03	24.00	23.00	TrollOneLargeArtificial	713
492	Sinjai	ALDI SAPUTRA 01	22.00	21.10	PurseSeine	713
493	Sinjai	ALIF JAYA 05	25.00	24.50	TrollOneLargeArtificial	713
494	Sinjai	ALIF PUTRA 02	13.00	12.30	TrollOneLargeArtificial	713
495	Sinjai	ALIF PUTRA 04	18.00	17.30	TrollOneLargeArtificial	713
496	Sinjai	ALISAN 03	30.00	28.00	PurseSeine	713
497	Sinjai	AMIRA JAYA 02	25.00	24.50	PurseSeine	713
498	Sinjai	ANUGRAH AS	29.00	28.10	PurseSeine	713
499	Sinjai	ARDIASYA 02	24.00	23.00	TrollOneLargeArtificial	713
500	Sinjai	ARYA PUTRA 77	23.00	22.30	TrollOneLargeArtificial	713
501	Sinjai	ASNAWI 03	26.00	25.10	TrollOneLargeArtificial	713
502	Sinjai	AULIAH 04	25.00	24.50	TrollOneLargeArtificial	713
503	Sinjai	BALAS BUDI 09	18.00	17.30	TrollOneLargeArtificial	713
504	Sinjai	BALIHUKO JAYA 01	19.00	18.50	TrollOneLargeArtificial	713
505	Sinjai	BALIHUKO JAYA 05	25.00	24.50	TrollOneLargeArtificial	713
506	Sinjai	BARUNA TAHIR	29.00	28.10	TrollOneLargeArtificial	713
507	Sinjai	BAYANGKARA 1	23.00	22.30	PurseSeine	713
508	Sinjai	BERKAH ALAM MS 03	19.00	18.50	TrollOneLargeArtificial	713
509	Sinjai	BERKAH ALAM MS 11	27.00	26.70	TrollOneLargeArtificial	713
510	Sinjai	BERKAH HIDAYAT 02	25.00	24.50	TrollOneLargeArtificial	713
511	Sinjai	BINTANG KEJORA HD 03	17.00	17.00	TrollOneLargeArtificial	713
512	Sinjai	BINTANG KEJORA HD 04	18.00	17.30	TrollOneLargeArtificial	713
513	Sinjai	BINTANG KEJORA ND 01	15.00	14.60	TrollOneLargeArtificial	713
514	Sinjai	BINTANG KEJORA ND 03	17.00	17.00	TrollOneLargeArtificial	713
515	Sinjai	BINTANG KEJORA ND 04	17.00	17.00	TrollOneLargeArtificial	713
516	Sinjai	BINTANG KEJORA ND 05	28.00	27.30	TrollOneLargeArtificial	713

Table 9.1: Boat Information from FLP. Lappa, Sinjai

No	Program Site	Boat Name	GT Declared	GT Estimate	Fishing Gear	Fishing Area
517	Sinjai	BINTANG TARUPA 01	29.00	28.10	PurseSeine	713
518	Sinjai	BINTANG TERANG 04	27.00	26.70	TrollOneLargeArtificial	713
519	Sinjai	BINTANG TERANG A02	22.00	21.10	TrollOneLargeArtificial	713
520	Sinjai	BINTANG TERANG A05	25.00	24.50	TrollOneLargeArtificial	713
521	Sinjai	BRASIL 77	28.00	27.30	TrollOneLargeArtificial	713
522	Sinjai	BUANA LAUT NUSANTARA 04	30.00	28.00	PurseSeine	713
523	Sinjai	BULUKAMASE 04	26.00	25.10	TrollOneLargeArtificial	713
524	Sinjai	BULUKAMASE BERLAYAR 07	28.00	27.30	TrollOneLargeArtificial	713
525	Sinjai	BULUKAMASE BERLAYAR 08	29.00	28.10	TrollOneLargeArtificial	713
526	Sinjai	BURUNG LAUT 01	21.00	19.90	TrollOneLargeArtificial	713
527	Sinjai	CAHAYA KEJORA 01	17.00	17.00	TrollOneLargeArtificial	713
528	Sinjai	CAHAYA MALLISE 02	23.00	22.30	TrollOneLargeArtificial	713
529	Sinjai	CAHAYA MULIA BARU 02	17.00	17.00	TrollOneLargeArtificial	713
530	Sinjai	CAHAYA REZKY 77	27.00	26.70	TrollOneLargeArtificial	713
531	Sinjai	CAHAYA SEJAHTERA 01 KL	17.00	17.00	TrollOneLargeArtificial	713
532	Sinjai	CAHAYA UJUNG BL	17.00	17.00	TrollOneLargeArtificial	713
533	Sinjai	CINTA MEKKAH 09	26.00	25.10	TrollOneLargeArtificial	713
534	Sinjai	CINTA MEKKAH RAHMATULLAH	17.00	17.00	TrollOneLargeArtificial	713
535	Sinjai	CITRA MANDIRI 207	29.00	28.10	TrollOneLargeArtificial	713
536	Sinjai	DAFAH 02	26.00	25.10	TrollOneLargeArtificial	713
537	Sinjai	DANIL JAYA 02	26.00	25.10	TrollOneLargeArtificial	713
538	Sinjai	DERMAGA STAR 04	27.00	26.70	TrollOneLargeArtificial	713
539	Sinjai	DIRGA 02	17.00	17.00	TrollOneLargeArtificial	713
540	Sinjai	DIRGA 07	24.00	23.00	TrollOneLargeArtificial	713
541	Sinjai	DOA SUCI 01	15.00	14.60	TrollOneLargeArtificial	713
542	Sinjai	DUA PUTRI BJ	19.00	18.50	TrollOneLargeArtificial	713
543	Sinjai	FADHIL ABYAN 02	30.00	28.00	TrollOneLargeArtificial	713
544	Sinjai	FAIZA RMJ 01	18.00	17.30	TrollOneLargeArtificial	713
545	Sinjai	FAIZA RMJ 04	23.00	22.30	TrollOneLargeArtificial	713
546	Sinjai	FAJAR PUTRA AMR 01	17.00	17.00	TrollOneLargeArtificial	713
547	Sinjai	FATYR 01	19.00	18.50	TrollOneLargeArtificial	713
548	Sinjai	FIKRY JAYA 01	19.00	18.50	TrollOneLargeArtificial	713
549	Sinjai	HALILINTAR ARIQAH 12	14.00	13.60	TrollOneLargeArtificial	713
550	Sinjai	HALILINTAR ARIQAH 20	15.00	14.60	TrollOneLargeArtificial	713
551	Sinjai	HIKMAH INDAH 01	24.00	23.00	TrollOneLargeArtificial	713
552	Sinjai	HUSNI UTAMA	17.00	17.00	TrollOneLargeArtificial	713
553	Sinjai	IKAR JAYA 02	29.00	28.10	PurseSeine	713
554	Sinjai	ILHAM JAYA D 02	20.00	19.70	TrollOneLargeArtificial	713
555	Sinjai	INDRIANI 02	26.00	25.10	TrollOneLargeArtificial	713
556	Sinjai	INGIN JAYA 02	23.00	22.30	TrollOneLargeArtificial	713
557	Sinjai	IRSANDI KMR 01	17.00	17.00	TrollOneLargeArtificial	713
558	Sinjai	ISRAFIL BL 01	27.00	26.70	TrollOneLargeArtificial	713
559	Sinjai	KURNIA ILAHI BL 03	24.00	23.00	TrollOneLargeArtificial	713
560	Sinjai	LAPPA MAS 01	22.00	21.10	TrollOneLargeArtificial	713
561	Sinjai	LIANG LIANG PUTRA 02	26.00	25.10	TrollOneLargeArtificial	713
562	Sinjai	LIMA PUTRA 001	17.00	17.00	TrollOneLargeArtificial	713
563	Sinjai	LIMA PUTRA MR 03	14.00	13.60	TrollOneLargeArtificial	713
564	Sinjai	MADANI 77	25.00	24.50	TrollOneLargeArtificial	713
565	Sinjai	MAHARANI JAYA 01	27.00	26.70	TrollOneLargeArtificial	713
566	Sinjai	MAROANGINGTA HM 02	23.00	22.30	TrollOneLargeArtificial	713
567	Sinjai	MASAGENAE RISKA 07	28.00	27.30	TrollOneLargeArtificial	713
568	Sinjai	MIFTAHUL JANNAH 01	26.00	25.10	TrollOneLargeArtificial	713
569	Sinjai	MUARA TARUPA	30.00	28.00	PurseSeine	713
570	Sinjai	MUTIARA BL 02	24.00	23.00	TrollOneLargeArtificial	713
571	Sinjai	NADIA 02	16.00	15.40	TrollOneLargeArtificial	713
572	Sinjai	NATASYA 08	23.00	22.30	TrollOneLargeArtificial	713
573	Sinjai	NITA JAYA 01	29.00	28.10	TrollOneLargeArtificial	713
574	Sinjai	NURSAFA 02	24.00	23.00	TrollOneLargeArtificial	713
575	Sinjai	NURSAFA 03	25.00	24.50	TrollOneLargeArtificial	713
576	Sinjai	NURUL SYIFANI	20.00	19.70	DropOneLargeArtificial	713

Table 9.1: Boat Information from FLP. Lappa, Sinjai

No	Program Site	Boat Name	GT Declared	GT Estimate	Fishing Gear	Fishing Area
577	Sinjai	PALAPA 07	25.00	24.50	TrollOneLargeArtificial	713
578	Sinjai	PERMATA SARI 03	25.00	24.50	TrollOneLargeArtificial	713
579	Sinjai	PORTUNA 01	14.00	13.60	TrollOneLargeArtificial	713
580	Sinjai	PUTRA CK	25.00	24.50	TrollOneLargeArtificial	713
581	Sinjai	PUTRI AISYAH 01	18.00	17.30	TrollOneLargeArtificial	713
582	Sinjai	PUTRI TUNGGAL 02	19.00	18.50	TrollOneLargeArtificial	713
583	Sinjai	RAHMAT 01	13.00	12.30	TrollOneLargeArtificial	713
584	Sinjai	RATNA JAYA 03	24.00	23.00	TrollOneLargeArtificial	713
585	Sinjai	RESKI DARUL HIKMAH 03	22.00	21.10	TrollOneLargeArtificial	713
586	Sinjai	REZKY FAUJIAH	27.00	26.70	TrollOneLargeArtificial	713
587	Sinjai	RISKI AWALIA 99	28.00	27.30	TrollOneLargeArtificial	713
588	Sinjai	RISMA 01	18.00	17.30	TrollOneLargeArtificial	713
589	Sinjai	RISWAN 02	20.00	19.70	TrollOneLargeArtificial	713
590	Sinjai	RIZKI ALIU 01	18.00	17.30	TrollOneLargeArtificial	713
591	Sinjai	ROMANTIKA RAYA 07	19.00	18.50	PurseSeine	713
592	Sinjai	SABIL PUTRA 03	14.00	13.60	TrollOneLargeArtificial	713
593	Sinjai	SALAWATI 04	26.00	25.10	TrollOneLargeArtificial	713
594	Sinjai	SAMUDERA - 05	27.00	26.70	PurseSeine	713
595	Sinjai	SAMUDRA INDAH 077	17.00	17.00	TrollOneLargeArtificial	713
596	Sinjai	SANDIKA BL 01	25.00	24.50	TrollOneLargeArtificial	713
597	Sinjai	SARO MASE 09	28.00	27.30	TrollOneLargeArtificial	713
598	Sinjai	SARO MASE 13	29.00	28.10	DropOneLargeArtificial	713
599	Sinjai	SARO MASE 14	27.00	26.70	TrollOneLargeArtificial	713
600	Sinjai	SARO MASE 15	29.00	28.10	TrollOneLargeArtificial	713
601	Sinjai	SAROMASE 08	19.00	18.50	TrollOneLargeArtificial	713
602	Sinjai	SAROMASE 12	27.00	26.70	TrollOneLargeArtificial	713
603	Sinjai	SINAR ASRIANNISA 01	22.00	21.10	TrollOneLargeArtificial	713
604	Sinjai	SINAR BARU MR 03	26.00	25.10	TrollOneLargeArtificial	713
605	Sinjai	SINAR BUA INTANG 01	22.00	21.10	TrollOneLargeArtificial	713
606	Sinjai	SINAR HARAPAN SINJAI	21.00	19.90	TrollOneLargeArtificial	713
607	Sinjai	SINAR HARAPAN SINJAI 02	20.00	19.70	TrollOneLargeArtificial	713
608	Sinjai	SUMBER ALAM SEJAHTERA 07	17.00	17.00	TrollOneLargeArtificial	713
609	Sinjai	SUMBER RESKI 11	19.00	18.50	TrollOneLargeArtificial	713
610	Sinjai	SUMBER REZKI ALAM 77	14.00	13.60	TrollOneLargeArtificial	713
611	Sinjai	SUMBER REZKI ALAM 99	17.00	17.00	TrollOneLargeArtificial	713
612	Sinjai	SURIYANTI 01	18.00	17.30	PurseSeine	713
613	Sinjai	SURYANTI 02	15.00	14.60	PurseSeine	713
614	Sinjai	TAKBIR RAMA JAYA	23.00	22.30	TrollOneLargeArtificial	713
615	Sinjai	TELUK BONE 09	21.00	19.90	TrollOneLargeArtificial	713
616	Sinjai	TELUK BONE 12	22.00	21.10	TrollOneLargeArtificial	713
617	Sinjai	TITIPAN ILAHI AS 02	27.00	26.70	TrollOneLargeArtificial	713
618	Sinjai	TRIBUN TIMUR 03	13.00	12.30	TrollOneLargeArtificial	713
619	Sinjai	TRIBUN TIMUR 06	14.00	13.60	TrollOneLargeArtificial	713
620	Sinjai	TRIBUN TIMUR 09	22.00	21.10	TrollOneLargeArtificial	713
621	Sinjai	TUNA KING 02	29.00	28.10	PurseSeine	713
622	Sinjai	USAHA ABADI IRW 02	23.00	22.30	TrollOneLargeArtificial	713
623	Sinjai	USAHA BERDIKARI 99	25.00	24.50	TrollOneLargeArtificial	713
624	Sinjai	USAHA BERSAMA 55	27.00	26.70	TrollOneLargeArtificial	713
625	Sinjai	WAHYU RESKI 03	17.00	17.00	TrollOneLargeArtificial	713
626	Bulukumba	ADIDAS KOMUNITY 01	21.00	22.10	PurseSeine	713

9.2.3 Follow-up

This harbour is recommended to CODRS contract since the diverse of fishing gear and vessel dedicated to catch tuna. However, it should be considered that some vessels have andon fishing license making them possible dynamically to move outside of IAW.

9.2.4 Important Contact

Name : Bapak Amal
Affiliation : Officer of PPI Lappa Sinjai
Contact : 082347547578 or 082348202233

Name : Bapak Dayat
Affiliation : PSDKP PPI Lappa Sinjai
Contact : 085343609099

Name : Bapak Muchlis
Affiliation : Supplier UD Dedi Lestari/Vessel owner
Contact : 081242407025

Name : Haji Arman
Affiliation : Supplier/ Pemilik UD Ryan/ Vessel owner
Contact : 085299303019

Name : Bahar
Affiliation : Supplier/ Vessel owner
Contact : 082145794444

Name : Haji Sudi
Affiliation : Coordinator and middleman of fishing license for TCT vessel
Contact : 082189828289

9.2.5 References

Dinas Kelautan dan Perikanan (DKP) Kabupaten Sinjai. 2017. Statistik Perikanan TPI Lappa Kabupaten Sinjai 2017 [5].

9.2.6 Figures



Figure 9.10: Trollig vessel or 'penongkol' boat



Figure 9.11: Situation of fish auction area in PPI Lappa



Figure 9.12: Catch from purse seine vessel



Figure 9.13: Situation of fish auction area in PPI Lappa



Figure 9.14: Skipjack



Figure 9.15: Demersal fish found in PPI Lappa



Figure 9.16

9.3 FLP. Kajang, Bulukumba

9.3.1 Background and Survey Practicalities

Background

FLP Kajang is located in sub district of Kajang, Bulukumba. This harbour is popular with the '*pelabuhan rakyat*' (English: Kassi people's harbour). This harbour is one of the landing sites in eastern South Sulawesi Province. However, the unloading activities are not crowded as in Bone and Sinjai. This harbour is more function to land the catch of local vessel and place to shelter if the bad weather comes to Bone Bay.

Based on the information from interview survey, this harbour has less diverse of vessel type and gear. It is dominated by purse seine vessel by 43 vessels and only 2-5 hand line vessels. However, most of them come from different regions and not from local. The unloading activity starts in the early morning at 04.00 WITA and finish at 09.00 WITA. After that time, the harbour seems empty. The commodity of fish in this harbour is small pelagic such as scads and sardines, tongkol, skipjack and baby tuna. It is very limited information obtained from the harbour officers since they were not in place when the survey was conducted.

Survey team

Survey was done by Duaitd Kolibonso

Period visited

Survey conducted on 12 Mei 2019

How to get there

The harbour can be reached from Sinjai by travelling 1-2hours using car or 1 hour using boat from Bira harbour.

9.3.2 Fleet Description

Dominant fishing vessel in FLP Kassi is purse seine with size range 10-30GT. Target catch of the purse seine is small pelagic such as scads and sardine, tongkol, baby tuna, skipjack, wahoo etc. The gear ha a specification length 300-400 meters and depth 15-25 meters. The average catch is 2-4tonnes/trip with trip duration 1-5 days/trip. The number of crew is between 7-10 people.

Fishing ground is located in FMA 713 namely Selayar waters until Taka Bonerate, and parts of FMA 714 in Buton Island waters. Based on field survey, there are several handline vessels but they anchored quite distance from the mainland of the harbour. Meanwhile, there are many katinting boat (motorized nano-size boat) anchored in the west side of the harbour. Based on the interview with the locals, those vessels catch all fish and do not have dedicated to certain species. The use one-day fishing trip system and operate around 4-8 miles from the land.

Table 9.2: Boat Information from FLP. Kajang, Bulukumba

No	Program Site	Boat Name	GT Declared	GT Estimate	Fishing Gear	Fishing Area
1	Bulukumba	KMN Aira Erbul 02	6.00	6.00	TrollMultipleSmallArtificial	713
2	Bulukumba	KMN Aira Erbul 01	6.00	6.00	DropOneLargeNatural	713
3	Bulukumba	Aira 2	7.00	6.72	KiteOneLargeArtificial	713

Table 9.2: Boat Information from FLP. Kajang, Bulukumba

No	Program Site	Boat Name	GT Declared	GT Estimate	Fishing Gear	Fishing Area
4	Bulukumba	Aira	7.00	6.72	DropOneLargeNatural	713
5	Bulukumba	Erebulan 2	7.00	6.72	DropOneLargeNatural	713
6	Bulukumba	Erebulan 3	7.00	6.72	DropOneLargeNatural	713
7	Bulukumba	Erebulan 4	7.00	6.72	DropOneLargeNatural	713
8	Bulukumba	Erebulan 5	7.00	6.72	DropOneLargeNatural	713
9	Bulukumba	Erebulan 6	7.00	6.72	DropOneLargeNatural	713
10	Bulukumba	Erebulan 7	7.00	6.72	DropOneLargeNatural	713
11	Bulukumba	Erebulan 8	7.00	6.72	DropOneLargeNatural	713
12	Bulukumba	Erebulan 9	7.00	6.72	DropOneLargeNatural	713
13	Bulukumba	Erebulan 10	7.00	6.72	DropOneLargeNatural	713
14	Bulukumba	Erebulan 11	7.00	6.72	DropOneLargeNatural	713
15	Bulukumba	Erebulan 12	7.00	6.72	DropOneLargeNatural	713
16	Bulukumba	Erebulan 13	7.00	6.72	DropOneLargeNatural	713
17	Bulukumba	Erebulan 14	7.00	6.72	DropOneLargeNatural	713
18	Bulukumba	Erebulan 15	7.00	6.72	DropOneLargeNatural	713
19	Bulukumba	Erebulan 16	7.00	6.72	DropOneLargeNatural	713
20	Bulukumba	Erebulan 17	7.00	6.72	DropOneLargeNatural	713
21	Bulukumba	Erebulan 18	7.00	6.72	DropOneLargeNatural	713
22	Bulukumba	Erebulan 19	7.00	6.72	DropOneLargeNatural	713
23	Bulukumba	Erebulan 20	7.00	6.72	DropOneLargeNatural	713
24	Bulukumba	Erebulan 21	7.00	6.72	DropOneLargeNatural	713
25	Bulukumba	Erebulan 22	7.00	6.72	DropOneLargeNatural	713
26	Bulukumba	Erebulan 23	7.00	6.72	DropOneLargeNatural	713
27	Bulukumba	Erebulan 24	7.00	6.72	DropOneLargeNatural	713
28	Bulukumba	Erebulan 25	7.00	6.72	DropOneLargeNatural	713
29	Bulukumba	Erebulan 26	7.00	6.72	DropOneLargeNatural	713
30	Bulukumba	Erebulan 27	7.00	6.72	DropOneLargeNatural	713
31	Bulukumba	Erebulan 28	7.00	6.72	DropOneLargeNatural	713
32	Bulukumba	Erebulan 29	7.00	6.72	DropOneLargeNatural	713
33	Bulukumba	Erebulan 30	7.00	6.72	DropOneLargeNatural	713
34	Bulukumba	Erebulan 31	7.00	6.72	DropOneLargeNatural	713
35	Bulukumba	Erebulan 32	7.00	6.72	DropOneLargeNatural	713
36	Bulukumba	Erebulan 33	7.00	6.72	DropOneLargeNatural	713
37	Bulukumba	Erebulan 34	7.00	6.72	DropOneLargeNatural	713
38	Bulukumba	Erebulan 35	7.00	6.72	DropOneLargeNatural	713
39	Bulukumba	Erebulan 36	7.00	6.72	DropOneLargeNatural	713
40	Bulukumba	Erebulan 37	7.00	6.72	DropOneLargeNatural	713
41	Bulukumba	Erebulan 38	7.00	6.72	DropOneLargeNatural	713
42	Bulukumba	Erebulan 39	7.00	6.72	DropOneLargeNatural	713
43	Bulukumba	Erebulan 40	7.00	6.72	DropOneLargeNatural	713
44	Bulukumba	Erebulan 41	7.00	6.72	DropOneLargeNatural	713
45	Bulukumba	Erebulan 42	7.00	6.72	DropOneLargeNatural	713
46	Bulukumba	Erebulan 43	7.00	6.72	DropOneLargeNatural	713
47	Bulukumba	Erebulan 44	7.00	6.72	DropOneLargeNatural	713
48	Bulukumba	Erebulan 45	7.00	6.72	DropOneLargeNatural	713
49	Bulukumba	Erebulan 46	7.00	6.72	DropOneLargeNatural	713
50	Bulukumba	Erebulan 47	7.00	6.72	DropOneLargeNatural	713
51	Bulukumba	Erebulan 48	7.00	6.72	DropOneLargeNatural	713
52	Bulukumba	Erebulan 49	7.00	6.72	DropOneLargeNatural	713

9.3.3 Follow-up

This location is not recommended for CODRS contract since lack of variation of vessel types and gears. Most of vessels are dedicated for small pelagic fish.

9.3.4 References

9.3.5 Important Contact

Name : Iskandar
Affiliation : Nelayan
Contact : 085219749491

9.3.6 Figures



Figure 9.17: Purse seine size 30GT in FLP Kassi



Figure 9.18: Purse seine size 15GT in FLP Kassi



Figure 9.19: Handline vessel in FLP Kassi



Figure 9.20: Katinting boat

9.4 TPI Para Para, Bulukumba

9.4.1 Background and Survey Practicalities

Background

TPI Para Para (fish auction area) is located in sub-district Bonto Tiro, Bulukumba. This harbour is one of the small harbours in eastern coastal of Bulukumba. This harbour is not very busy as other harbour. There is no fish auction activity since all landed fish are directly collected by middleman. They will sort the fish based on size and quality before sending it to the processing company in Makassar.

Most fishermen originated from nearby area and there is no fisherman come from outside region. This condition leads to homogeny of vessel and gear type. The main gear is handline with the total number of 95 vessels. Based on the information from the local supplier, the total production volume is around 80 tonnes/year.



Figure 9.21: Situation of TPI Para para

Survey team

Survey was done by Dwaitd Kolibonso

Period visited

Survey was conducted on 12 May 2019

How to get there

This harbour can be reached by land transportation from Bira harbour 50 minutes travelling.

9.4.2 Fleet Description

In general, tuna vessel found in TPI Para Para has a dimension 16-18meters length, 2-3meters width, 0.8-1meter high with size 10-15 GT. The main fishing gear used is hand line with its variation such as Dropline One Large Natural, Dropline Multiple Small Artificial, dan Surface One Large Natural. The type of natural bait used is scads and squid. The main target catch is large tuna, medium tuna, baby tuna, skipjack and tongkol. The average catch is 500-700kg/trip during west season and 1-1.5tonnes/trip during east season. The fishing trip duration is around 7-14 days in which 4-5 crew join the vessel. The fishing ground is around FMA 713 covering Selayar waters, Taka Bonerate, and Flores Sea. The fishing activity is associated with FAD, dolphin and bird school.

Table 9.3: Boat Information from TPI Para Para, Bulukumba

No	Program Site	Boat Name	GT Declared	GT Estimate	Fishing Gear	Fishing Area
1	Bulukumba	KMN Pelita Jaya Tiro 02	18.00	13.50	DropOneLargeNatural	713
2	Bulukumba	KMN Cinta Rasul	0.00	2.10	DropOneLargeNatural	713
3	Bulukumba	Parapara 21	12.00	11.90	DropOneLargeNatural	713
4	Bulukumba	Parapara 22	12.00	11.70	DropOneLargeNatural	713
5	Bulukumba	Parapara 23	12.00	10.80	DropOneLargeNatural	713
6	Bulukumba	Parapara 24	12.00	10.90	DropOneLargeNatural	713
7	Bulukumba	Parapara 25	13.00	12.20	DropOneLargeNatural	713
8	Bulukumba	Parapara 26	13.00	12.20	DropOneLargeNatural	713
9	Bulukumba	Parapara 27	13.00	12.20	DropOneLargeNatural	713
10	Bulukumba	Parapara 28	13.00	11.90	DropOneLargeNatural	713
11	Bulukumba	Parapara 29	13.00	11.90	DropOneLargeNatural	713
12	Bulukumba	Parapara 30	13.00	11.90	DropOneLargeNatural	713
13	Bulukumba	Parapara 31	13.00	11.90	DropOneLargeNatural	713
14	Bulukumba	Parapara 32	13.00	11.90	DropOneLargeNatural	713
15	Bulukumba	Parapara 33	13.00	11.90	DropOneLargeNatural	713
16	Bulukumba	Parapara 34	13.00	11.90	DropOneLargeNatural	713
17	Bulukumba	Parapara 35	13.00	11.90	DropOneLargeNatural	713
18	Bulukumba	Parapara 36	13.00	11.90	DropOneLargeNatural	713
19	Bulukumba	Parapara 37	13.00	12.80	DropOneLargeNatural	713
20	Bulukumba	Parapara 38	13.00	10.90	DropOneLargeNatural	713
21	Bulukumba	Parapara 39	13.00	12.20	DropOneLargeNatural	713
22	Bulukumba	Parapara 40	13.00	12.20	DropOneLargeNatural	713
23	Bulukumba	Parapara 41	13.00	12.20	DropOneLargeNatural	713
24	Bulukumba	Parapara 42	13.00	11.90	DropOneLargeNatural	713
25	Bulukumba	Parapara 43	13.00	11.90	DropOneLargeNatural	713
26	Bulukumba	Parapara 44	13.00	11.90	DropOneLargeNatural	713
27	Bulukumba	Parapara 45	13.00	11.90	DropOneLargeNatural	713
28	Bulukumba	Parapara 46	13.00	11.90	DropOneLargeNatural	713
29	Bulukumba	Parapara 47	13.00	11.90	DropOneLargeNatural	713
30	Bulukumba	Parapara 48	13.00	11.90	DropOneLargeNatural	713
31	Bulukumba	Parapara 49	13.00	11.90	DropOneLargeNatural	713
32	Bulukumba	Parapara 50	14.00	13.30	DropOneLargeNatural	713
33	Bulukumba	Parapara 51	14.00	13.30	DropOneLargeNatural	713
34	Bulukumba	Parapara 52	14.00	13.30	DropOneLargeNatural	713
35	Bulukumba	Parapara 53	14.00	12.20	DropOneLargeNatural	713
36	Bulukumba	Parapara 54	14.00	12.00	DropOneLargeNatural	713
37	Bulukumba	Parapara 55	14.00	12.20	DropOneLargeNatural	713
38	Bulukumba	Parapara 56	14.00	13.10	DropOneLargeNatural	713
39	Bulukumba	Parapara 57	14.00	13.10	DropOneLargeNatural	713
40	Bulukumba	Parapara 58	14.00	13.00	DropOneLargeNatural	713
41	Bulukumba	Parapara 59	14.00	13.30	DropOneLargeNatural	713
42	Bulukumba	Parapara 60	14.00	13.30	DropOneLargeNatural	713
43	Bulukumba	Parapara 61	14.00	13.20	DropOneLargeNatural	713
44	Bulukumba	Parapara 62	14.00	13.30	DropOneLargeNatural	713

Table 9.3: Boat Information from TPI Para Para, Bulukumba

No	Program Site	Boat Name	GT Declared	GT Estimate	Fishing Gear	Fishing Area
45	Bulukumba	Parapara 63	14.00	13.30	DropOneLargeNatural	713
46	Bulukumba	Parapara 64	14.00	13.30	DropOneLargeNatural	713
47	Bulukumba	Parapara 65	14.00	12.20	DropOneLargeNatural	713
48	Bulukumba	Parapara 66	14.00	12.00	DropOneLargeNatural	713
49	Bulukumba	Parapara 67	14.00	12.20	DropOneLargeNatural	713
50	Bulukumba	Parapara 68	14.00	13.10	DropOneLargeNatural	713
51	Bulukumba	Parapara 69	14.00	13.10	DropOneLargeNatural	713
52	Bulukumba	Parapara 70	15.00	13.00	DropOneLargeNatural	713
53	Bulukumba	Parapara 71	15.00	13.30	DropOneLargeNatural	713
54	Bulukumba	Parapara 72	15.00	13.30	DropOneLargeNatural	713
55	Bulukumba	Parapara 73	15.00	13.20	DropOneLargeNatural	713
56	Bulukumba	Parapara 74	15.00	13.30	DropOneLargeNatural	713
57	Bulukumba	Parapara 75	15.00	13.30	DropOneLargeNatural	713
58	Bulukumba	Parapara 76	15.00	13.30	DropOneLargeNatural	713
59	Bulukumba	Parapara 77	15.00	12.20	DropOneLargeNatural	713
60	Bulukumba	Parapara 78	15.00	12.00	DropOneLargeNatural	713
61	Bulukumba	Parapara 79	15.00	12.20	DropOneLargeNatural	713
62	Bulukumba	Parapara 80	15.00	13.10	DropOneLargeNatural	713
63	Bulukumba	Parapara 81	15.00	13.10	DropOneLargeNatural	713
64	Bulukumba	Parapara 82	15.00	13.00	DropOneLargeNatural	713
65	Bulukumba	Parapara 83	15.00	13.30	DropOneLargeNatural	713
66	Bulukumba	Parapara 84	15.00	13.30	DropOneLargeNatural	713
67	Bulukumba	Parapara 85	15.00	13.20	DropOneLargeNatural	713
68	Bulukumba	Parapara 86	15.00	13.30	DropOneLargeNatural	713
69	Bulukumba	Parapara 87	15.00	13.30	DropOneLargeNatural	713
70	Bulukumba	Parapara 88	15.00	13.30	DropOneLargeNatural	713
71	Bulukumba	Parapara 89	15.00	12.20	DropOneLargeNatural	713
72	Bulukumba	Parapara 90	15.00	12.00	DropOneLargeNatural	713
73	Bulukumba	Parapara 91	15.00	12.20	DropOneLargeNatural	713
74	Bulukumba	Parapara 92	15.00	13.10	DropOneLargeNatural	713
75	Bulukumba	Parapara 93	15.00	13.10	DropOneLargeNatural	713
76	Bulukumba	Parapara 94	15.00	13.00	DropOneLargeNatural	713
77	Bulukumba	Parapara 95	15.00	13.30	DropOneLargeNatural	713

9.4.3 Follow-up

This location is recommended for CODRS program since all vessels are dedicated to catch tuna.

9.4.4 Important Contact

Name : Pak Fauzi
Affiliation : Supplier/Coordinator of 6 vessels.
Contact : 082349796800

9.4.5 References

9.4.6 Figures



Figure 9.22: Typical handline vessel in TPI Para Para



Figure 9.23: Typical handline vessel in TPI Para Para

9.5 FLP. Bonto Bahari, Bulukumba

9.5.1 Background and Survey Practicalities

Background

FLP Bonto Bahari is one of the fishing ports located in the south coast of Bulukumba Regency and it is facilitated with the fish auction area. The unloading activity starts in the early morning until at 09.00 am. This port is also the main unloading place for the collecting boat originated from Selayar Islands Regency.

Based on the information from the locals, the most dominant vessel is purse seine followed by small-motorized boat (outboard motor boat) using handline gear. There are around 20 purse seine vessels in this port. Main landed catch is small pelagic fish such as auxis, decapтерus, scads, baby tuna, and skipjack. The geographical location of FLP Bonto Bahari facing to the Flores Sea gives the impact to the unloading activities especially during the east season April to September where the sea condition is calm, there will be more purse seine vessels found in this port including fishing vessels come from FLP Kassi and Bira. On the other hand, the fishing port will be empty during west season October until March since the bad weather. Those vessels will land their catch in the FLP Kassi, Bira, and Birea. Most of the landed catch is collected by local suppliers that distribute it to the processing companies in Bantaeng and Makassar.

Survey team

Survey was done by Duaitd Kolibonso

Period visited

Survey was conducted on May 13, 2019

How to get there

FLP Bonto Bahari can be reached using land transportation from Bira harbour by around 20 minutes. It also can be accessed directly from Makassar by 3-4 hours of travel using the car.

9.5.2 Fleet Description

As mentioned above that purse seine vessels are dominant in this harbour. It ranges from 10-20 GT. The target species of this vessel is small pelagic fish such as decapтерus, scads, auxis and other species baby tuna, skipjack, wahoo etc. The length of purse seine is around 100-200 meters with the depth ranged from 15-25 meters. The average of the catch is 1-2 tonnes/trip where one fishing trip spends 1-3 days. The number of crew is 6-10 people per boat. The fishing ground is influenced by the season where the fishermen will fish around Selayar until Taka Bonerate waters in FMA 713 during the east season and move to FMA 714 west Button Island when it enters to the west season. Meanwhile, the size of small-motorized boats is 3-5GT. It catches all fish either pelagic or grouper-snapper fish. The trip is in one-day fishing and it operates around Selayar Island.

Table 9.4: Boat Information from FLP. Bonto Bahari, Bulukumba

No	Program Site	Boat Name	GT Declared	GT Estimate	Fishing Gear	Fishing Area
1	Bulukumba	KMN Citra Laut 99	6.00	8.80	DropOneLargeNatural	713

Table 9.4: Boat Information from FLP. Bonto Bahari, Bulukumba

No	Program Site	Boat Name	GT Declared	GT Estimate	Fishing Gear	Fishing Area
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9.5.3 Follow-up

This location is not recommended for conducting CODRS program because it is dominated by one fishing gear and has a high similarity with the vessels in Bone and Sinjai.

9.5.4 Important Contact

9.5.5 References

9.5.6 Figures



Figure 9.24: A typical of purse seine vessel in FLP Birea moors in the middle of the jetty.



Figure 9.25: Kapal-kapal penangkap jenis pole and line di PPI Wameo

9.6 FLP. Birea, Bantaeng

9.6.1 Background and Survey Practicalities

Background

FLP Birea is located in south coast of Bantaeng Regency. It is equipped with the fish auction area. The unloading activity starts at 06.00 until 10.00 am. Purse seine vessel is dominant here followed by gill net, and small-motorized boat using handline. Similar with FLP Bonto Bahari, this port is one of the main landing places for the collecting boat from Selayar Islands. This unloading activity relies on the season where during the east season there will be many purse seine vessels from Kaili and Galesong are landing the catch because of closer distance from the fishing ground in Selayar Islands waters. However, the situation changes to be quieter during the west season since only the local vessels land their catch here. The number of purse seine is identified to be 20 vessels. Their main catch are small pelagic fish such as scads, *decapterus*, *auxis* and baby tuna. Meanwhile, gill net and handline are targeting demersal fish such as snapper, grouper and barracuda.

Survey team

Survey was done by Duaitd Kolibonso

Period visited

Survey was conducted on May 13, 2019

How to get there

FLP Birea can be accessed by land transportation by 3-4 hours of travel using the car. If the travel starts from Bira harbour, it will take 45 minutes of traveling on the car.

9.6.2 Fleet Description

The size of purse seine vessels in FLP Birea varies from 10-30 GT. Target species are small pelagic fish such as scads, *decapterus*, *auxis*, and baby tuna. The length of purse seine is 200-400 meters with the depth is around 15-25 meters. The average catch is 1-2 tonnes/trip. The number of crew in a vessel is 6-10 people/trip. The fishing ground applies to the seasonality. During the east season, fishermen will go to FMA 713 covering Selayar waters until Taka Bonerate. Conversely, they will move to FMA 714 during the west season where the fishing ground is located in the west of Buton Island. Meanwhile, the other smaller vessels such as gill net and hand line have the size 3-5GT. They catch both pelagic and demersal fish and there is no specific target catch. The fishing trip applies a one-day fishing trip with the fishing ground is around Selayar Islands.

9.6.3 Follow-up

This location is not recommended for CODRS program implementation since it is dominated by single fishing gear. Most of the fishing grounds are similar to the vessels in Bone and Sinjai.

9.6.4 Important Contact

9.6.5 References

9.6.6 Figures



Figure 9.26: A typical of purse seine vessel in FLP Birea moors in the middle of the jetty.



Figure 9.27: Gill net vessels in FLP Birea.



Figure 9.28: Type of gill net found in FLP Birea

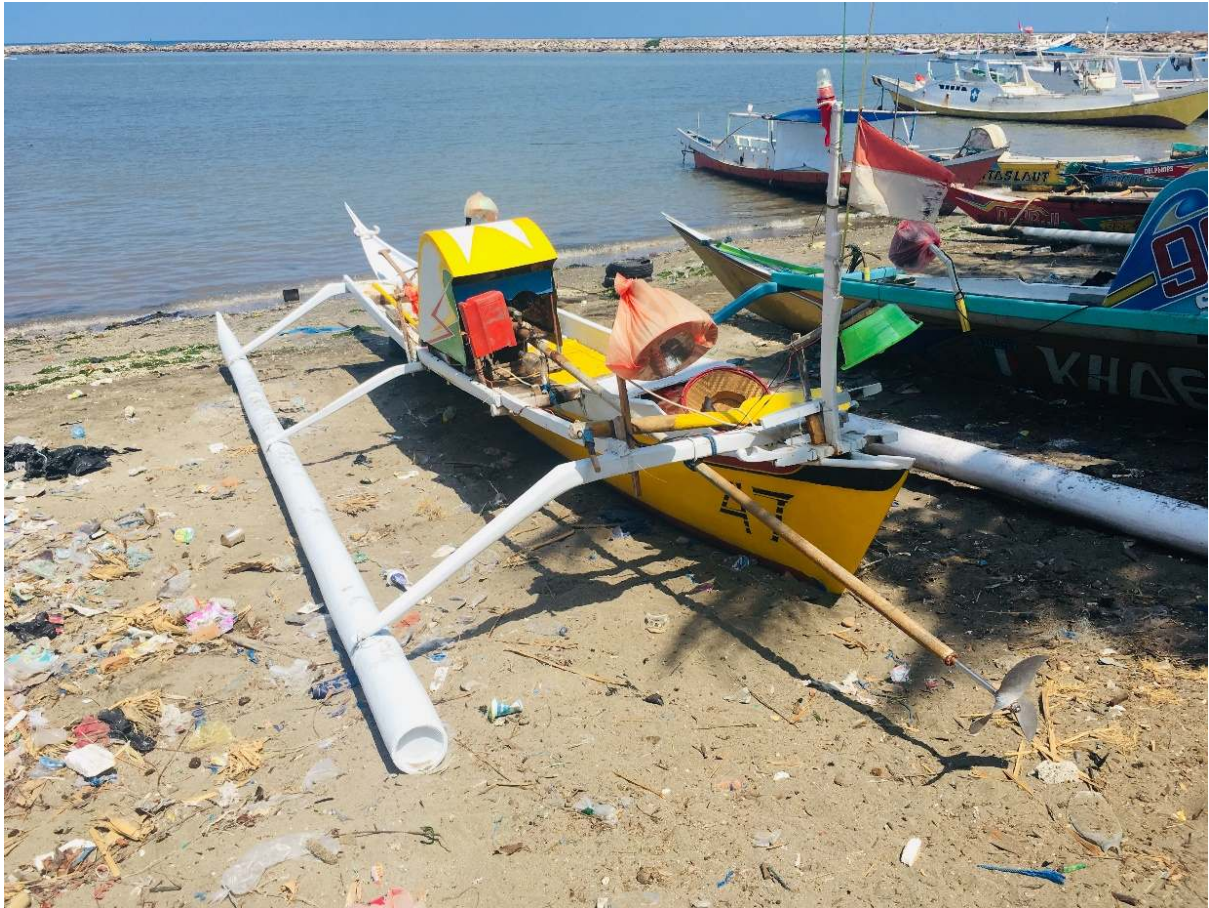


Figure 9.29: Small-motorized boat
using handline in FLP Birea

9.7 TPI Kaili, Bantaeng

9.7.1 Background and Survey Practicalities

Background

Fish auction area (FAA) Kaili is located in the south coast of Bantaeng Regency. It has a similar type to FLP Birea where the unloading activities starts at 06.00 until 10.00 am. Purse seine vessels are dominant followed by some collecting boats originated from Selayar Islands. Since it is located in the south coast, therefore the unloading activities rely on the season. During the east season, this port will be dominated by purse seine vessels originated from Birea and Galesong since the close distance to the fishing ground in Selayar Islands waters. However, the situation will be quitter during the west season since only the local vessels that unload their catch. It was found that there were 12 fishing vessels registered in this port. Main landed catch is small pelagic fish, scads, auxis, and baby tuna.

Survey team

Survey was done by Duaitd Kolibonso

Period visited

Survey was conducted on May 13, 2019

How to get there

FAA. Kaili can be reached from Makassar by traveling around 3 hours using car.

9.7.2 Fleet Description

Purse seine vessels in FAA. Kaili are sizing 20-30 GT (Figure xx). The target species of this type of vessel is pelagic fish such as scads, auxis, baby tuna, skipjack, wahoo etc. The length of purse seine is 200-400 meters with the depth is around 15-25 meters. The average catch is 1-2 tonnes/trip. The number of crew in a vessel is 6-10 people/trip. The fishing activity follows the same pattern of purse seine vessels in FLP Birea in which fishermen fish in FMA 713 around Selayar Islands andTaka Bonerate waters. During the west season, they will move to FMA 714 where the fishing ground is around the west of Buton Island.

9.7.3 Follow-up

This location is not recommended for deploying CODRS tuna program since it is dominated by purse seine vessel that targeting small pelagic fish.

9.7.4 Important Contact

9.7.5 References

9.7.6 Figures



Figure 9.30: Typical purse seine vessels in FAA. Kaili



Figure 9.31: Typical purse seine vessels in FAA. Kaili

9.8 FLP. Kayuadi, Selayar

PPIKayuadiSelayar.Rnw

Table 9.5: Boat Information from FLP. Kayuadi, Selayar

No	Program Site	Boat Name	GT Declared	GT Estimate	Fishing Gear	Fishing Area
1	Kepulauan Selayar	Berkah Jaya	6.00	6.00	PurseSeine	713
2	Kepulauan Selayar	Berkat Usaha 03	22.00	21.60	TrollOneLargeArtificial	713
3	Kepulauan Selayar	Berkat Usaha BBN	20.00	18.90	TrollOneLargeArtificial	713
4	Kepulauan Selayar	Bintang Selayar	27.00	26.40	PurseSeine	713
5	Kepulauan Selayar	Brasil 02	22.00	21.60	TrollOneLargeArtificial	713
6	Kepulauan Selayar	Cahaya Malise	6.00	5.50	TrollOneLargeArtificial	713
7	Kepulauan Selayar	Cahaya Malise 02	23.00	18.80	TrollOneLargeArtificial	713
8	Kepulauan Selayar	Cahaya Reski	6.00	6.06	PurseSeine	713
9	Kepulauan Selayar	Garuda Jaya 06	30.00	28.90	PurseSeine	713
10	Kepulauan Selayar	Kepiting Laut	29.00	28.30	PurseSeine	713
11	Kepulauan Selayar	Mattiro Kota 234	29.00	28.86	PurseSeine	713
12	Kepulauan Selayar	Miftahul Jaya	29.00	28.30	PoleAndLine	713
13	Kepulauan Selayar	Minasa Bone	28.00	21.80	PurseSeine	713
14	Kepulauan Selayar	Minasa Bone II	30.00	28.90	PurseSeine	713
15	Kepulauan Selayar	Minasa Bone V	28.00	27.80	PurseSeine	713
16	Kepulauan Selayar	Nurfadillah	25.00	21.30	PurseSeine	713
17	Kepulauan Selayar	Samudra Nusantara 57	30.00	28.70	PurseSeine	713
18	Kepulauan Selayar	Somba 39	17.00	16.80	PurseSeine	713
19	Kepulauan Selayar	Sunggumanai 03	28.00	27.80	PurseSeine	713
20	Kepulauan Selayar	Sunggumanai 05	30.00	28.90	PurseSeine	713
21	Kepulauan Selayar	Rizky Jaya	29.00	28.90	TrollOneLargeArtificial	713
22	Kepulauan Selayar	Rizky Jaya 03	29.00	28.90	TrollOneLargeArtificial	713

9.9 FLP. Lero, Pare-pare

PPI Lero Pare-pare.Rnw

9.10 AFP. Untia, Makassar

9.10.1 Background and Survey Practicalities

Background

Archipelagic Fishing Port (AFP) Untia is the largest fishing port in South Sulawesi. The fishing port is under the authority of Technical Unit of MMAF and categorized as type B of fishing port. The fishing port was inaugurated in 2016. Our survey showed that loading and unloading fishing vessels and other fishing activities in the harbor were low. Some lack facilities such as fuel station, clean water and ice factory in the fishing port could be the reason for low fishing activity. Moreover, silting up around the landing areas cause difficulty in the landing process. Fishing fleet in AFP Untia is dominated by purse seiners who is targeting small pelagic such as scads and bullet tuna, and demersal fish.

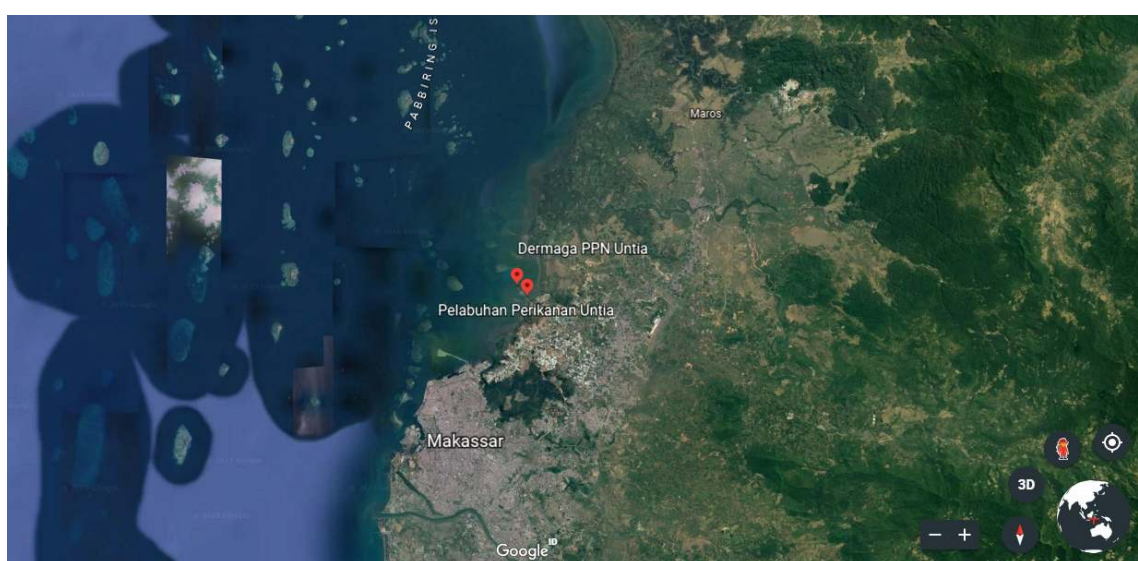


Figure 9.32

Survey team

Survey was done by Dwaitd Kolibonso and Shinta Yuniarta.

Period visited

Survey was conducted on 24 June 2019.

How to get there

AFP Untia can be accessed from Makassar City within 30 minutes by car.

9.10.2 Fleet Description

Fishing vessels composition in AFP Untia is dominated by purse seiners around 42 vessels that come to the port and unloading their catch regularly. The vessels range between 10 and 30 GT with arrival frequency about 3-4 vessels per day. Their target catch is small pelagic such as scads and bullet tuna, and demersal fish. Fishing ground of those purse seiners is FMA 713 including Makassar Strait and Spermonde Islands.

Table 9.6: Boat Information from AFP. Untia, Makassar

No	Program Site	Boat Name	GT Declared	GT Estimate	Fishing Gear	Fishing Area
1	Kota Makassar	ARINDO III	28.00	28.00	PurseSeine	713
2	Kota Makassar	AWIRA	29.00	29.00	PurseSeine	713
3	Kota Makassar	BORNEO 07	25.00	25.00	PurseSeine	713
4	Kota Makassar	BUAH HARAPAN 02	25.00	25.00	PurseSeine	713
5	Kota Makassar	BUNGA MAWAR 03	29.00	29.00	PurseSeine	713
6	Kota Makassar	BUNGA ROSIA 02	29.00	29.00	PurseSeine	713
7	Kota Makassar	CAHAYA BARU 89	28.00	28.00	PurseSeine	713
8	Kota Makassar	CAHAYA BULAN	28.00	28.00	PurseSeine	713
9	Kota Makassar	CAHAYA FELCIA	29.00	29.00	PurseSeine	713
10	Kota Makassar	CAHAYA INDAH_Untia	23.00	23.00	PurseSeine	713
11	Kota Makassar	CAHAYA MADINA II	24.00	24.00	PurseSeine	713
12	Kota Makassar	CAHAYA MEKKA 2000	24.00	24.00	PurseSeine	713
13	Kota Makassar	CAHAYA SEJATI	25.00	25.00	PurseSeine	713
14	Kota Makassar	DUTA HARAPAN	26.00	26.00	PurseSeine	713
15	Kota Makassar	DUTA INDAH	30.00	30.00	PurseSeine	713
16	Kota Makassar	HARAPAN JAYA 06	23.00	23.00	PurseSeine	713
17	Kota Makassar	HIDAYAH SASKIA	25.00	25.00	PurseSeine	713
18	Kota Makassar	IRMA JAYA 03	29.00	29.00	PurseSeine	713
19	Kota Makassar	IRMA JAYA 04	27.00	27.00	PurseSeine	713
20	Kota Makassar	IRMA JAYA 05	30.00	30.00	PurseSeine	713
21	Kota Makassar	IRMA JAYA 07	30.00	30.00	PurseSeine	713
22	Kota Makassar	IRNA JAYA 02	27.00	27.00	PurseSeine	713
23	Kota Makassar	JUMRIANI INDAH	12.00	12.00	DropOneLargeNatural	713
24	Kota Makassar	KARYA TANJUNG 77	30.00	30.00	PurseSeine	713
25	Kota Makassar	LADANG PERTIWI - 02	28.00	28.00	PurseSeine	713
26	Kota Makassar	LADANG PERTIWI - 03	14.00	14.00	DropOneLargeNatural	713
27	Kota Makassar	LADANG PERTIWI - 04	14.00	14.00	DropOneLargeNatural	713
28	Kota Makassar	MAGFIRA - 01	25.00	25.00	PurseSeine	713
29	Kota Makassar	MAGFIRA 02	29.00	29.00	PurseSeine	713
30	Kota Makassar	MAGFIRA 04	29.00	29.00	PurseSeine	713
31	Kota Makassar	MAGFIRA 07	29.00	29.00	PurseSeine	713
32	Kota Makassar	MAGFIRA 33	33.00	33.00	PurseSeine	713
33	Kota Makassar	MAHKOTA INDAH	27.00	27.00	PurseSeine	713
34	Kota Makassar	MEKAR INDAH	29.00	29.00	PurseSeine	713
35	Kota Makassar	MURAH HATI 01	10.00	10.00	DropOneLargeNatural	713
36	Kota Makassar	NURUL FAIDAH	25.00	25.00	PurseSeine	713
37	Kota Makassar	PAJENEKANG	25.00	25.00	PurseSeine	713
38	Kota Makassar	PERINUS 01	13.00	13.00	DropOneLargeNatural	713
39	Kota Makassar	PUSAKA INDAH 01	23.00	23.00	PurseSeine	713
40	Kota Makassar	PUTRA ABADI HJ 2	30.00	30.00	PurseSeine	713
41	Kota Makassar	RAFI JAYA	29.00	29.00	DropOneLargeNatural	713
42	Kota Makassar	RIZKY RAMADANI	30.00	30.00	PurseSeine	713
43	Kota Makassar	SAFWA - 99	28.00	28.00	PurseSeine	713
44	Kota Makassar	SAFWA 88	15.00	15.00	PurseSeine	713
45	Kota Makassar	SAPA MARWAH 02	27.00	27.00	PurseSeine	713
46	Kota Makassar	SAPAMARWA	19.00	19.00	PurseSeine	713
47	Kota Makassar	SUMBER REZKI	27.00	27.00	PurseSeine	713
48	Kota Makassar	SURGA MADINA	20.00	20.00	PurseSeine	713

9.10.3 Follow-up

AFP Untia is not recommended to implement CODRS program because fishing vessels in the port is dominated by vessels targeting small pelagic.

9.10.4 Important Contact

Name : Faizal
Affiliation : PSDKP Satker Makassar
Contact : -

Name : Andy Mannoengi
Affiliation : Kepala Pelabuhan PPN Untia
Contact : -

9.10.5 References

9.10.6 Figures



Figure 9.33



Figure 9.34

9.11 FLP. Galesong, Takalar

PPI Galesong

9.12 FLP. Beba, Takalar

9.12.1 Background and Survey Practicalities

Background

FLP Beba is located in the North Galesong, District of Takalar. The landing port close to fisher village. Usually, the activity starts at 5 AM. FLP Beba is a landing location for small purse seiners who were targeting small pelagic, bottom longliners, bottom gillnetters, and drop liners who were targeting demersal fish such as snapper and grouper. Facilities in the FLP Beba includes wharf and fishing auction.

Survey team

Survey was done by Duaitd Kolibonso and Shinta Yuniarta

Period visited

Survey was conducted on 25 June 2019.

How to get there

FLP Beba can be accessed by car within 45-60 minutes from Makassar City.

9.12.2 Fleet Description

Our interview to the Fishing Port officers shows that there were about 100 active vessels which land their catch in FLP Beba. The vessel size range between 10 and 30GT diverse by gears and target catch. Purse seiners are usually targeting small pelagic (scads, bullet tuna, kawa-kawa, etc.) and sailing for about 7-10 days at sea. The purse seine has main line about 200-300 meters in length and set at 25-30 meters in depth. The fishing ground of purse seiners is in FMA 713 including Makassar Strait, Spermonde Islands, and Selayar Islands. Supporting devices includes lights for the attractor. Other fishing gears such as bottom longline, bottom gillnet, and dropline are targeting demersal fish such as snappers and groupers. We did not find any vessels in FLP Beba, which were dedicated or targeting to catch tuna.

9.12.3 Follow-up

FLP Beba is not recommended site to deploy CODRS program because we did not find any vessels which are targeting or dedicated to catch tuna.

9.12.4 Important Contact

9.12.5 References

9.12.6 Figures



Figure 9.35



Figure 9.36



Figure 9.37

9.13 FLP. Jeneponto, Bulukumba

PPI Jeneponto, Bulukumba

9.14 TPI Bajange, Bulukumba

Table 9.7: Boat Information from TPI Bajange, Bulukumba

No	Program Site	Boat Name	GT Declared	GT Estimate	Fishing Gear	Fishing Area
1	Bulukumba	Bajange 1	0.00	12.50	PurseSeine	713
2	Bulukumba	Bajange 2	0.00	12.50	PurseSeine	713
3	Bulukumba	Bajange 3	0.00	12.50	PurseSeine	713
4	Bulukumba	Bajange 4	0.00	12.50	PurseSeine	713
5	Bulukumba	Bajange 5	0.00	12.50	PurseSeine	713
6	Bulukumba	Bajange 6	0.00	12.50	PurseSeine	713
7	Bulukumba	Bajange 7	0.00	12.50	PurseSeine	713
8	Bulukumba	Bajange 8	0.00	12.50	PurseSeine	713
9	Bulukumba	Bajange 9	0.00	12.50	PurseSeine	713
10	Bulukumba	Bajange 10	0.00	12.50	PurseSeine	713
11	Bulukumba	Bajange 11	0.00	12.50	PurseSeine	713
12	Bulukumba	Bajange 12	0.00	12.50	PurseSeine	713
13	Bulukumba	Bajange 13	0.00	12.50	PurseSeine	713
14	Bulukumba	Bajange 14	0.00	12.50	PurseSeine	713
15	Bulukumba	Bajange 15	0.00	12.50	PurseSeine	713
16	Bulukumba	Bajange 16	0.00	12.50	PurseSeine	713
17	Bulukumba	Bajange 17	0.00	12.50	PurseSeine	713
18	Bulukumba	Bajange 18	0.00	12.50	PurseSeine	713
19	Bulukumba	Bajange 19	0.00	12.50	PurseSeine	713
20	Bulukumba	Bajange 20	0.00	12.50	PurseSeine	713
21	Bulukumba	Bajange 21	0.00	12.50	PurseSeine	713
22	Bulukumba	Bajange 22	0.00	12.50	PurseSeine	713
23	Bulukumba	Bajange 23	0.00	12.50	PurseSeine	713
24	Bulukumba	Bajange 24	0.00	12.50	PurseSeine	713
25	Bulukumba	Bajange 25	0.00	12.50	PurseSeine	713
26	Bulukumba	Bajange 26	0.00	12.50	PurseSeine	713
27	Bulukumba	Bajange 27	0.00	12.50	PurseSeine	713
28	Bulukumba	Bajange 28	0.00	12.50	PurseSeine	713
29	Bulukumba	Bajange 29	0.00	12.50	PurseSeine	713
30	Bulukumba	Bajange 30	0.00	12.50	PurseSeine	713
31	Bulukumba	Bajange 31	0.00	12.50	PurseSeine	713
32	Bulukumba	Bajange 32	0.00	12.50	PurseSeine	713
33	Bulukumba	Bajange 33	0.00	12.50	PurseSeine	713
34	Bulukumba	Bajange 34	0.00	12.50	PurseSeine	713
35	Bulukumba	Bajange 35	0.00	12.50	PurseSeine	713

10 Southeast Sulawesi Province

10.1 OFP. Kendari

10.1.1 Background and Survey Practicalities

Background

Ocean Fishing Harbour (OFH) Kendari is the harbour that is integrated with the fish auction area. This harbour is quite busy on the activity of unloading catch of tuna and other pelagic fish. The dominant fishing gear is purse seine followed by handline and pole and line. The office working hour is between 08.30 until 13.00 WITA.

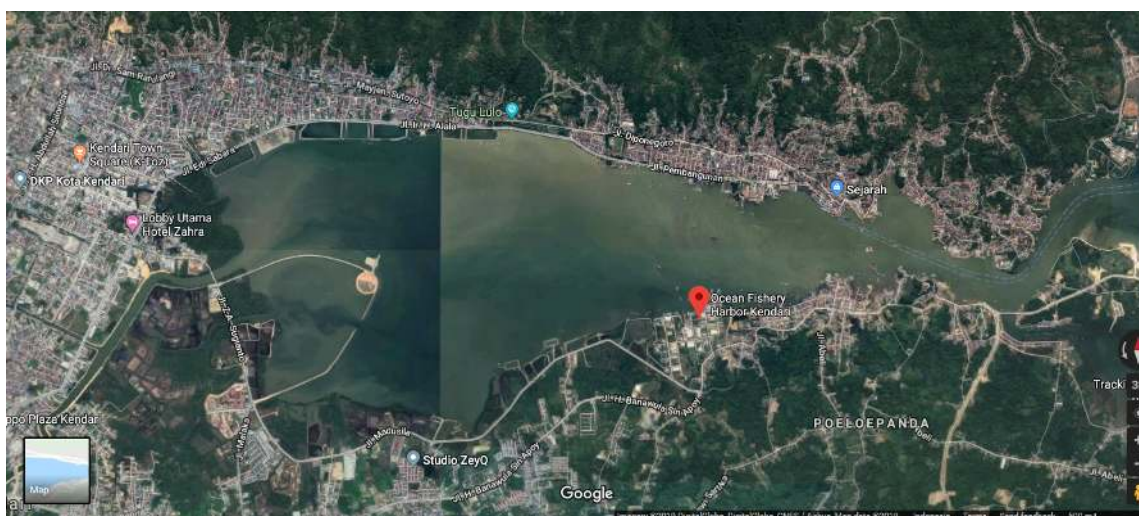


Figure 10.1: Location of PPN Ternate (taken from Google Map)

Survey team

Survey was done by Yeremia Apriyanto and Dwaitd Kolibonso

Period visited

Survey was conducted on 29 April 2019

How to get there

From Haluoleo Airport, it can be reached by travelling around 1 hour to the city center then continue to PPS Kendari with 20-30minutes depending on the traffic situation.

10.1.2 Fleet Description

Based on the data obtained from MCS Agency Kendari (PSDKP), the most dominant fishing fleet is purse seine by 309 vessels, handline 76 vessels and pole and line 22 vessels. The size range of purse seine 6-100GT, and the vessel of 30GT is the highest number. Handline size is ranging 6-30GT and pole and line 30-50GT. The main fishing ground of fishing fleet based in Kendari is Kendari waters, Banda Sea and Flores Sea (FMA 714). The main target of purse seine is small pelagic fish, handline is large tuna and pole and line is skipjack and baby tuna.

10.1.3 Follow-up

The location is not recommended for conducting CODRS contract since most purse seine vessels are targeting small pelagic fish and occasionally catch skipjack. Handline vessel consists of Mandar fishermen who always move over the year using andon fishing license.

10.1.4 Important Contact

Name : Hasanuddin
Affiliation : KM. Rembulan 02
Contact : 081241887235

Name : Tri
Affiliation : Kepala PSDKP Kendari
Contact : 08114007136

Name : Tri
Affiliation : Staff PSDKP Kendari
Contact : 081341727175

10.1.5 References

10.1.6 Figures



Figure 10.2: Some vessels anchored in OFP Kendari



Figure 10.3: Typical Mandar handline vessel



Figure 10.4: Fishing gear of Mandar handliners



Figure 10.5: Catch of Mandar handliners

10.2 FLP. Sodohoa, Kendari

10.2.1 Background and Survey Practicalities

Background

FLP. Sodohoa is a fishing harbour that located in the opposite of PPS. Kendari. Based on the information obtained from MCS Agency of Kendari, the main fishing vessels based in Sodohoa consists of purse seine and bodi/jukung boat that targeting pelagic fish and tuna. FLP. Sodohoa is also integrated with hygienist fish auction area.

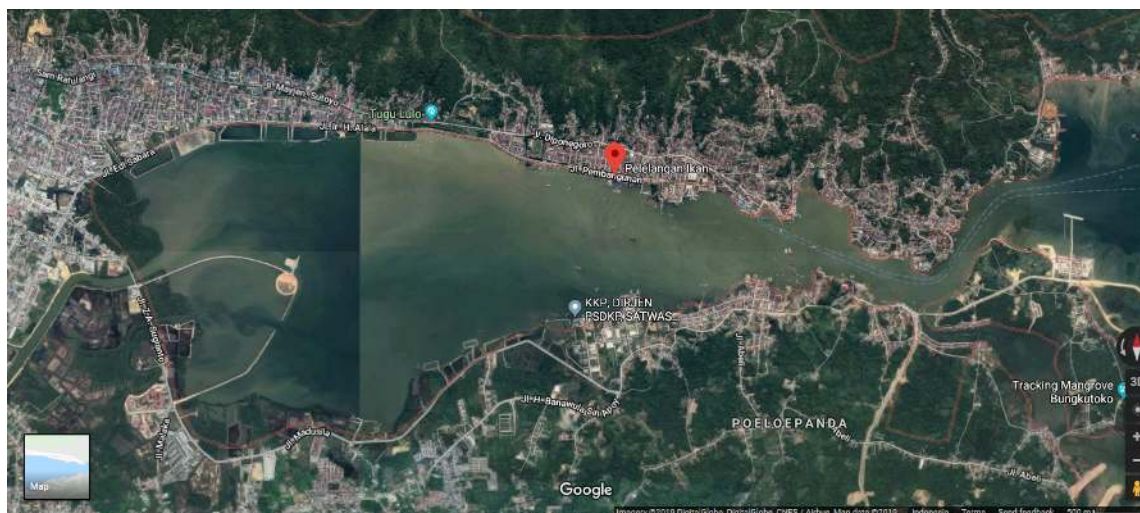


Figure 10.6: Location of FLP Ternate (taken from Google Map)

Survey team

Survey was done by Yeremia Apridianto dan Duitd Kolibonso

Period visited

Survey was conducted on 29 April 2019

How to get there

From Haluoleo Airport, it can be reached by travelling around 1 hour to the city center then continue to PPS Kendari with duration around 20 minutes

10.2.2 Fleet Description

Purse seine and handline are dominant in FLP Sodohoa. Most of purse seine have size 30 GT. Meanwhile the size of bodi boat is around 1GT (nano boat). The fishing ground of vessels based in Sodohoa is similar with the vessels in PPS Kendari in Kendari waters and Banda Sea (FAM 714). The main target of purse seine is small pelagic fish and catch occasionally on skipjack and baby tuna. Bodi boat is targeting large tuna.

10.2.3 Follow-up

The location is not recommended for conducting CODRS contract since most purse seine vessels are targeting small pelagic fish and occasionally to catch skipjack.

10.2.4 Important Contact

10.2.5 References

10.2.6 Figures



Figure 10.7: Hygienist fish auction area in PPI Sodohoa



Figure 10.8: Typical purse seine vessel in PPI Sodohoa

10.3 FLP. Soropia, Konawe

10.3.1 Background and Survey Practicalities

Background

FLP Soropia is a fishing harbour located in Soropia, Konawe. Based on information obtained from harbour staff in Kendari, FLP Soropia has a potency of pelagic fisheries in which many fishing vessels land their catch in this harbour.

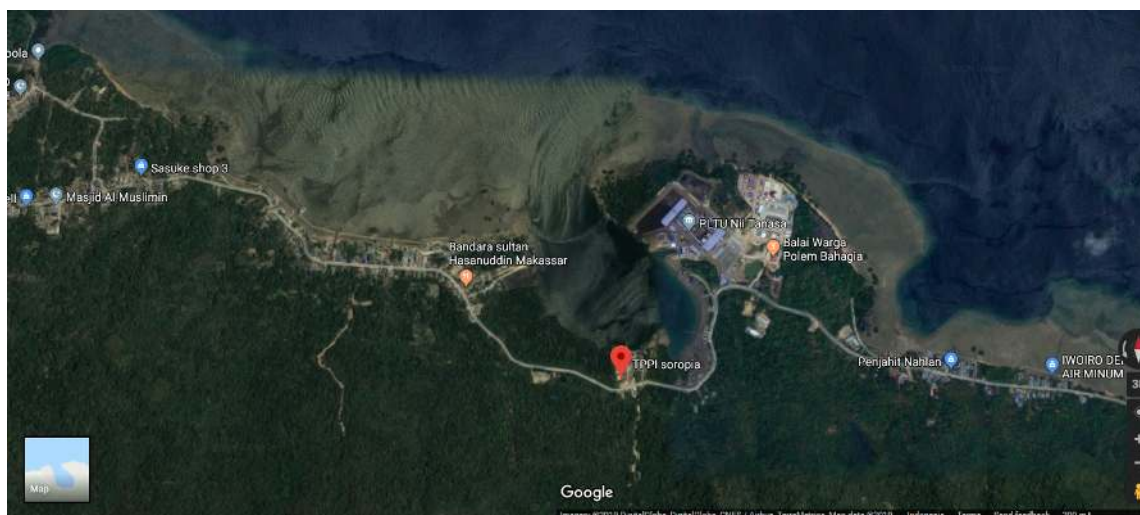


Figure 10.9: Location of Soropia (taken from Google Map)

Survey team

Survey was done by Yeremia Apridianto dan Duaitd Kolibonso

Period visited

Survey was conducted on 30 April 2019

How to get there

From Haluoleo Airport, it can be reached by travelling around 1 hour to the city center then continue to PPS Soropia with duration around 1.5 hour.

10.3.2 Fleet Description

This harbour was not active when the visit was conducted. There was only one bodi boat land the catch of shallow water snapper and some tenggiri. The fishing ground is around Labengki Island.

10.3.3 Follow-up

This area is not recommended for conducting CODRS contract.

10.3.4 Important Contact

10.3.5 References

10.3.6 Figures



Figure 10.10: The office name plate of FLP Soropia



Figure 10.11: The building of fish auction area FLP Soropia



Figure 10.12: Inactive fishing vessels granted from MMAF



Figure 10.13: Bodi boat in FLP Soropia with fishing ground around Labengki Island

10.4 FLP. Wameo, Baubau

10.4.1 Background and Survey Practicalities

Background

FLP. Wameo is a quite busy fishing port located in Buton Island. There are many vessels from local and the surrounding islands land their catch in this port making it one of the fisheries centres in the island. The location of the FLP is quite strategic where it is close to the traditional market of Wameo at the city center of Baubau. It is managed by UPDT Baubau Regency and belongs to the port of type C which is dedicated for supporting the small-scale fisheries. The average production is >500tonnes/year [9]. It is facilitated by the small capacity cold storage that is rented by the local companies. FLP. Wameo is also the landing place for both types of catcher and collecting vessels from Jakarta. Some of the fishing vessels found in this port are pole and line with size range 10-29GT and small-motorized boat (bodi batang) sizing 1-2GT. Meanwhile, the size of the collecting vessels is varied. The commodity that is often landed consisted of large pelagic fish such as skipjack, baby tuna, medium tuna, large tuna and small pelagic fish such as auxis, scads and decapterus.

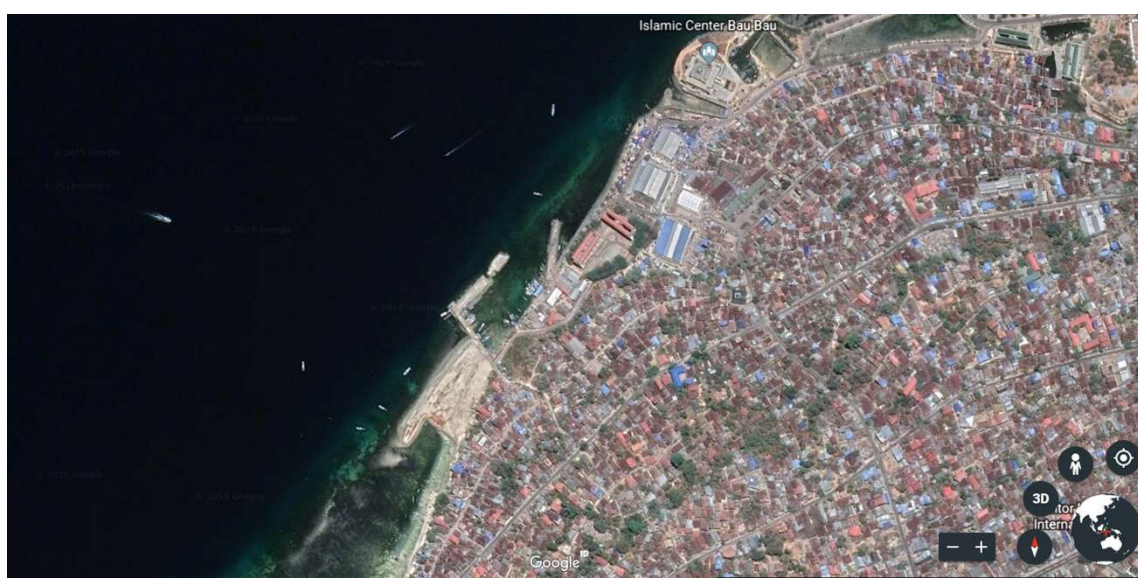


Figure 10.14: The location of FLP Wameo (inside the box square) in Wameo, Baubau

Survey team

The survey was conducted by Dwaitd Kolibongso and Yeremia Apridianto

Period visited

The survey was done on April 26, 2019

How to get there

FLP Wameo is located very close the traditional market of Wameo, Baubau regency that can be reached by only 15 minutes traveling by car from the Baubau airport

10.4.2 Fleet Description

Generally, the type of fishing vessel that is dominant in FLP Wameo is pole and line with the small capacity. It has a length of 10-17 meters, the width of 1-1.5 meters with the size estimated range is 10-29GT (Figure xx). Based on the information provided by PSDKP Baubau there are 20 pole and line vessels that are active to unload their catch in FLP. Wameo. The target species of this vessel is skipjack, baby tuna, medium tuna, aaxis, and some other pelagic fish. The fishing trip duration is 1-2days resulting in the average catch of 1-3tonnes/trip.

Table 10.1: Boat Information from FLP. Wameo, Baubau

No	Program Site	Boat Name	GT Declared	GT Estimate	Fishing Gear	Fishing Area
1	Kota Bau-Bau	Sinai 02	10.00	10.00	PoleAndLine	714
2	Kota Bau-Bau	Fatni 27	10.00	10.00	PoleAndLine	714
3	Kota Bau-Bau	Alsya 01	29.00	29.00	PoleAndLine	714
4	Kota Bau-Bau	Alsya 03	10.00	10.00	PoleAndLine	714
5	Kota Bau-Bau	Ronald Fishing	10.00	10.00	PoleAndLine	714
6	Kota Bau-Bau	Samandar 09	10.00	10.00	PoleAndLine	714
7	Kota Bau-Bau	Bunga Mawar Mulia Makai	10.00	10.00	PoleAndLine	714
8	Kota Bau-Bau	Nelayan Bakti 25	10.00	10.00	PoleAndLine	714
9	Kota Bau-Bau	Nelayan Bakti 16	10.00	10.00	PoleAndLine	714
10	Kota Bau-Bau	Nelayan Samudera	10.00	10.00	PoleAndLine	714
11	Kota Bau-Bau	Nelayan Bakti 07	10.00	10.00	PoleAndLine	714
12	Kota Bau-Bau	Nelayan 2017 875	14.00	14.00	PoleAndLine	714
13	Kota Bau-Bau	Nelayan Bakti 50	10.00	10.00	PoleAndLine	714
14	Kota Bau-Bau	Delfi 35	10.00	10.00	PoleAndLine	714
15	Kota Bau-Bau	Tiworo Jaya	14.00	14.00	PoleAndLine	714
16	Kota Bau-Bau	Arumi Jaya 22	10.00	10.00	PoleAndLine	714
17	Kota Bau-Bau	Nelayan Bakti 15	10.00	10.00	PoleAndLine	714
18	Kota Bau-Bau	Nelayan Bakti 21	10.00	10.00	PoleAndLine	714
19	Kota Bau-Bau	Tarafu Jaya 88	15.00	15.00	PoleAndLine	714
20	Kota Bau-Bau	KMN NB 77	10.00	10.00	PoleAndLine	714

The main fishing ground of those vessels is located in FMA 714 covering the south of Buton Island (close to Batuata Island) until the west part of Wakatobi Islands. Unfortunately, during the visit, there were only small-motorized boats were busy in unloading their catch. Most of the pole and line were resting since the difficulties in obtaining the supply of living bait. Therefore, there is no picture of their catch from this visit.

10.4.3 Follow-up

This location is not recommended for the CODRS program since the less variation of the fishing fleet. Moreover, most of the catch does not come from the local vessels, yet vessel from the outside regions.

10.4.4 Important Contact

Name : Bapak Irmanto
Affiliation : PSDKP Kota Baubau
Contact : 081355508041

10.4.5 References

Satuan Kerja PSDKP Baubau, 2018. Laporan Rekapitulasi Kedatangan Kapal Perikanan Izin Pusat dan Daerah Wilayah Kerja Baubau. 2018 [9]

10.4.6 Figures



Figure 10.15: Typical pole and line vessels in FLP Wameo



Figure 10.16: Small-motorized boat (bodi batang) in FLP Wameo



Figure 10.17: Typical catch from the small-motorized boat (bodi batang)

10.5 FP. Pasar Wajo, Buton

10.5.1 Background and Survey Practicalities

Background

FLP Pasarwajo is one of the main landing places for the Buton fishermen and also the surrounding islands. It is located in Wagola village, Buton regency. Based on the classification issued by the Directorate General of Capture Fisheries it belongs to the port type of C that is dedicated for the small-scale fisheries. The average production is >150 tonnes/year. There are various types of the vessel found in this port, namely the small-motorized boats sizing 1-2GT, pole and line with size range 10-20GT, purse seine with size 10-30GT and some gill nets.

The common landed catch consisted of pelagic fish such as skipjack, baby tuna, medium tuna, and large tuna. There are also some small pelagic such as scads, auxis and decapтерus and some types of billfish. Some of the catch are bought by local supplier PT. Triko Bina Nusantara that is the only processing company exists in Dongkala village (east side of Wagola village). This company produces frozen products not only fish but also other types such as squid, octopus and shrimp for the export. Apart from a local supplier, there are also some middlemen who buy the fish and distribute it to the local market of Baubau, Kendari and Makassar.

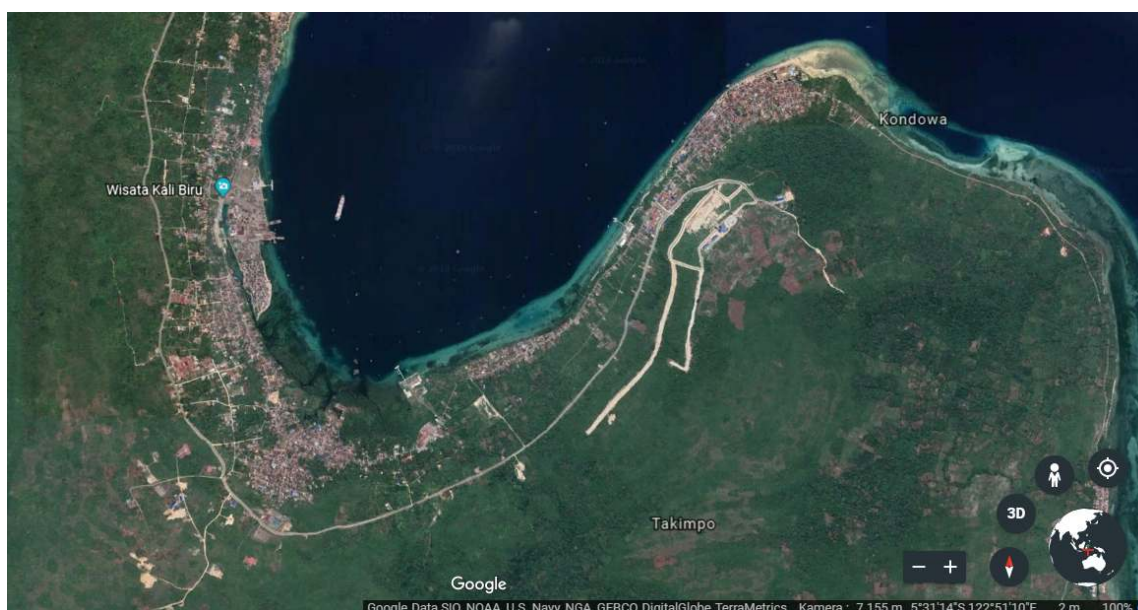


Figure 10.18: The location of FLP Pasarwajo (red box square) in Wagola village, Buton regency.

Survey team

The survey was conducted by Duaitd Kolibongso and Yeremia Apridianto

Period visited

The survey was done on April 26, 2019.

How to get there

It takes 2 hours travel on car from the city center of Baubau.

10.5.2 Fleet Description

Based on the data provided by PSDKP Buton, there are 71 fishing vessels registered in the FLP Pasarwajo with various sizes and target species particularly pelagic fish. It is dominated by purse seine by 34 vessels targeting small pelagic fish such as scads, auxis, decapterus and some of large pelagic species such as skipjack and baby tuna with the average catch is around 2-4tonnes/trip. The fishing trip applies one-day fishing. The purse gear has a specification of length 400-450meters. Meanwhile, the total number of pole and line vessels in FLP Pasarwajo is 20 vessels. They are targeting skipjack, baby tuna, medium tuna and auxis with the fishing trip duration is 1-2days. With regard to the small-motorized boats (bodi batang), the identified number is 15 boats with the target species is large tuna, medium tuna, skipjack, and billfish. The average catch is 60kg/trip that is obtained from one-day fishing trip. Some of handline fishing gears are identified as follows :

1. Trolling line without kite, one large hook, artificial lure (TrollOneLargeArtificial)
2. Trolling line without kite, one large hook, dead natural bait (TrollOneLargeNatural)
3. Trolling line with kite, one large hook, artificial lure (KiteOneLargeArtificial)
4. Trolling line with kite, one large hook, dead natural bait (KiteOneLargeNatural)
5. Trolling line without kite, multiple small hooks, artificial lures (KiteMultipleLargeArtificial)

The type of living bait used is small pelagic fish such as scads, decapterus, auxis and some types of flying fish. The fishing ground is covering FMA 714 and 713, namely the south of Buton Island until Flores Sea and the west side of Wakatobi Islands. Purse seine vessels use FADs to assist them in localizing the fish. Pole and line and bodi batang also make use of FADs and also sign of birds, dolphin schooling.

There is old cold storage with the small capacity in FLP Pasarwajo, but it does not operate anymore. Only PT Triko Bina Nusantara that is active in buying the catch from this port. The main product of this company is frozen and chill fish that are dedicated to the export commodity. Most of pole and line and purse seine is distributing their catch to this company. Some of the catch is also bought by the middlemen to be distributed to Baubau and Makassar Regencies.

Table 10.2: Boat Information from FP. Pasar Wajo, Buton

No	Program Site	Boat Name	GT Declared	GT Estimate	Fishing Gear	Fishing Area
1	Buton	Dino	1.00	1.00	TrollMultipleSmallArtificial	714
2	Buton	Elang	1.00	1.00	TrollMultipleSmallArtificial	714
3	Buton	Lintas	1.00	1.00	TrollMultipleSmallArtificial	714
4	Buton	Lintas Samudera_Buton	1.00	1.00	TrollMultipleSmallArtificial	714
5	Buton	Oki	1.00	1.00	TrollMultipleSmallArtificial	714
6	Buton	Putri Wilsa	1.00	1.00	TrollMultipleSmallArtificial	714
7	Buton	Ria	1.00	1.00	TrollMultipleSmallArtificial	714
8	Buton	Riko	1.00	1.00	TrollMultipleSmallArtificial	714
9	Buton	Risno	1.00	1.00	TrollMultipleSmallArtificial	714
10	Buton	Rizal	2.00	2.00	TrollMultipleSmallArtificial	714
11	Buton	Robi	1.00	1.00	TrollMultipleSmallArtificial	714
12	Buton	Roy	1.00	1.00	TrollMultipleSmallArtificial	714
13	Buton	Sinar_Buton	1.00	1.00	TrollMultipleSmallArtificial	714

Table 10.2: Boat Information from FP. Pasar Wajo, Buton

No	Program Site	Boat Name	GT Declared	GT Estimate	Fishing Gear	Fishing Area
14	Buton	Sukri	1.00	1.00	TrollMultipleSmallArtificial	714
15	Buton	Susang	1.00	1.00	TrollMultipleSmallArtificial	714



Figure 10.19: Troll One Large Natural/Artificial



Figure 10.20: Troll Multiple Small Artificial



Figure 10.21: Kite One large Natural/Artificial



Figure 10.22: Semua jenis alat tangkap dalam box

10.5.3 Follow-up

This location is recommended for the CODRS tuna program since various types of fishing gear and vessels dedicated for tuna. This port is also one of fisheries centers in Buton and Baubau Regencies.

10.5.4 Important Contact

Name : La Ode Basri
Affiliation : The owner of pole and line vessel dan bodi batang boat
Contact : -

Name : Tahiruddin
Affiliation : The coordinator PSDKP Pasarwajo
Contact : -

10.5.5 References

Satuan Kerja PSDKP Baubau, 2018. Laporan Rekapitulasi Kedatangan Kapal Perikanan Izin Pusat dan Daerah Wilayah Kerja Baubau. 2018 [9]

10.5.6 Figures



Figure 10.23: Pole and Line



Figure 10.24: Purse Seine



Figure 10.25: Bodi batang

10.6 Dongkala Village, Buton

10.6.1 Background and Survey Practicalities

Background

Dongkala village is located in the east of FLP Pasarwajo, Buton regency. This village is known as the center of fisheries apart from FLP Pasarwajo because most of the locals are working as the fisher. Nevertheless, most of the fishing fleet found is the small-motorized boat (*bodi batang*) with the fishing trip 1-2 nights. The target catch is large tuna, medium tuna, baby tuna, skipjack, aaxis, and some corals fish. Most of the catch is brought to FLP Pasarwajo and also bought by local middlemen to be sold to the local market. Therefore, it is difficult to get information about the average of total catch from this village. Some of the interviewees inform that they can get 50-100kg/trip depending on the season.



Figure 10.26: Location of Dongkala village, Buton regency

Survey team

The survey was done by Dwaitd Kolibongso and Yeremia Apridianto

Period visited

The survey was conducted on April 26, 2019

How to get there

Dongkala village can be reached by land transportation using car from the city centre of Baubau by 2hours traveling.

10.6.2 Fleet Description

Most of the fishing vessels found in this village are bodi batang / the small-motorized boat with size range 1-2GT. It also found few of fishing boats grant given by the government sizing 6-8GT (Figure yy and dd). Based on the information from the head of the fisher coop of Dongkala, most of the fishing boat grant is used as 'mother boat' to collect the catch from the small-motorized boat because it has large storage capacity making the operational cost from and to the fishing ground is more efficient. Later, the same person informs that there were at least 100 small-motorized boats in Dongkala village. However, based on the frame survey it was estimated 50-60 boats. The type of fishing gear used on this vessel is the same with the vessel in FLP. Pasarwajo as follows

1. Trolling line without kite, one large hook, artificial lure (TrollOneLargeArtificial)
2. Trolling line without kite, one large hook, dead natural bait (TrollOneLargeNatural)
3. Trolling line with kite, one large hook, artificial lure (KiteOneLargeArtificial)
4. Trolling line with kite, one large hook, dead natural bait (KiteOneLargeNatural)
5. Trolling line without kite, multiple small hooks, artificial lures (KiteMultipleLargeArtificial)

The target species is large tuna, medium tuna, skipjack, baby tuna, auxis, scads, decapтерus, etc. Most of the fish are sold to the local market and the rest is used for daily consumption. The fishing ground is located in FMA 714 starting namely the west side of Wakatobi Islands.

The distance to the fishing ground is around 6-10 nautical miles.

10.6.3 Follow-up

This location is not recommended for the CODRS tuna program since the fisheries are considered to have the same characteristic as the FLP Pasarwajo. Moreover, the distance of both locations Dongkala and Pasarwajo is quite close. fisher also have relatively the same fishing ground.

10.6.4 Important Contact

Name : Addison
Affiliation : Head of fisher Coop of Dongkala village
Contact : 082189463691

10.6.5 References

10.6.6 Figures



Figure 10.27: Typical small-motorized boat (*bodi batang*) in Dongkala village



Figure 10.28: One of the fishing boat grant given by the government used as the collecting boat.

10.7 TPI Binongko, Wakatobi

PPIBinongkoWakatobi.Rnw

10.8 Mola Bahari Village, Wakatobi

10.8.1 Background and Survey Practicalities

Background

Mola Bahari village is dominated by Bajo tribe. Most people of Bajo tribe work as fishers who are targeting pelagic fish or grouper and snapper. Fishers in Mola Bahari use small vessels, although some fishers use pole-and-line. Their fishing ground is in Wakatobi waters and surroundings.

Survey team

Survey was done by Yeremia Apridianto and Duaitd Kolibonso.

Period visited

Survey was held on 2 May 2019.

How to get there

Mola Bahari Village can be accessed by car for about 1 hour from Matahora Airport in Wakatobi.

10.8.2 Fleet Description

Our survey showed that vessels in Mola Bahari village is dominated by the small size (0.5 - 1 GT). Fishing gear in the village consists of drop-single-large-natural, kite-one-large-artificial, and pole-and-line with one-day-fishing. The line fishing gears are targeting big tuna, marlin, sailfish and skipjack; while the pole-and-line is targeting skipjack and baby tuna.

Table 10.3: Boat Information from Mola Bahari Village, Wakatobi

No	Program Site	Boat Name	GT Declared	GT Estimate	Fishing Gear	Fishing Area
1	Wakatobi	MOLA BAHARI 1	1.50	1.90	TrollMultipleSmallArtificial	714
2	Wakatobi	MOLA BAHARI 2	1.50	1.90	TrollMultipleSmallArtificial	714
3	Wakatobi	MOLA BAHARI 3	1.50	1.90	TrollMultipleSmallArtificial	714
4	Wakatobi	MOLA BAHARI 4	1.50	1.90	TrollMultipleSmallArtificial	714
5	Wakatobi	MOLA BAHARI 5	1.50	1.90	TrollMultipleSmallArtificial	714
6	Wakatobi	MOLA BAHARI 6	1.50	1.90	TrollMultipleSmallArtificial	714
7	Wakatobi	MOLA BAHARI 7	1.50	1.90	TrollMultipleSmallArtificial	714
8	Wakatobi	MOLA BAHARI 8	1.50	1.90	TrollMultipleSmallArtificial	714
9	Wakatobi	MOLA BAHARI 9	1.50	1.90	TrollMultipleSmallArtificial	714
10	Wakatobi	MOLA BAHARI 10	1.50	1.90	TrollMultipleSmallArtificial	714
11	Wakatobi	MOLA BAHARI 11	1.50	1.90	TrollMultipleSmallArtificial	714
12	Wakatobi	MOLA BAHARI 12	1.50	1.90	TrollMultipleSmallArtificial	714
13	Wakatobi	MOLA BAHARI 13	1.50	1.90	TrollMultipleSmallArtificial	714
14	Wakatobi	MOLA BAHARI 14	1.50	1.90	TrollMultipleSmallArtificial	714
15	Wakatobi	MOLA BAHARI 15	1.50	1.90	TrollMultipleSmallArtificial	714
16	Wakatobi	MOLA BAHARI 16	1.50	1.90	TrollMultipleSmallArtificial	714
17	Wakatobi	MOLA BAHARI 17	1.50	1.90	TrollMultipleSmallArtificial	714
18	Wakatobi	MOLA BAHARI 18	1.50	1.90	TrollMultipleSmallArtificial	714
19	Wakatobi	MOLA BAHARI 19	1.50	1.90	TrollMultipleSmallArtificial	714
20	Wakatobi	MOLA BAHARI 20	1.50	1.90	TrollMultipleSmallArtificial	714
21	Wakatobi	MOLA BAHARI 21	1.50	1.90	TrollMultipleSmallArtificial	714
22	Wakatobi	MOLA BAHARI 22	1.50	1.90	TrollMultipleSmallArtificial	714
23	Wakatobi	MOLA BAHARI 23	1.50	1.90	TrollMultipleSmallArtificial	714
24	Wakatobi	MOLA BAHARI 24	1.50	1.90	TrollMultipleSmallArtificial	714
25	Wakatobi	MOLA BAHARI 25	1.50	1.90	TrollMultipleSmallArtificial	714

Table 10.3: Boat Information from Mola Bahari Village, Wakatobi

No	Program Site	Boat Name	GT Declared	GT Estimate	Fishing Gear	Fishing Area
26	Wakatobi	MOLA BAHARI 26	1.50	1.90	TrollMultipleSmallArtificial	714
27	Wakatobi	MOLA BAHARI 27	1.50	1.90	TrollMultipleSmallArtificial	714
28	Wakatobi	MOLA BAHARI 28	1.50	1.90	TrollMultipleSmallArtificial	714
29	Wakatobi	MOLA BAHARI 29	1.50	1.90	TrollMultipleSmallArtificial	714
30	Wakatobi	MOLA BAHARI 30	1.50	1.90	TrollMultipleSmallArtificial	714
31	Wakatobi	MOLA BAHARI 31	1.50	1.90	TrollMultipleSmallArtificial	714
32	Wakatobi	MOLA BAHARI 32	1.50	1.90	TrollMultipleSmallArtificial	714
33	Wakatobi	MOLA BAHARI 33	1.50	1.90	TrollMultipleSmallArtificial	714
34	Wakatobi	MOLA BAHARI 34	1.50	1.90	TrollMultipleSmallArtificial	714
35	Wakatobi	MOLA BAHARI 35	1.50	1.90	TrollMultipleSmallArtificial	714
36	Wakatobi	MOLA BAHARI 36	1.50	1.90	TrollMultipleSmallArtificial	714
37	Wakatobi	MOLA BAHARI 37	1.50	1.90	TrollMultipleSmallArtificial	714
38	Wakatobi	MOLA BAHARI 38	1.50	1.90	TrollMultipleSmallArtificial	714
39	Wakatobi	MOLA BAHARI 39	1.50	1.90	TrollMultipleSmallArtificial	714
40	Wakatobi	MOLA BAHARI 40	1.50	1.90	TrollMultipleSmallArtificial	714
41	Wakatobi	MOLA BAHARI 41	0.50	0.60	TrollMultipleSmallArtificial	714
42	Wakatobi	MOLA BAHARI 42	0.50	0.60	TrollMultipleSmallArtificial	714
43	Wakatobi	MOLA BAHARI 43	1.50	1.90	TrollMultipleSmallArtificial	714
44	Wakatobi	MOLA BAHARI 44	1.50	1.90	TrollMultipleSmallArtificial	714
45	Wakatobi	MOLA BAHARI 45	1.50	1.90	TrollMultipleSmallArtificial	714
46	Wakatobi	MOLA BAHARI 46	1.00	1.90	TrollMultipleSmallArtificial	714
47	Wakatobi	MOLA BAHARI 47	1.50	1.90	TrollMultipleSmallArtificial	714
48	Wakatobi	MOLA BAHARI 48	1.50	1.90	TrollMultipleSmallArtificial	714
49	Wakatobi	MOLA BAHARI 49	1.50	1.90	TrollMultipleSmallArtificial	714
50	Wakatobi	MOLA BAHARI 50	1.00	1.90	TrollMultipleSmallArtificial	714
51	Wakatobi	MOLA BAHARI 51	1.50	1.90	TrollMultipleSmallArtificial	714
52	Wakatobi	MOLA BAHARI 52	1.50	1.90	TrollMultipleSmallArtificial	714
53	Wakatobi	MOLA BAHARI 53	1.50	1.90	TrollMultipleSmallArtificial	714
54	Wakatobi	MOLA BAHARI 54	1.50	1.90	TrollMultipleSmallArtificial	714
55	Wakatobi	MOLA BAHARI 55	1.00	1.90	TrollMultipleSmallArtificial	714
56	Wakatobi	MOLA BAHARI 56	0.50	0.60	TrollMultipleSmallArtificial	714
57	Wakatobi	MOLA BAHARI 57	0.50	0.60	TrollMultipleSmallArtificial	714
58	Wakatobi	MOLA BAHARI 58	0.50	0.60	TrollMultipleSmallArtificial	714
59	Wakatobi	MOLA BAHARI 59	0.50	0.60	TrollMultipleSmallArtificial	714
60	Wakatobi	MOLA BAHARI 60	1.50	1.90	TrollMultipleSmallArtificial	714
61	Wakatobi	MOLA BAHARI 61	1.00	1.90	TrollMultipleSmallArtificial	714
62	Wakatobi	MOLA BAHARI 62	1.50	1.90	TrollMultipleSmallArtificial	714
63	Wakatobi	MOLA BAHARI 63	0.50	0.60	TrollMultipleSmallArtificial	714
64	Wakatobi	MOLA BAHARI 64	1.50	1.90	TrollMultipleSmallArtificial	714
65	Wakatobi	MOLA BAHARI 65	1.00	1.90	TrollMultipleSmallArtificial	714
66	Wakatobi	MOLA BAHARI 66	0.50	0.60	TrollMultipleSmallArtificial	714
67	Wakatobi	MOLA BAHARI 67	0.50	0.60	TrollMultipleSmallArtificial	714
68	Wakatobi	MOLA BAHARI 68	0.50	0.60	TrollMultipleSmallArtificial	714
69	Wakatobi	MOLA BAHARI 69	0.50	0.60	TrollMultipleSmallArtificial	714
70	Wakatobi	MOLA BAHARI 70	0.50	0.60	TrollMultipleSmallArtificial	714
71	Wakatobi	MOLA BAHARI 71	0.50	0.60	TrollMultipleSmallArtificial	714
72	Wakatobi	MOLA BAHARI 72	1.50	1.90	TrollMultipleSmallArtificial	714
73	Wakatobi	MOLA BAHARI 73	0.50	0.60	TrollMultipleSmallArtificial	714
74	Wakatobi	MOLA BAHARI 74	1.50	1.90	TrollMultipleSmallArtificial	714
75	Wakatobi	MOLA BAHARI 75	1.50	1.90	TrollMultipleSmallArtificial	714
76	Wakatobi	MOLA BAHARI 76	1.50	1.90	TrollMultipleSmallArtificial	714
77	Wakatobi	MOLA BAHARI 77	1.50	1.90	TrollMultipleSmallArtificial	714
78	Wakatobi	MOLA BAHARI 78	1.00	1.90	TrollMultipleSmallArtificial	714
79	Wakatobi	MOLA BAHARI 79	1.00	1.90	TrollMultipleSmallArtificial	714
80	Wakatobi	MOLA BAHARI 80	0.50	0.60	TrollMultipleSmallArtificial	714
81	Wakatobi	MOLA BAHARI 81	1.00	1.90	TrollMultipleSmallArtificial	714
82	Wakatobi	MOLA BAHARI 82	1.00	1.90	TrollMultipleSmallArtificial	714
83	Wakatobi	MOLA BAHARI 83	1.50	1.90	TrollMultipleSmallArtificial	714
84	Wakatobi	MOLA BAHARI 84	0.00	0.60	TrollMultipleSmallArtificial	714
85	Wakatobi	MOLA BAHARI 85	0.50	0.60	TrollMultipleSmallArtificial	714

Table 10.3: Boat Information from Mola Bahari Village, Wakatobi

No	Program Site	Boat Name	GT Declared	GT Estimate	Fishing Gear	Fishing Area
86	Wakatobi	MOLA BAHARI 86	1.50	1.90	TrollMultipleSmallArtificial	714
87	Wakatobi	MOLA BAHARI 87	1.50	1.90	TrollMultipleSmallArtificial	714
88	Wakatobi	MOLA BAHARI 88	1.50	1.90	TrollMultipleSmallArtificial	714
89	Wakatobi	MOLA BAHARI 89	1.50	1.90	TrollMultipleSmallArtificial	714
90	Wakatobi	MOLA BAHARI 90	1.50	1.90	TrollMultipleSmallArtificial	714
91	Wakatobi	MOLA BAHARI 91	1.00	1.90	TrollMultipleSmallArtificial	714
92	Wakatobi	MOLA BAHARI 92	1.50	1.90	TrollMultipleSmallArtificial	714
93	Wakatobi	MOLA BAHARI 93	0.50	0.60	TrollMultipleSmallArtificial	714
94	Wakatobi	MOLA BAHARI 94	1.00	1.90	TrollMultipleSmallArtificial	714
95	Wakatobi	MOLA BAHARI 95	1.50	1.90	TrollMultipleSmallArtificial	714
96	Wakatobi	MOLA BAHARI 96	1.00	1.90	TrollMultipleSmallArtificial	714
97	Wakatobi	MOLA BAHARI 97	0.50	0.60	TrollMultipleSmallArtificial	714
98	Wakatobi	MOLA BAHARI 98	1.50	1.90	TrollMultipleSmallArtificial	714
99	Wakatobi	MOLA BAHARI 99	0.50	0.60	TrollMultipleSmallArtificial	714
100	Wakatobi	MOLA BAHARI 100	0.50	0.60	TrollMultipleSmallArtificial	714
101	Wakatobi	MOLA BAHARI 101	0.50	0.60	TrollMultipleSmallArtificial	714
102	Wakatobi	MOLA BAHARI 102	0.50	0.60	TrollMultipleSmallArtificial	714
103	Wakatobi	MOLA BAHARI 103	0.50	0.60	TrollMultipleSmallArtificial	714
104	Wakatobi	MOLA BAHARI 104	0.50	0.60	TrollMultipleSmallArtificial	714

10.8.3 Follow-up

Mola Bahari village is recommended location to deploy CODRS. However, people in the village lack of technology development. Therefore, it should be considered in the training process.

10.8.4 Contact

10.8.5 References

10.8.6 Figures

10.9 Koroeonowa Village, Wakatobi

10.9.1 Background and Survey Practicalities

Background

Koroe village is located at coastal area of Waha, Wangi-wangi that has a big potency of tuna resource. All fishers in this village are targeting large tuna, wahoo, dolphin fish, skipjack and baby tuna.

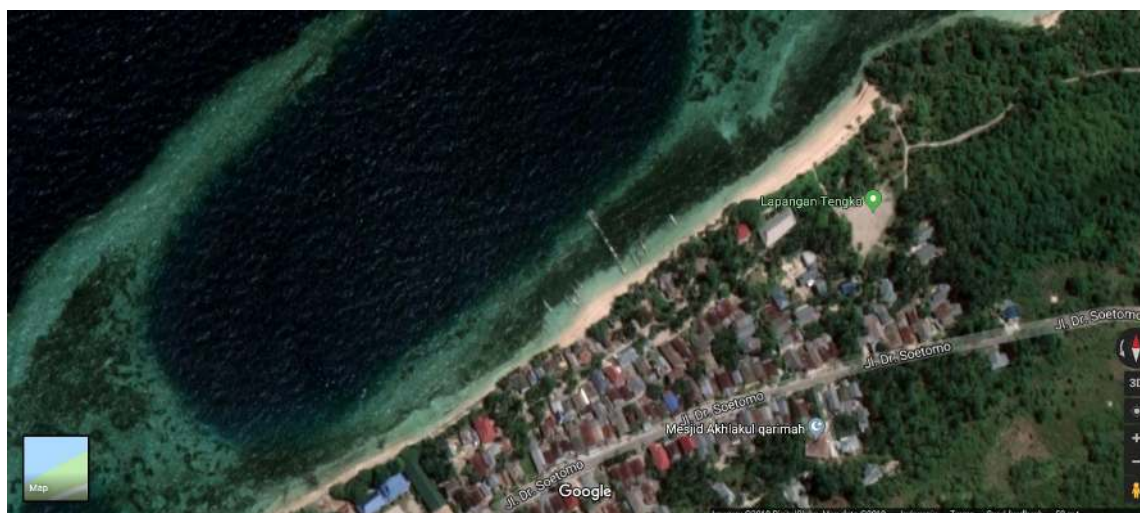


Figure 10.29: Location of Koroe village, Wakatobi.

Survey team

Survey was done by Yeremia Apridianto and Duitd Kolibongso

Period visited

Survey was conducted on May 7, 2019

How to get there

From Matahora airport Wakatobi, Koroe village can be accessed by car by 20 minutes traveling.

10.9.2 Fleet Description

All the fishing fleet in Koroe village are bodi batang, small-motorized boat with the size range 0.5-1GT. The type of fishing gear used is weighted drop lines with one large hook, artificial lure (DropOneLargeArtificial), weighted drop lines with one small hook, natural bait (DropOneSmallNatural) and trolling line with kite, one large hook, artificial lure (KiteOneLargeHookArtificial). All fishers apply one-day fishing trip. They go to the sea at midnight and back to the home base in the day or the afternoon. The target catch is large tuna, billfish, and skipjack.

Table 10.4: Boat Information from Koroeonowa Village, Wakatobi

No	Program Site	Boat Name	GT Declared	GT Estimate	Fishing Gear	Fishing Area
1	Wakatobi	KM. Dina	0.00	3.10	SurfaceOneLargeLive	714
2	Wakatobi	KM. Uci	0.00	2.50	SurfaceOneLargeLive	714

Table 10.4: Boat Information from Koroconowa Village, Wakatobi

No	Program Site	Boat Name	GT Declared	GT Estimate	Fishing Gear	Fishing Area
3	Wakatobi	KM. Hamzah Laut	0.00	1.32	SurfaceOneLargeLive	714
4	Wakatobi	KM. Zahra Wakatobi	0.00	2.70	SurfaceOneLargeLive	714
5	Wakatobi	KM. Dina	0.00	1.62	SurfaceOneLargeLive	714
6	Wakatobi	KM. Uci	0.00	1.32	SurfaceOneLargeLive	714
7	Wakatobi	KM. Zahra Wakatobi	0.00	1.47	SurfaceOneLargeLive	714

10.9.3 Follow-up

This village is recommended as the location for the implementation of the CODRS tuna program because all fishers are dedicated to targeting tuna. The accessibility to the location is also quite easy.

10.9.4 Important Contact

Name : Aci
Affiliation : Owner KM. Uci
Contact : 081244419097

Name : Ferdin
Affiliation : KM. Hamzah Laut
Contact : 085299399954

10.9.5 References

10.9.6 Figures

10.10 FP. Torobulu, Konawe Selatan

10.10.1 Background and Survey Practicalities

Background

FP Torobulu is located in South Konawe. Based on information gathered from harbour staff in Kendari, FP Torobulu is one of the potential landing sites for pelagic fisheries. The activity starts from 12.00 in the evening up to 09.00 in the morning.

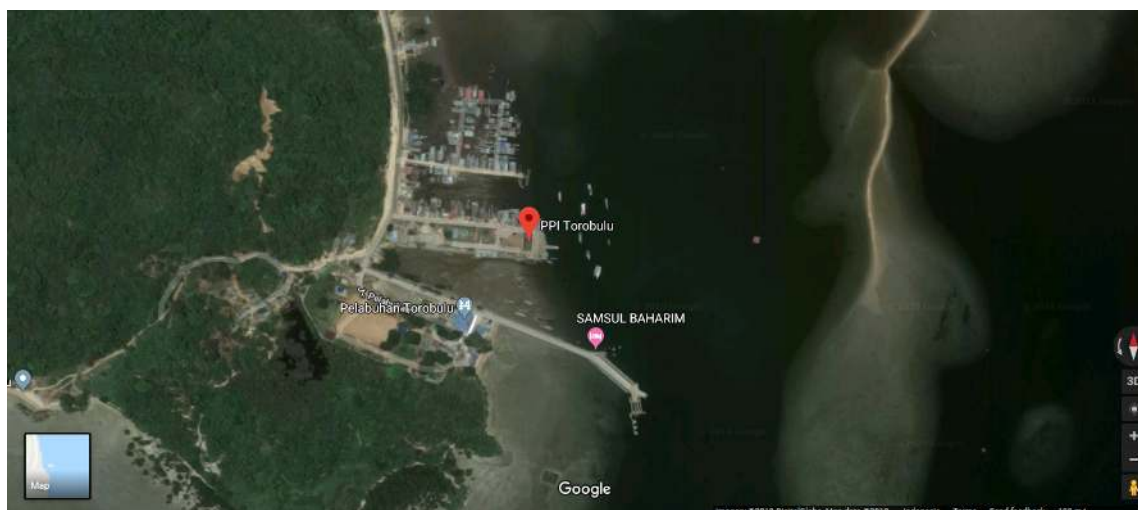


Figure 10.30: Location of PPN Ternate (taken from Google Map)

Survey team

Survey was done by Yeremia Apridianto dan Dwaitd Kolibonso

Period visited

Survey was done on 1 May 2019

How to get there

From Haluoleo Airport, FP Torobulu can be accessed by travelling around 2.50-3 hours using car.

10.10.2 Fleet Description

Based on the field trip, there were only purse seine vessel exists in FP Torobulu. There were 15 purse seine vessels found in FP Torobulu. The estimated size of the vessel is around 30 GT. The main target catch is small pelagic fish and rarely to catch tongkol, skipjack and baby tuna.

10.10.3 Follow-up

The location is not recommended for conducting CODRS contract since most purse seine vessels are targeting small pelagic fish and occasionally to catch skipjack.

10.10.4 Important Contact

10.10.5 References

10.10.6 Figures



Figure 10.31: The office building
of FP Torobulu



Figure 10.32: Typical vessels found
in FP Torobulu

10.11 Jaya Makmur Village, Wakatobi

10.11.1 Background and Survey Practicalities

Background

Jaya Makmur village is one of the villages located in Binongko Island. Based on the information provided by Snapper team, this location has a potency of tuna fisheries where there are many tuna fishing fleets found in this village.

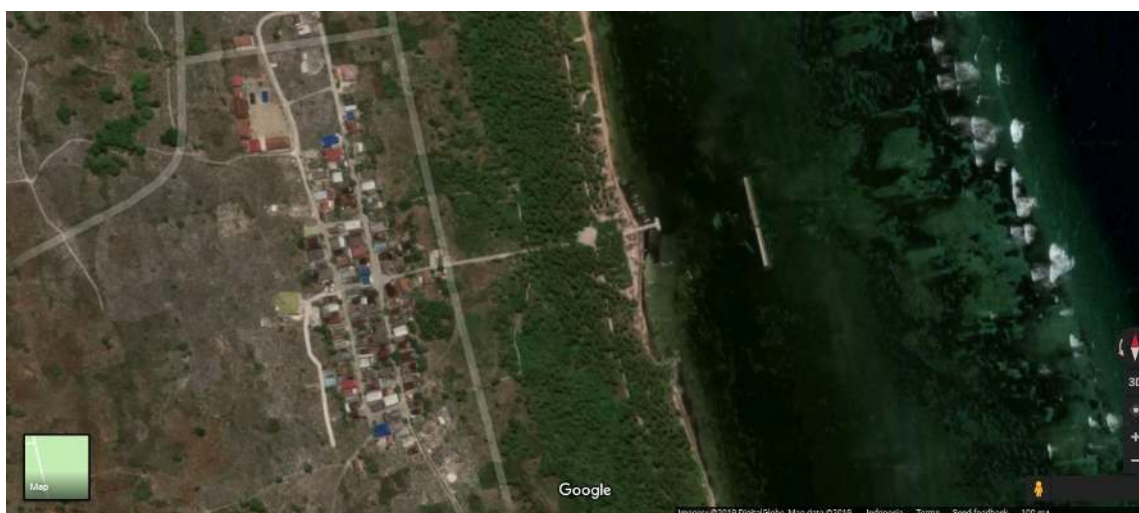


Figure 10.33: Location of Jaya Makmur village in Binongko Island.

Survey team

Survey was done by Yeremia Apridianto and Duitd Kolibongso

Period visited

Survey was conducted on May 4, 2019

How to get there

Starting from Matahora airport, it continues to Wanci village by around 45 minutes traveling to get the ferry harbour of Jabal. The travel from Jabal harbour using the wood ferry to Binongko Island takes around 5 hours. It continues by using motorcycle taxi (ojek) to Jaya Makmur village by around 30 minutes traveling.

10.11.2 Fleet Description

All tuna fishers in Jaya Makmur village use small-motorized boat of bodi batang sizing 0.5-1GT. The type of fishing gear used is varied such as weighted drop lines with one large hook, artificial lure (DropOneLargeArtificial), trolling line with kite, one large hook, artificial lure (KiteOneLargeArtificial) and trolling line without kite, multiple small hooks, artificial lure (TrollMultipleSmallArtificial). Based on the field survey, there are around 10 boats dedicated to catching tuna. The species target is large tuna, billfish, skipjack and baby tuna. The fishing ground is located in Wakatobi waters belonged to FMA 714. They work on one-day fishing trip where the fishing trip start in midnight and back to the home base around the day or afternoon. All catch is distributed to the locals and surrounded villages.

10.11.3 Follow-up

This location is recommended to employ CODRS tuna program since the potency of tuna fisheries. However, it should be reminded that the access to get Binongko Island takes the time. Apart from this, the characteristic of the fisheries is similar to the fisheries in Wangi-Wangi in which it is easier to be reached.

10.11.4 Important Contact

Name : Amursan
Affiliation : The Coordinator of Binongko Fishers
Contact : 082293327121

10.11.5 References

10.11.6 Figures

10.12 Lagongga Village, Wakatobi

10.12.1 Background and Survey Practicalities

Background

Lagongga village is located in Binongko Island and adjacent directly to Jaya Makmur village. Based on the information obtained from the local fisher coordinator, there are more fishers in Lagongga village than in Jaya Makmur village. This information shows that there is a big potency of tuna fisheries in this location.

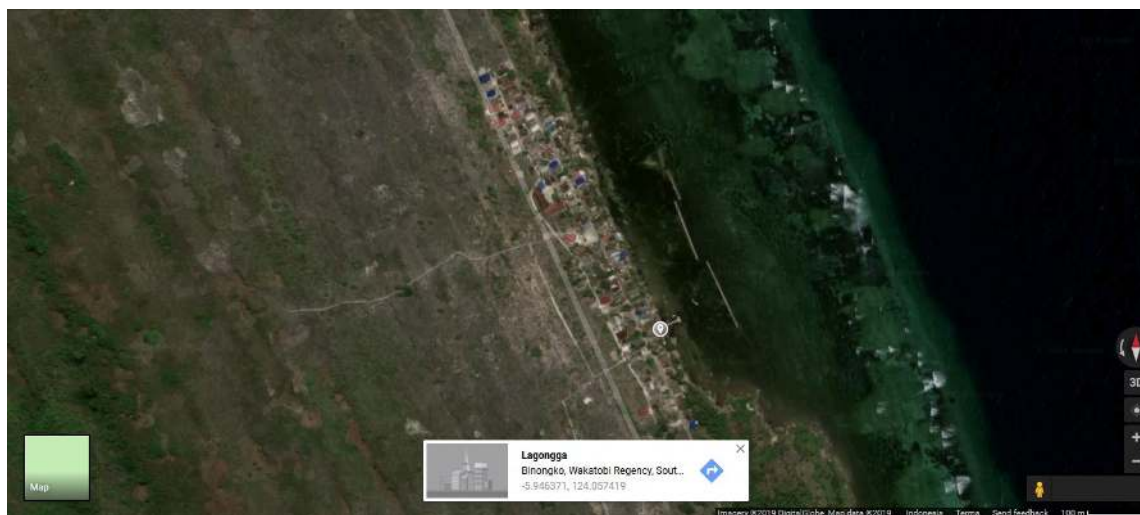


Figure 10.34: Location of Lagongga Village in Binongko Island, Wakatobi

Survey team

Survey was done by Yeremia Apridianto and Dwaitd Kolibongso

Period visited

Survey was conducted on May 4, 2019

How to get there

Since the village is located adjacent to Jaya Makmur village, the access to the village is simila. Starting from Matahora airport, it continues to Wanci village by around 45 minutes traveling to get the ferry harbour of Jabal. The travel from Jabal harbour using the wood ferry to Binongko Island takes around 5 hours. It continues by using motorcycle taxi (ojek) by around 30 minutes traveling. The travel from Jaya Makmur village to Lagoingga village is only 10 minutes by using motorcycle.

10.12.2 Fleet Description

Based on the field survey and interview with the local fishers, all fishers in Lagongga village use bodi batang, small-motorized boat to fish tuna. The size is between 0.5-1GT. However, it also found that there are some boats with a size of two times wider than the general size. The tare three types of fishing gear used namely, weighted drop lines with one large hook, artificial lure (DropOneLargeArtificial), trolling line with kite, one large hook, artificial lure (KiteOneLargeArtificial) and trolling line without kite, multiple small hooks, artificial lure (TrollMultipleSmallArtificial).

10.12.3 Follow-up

Similar to the situation in Jaya Makmur village, Lagongga village is recommended to employ CODRS tuna program since the potency of tuna fisheries. However, it should be reminded that the access to get Binongko Island takes the time. Apart from this, the characteristic of the fisheries is similar to the fisheries in Wangi-Wangi in which it is easier to be reached

10.12.4 Important Contact

Name : Amursan
Affiliation : The Coordinator of Binongko Fishers
Contact : 082293327121

Name : La Sadidun
Affiliation : Seasonal fisher
Contact : 081240873386

10.12.5 References

10.12.6 Figures

10.13 Kampo kampo Village, Wakatobi

10.13.1 Background and Survey Practicalities

Background

Kampo-kampo village is located adjacent to Lagongga village. Based on the information provided by the coordinator of local village, there is purse seine fleet exist in the village and also bodi batang boat with the same specification to the boat in Jaya Makmur and Lagongga villages. In general, the potency of tuna fisheries in this village is quite high. Therefore it should be followed up by more survey.

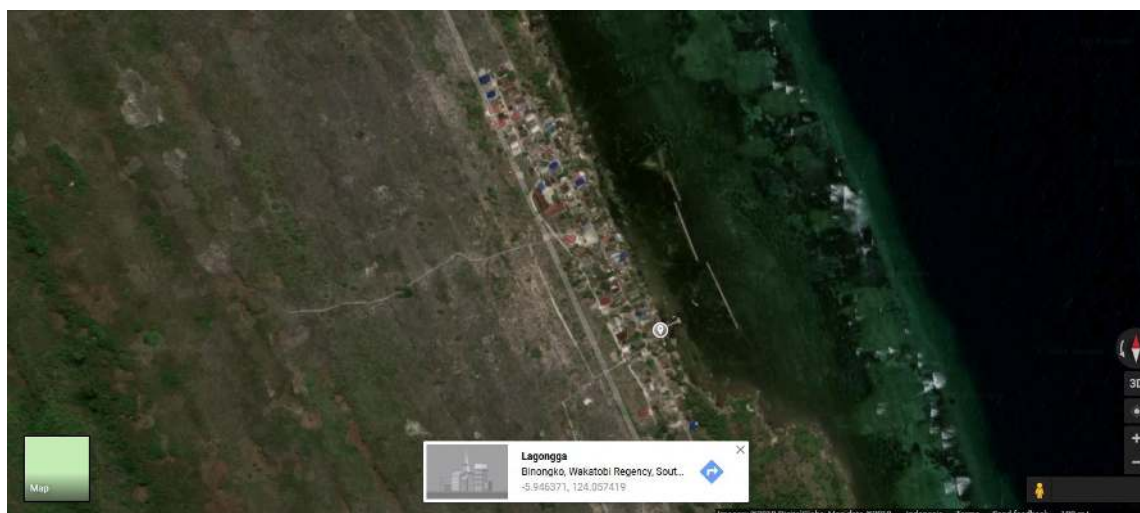


Figure 10.35: Location of Kampo-kampo village, Binongko Island.

Survey team

Survey was done by Yeremia Apridianto and Dwaitd Kolibongso

Period visited

Survey was conducted on May 4, 2019

How to get there

Located adjacent to Lagongga village, the pathway to Kampo-kampo village is similar to Jaya Makmur and Lagongga village. It takes only 20 minutes travelling by using motorcycle taxi (ojek) from Lagongga village.

10.13.2 Fleet Description

Based on the field survey and the interview, there are two purse seine vessels in Kampo-kampo village. Despite the declared size is 6GT, it is estimated that the real size is around 15GT. There is no other fishing gear in these vessels. The fishing ground is around Wakatobi waters, Banda Sea and Flores Sea. The fishing trip is around 1-2days depending on the catch amount. The target species is mackerel scad, bullet tuna, skipjack and baby tuna.

10.13.3 Follow-up

This village is recommended to implement CODRS tuna program since the potency of tuna fisheries. However, it should be reminded that the access to get Binongko Island takes the time.

10.13.4 Important Contact

Name : Amursan
Affiliation : The Coordinator of Binongko Fishers
Contact : 082293327121

Name : La Halidu
Affiliation : Captain of KM. Nur Fadillah
Contact : 085298999836

10.13.5 References

10.13.6 Figures

11 Maluku Province

11.1 AFP. Ambon

11.1.1 Background and Survey Practicalities

Background

Pelabuhan Perikanan Nusantara / Archipelago Fishing Port (AFP) Ambon was first built in 1984-1985 funded by local government. The harbour was a Type-D similar to the fishing landing area (PPI). The development was continued in 1990/1991 until 1995/1996 with funding source from central government and loan INP-22. It was upgraded to Pelabuhan Perikanan Pantai / Coastal Fishing Port (CFP) Type-C and managed by Fisheries and Marine Agency (DKP) Maluku. In 2000, the harbour status was upgraded to AFH Type-B in 2000 where the office was technical implementation unit (UPT) supervised by Directorate General Capture Fisheries (DGCF –MMAF) (PPIP, 2019).

AFP Ambon is located in the Ambon Bay and has an important role to support the fisheries. Fishing vessels based in the harbour operated in the Banda (FMA 714), Seram-Maluku (FMA 715) and Arafura Sea (FMA 718) (Manapa, 2012). Some fishing companies are also built in the harbour area to support the landing activities.

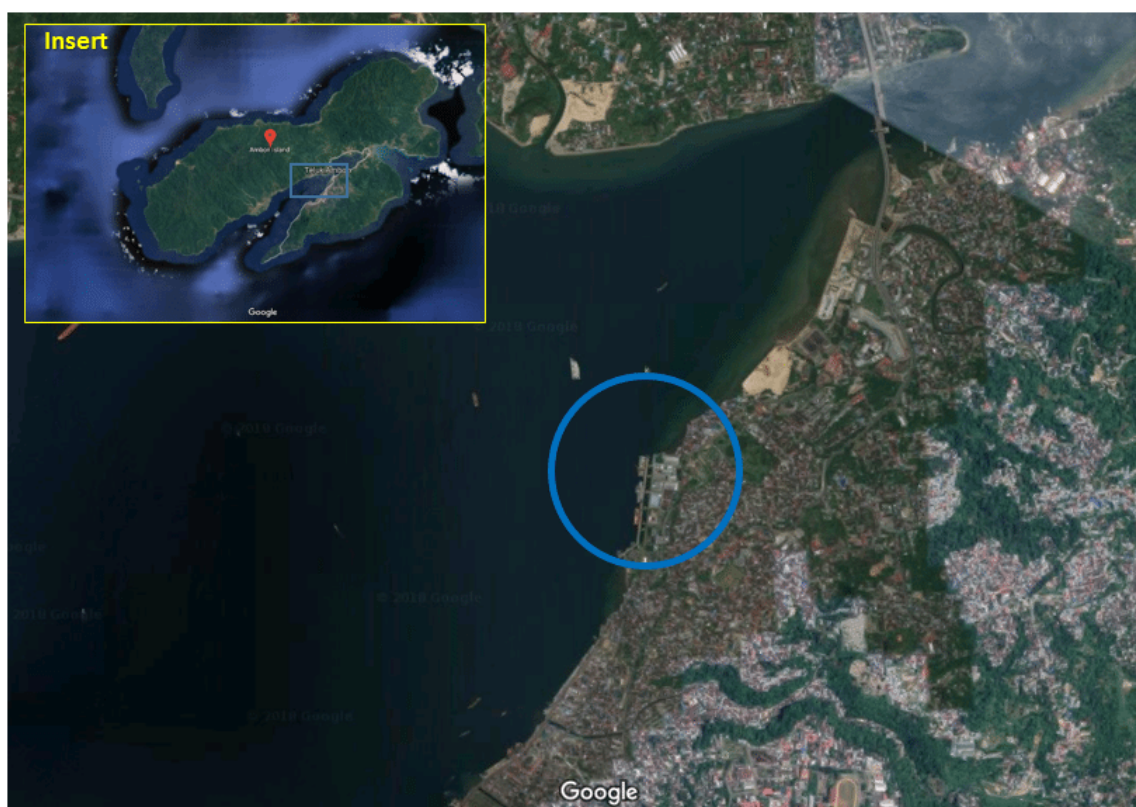


Figure 11.1: Map location of AFP Ambon, Maluku (taken from Google Map).

Survey team

Survey was done by Dimas Galang Fergiawan and Al Aidy

Period visited

Survey was conducted on 22-26 January 2019

How to get there

AFP Ambon located in the city centre city of Ambon, and can be accessed from Pattimura International Airport by travelling using car around 1 hour.

11.1.2 Fleet Description

Based on the information from the harbour officer, there are 110 active fishing vessels consisted of 40 long line, 16 purse seine, 23 handline, 6 pole and line, 17 carrier vessels, 6 light boats and 2 squid boat with the size average 30GT. Most fishing fleets are owned by fishing companies such as PT. Tri Satria Samudera 01, PT. Harta Samudera 01, PT. Bersama Mitra Sejahtera, and PT. Sumber Laut Utama.

During the field work, there is no fishing fleet rest in the jetty because there is a rule that prohibits the fleet to anchor in the outer Ambon Bay. Therefore, many fishing fleet anchor in the inner Ambon Bay. This condition makes difficult to meet and verify the data since they are in the open water.

Table 11.1: Boat Information from AFP. Ambon

No	Program Site	Boat Name	GT Declared	GT Estimate	Fishing Gear	Fishing
1	Kota Ambon	KM. Samudera Indah 033	16.00	15.40	DriftOneLargeNatural	714
2	Kota Ambon	KM. Cakrawala SJ 01	18.00	16.30	DriftOneLargeNatural	714
3	Kota Ambon	KM. Kapernau	15.00	14.10	DriftOneLargeNatural	714
4	Maluku Tengah	KM. Manu Indah	30.00	23.70	PurseSeine	714
5	Maluku Tengah	KM. Lai Lai 02	30.00	23.70	PoleAndLine	714
6	Maluku Tengah	KM. Maya Mandiri 02	29.00	22.50	LongMultipleLargeNatural	714
7	Kota Ambon	KM. Manurusi Indah	29.00	22.10	PurseSeine	714
8	Kota Ambon	KM. Samudra Indah 088	19.00	17.60	TrollMultipleSmallArtificial	714
9	Kota Ambon	KM. Bintang Terang A 01	27.00	25.30	DropOneLargeNatural	714
10	Kota Ambon	KM. Halilintar Ariqah 22	15.00	13.30	TrollMultipleSmallArtificial	714
11	Kota Ambon	KM. Maya Mandiri 15	29.00	20.50	LongMultipleLargeNatural	714
12	Kota Ambon	KMN. SELIA 02	23.00	17.00	PoleAndLine	714
13	Kota Ambon	KM. Adi Jaya 03	19.00	17.20	TrollOneLargeArtificial	714
14	Maluku Tengah	KM. CALLISTA 01	30.00	25.60	PoleAndLine	714
15	Kota Ambon	KM. Baskara 01	20.00	19.30	DriftOneLargeNatural	714
16	Kota Ambon	KM. Air Manis 05	23.00	18.50	DriftOneLargeNatural	714
17	Kota Ambon	KM. Malvinas 03	24.00	22.40	DriftOneLargeNatural	714
18	Kota Ambon	KM. Air Manis 01	24.00	22.40	DriftOneLargeNatural	714
19	Maluku Tengah	KM. Fajar Terang	20.00	13.70	PoleAndLine	714
20	Seram Bagian Barat	KM. Selia 02	23.00	0.00	PoleAndLine	714
21	Kota Ambon	KM. INDO TIMUR	29.00	22.78	PoleAndLine	714
22	Maluku Tengah	KM. New Ade Laen	29.00	15.10	PoleAndLine	714
23	Kota Ambon	KM. Aneka Bahari	29.00	23.20	PoleAndLine	715
24	Kota Ambon	KM. New Ade Laen 02	28.00	20.60	PoleAndLine	715
25	Kota Ambon	KM. Samudera Indah 088	19.00	19.00	TrollOneLargeArtificial	714
26	Kota Ambon	KM. Bintang Timur VI	29.00	19.90	LongMultipleLargeNatural	714
27	Kota Ambon	KM. Bina Hasil Jaya XII	30.00	30.00	LongMultipleLargeNatural	714
28	Kota Ambon	KM. Prima Utama	29.00	29.00	LongMultipleLargeNatural	714
29	Maluku Tengah	KM. Huber	29.00	19.70	PoleAndLine	714
30	Kota Ambon	KM. Kurnia Ilahi 05	21.00	20.10	DriftOneLargeNatural	714
31	Kota Ambon	KM. Asri Jaya 02	21.00	19.30	DriftOneLargeNatural	715
32	Maluku Tengah	KM. Sumber Bahari	29.00	19.70	PoleAndLine	714
33	Kota Ambon	KM. Yora 05	30.00	23.50	PoleAndLine	715
34	Kota Ambon	KM. Yora 04	30.00	23.50	PoleAndLine	715
35	Kota Ambon	KM. Bintang Slamet	30.00	23.80	PurseSeine	714
36	Kota Ambon	KM. Rofina LP 02	29.00	29.00	TrollOneLargeArtificial	714
37	Kota Ambon	KM. Putra Harapan 2	29.00	29.00	LongMultipleLargeNatural	714
38	Kota Ambon	KM. Normayanti 01	21.00	17.90	DriftOneLargeNatural	714

Table 11.1: Boat Information from AFP. Ambon

No	Program Site	Boat Name	GT Declared	GT Estimate	Fishing Gear	Fishing
39	Kota Ambon	KM. Swarna Jaya 03	25.00	25.00	LongMultipleLargeNatural	714
40	Kota Ambon	KM. Pulau Dewata	28.00	28.00	LongMultipleLargeNatural	714
41	Kota Ambon	KM. Hidup Baru 03	14.00	13.50	DriftOneLargeNatural	714
42	Kota Ambon	KM. Jeannie Jaya	29.00	29.00	LongMultipleLargeNatural	714
43	Kota Ambon	KM. Sambas II	28.00	28.00	LongMultipleLargeNatural	714
44	Kota Ambon	KM. Mitra Rezeki	28.00	28.00	LongMultipleLargeNatural	714
45	Kota Ambon	KM. Andalas	28.00	28.00	LongMultipleLargeNatural	714
46	Kota Ambon	KM. Yora 03	30.00	23.50	DriftOneLargeNatural	714
47	Kota Ambon	KM. Berkah Samudra	88.00	68.50	PurseSeine	714
48	Kota Ambon	KM. IMJ Tujuh	160.00	152.00	PurseSeine	714
49	Maluku Tengah	KM. Makmusr Jaya Abadi 001	27.00	27.00	PoleAndLine	714
50	Kota Ambon	KM. Matahari Abadi 1	30.00	30.00	LongMultipleLargeNatural	714
51	Kota Ambon	KM. Asri Jaya 01	18.00	16.80	DriftOneLargeNatural	714
52	Kota Ambon	KM. Kurnia Ilahi 03	19.00	18.68	DriftOneLargeNatural	714
53	Kota Ambon	KM. Halilintar Arigaha 20	15.00	16.10	DriftOneLargeNatural	714
54	Kota Ambon	KM. Halilintar Arigaha 22	15.00	15.00	TrollOneLargeArtificial	714
55	Kota Ambon	KM. SAGITARIUS RIK RIF	28.00	28.00	PurseSeine	714
56	Kota Ambon	KM. Air Manis 04	28.00	25.80	DriftOneLargeNatural	714
57	Kota Ambon	KM. Air Manis 03	22.00	19.60	DriftOneLargeNatural	714
58	Kota Ambon	KM. Putri Dobo	28.00	28.00	PurseSeine	714
59	Kota Ambon	KM. SB Raya 06	96.00	71.70	PurseSeine	714
60	Kota Ambon	KM. Setia Makmur 6	28.00	28.00	LongMultipleLargeNatural	714
61	Kota Ambon	KM. Aru Permai	28.00	21.60	PurseSeine	715
62	Kota Ambon	KM. Yora 01	30.00	23.50	PoleAndLine	715
63	Kota Ambon	KM. Maya Mandiri 07	29.00	20.50	LongMultipleLargeNatural	714
64	Kota Ambon	KM. Maya Mandiri 08	29.00	20.50	LongMultipleLargeNatural	714
65	Maluku Tengah	KM. Maya Mandiri 09	29.00	22.60	LongMultipleLargeNatural	714
66	Kota Ambon	KM. Rezeki Samudra	78.00	34.10	PurseSeine	714
67	Kota Ambon	KM. Lampu Sakti 08	22.00	19.60	DriftOneLargeNatural	714
68	Kota Ambon	KM. Air Manis 06	26.00	23.70	DropOneLargeNatural	714
69	Kota Ambon	KM. FMJ Dua	29.00	29.00	TrollOneLargeArtificial	714
70	Kota Ambon	KM. Maya Mandiri 01	29.00	29.00	LongMultipleLargeNatural	714
71	Kota Ambon	KM. IMJ Lima	100.00	72.20	PurseSeine	714
72	Kota Ambon	KM. Haldy-1	30.00	22.30	LongMultipleLargeNatural	714
73	Kota Ambon	KM. Bintang Timur V	29.00	19.90	LongMultipleLargeNatural	714
74	Kota Ambon	KM. Iwan Jaya Tiga	275.00	275.00	PurseSeine	714
75	Kota Ambon	KM. SB Raya 02	134.00	134.00	PurseSeine	714
76	Kota Ambon	KM. Sulawesi Raya Dua Purtra 02	15.00	15.00	TrollOneLargeArtificial	714
77	Kota Ambon	KM. Maya Mandiri 06	29.00	20.50	LongMultipleLargeNatural	714
78	Kota Ambon	KM. Raja Mas	29.00	21.50	PoleAndLine	715
79	Kota Ambon	KM. Dermaga Star 03	24.00	21.70	DropOneLargeNatural	714
80	Kota Ambon	KM. Cilacap Maluku Jaya Tiga	27.00	16.30	DriftOneLargeNatural	714
81	Kota Ambon	KM. Nafiri 02	28.00	28.00	PurseSeine	714
82	Kota Ambon	KM. Sinar Mas No 1	28.00	28.00	LongMultipleLargeNatural	714
83	Kota Ambon	KM. Anugerah Cahaya	27.00	17.01	LongMultipleLargeNatural	714
84	Kota Ambon	KM. Jaya Mulia 01	17.00	13.50	DriftOneLargeNatural	714
85	Kota Ambon	KM. Jaya Mulia 02	16.00	13.50	DriftOneLargeNatural	714
86	Kota Ambon	KM. JMJ Tiga	27.00	21.60	PurseSeine	714
87	Kota Ambon	KM. Puteri Jantak 88	30.00	30.00	PurseSeine	714
88	Maluku Tengah	KM. Laut Mas	28.00	22.40	PoleAndLine	714
89	Kota Ambon	KM. Maya mandiri 128	30.00	22.30	LongMultipleLargeNatural	714
90	Kota Ambon	KM. Bandar Tuna Jaya 3	30.00	30.00	LongMultipleLargeNatural	714
91	Kota Ambon	KM. Bintang Cemerlang	30.00	23.50	PoleAndLine	715
92	Maluku Tengah	KM. Samudra Mas	30.00	25.60	PoleAndLine	714
93	Kota Ambon	KM. Asri Jaya 04	25.00	19.30	DriftOneLargeNatural	714
94	Kota Ambon	KM. FMJ Tiga	25.00	19.80	DriftOneLargeNatural	714
95	Kota Ambon	KM. Yora 06	30.00	23.50	PoleAndLine	715
96	Kota Ambon	KM. AMJ Lima	82.00	82.00	PurseSeine	714
97	Kota Ambon	KM. Sun Jadi	30.00	30.00	LongMultipleLargeNatural	714
98	Kota Ambon	KM. BMJ Enam	97.00	97.00	PurseSeine	714

Table 11.1: Boat Information from AFP. Ambon

No	Program Site	Boat Name	GT Declared	GT Estimate	Fishing Gear	Fishing
99	Kota Ambon	KM. Matahari Abadi	30.00	30.00	LongMultipleLargeNatural	714
100	Kota Ambon	KM. DMJ Enam	95.00	95.00	PurseSeine	714
101	Kota Ambon	KM. Penjuru Bntang 05	19.00	18.68	DriftOneLargeNatural	714
102	Maluku Tengah	KM. Karya Mina Perdana 01	29.00	29.00	PurseSeine	714
103	Maluku Tengah	KM. Karya Mina Perdana 02	29.00	29.00	PurseSeine	714
104	Kota Ambon	KM. Ulang Ulie XXV	42.00	42.00	LongMultipleLargeNatural	714
105	Kota Ambon	KM. Into Jaya 01	22.00	13.40	LongMultipleLargeNatural	714
106	Kota Ambon	KM. Teluk Bakau	29.00	20.50	LongMultipleLargeNatural	714
107	Kota Ambon	KM. Teluk Bakau 08	29.00	20.50	LongMultipleLargeNatural	714
108	Kota Ambon	KM. Cilacap Maluku Jaya Dua	21.00	16.30	DriftOneLargeNatural	714
109	Kota Ambon	KM. Setia Makmur	26.00	26.00	LongMultipleLargeNatural	714
110	Kota Ambon	KM. Kurnia Ilahi 04	16.00	15.30	DriftOneLargeNatural	714
111	Maluku Tengah	KM. Delta King	30.00	30.00	PurseSeine	714
112	Kota Ambon	KM. Mus Indah 02	15.00	15.00	TrollOneLargeArtificial	714
113	Kota Ambon	KM. Princtar 04	32.00	25.30	PoleAndLine	715
114	Kota Ambon	KM. Swama Jaya 1	29.00	29.00	LongMultipleLargeNatural	714
115	Kota Ambon	KM. Intan 9	20.00	20.00	LongMultipleLargeNatural	714
116	Kota Ambon	KM. Malvinas 04	18.00	16.30	DriftOneLargeNatural	714
117	Maluku Tengah	KM. Karya Mina Perdana 05	30.00	30.00	PurseSeine	714
118	Kota Ambon	KM. Maluku Prima Makmur 1	29.00	20.10	LongMultipleLargeNatural	714
119	Kota Ambon	KM. Bintang Timur VII	28.00	18.86	LongMultipleLargeNatural	714
120	Kota Ambon	KM. Resti Jaya 99	19.00	17.60	DriftOneLargeNatural	714
121	Kota Ambon	KM. Maya Mandiri 05	29.00	20.50	LongMultipleLargeNatural	714
122	Kota Ambon	KM. Penjuru Bintang 02	17.00	15.30	TrollOneLargeArtificial	714
123	Kota Ambon	KM. Penjuru Bintang 04	17.00	15.30	DriftOneLargeNatural	714
124	Kota Ambon	KM. Maya Mandiri 03	29.00	20.50	LongMultipleLargeNatural	714
125	Kota Ambon	KM. Asri Jaya 03	23.00	19.30	DriftOneLargeNatural	714
126	Kota Ambon	KM. Sari Segara Utama 25	30.00	30.00	LongMultipleLargeNatural	714
127	Kota Ambon	KM. Sari Segara 27	27.00	27.00	LongMultipleLargeNatural	714
128	Kota Ambon	KM. Akau Jaya Delapan	139.00	139.00	PurseSeine	714
129	Kota Ambon	KM. Billabong 02	21.00	19.30	DriftOneLargeNatural	714
130	Kota Ambon	KM. Bandar Tuna Jaya 7	30.00	30.00	LongMultipleLargeNatural	714
131	Kota Ambon	KM. Sari Segara Utama 26	30.00	30.00	LongMultipleLargeNatural	714
132	Kota Ambon	KM. SB raya 1	130.00	130.00	PurseSeine	714
133	Kota Ambon	KM. Ampri 03	22.00	22.00	PoleAndLine	714
134	Kota Ambon	KM. Karya Marina 810	6.00	6.00	TrollOneLargeArtificial	714
135	Denpasar	Bmj Enam	97.00	63.00	Gillnet	714
136	Kota Ambon	BMJ Satu	99.00	68.60	PurseSeine	714
137	Denpasar	Citera Surya Nusantara - V	60.00	42.00	LongMultipleLargeNatural	714
138	Denpasar	Citra Nusantara - III	56.00	38.50	LongMultipleLargeNatural	714
139	Denpasar	Dmj Enam	95.00	63.00	Gillnet	714
140	Denpasar	Ervin Jaya	49.00	39.90	LongMultipleLargeNatural	714
141	Denpasar	Henry Jaya	46.00	39.90	LongMultipleLargeNatural	714
142	Kota Ambon	IMJ Empat	58.00	56.13	PurseSeine	714
143	Denpasar	INTAN 09	20.00	21.00	LongMultipleLargeNatural	714
144	Denpasar	Maya Mandiri 118	58.00	38.50	LongMultipleLargeNatural	714
145	Denpasar	Muara Tuna Raya	16.00	19.60	LongMultipleLargeNatural	714
146	Denpasar	Naga Mas Perkasa - 18	63.00	38.50	LongMultipleLargeNatural	714
147	Denpasar	Perintis Jaya - 11	14.00	19.60	LongMultipleLargeNatural	714
148	Denpasar	Perintis Jaya - 16	28.00	24.84	LongMultipleLargeNatural	714
149	Denpasar	Perintis Jaya - 17	56.00	38.50	LongMultipleLargeNatural	714
150	Denpasar	Perintis Jaya - 26	28.00	24.84	LongMultipleLargeNatural	714
151	Denpasar	Perintis Jaya - 38	29.00	24.92	LongMultipleLargeNatural	714
152	Denpasar	Perintis Jaya - 9	23.00	22.40	LongMultipleLargeNatural	714
153	Denpasar	Perintis Jaya 10	30.00	24.99	LongMultipleLargeNatural	714
154	Denpasar	Perintis Jaya 201	28.00	24.84	LongMultipleLargeNatural	714
155	Denpasar	Perintis Jaya 21	28.00	24.84	LongMultipleLargeNatural	714
156	Denpasar	Perintis Jaya 22	27.00	23.38	LongMultipleLargeNatural	714
157	Denpasar	Perintis Jaya 23	29.00	24.92	LongMultipleLargeNatural	714
158	Denpasar	Perintis Jaya 25	28.00	24.84	LongMultipleLargeNatural	714

Table 11.1: Boat Information from AFP. Ambon

No	Program Site	Boat Name	GT Declared	GT Estimate	Fishing Gear	Fishing
159	Denpasar	Perintis Jaya 273	29.00	24.92	LongMultipleLargeNatural	714
160	Denpasar	Perintis Jaya 28	28.00	24.84	LongMultipleLargeNatural	714
161	Denpasar	Perintis Jaya 29	27.00	23.38	LongMultipleLargeNatural	714
162	Denpasar	Perintis Jaya 66	58.00	38.50	LongMultipleLargeNatural	714
163	Denpasar	Putra Harapan - 2	29.00	24.92	LongMultipleLargeNatural	714
164	Denpasar	PUTRA HARAPAN - 3	25.00	22.40	LongMultipleLargeNatural	714
165	Denpasar	Sari Segara Utama - 25	30.00	24.99	LongMultipleLargeNatural	714
166	Denpasar	Satria - 8	29.00	24.92	LongMultipleLargeNatural	714
167	Kota Ambon	SB Raya - 4	93.00	68.60	PurseSeine	714
168	Denpasar	Slamet Rahayu	58.00	38.50	LongMultipleLargeNatural	714
169	Denpasar	Tanjung Sari VI	29.00	24.92	LongMultipleLargeNatural	714
170	Kota Ambon	Tirta Usaha Mina - 108	58.00	55.46	PurseSeine	714
171	Denpasar	ULANG ULIE - VI	28.00	22.11	DropOneLargeNatural	714
172	Sinjai	ASRI JAYA 05	28.00	27.30	TrollOneLargeArtificial	714
173	Sinjai	ASTRI JAYA 02	24.00	23.00	TrollOneLargeArtificial	714
174	Sinjai	RESTI JAYA	19.00	18.50	TrollOneLargeArtificial	714
175	Sinjai	RISMA JAYA 02 SJ	27.00	26.70	TrollOneLargeArtificial	714
176	Kota Ambon	KM. Akau Jaya II	92.00	76.70	PurseSeine	714
177	Kota Ambon	KM. Alexis Laut Banda	29.00	21.30	PoleAndLine	714
178	Kota Ambon	KM. Halilintar Ariqah 23	15.00	13.40	DriftOneLargeNatural	714
179	Kota Ambon	KM. Jaya Mulia 03	22.00	16.30	DriftOneLargeNatural	714
180	Kota Ambon	KM. Maluku Prima Makmur 2	29.00	20.20	LongMultipleLargeNatural	714
181	Kota Ambon	KM. Maluku Prima Makmur 3	29.00	20.20	LongMultipleLargeNatural	714
182	Kota Ambon	KM. SB Raya 3	137.00	85.80	PurseSeine	714
183	Kota Ambon	KM. AMJ Enam	96.00	76.70	PurseSeine	714
184	Kota Ambon	KM. Asri Jaya 5	28.00	26.30	DriftOneLargeNatural	714
185	Kota Ambon	KM. Astri Jaya 02	24.00	19.30	DriftOneLargeNatural	714
186	Kota Ambon	KM. Azan Jaya	23.00	15.10	DriftOneLargeNatural	714
187	Kota Ambon	KM. Baru Mandiri II	15.00	15.70	PurseSeine	714
188	Kota Ambon	KM. Bintang Terang A 02	22.00	20.70	DriftOneLargeNatural	714
189	Kota Ambon	KM. BMJ Dua	29.00	22.50	PurseSeine	714
190	Kota Ambon	KM. BMJ Tujuh	98.00	71.70	PurseSeine	714
191	Kota Ambon	KM. Cakrawala SJ 02	25.00	23.00	DriftOneLargeNatural	714
192	Kota Ambon	KM. DMJ Dua	28.00	26.30	PurseSeine	714
193	Kota Ambon	KM. EMJ Lima	99.00	76.70	PurseSeine	714
194	Kota Ambon	KM. Fathur Zikri 02	24.00	19.30	DriftOneLargeNatural	714
195	Kota Ambon	KM. Gelora Laut 04	25.00	23.00	DriftOneLargeNatural	714
196	Kota Ambon	KM. IMJ Satu Raya	99.00	71.70	PurseSeine	714
197	Kota Ambon	KM. Karya Mina Perdana 03	30.00	25.60	PoleAndLine	714
198	Kota Ambon	KM. Karya Mina Perdana 04	30.00	25.60	PoleAndLine	714
199	Kota Ambon	KM. Karya Mina Perdana 06	30.00	25.60	PoleAndLine	714
200	Kota Ambon	KM. Karya Mina Perdana 07	30.00	25.60	PoleAndLine	714
201	Kota Ambon	KM. Lampu Sakti 10	29.00	22.50	PurseSeine	714
202	Kota Ambon	KM. Malbers 00	28.00	23.40	PurseSeine	714
203	Kota Ambon	KM. Maya Mandiri 10	29.00	20.50	LongMultipleLargeNatural	714
204	Kota Ambon	KM. Maya Mandiri 218	59.00	43.90	LongMultipleLargeNatural	714
205	Kota Ambon	KM. Maya Mandiri 12	29.00	20.50	LongMultipleLargeNatural	714
206	Kota Ambon	KM. Maya Mandiri 16	29.00	20.50	LongMultipleLargeNatural	714
207	Kota Ambon	KM. Maya Mandiri 17	29.00	20.50	LongMultipleLargeNatural	714
208	Kota Ambon	KM. Maya Mandiri 19	29.00	20.50	LongMultipleLargeNatural	714
209	Kota Ambon	KM. Maya Mandiri 20	29.00	20.50	LongMultipleLargeNatural	714
210	Kota Ambon	KM. Maya Mandiri 21	29.00	20.50	LongMultipleLargeNatural	714
211	Kota Ambon	KM. Maya Mandiri 22	29.00	20.50	LongMultipleLargeNatural	714
212	Kota Ambon	KM. Maya Mandiri 23	29.00	20.50	LongMultipleLargeNatural	714
213	Kota Ambon	KM. Maya Mandiri 25	29.00	20.50	LongMultipleLargeNatural	714
214	Kota Ambon	KM. Penjuru Bintang 01	27.00	25.20	DriftOneLargeNatural	714
215	Kota Ambon	KM. Princtara 05	32.00	25.30	PoleAndLine	714
216	Kota Ambon	KM. Reski Darul Hikmah 03	22.00	20.70	PurseSeine	714
217	Kota Ambon	KM. Rezky Abadi 01	25.00	23.00	DriftOneLargeNatural	714
218	Kota Ambon	KM. Risma 02 SJ	27.00	25.20	DriftOneLargeNatural	714

Table 11.1: Boat Information from AFP. Ambon

No	Program Site	Boat Name	GT Declared	GT Estimate	Fishing Gear	Fishing
219	Kota Ambon	KM. Samudra Mas 02	27.00	17.00	PoleAndLine	714
220	Kota Ambon	KM. Sang Surya 04	21.00	20.70	DriftOneLargeNatural	714
221	Kota Ambon	KM. Teluk Bone	21.00	20.70	DriftOneLargeNatural	714
222	Kota Ambon	KM. Teluk Mas	29.00	21.30	PoleAndLine	714
223	Kota Ambon	KM. Vitto Star	24.00	19.30	PurseSeine	714

11.1.3 Follow-up

AFP Ambon is recommended to make CODRS contract although those fishing vessels have not started the fishing trip. It relies on the requirement from the company.

11.1.4 Important Contact

Name : Bapak Taib Sangadji, S.E
Affiliation : Kepala AFP Ambon
Contact : 082242900919

Name : Bapak Erik Lesmana Ishak, S.St.Pi
Affiliation : Syahbandar AFP Ambon
Contact : 082198594489

11.1.5 References

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Pusat Informasi Pelabuhan Perikanan (PPIP), 2019. pipp.djpt.kkp.go.id [7]

11.1.6 Figures



Figure 11.2: Jetty in AFP Ambon



Figure 11.3: Some surveillance vessels in AFP Ambon



Figure 11.4: Small boat in the jetty of AFP Ambon



Figure 11.5: A purse seine vessel unloads the catch in AFP Ambon



Figure 11.6: Purse seine vessel KM. Nafiri 02 28GT in AFP Ambon



Figure 11.7: Office of AFP Ambon

11.2 Galala Village, Ambon

11.2.1 Background and Survey Practicalities

Background

Galala village is located on the coordinate -3.663710, 128.202577 or near to the PT. Perikanan Nusantara Ambon (Perinus) a government-owned fishing company. Based on the information provided by head of the Ambon fishing harbour, Galala village is one of the landing area for Sinjai fishermen or Known as Penongkol or trolling line vessel. There are 50 fishing fleets that base in Galala where 30 of them has the fishing permit issued from Ambon harbour.



Figure 11.8: The location of Galala fishing base (taken from Google Map).

Survey team

Survey was done by Dimas Galang Fergiawan and Al Aidy

Period visited

Survey was conducted on 22-26 January 2019

How to get there

Galala village can be reached through Kapten P. Tendean street (on the east of Merah Putih bridge) by traveling using car around 45 minute from Pattimura International Airport.

11.2.2 Fleet Description

Fishing fleet in Galala village consisted of trolling line vessel Known as Penongkol with a total number 50 vessels averaging 16-20GT (declared). Those fishing vessels are similar with the vessels in Lombok, Bali and some other regions in southern Java. Each boat has 3-4 storages within capacity 1-1.5ton per storage. The gear type used is handline with either single hook or multiple hook with modification.

The fishing trip involves 4-6 crews with duration 10-14 days depending on the weather condition and the boat supply. The average of total catch is 1000-1500kg in one trip. The fishing ground is in Banda Sea (FMA714) and Aru Sea (FMA 718). Based on the interview with the skippers, the catch consists of baby/juvenile tuna (yellow fin, big eye), skipjack, bullet tuna and kawa kawa, rainbow runner and occasionally squid. The big size catch will be unloaded directly to the fishing company and the small size is sold to the local market called as Arumbai. In the fieldwork, CODRS program was introduced to three skippers

11.2.3 Follow-up

This location is recommended for CODRS program because there are many troll line/hand line vessels dedicated for tuna and tuna-like species with the main fishing ground in FMA 714.

11.2.4 Important Contact

Name : Bapak Erau
Affiliation : Foreman at PT. WIKA (as senior at Kampung Nelayan Galala)
Contact : 085344439132

Name : Bapak Dahlan
Affiliation : Captain KM. Samudera Indah 033
Contact : 082353023591

Name : Bapak Ronal
Affiliation : Captain KM. Kapernau
Contact : 085242743506

Name : Mas Vrengkyn
Affiliation : Operational
Contact : -

11.2.5 References

11.2.6 Figures



Figure 11.9: Office of AFP Ambon



Figure 11.10: Typical trolling line vessels based in Galala village



Figure 11.11: Office of AFP Ambon



Figure 11.12: Office of AFP Ambon



Figure 11.13: Unloading activities from trolling line vessel.



Figure 11.14



Figure 11.15: Type of fishing gear and hook used by trolling line fisherman.

11.3 Tulehu Harbour, Maluku Tengah

11.3.1 Background and Survey Practicalities

Background

Tulehu harbour is located in Tulehu village eastern Ambon island. It belongs to Central Maluku Regency in the coordinate -3.592123, 128.339018. Tulehu village has an important role as the entry point for people from neighbour islands such as Saparua, Seram, Haruku, Nusa Laut and other small islands. Therefore, there is a big ferry port built in Tulehu. Apart from the transportation, Tulehu is also important region for fisheries in which there are 40-50 fishing vessels based in Tulehu harbour.



Figure 11.16: Location of Tulehu port.

Survey team

Survey was done by Dimas Galang Fergiawan and Al Aidy

Period visited

Survey was conducted on 22-26 January 2019

How to get there

Tulehu harbour can be accessed by car within 45-60 minutes travelling from Pattimura International Airport.

11.3.2 Fleet Description

Following the database sourced from AFP Ambon, there are 50 registered fishing vessels in Tulehu harbour using 4 different fishing gears, pole and line (25), purse seine (4), hand line (8) and longline (20). The fishing trip of pole and line vessel is 1-3 days, longline

30-40 days, handline 7-14 days, purse seine 15-20 days depending on the weather and supply.

In average, the catch per trip for each different vessel is 2500 kg for pole and line, 1000 kg for long line, 1500 kg for handline and purse seine 2500 kg respectively. The fishing ground covers the Banda Sea (FMA 714). The catch composition consists of aby/juvenile tuna (yellow fin, big eye), skipjack, bullet tuna and kawa kawa, and rainbow runner. The fisherman divides the catch into two allocations: the big size is delivered to the local fishing company and small size is sold to the middleman to be brought to the local market of Arumbai.

In the fieldwork, the team had a chance to meet and discuss with the officer representative of PT. Aneka Sumber Tata Bahari (PT. ASTB). The company gives the permission to TNC to make a cooperation with the fishing vessels owned by PT. ASTB. This company has 7 pole and line vessels, but only 2 vessels are still active because the other vessels have a problem of broken machine. Another information is this company will start to receive and process the snapper fish sourced from the local fishermen.

The plan of visiting another fishing company PT. Peduli Laut Maluku (PT PLM) could not be implemented due to permission problem. However, the fishermen inform that the company has 1-2 long line vessels present in the harbour. Many long line vessels are converted to be purse seine and squid vessel. In this survey, CODRS program was introduced to 3 skippers

11.3.3 Follow-up

This location is recommended for implementing CODRS contract since there many pole and line and purse seine dedicated for tuna fisheries especially for FMA 714.

11.3.4 Important Contact

Name : Bapak Salim
Affiliation : Captain KM. Tatari 03
Contact : 6281389424886

Name : Bapak Sudin
Affiliation : Captain KM. Calista 01
Contact : 081215329695

Name : Bapak Ode Dulhaji
Affiliation : Captain KM. Manu Indah
Contact : 081280509810

Name : Bapak Heldi
Affiliation : Bag. Operasional ASTB
Contact : 08124056788

Name : Bapak Ade
Affiliation : Pengepul Ikan
Contact : 085243096973

11.3.5 References

11.3.6 Figures



Figure 11.17: Catch of pole and line vessel KM. Calista 01



Figure 11.18: Typical pole and line vessels in Tulehu Harbour



Figure 11.19: Pole and line vessel KM. Tatari 03



Figure 11.20: Purse seine vessel KM. Manu Indah



Figure 11.21: Purse seine net of KM. Manu Indah



Figure 11.22: Catch of KM. Manu Indah



Figure 11.23: Longline vessel KM. Jeannie Jaya in PT. PLM



Figure 11.24: Pole and line vessels of PT. ASTB Tulehu



Figure 11.25



Figure 11.26: Longline gear and hook of KM. Jeannie

11.4 FP. Masohi, Tehoru and Amahai Harbours, Maluku Tengah

11.4.1 Background and Survey Practicalities

Background

FLP Masohi is managed by the Technical Implementation Unit of the Marine and Fisheries Agency (MFA), Central Maluku Regency. It was built in 2005. The operational activities in this port encompass anchor and mooring vessels, unloading catches, repairing gears, filling of fuel, ice and water into the vessel. Based on the information provided by the secretary of MFA, Central Maluku Regency Mr. Ibrahim, the fisheries activities have been decreased since last year. This is led by ministerial regulation No. 23 2014 that separates the authority between MFAs in the regency and the province level. In addition, Mr. Chorneles who is the KBPNK also adds the information that the potential locations of tuna fisheries in the Central Maluku Regency are characterized by handline and mini purse seine based in some villages, namely Aira, Ruta/Namdua, Yainuelo and Tehoru.

Survey team

Survey was done by Al Aidy

Period visited

Survey was conducted on March 18-21, 2019

How to get there

FLP Masohi can be reached from Ambon by travelling 6 hours using car or 2 hours from Tulehu ferry harbour.

11.4.2 Fleet Description

Based on the data originated from MFA Central Maluku, there are 19 vessels registered in this port. It consists of four different fishing gears, pole and line, purse seine, longline and gill net. Long line is dominant by 10 vessels followed by purse seine 6 vessels, pole and line 2 vessels and one unit of gill net vessel. Pole and line vessel spends 1-5days for one fishing trip. While long line has a longer fishing trip by 30-40days. Handline fishing trip is around 7-14 days and purse seine is ranging between 15-20 days depending on the weather condition and supplies.

The average catch in one fishing trip of each type of vessel is varied, 2500kg for pole and line, 1000kg for long line, 1500kg for handline, and purse seine is around 2500kg. The fishing ground is located in FMA 714 covering part of the Banda Sea. Based on the interview with the captain, the catch composition consists of baby tuna, skipjack, aaxis, scads, and rainbow runner. The catch with the large size of fish will be unloaded directly to the local processing companies. Meanwhile, the small fish is sold to the local middlemen to be distributed to the local market.

11.4.3 Follow-up

This location is recommended for implementing CODRS tuna program since there are pole and line vessels dedicated for tuna operated in FMA 714.

11.4.4 Important Contact

Name : Bambang Sugiarto
Affiliation : Captain KM. Inka Mina 23
Contact : 6281247027623

Name : Bapak Sudin
Affiliation : Captain KM. Calista 01
Contact : 081215329695

11.4.5 References

11.4.6 Figures



Figure 11.27



Figure 11.28



Figure 11.29



Figure 11.30



Figure 11.31

11.5 CFP. Banda Neira, Maluku Tengah

11.5.1 Background and Survey Practicalities

Background

CFP Banda Neira is located in Banda Neira Island, Central Maluku - Maluku Province. The island is located in FMA 714. CFP Banda Neira is the only fishing port on the island. Some facilities in the port include ice factory and cold storage for fish storage. Besides CFP Banda Neira, our observation showed that some locations have potential in tuna fisheries such as fish landing Negeri Kampung Baru which is located in east of Banda Neira island, and fish landing Pulau Rhun.

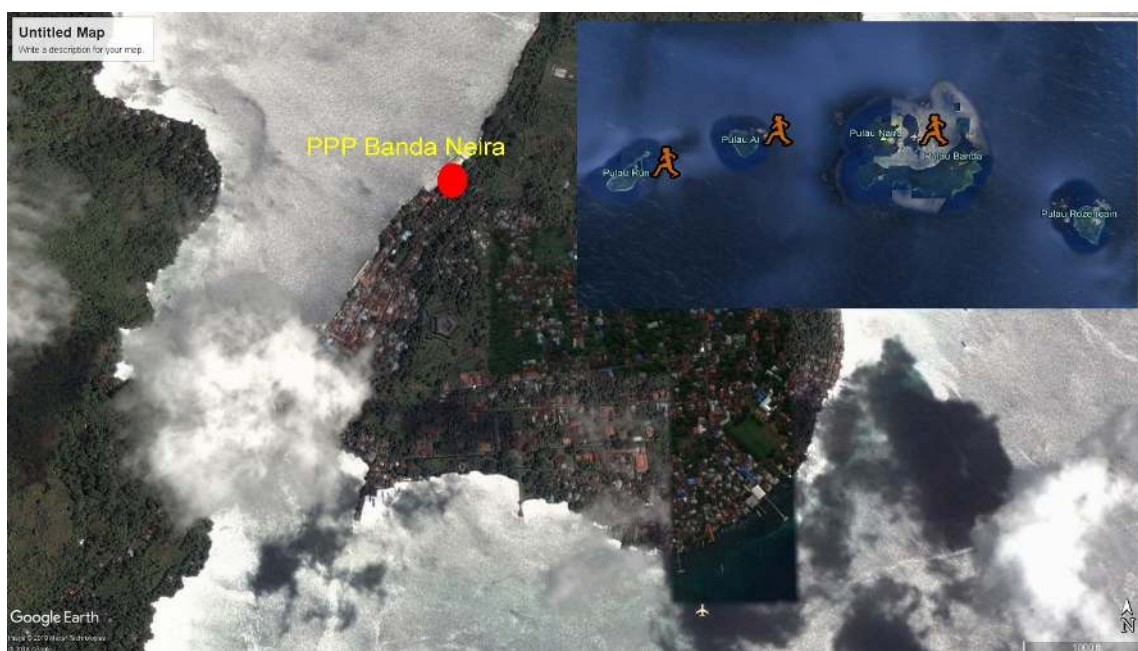


Figure 11.32: Location of PPP Banda Neira, Ay Island and Rhun Island.

Survey team

The survey was done by Al Aidy.

Period visited

Survey was done on September 2-6, 2019.

How to get there

CFP Banda Neira can be accessed by flight for 45-60 minutes from Ambon City or by marine transport for 6-10 hours. There are two options for marine transportation to go to Banda Neira: speed boat from Tulehu and PELNI Vessel from Ambon City.

11.5.2 Fleet Description

Our interview with the head of Surveillance Unit of PSDKP in Banda result that there are three main fish landing location in Banda Neira: CFP Banda Neira, fish landing Negeri Kampung Baru, and fish landing Pulau Rhun. The homogeneities of those fishing ports are purse seiners (Bobo) and handliners which are dominant in number in those

ports. Our survey showed that total fishing fleet in those ports was 172 units consists of 19 purse seiners and 152 handliners with specific gears on Surface One Large Live, Kite One Large Artificial and Troll One Large Natural. The fishing ground of the fleet is in FMA 714.

The head of Surveillance unit of PSDKP Banda explained that there are four carrier vessels >100 GT owned by PT. Intimas Surya in Benoa Bali. Most of landed catch in Banda Neira is sold to the carrier vessels. It takes about 4-7 months for those vessels to have full containers of landed catch in Banda Neira, depends on the fishing season.

Fish landing Negeri Kampung Baru is located in east of Banda Neira island. Dominant fishing fleet on the fish landing is handliners <5GT with specific fishing gears on Surface One Large Live, Kite One Large Artificial, and Troll One Large Natural. Landed yellowfin tuna is usually sold to the carrier vessels of PT. Intimas Surya at CFP Banda Neira.

Fish landing Pulau Rhun is located in Rhun Island in Banda Neira Islands. One of fishers in the fish landing explained that there are about 50 handliners landing in fish landing Pulau Rhun.

Our survey showed that some enumerators from LINI that are collecting data on landed tuna in CFP Banda Neira. Coordinator for the data collection of LINI in Banda Neira island is Mr. Andre.

11.5.3 Follow-up

The location is recommended to deploy CODRS program because there are many dedicated handliners for fishing tuna in Banda Sea, FMA 714.

11.5.4 Important Contact

Name : Ali Tamher
Affiliation : Head of Surveillance Unit of PSDKP Banda Neira
Contact : 081248876543

Name : Hadi
Affiliation : Owner of Purse Seine (Bobo) and Handline in Banda Neira
Contact : 082198642655

Name : Andre
Affiliation : LINI Staff at Banda Neira
Contact : 081337474844

Name : Jaka
Affiliation : Owner of Handline at Rhun Island
Contact : 082198135387

11.5.5 References

11.5.6 Figures

11.5.7 Gambar



Figure 11.33: Coastal Fishing Port (CFP) Banda Neira.



Figure 11.34: (PP) Negeri Kampung Baru, Banda Neira



Figure 11.35: (PP) Pulau Rhun, Banda Neira



Figure 11.36



Figure 11.37

Armada Penangkapan di PPP Banda Neira



Figure 11.38



Figure 11.39

Armada Penangkapan di Negeri Kampung Baru



Figure 11.40



Figure 11.41

Armada Penangkapan di Pulau Rhun



Figure 11.42



Figure 11.43

The catch of the Handline in Banda Neira



Figure 11.44



Figure 11.45

The catch of the Purse Seine (Bobo) in Banda Neira



Figure 11.46



Figure 11.47

The catch of the Purse Seine (Bobo) in Banda Neira



Figure 11.48



Figure 11.49



Figure 11.50

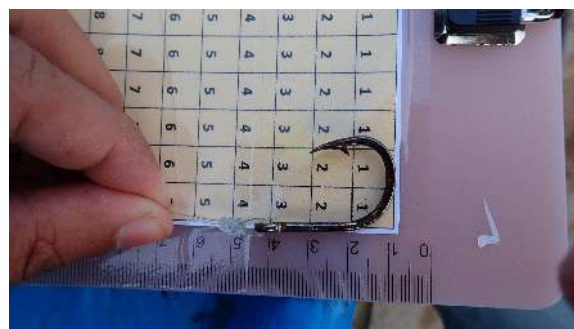


Figure 11.51



Figure 11.52



Figure 11.53

Handline fishing gear (SurfaceOneLargeLive, TrollOneLargeArtificial and KiteOneLargeArtificial) in Banda Neira

11.6 FP. Wetar, Maluku Barat Daya

PPWetar.Rnw

11.7 FP. Ukurlaran, Kepulauan Tanimbar

PPIPembanganSaumlaki.Rnw

11.8 FP. Masarete, Buru

PPMasareteBuru.Rnw

11.9 FP. Piru, Seram Bagian Barat

11.9.1 Background and Survey Practicalities

Background

Coastal Fishing Port (CFP) Piru is the biggest fishing port in Seram Bagian Barat Regency (SBB). The location is quite strategic in the city center of Piru. This port is the landing place for the fisher who operated in Bay of Piru belonged to FMA 714. Despite most of the landing catch are pelagic fish such as tuna and skipjack, it is also found some grouper and snapper fish. However, it is unclear where the fishing fleet come from.



Figure 11.54: Map location of AFP Ambon, Maluku (taken from Google Map).

Survey team

Survey was done by Al Aidy

Period visited

The survey was conducted on January 23-24, 2019

How to get there

The travel to CFP Piru can be reached through land transportation from the city centre of Ambon by 4 hours. However, it can be longer around 6 hours if the travel starts from Masohi.

11.9.2 Fleet Description

Based on the field survey, the fishing fleet in Seram Bagian Barat regency is dominated by two types of vessels: handline mini (jonson) and non-motorized boat sampan (perahu semang). During the survey, it was found there were 8 jonson vessels in CFP Piru. The similar type of vessel was also found in several villages: Pleti Jaya (10-15), Kawa village (15-20) and Wayono village (20-30). Meanwhile, the type of sampan boat was always found in each village in the coastal of SBB.

Jonson fleet is targeting pelagic fish such as yellow fin, big eye, and skipjack tuna in FMA 714. The duration of fishing time is around 8-10 hours by pursuing the schooling of dolphin, seabird, and using the local knowledge in identifying fishing ground called saaru (the local wisdom in recognizing the fishing ground). For the semang boat, the main target catch is snapper and grouper fish in which the fishing ground is located around 100-300 meters from the coastline. Most of the catch is used for consumption. Fishers will sell their catch if they have the exceeds catch. The operational fishing time is around 2-3 hours. Unfortunately, it was not found eligible fleet to be introduced to the CODRS program.

Table 11.2: Boat Information from FP. Piru, Seram Bagian Barat

No	Program Site	Boat Name	GT Declared	GT Estimate	Fishing Gear	Fishing Area
1	Seram Bagian Barat	Piru 1	0.00	1.30	TrollOneLargeArtificial	715
2	Seram Bagian Barat	Piru 2	0.00	1.30	TrollOneLargeArtificial	715
3	Seram Bagian Barat	Piru 3	0.00	1.30	TrollOneLargeArtificial	715
4	Seram Bagian Barat	Piru 4	0.00	1.30	TrollOneLargeArtificial	715
5	Seram Bagian Barat	Piru 5	0.00	1.30	TrollOneLargeArtificial	715
6	Seram Bagian Barat	Piru 6	0.00	1.30	TrollOneLargeArtificial	715
7	Seram Bagian Barat	Piru 7	0.00	1.30	TrollOneLargeArtificial	715
8	Seram Bagian Barat	Piru 8	0.00	1.30	TrollOneLargeArtificial	715
9	Seram Bagian Barat	Piru 9	0.00	1.30	TrollOneLargeArtificial	715
10	Seram Bagian Barat	Piru 10	0.00	1.30	TrollOneLargeArtificial	715
11	Seram Bagian Barat	Piru 11	0.00	1.30	TrollOneLargeArtificial	715
12	Seram Bagian Barat	Piru 12	0.00	1.30	TrollOneLargeArtificial	715
13	Seram Bagian Barat	Piru 13	0.00	1.30	TrollOneLargeArtificial	715
14	Seram Bagian Barat	Piru 14	0.00	1.30	TrollOneLargeArtificial	715

11.9.3 Follow-up

This location is not recommended for CODRS tuna program since the limited type of fishing vessel.

11.9.4 Important Contact

Name : Stevie Sahuburua
Affiliation : Kasubak Perencanaan DKP Piru.
Contact : +6281213059448

Nama : Tine
Affiliation : Penyuluh Perikanan DKP Piru.
Contact : +6285243687576

Nama : Muhamad
Affiliation : Capten Handline mini (Jonson)
Contact : -

11.9.5 References

11.9.6 Figures



Figure 11.55: The office of fisheries and marine agency in Piru



Figure 11.56: Fishing jetty of CFP Piru



Figure 11.57: Handline mini (jonson) in Kawa village



Figure 11.58: Handline mini (jonson) in Kawa village



Figure 11.59



Figure 11.60



Figure 11.61



Figure 11.62: The various of fishing gears used in jonson vessel di Kawa village



Figure 11.63: The various of fishing gears used in jonson vessel di Kawa village

12 North Maluku Province

12.1 AFP. Ternate

12.1.1 Background and Survey Practicalities

Background

Pole and line fisheries in Ternate Known as Huhate has existed for a long time. Wooden pole and line vessels sizing of 10 to 100 GT are based in Ternate, Tidore, between those islands and Halmahera where the baitfish is abundant (Naimin and Gafa, 1998). Based on information from our latest discussion with the survey team, one of the potential landing sites for tuna in Ternate is PPN Ternate. This location is dominated by medium boat between 5-30 GT for pole-and-line and drifting lines gear. Meanwhile, artisanal fisheries consisted of vessels used trolling-without/with-kite and drifting lines exist in the neighbouring area called Kampung Makassar.



Figure 12.1: Location of AFP Ternate (taken from Google Map)

Survey team

Survey was done by Dimas Galang Fergiawan and Yeremia Apridianto

Period visited

Survey was conducted on 21-22 February 2019

How to get there

AFP Ambon is close to the Ternate's airport Sultan Babullah by only 20 minutes travelling by car.

12.1.2 Fleet Description

AFP Ternate has a the same level with the AFP Ambon as the archipelago fishing port (AFP). According to the database, there were 149 fishing vessels registered consist of

handline, purse seine, pole and line, spear gun, and collecting/carrier. Pelagic fisheries are dominant in Ternate within major fishing ground is in Molucca Sea (FMA 715). Frame survey found that the pole-and-line and handline vessel (weighted-drop-lines-single-large-hook) commonly called pump boat are dominant in AFP Ternate.

The size of pole and line vessels is between 20-40 GT. Their target catch is skipjack and baby to medium tuna. The fishing takes between 2-5 days where the catch range is between 600 to 2000 kilograms. Meanwhile, the pumpboat has a size range between 20-40 GT. The trip duration is longer between 10-14 days in which they can catch 500 to 1500 kilograms of medium to large tuna, and billfish occasionally. Based on the information from local fishermen, there is nano vessel targeting medium to large tuna using gears of single-large-hook-drift-lines, and trolling-lines-with-kite-single-large-hook with artificial lure. Those vessels have a length dimension between 9-10 meters and wide is 1.3 meters. Purse seine vessel commonly catches small pelagic such as Malalugis (local name for *Decapterus sp.*), Kembung (*Rastrelliger sp*) with fishing trip duration is 1-2 days.

Table 12.1: Boat Information from AFP. Ternate

No	Program Site	Boat Name	GT Declared	GT Estimate	Fishing Gear	Fishing Area
1	Kota Ambon	KM. Tataro 03	30.00	23.50	PoleAndLine	714
2	Kota Ternate	KM Maitara Star	29.00	22.10	DropOneLargeNatural	715
3	Bitung	KM POF 52	17.00	12.60	DropOneLargeNatural	715
4	Kota Ternate	M RAFA	6.00	6.10	TrollMultipleSmallArtificial	715
5	Kota Ternate	KM Nelayan 2017 695	5.00	7.00	DriftOneLargeNatural	715
6	Kota Ternate	M RAFA	6.00	6.10	DropOneSmallArtificial	715
7	Kota Ternate	KMN. Indah Permata	30.00	23.15	PoleAndLine	715
8	Kota Ternate	KMN. Feybri Star	30.00	28.70	PurseSeine	715
9	Halmahera Selatan	KM. Nelayan 2017 986	37.00	34.80	PoleAndLine	715
10	Kota Ternate	Adelani - 01	6.00	6.06	PurseSeine	715
11	Kota Ternate	Adi Putra - 01	16.00	13.15	PurseSeine	715
12	Kota Ternate	Adi Putra - 05	24.00	22.25	PurseSeine	715
13	Kota Ternate	Mandiri - 85	6.00	6.06	PurseSeine	715
14	Kota Ternate	Berkah Mangael PMN	4.00	4.00	DropOneLargeNatural	715
15	Kota Ternate	Cakalang - 05	30.00	28.05	PoleAndLine	715
16	Kota Ternate	Cakalang - 11	20.00	17.69	PoleAndLine	715
17	Kota Ternate	Cakalang 18	26.00	26.00	DropOneLargeNatural	715
18	Kota Ternate	Cakarida - 02	30.00	29.09	PoleAndLine	715
19	Kota Ternate	Cahaya Bulan	6.00	7.17	PurseSeine	715
20	Kota Ternate	DKP-DD	5.00	5.83	DropOneLargeNatural	715
21	Kota Ternate	El Shadai	6.00	6.00	DropOneLargeNatural	715
22	Kota Ternate	Febri Star	30.00	28.72	PurseSeine	715
23	Kota Ternate	Gloria - 02	19.00	14.43	PurseSeine	715
24	Kota Ternate	Inka Mina - 283	33.00	26.61	PoleAndLine	715
25	Kota Ternate	Inka Mina - 285	33.00	31.12	PoleAndLine	715
26	Kota Ternate	Inka Mina - 521	37.00	32.90	PoleAndLine	715
27	Kota Ternate	Inka Mina - 780	35.00	34.55	PoleAndLine	715
28	Kota Ternate	Inka Mina - 979	37.00	29.05	PoleAndLine	715
29	Kota Ternate	Inka Mina - 980	37.00	29.05	PoleAndLine	715
30	Kota Ternate	Inka Mina - 985	37.00	34.55	PoleAndLine	715
31	Kota Ternate	Inka Mina - 986	37.00	29.05	PoleAndLine	715
32	Kota Ternate	KMN. Ingat Janji - 02	6.00	6.06	PurseSeine	715
33	Kota Ternate	Jaya Samudera 06	21.00	21.00	DropOneLargeNatural	715
34	Kota Ternate	Karapoto 03	23.00	23.03	DropOneLargeNatural	715
35	Kota Ternate	Marimoi - 02	19.00	15.36	PoleAndLine	715
36	Kota Ternate	Matorora - 01	14.00	14.00	DropOneLargeNatural	715
37	Kota Ternate	Media Trans	28.00	23.43	PurseSeine	715
38	Kota Ternate	Nelayan 2017 - 694	6.00	6.00	DropOneLargeNatural	715
39	Kota Ternate	Nenggala	24.00	24.00	DropOneLargeNatural	715
40	Kota Ternate	Perindo Maju 6	29.00	29.00	DropOneLargeNatural	715
41	Kota Ternate	Perindo Maju 8	15.00	15.00	DropOneLargeNatural	715

Table 12.1: Boat Information from AFP. Ternate

No	Program Site	Boat Name	GT Declared	GT Estimate	Fishing Gear	Fishing Area
42	Kota Ternate	POF - 51	23.00	10.44	DropOneLargeNatural	715
43	Kota Ternate	POF - 53	17.00	12.65	DropOneLargeNatural	715
44	Kota Ternate	POF - 54	17.00	12.65	DropOneLargeNatural	715
45	Kota Ternate	Putra - Putri - 02	30.00	30.09	PoleAndLine	715
46	Kota Ternate	Ridho Ilahi - 03	19.00	18.21	PurseSeine	715
47	Kota Ternate	Sinar Utara - 08	30.00	27.06	PoleAndLine	715
48	Kota Ternate	Shalom	15.00	15.00	DropOneLargeNatural	715
49	Kota Ternate	Surya Tomolou - 04	16.00	15.12	DropOneLargeNatural	715
50	Kota Ternate	Usaha Baru - 01	39.00	33.01	PoleAndLine	715
51	Kota Ternate	KM Virgo - 03	26.00	16.20	PoleAndLine	715
52	Kota Ternate	ahya 05	6.00	6.10	TrollMultipleSmallArtificial	715
53	Kota Ternate	Al Star 02	13.00	12.84	PurseSeine	715
54	Kota Ternate	Al Star 03	29.00	24.90	PurseSeine	715
55	Kota Ternate	gifani	6.00	6.00	TrollMultipleSmallArtificial	715
56	Kota Ternate	Hidayahzia Putra 01	17.00	15.91	PurseSeine	715
57	Kota Ternate	Hidayahzia Putra 03	16.00	11.29	PurseSeine	715
58	Kota Ternate	Inka Mina 276	33.00	22.90	PoleAndLine	715
59	Kota Ternate	INKA MINA 280	33.00	22.90	PoleAndLine	715
60	Kota Ternate	Inka Mina 286	33.00	22.90	PoleAndLine	715
61	Kota Ternate	Inka mina 287	33.00	22.90	PoleAndLine	715
62	Kota Ternate	INKA MINA 519	30.00	22.90	PoleAndLine	715
63	Kota Ternate	INKA MINA 523	30.00	22.90	PoleAndLine	715
64	Kota Ternate	Inka Mina 524	37.00	29.00	PoleAndLine	715
65	Kota Ternate	Inka Mina 713	30.00	22.90	PoleAndLine	715
66	Kota Ternate	Inka Mina 777	35.00	22.90	PoleAndLine	715
67	Kota Ternate	Inka Mina 778	35.00	22.90	PoleAndLine	715
68	Kota Ternate	Inka Mina 983	37.00	29.00	PoleAndLine	715
69	Kota Ternate	Inka Mina 989	37.00	29.00	PoleAndLine	715
70	Kota Ternate	INKA MINA 991	30.00	22.90	PoleAndLine	715
71	Kota Ternate	Inka Mina 992	37.00	29.00	PoleAndLine	715
72	Kota Ternate	INKA MINA 993	30.00	22.90	PoleAndLine	715
73	Kota Ternate	Inka Mina 997	37.00	22.90	PoleAndLine	715
74	Kota Ternate	INKA MINA989	30.00	22.90	PoleAndLine	715
75	Kota Ternate	Kurnia 05	63.00	22.90	PoleAndLine	715
76	Kota Ternate	m rafa	6.00	6.00	TrollMultipleSmallArtificial	715
77	Kota Ternate	Marimoi - 02	19.00	23.00	PoleAndLine	715
78	Kota Ternate	MATORORA 02	17.00	12.42	PurseSeine	715
79	Kota Ternate	MATORORA 03	17.00	14.04	PurseSeine	715
80	Kota Ternate	MATORORA 05	19.00	15.43	PurseSeine	715
81	Kota Ternate	Media Trans	28.00	23.43	PurseSeine	715
82	Kota Ternate	Milas 06	47.00	37.71	PoleAndLine	715
83	Kota Ternate	Mina maritim 130	36.00	22.90	PoleAndLine	715
84	Kota Ternate	Mina maritim 133	16.00	11.89	PoleAndLine	715
85	Kota Ternate	Mina maritim 143	36.00	22.90	PoleAndLine	715
86	Kota Ternate	Nelayan 2017 - 695	6.00	5.70	DropOneLargeNatural	715
87	Kota Ternate	Nenggala	24.00	24.00	DropOneLargeNatural	715
88	Kota Ternate	Putra Gaja	13.00	9.53	PurseSeine	715
89	Kota Ternate	Putra Hiri	30.00	23.30	PoleAndLine	715
90	Kota Ternate	Putra Putri 01	29.00	22.00	PoleAndLine	715
91	Kota Ternate	Virgo - 02	26.00	16.20	PoleAndLine	715
92	Kota Ternate	SALAM MESRA 02	10.00	8.00	PurseSeine	715
93	Kota Ternate	SALAM MESRA 03	7.00	15.49	PurseSeine	715
94	Kota Ternate	SALAM MESRA 04	18.00	15.49	PurseSeine	715
95	Kota Ternate	Tuna Morotai	38.00	30.92	PurseSeine	715
96	Kota Ternate	Tunas Muda	14.00	12.39	PurseSeine	715
97	Kota Ternate	Yora - II	30.00	14.23	PurseSeine	715

12.1.3 Follow-up

This location is recommended for CODRS program because there are many dedicated fishing vessels for tuna fisheries such as pole and line and handline and also skippers are willing to join CODRS program.

12.1.4 Important Contact

Name : Bambang Sugiarto
Affiliation : Captain KM. Inka Mina 23
Contact : 6281247027623

Name : Pak Halil
Affiliation : Captain on KM. Inka Mina 523
Contact : 085233054481

Name : Ono
Affiliation : Captain on KM. Matarora 01
Contact : 081357343036

Name : Edy
Affiliation : Captain on nano boat at AFP Ternate
Contact : 081248793402

12.1.5 References

Naimin, N and Gafa, B. 1998. Tuna Baitfish and the Pole-and-Line Fishery in Eastern Indonesia - an overview. IFR Journal 4:2. RIMF [8]

12.1.6 Figures



Figure 12.2: AFP Ternate



Figure 12.3: Catch from pole and line vessel



Figure 12.4: Handline vessel Pumpboat with weighted-drop-lines-single-large-hook gear



Figure 12.5: Weighted-drop-lines-single-large-hook gear



Figure 12.6



Figure 12.7: Typical C-hook used by weighted dropline single large hook targeting large tuna



Figure 12.8: Handmade hook used by pole and line vessels



Figure 12.9: Nano vessel in AFP Ternate



Figure 12.10: The catch of large tuna

12.2 CFP. Bacan, Halmahera Selatan

12.2.1 Background and Survey Practicalities

Background

CFP Bacan is located in Panamboang, Bacan Island. This harbour is the largest pelagic fishery harbour in Bacan and integrated with ice company, cold storage, processing company and fish auction area. Pole and line vessel is dominant in this harbour. The target catch is skipjack, baby tuna and medium tuna.



Figure 12.11: Location of CFP. Bacan, North Maluku

Survey team

Survey was done by Yeremia Apridianto and Dimas Galang Fergiawan.

Period visited

This survey was conducted on 23-24 February 2019.

How to get there

It takes 35 minutes flight from Sultan Babullah Airport Ternate to Oesman Sadik Airport in Bacan Island. There is only one flight each day from Ternate to Bacan and so also on the flight back. From the Oesman Sadik airport, it continues to travel by car around 20 minutes to reach the harbour.

12.2.2 Fleet Description

Based on the survey, most of the fishing vessels in CFP Bacan are pole and line (20-40 GT) targeting skipjack, baby tuna and medium tuna. Trip duration for those vessels is between 3 to 7 days. From the information from the locals, there is also nano vessels with the gear of weighted dropline single large hook targeting large tuna. They cut the large tuna to make the loin at the vessel. Then they sell it to the local market. The fishing ground is mainly in FMA 715 similar with vessels from Bitung.

Table 12.2: Boat Information from CFP. Bacan, Halmahera Selatan

No	Program Site	Boat Name	GT Declared	GT Estimate	Fishing Gear	Fishing Area
1	Halmahera Selatan	KM INKA MINA 778	35.00	26.30	PoleAndLine	715
2	Halmahera Selatan	KM INKA MINA 518	37.00	28.90	PoleAndLine	715
3	Halmahera Selatan	KM Inka Mina 984	37.00	32.30	PoleAndLine	715
4	Halmahera Selatan	BERKAT NAFIRI	92.00	60.00	PurseSeine	715
5	Halmahera Selatan	JAYA SAMUDERA 06	18.00	18.00	DropOneLargeNatural	715
6	Halmahera Selatan	Inka Mina 987	37.00	32.30	PoleAndLine	715
7	Halmahera Selatan	Inka Mina 990	37.00	32.30	PoleAndLine	715

12.2.3 Follow-up

This location is recommended for CODRS program because there are many dedicated pole and line vessels for tuna fisheries and also many of skippers are willing to join the CODRS program.

12.2.4 Important Contact

Name : Hilman
Affiliation : Staff from boat owner (KM. Inka Mina 518)
Contact : 081356930333

Name : Ade M. Jen
Affiliation : Captain of KM. Inka Mina 518
Contact : 082124994645

Name : Ono
Affiliation : Captain on KM. Matarora 01
Contact : 081357343036

Name : Ongen
Affiliation : Boat owner and captain
Contact : 082191710536

Name : Bule / Abdurahman Hajali
Affiliation : Captain of Inka Mina 987
Contact : 081278233287

Name : Jurfi
Affiliation : Collector of tuna (nano boat) from Mandioli Island
Contact : 085238915176

12.2.5 References

12.2.6 Figures



Figure 12.12: the catch from pole and line vessel in CFP Bacan



Figure 12.13: the catch from pole and line vessel in CFP Bacan



Figure 12.14: Pole and line vessels in CFP Bacan



Figure 12.15: Offloading activity from pole and line vessel in CFP Bacan



Figure 12.16: Fish auction area in CFP Bacan



Figure 12.17: Typical hook used for pole and line vessel



Figure 12.18



Figure 12.19: Nano vessel



Figure 12.20: Tuna loin

12.3 FLP. Goto, Kota Tidore Kepulauan

12.3.1 Background and Survey Practicalities

Background

FLP Goto is the only fishing port facility in Tidore Islands City under authority of the Tidore Islands City Agency Office. FLP Goto is located in Goto Village, City of Tidore Islands, Province of North Maluku. Port facilities are quite complete, such as anchored mooring docks, fishing port offices, and fish market.

Survey team

Survey was done by Dimas Galang Fergiawan and Shinta Yuniarta

Period visited

Survey was conducted on May 2019.

How to get there

FLP Goto can be accessed by car within 30-45 minutes from Rum Port in Tidore.

12.3.2 Fleet Description

Fishing fleet in FLP Goto is dominated by pole-and-line and pajeko purse seines (small pelagic purse seines) and continued by handline vessels. The pole-and-line vessels ranges between 19GT and 35GT with the 2-3 fishing days, depending on the availability of bait. The main target is pelagic fish such as skipjack and several types of small tunas. The production ranges between 500 and 2000 kg per trip. The small pelagic purse seines is targeting Carangidae. Handline vessels ranges between 2GT and 3GT. Fishing trip of handline vessels ranges between one to three days with small and large tunas as their fishing target.

Table 12.3: Boat Information from FLP. Goto, Kota Tidore Kepulauan

No	Program Site	Boat Name	GT Declared	GT Estimate	Fishing Gear	Fishing
1	Kota Tidore Kepulauan	INKA MINA - 275	33.00	26.61	PoleAndLine	715
2	Kota Tidore Kepulauan	INKA MINA - 279	37.00	30.59	PoleAndLine	715
3	Kota Tidore Kepulauan	INKA MINA - 282	36.00	30.59	PoleAndLine	715
4	Kota Tidore Kepulauan	INKA MINA - 286	33.00	33.00	PoleAndLine	715
5	Kota Tidore Kepulauan	INKA MINA - 287	37.00	37.00	PoleAndLine	715
6	Kota Tidore Kepulauan	INKA MINA - 288	33.00	26.61	PoleAndLine	715
7	Kota Tidore Kepulauan	INKA MINA - 522	37.00	30.59	PoleAndLine	715
8	Kota Tidore Kepulauan	INKA MINA - 523	37.00	28.86	PoleAndLine	715
9	Kota Tidore Kepulauan	INKA MINA - 777	35.00	26.26	PoleAndLine	715
10	Kota Tidore Kepulauan	INKA MINA - 986	37.00	37.00	PoleAndLine	715
11	Kota Tidore Kepulauan	INKA MINA - 987	37.00	29.05	PoleAndLine	715
12	Kota Tidore Kepulauan	INKA MINA - 988	37.00	29.05	PoleAndLine	715
13	Kota Tidore Kepulauan	INKA MINA - 989	37.00	29.05	PoleAndLine	715
14	Kota Tidore Kepulauan	INKA MINA - 993	36.00	29.60	PoleAndLine	715
15	Kota Tidore Kepulauan	INKA MINA - 998	36.00	29.60	PoleAndLine	715
16	Kota Tidore Kepulauan	INKA MINA CAKARIDA	27.00	25.67	PoleAndLine	715
17	Kota Tidore Kepulauan	INKA MINA MARITIM	0.00	26.30	PoleAndLine	715
18	Kota Tidore Kepulauan	CAKARIDA 01	27.00	19.30	PoleAndLine	715
19	Kota Tidore Kepulauan	KM Cakarida 02	29.00	29.00	PoleAndLine	715
20	Kota Tidore Kepulauan	KM. MULIN 10	19.00	19.00	PoleAndLine	715
21	Kota Tidore Kepulauan	KMN. MILAS 06	29.00	29.00	PoleAndLine	715
22	Kota Tidore Kepulauan	PMM NELAYAN	6.00	5.41	PoleAndLine	715

Table 12.3: Boat Information from FLP. Goto, Kota Tidore Kepulauan

No	Program Site	Boat Name	GT Declared	GT Estimate	Fishing Gear	Fishing
23	Kota Tidore Kepulauan	MOTORORA 03	17.00	14.12	PurseSeine	715
24	Kota Tidore Kepulauan	PAJEKO SONYINGA	9.00	8.17	PurseSeine	715
25	Kota Tidore Kepulauan	PAJEKO TUNAS MUDA	2.00	2.15	PurseSeine	715
26	Kota Tidore Kepulauan	PAJEKO DILARISTA	3.00	2.15	PurseSeine	715
27	Kota Tidore Kepulauan	PAJEKO KAUSAR	3.00	2.15	PurseSeine	715
28	Kota Tidore Kepulauan	PAJEKO MARASAI	3.00	2.15	PurseSeine	715
29	Kota Tidore Kepulauan	PAJEKO NORAMAKE	3.00	2.15	PurseSeine	715
30	Kota Tidore Kepulauan	PAJEKO TONGOWAI	2.00	2.15	PurseSeine	715
31	Kota Tidore Kepulauan	PAJEKO BABA NGOFA	3.00	8.65	PurseSeine	715
32	Kota Tidore Kepulauan	PAJEKO PRR QAULAN 06	6.00	4.81	PurseSeine	715
33	Kota Tidore Kepulauan	PAJEKO 2 PUTRI	6.00	6.06	PurseSeine	715
34	Kota Tidore Kepulauan	PAJEKO PMH SALAM MESRA 02	6.00	5.41	PurseSeine	715
35	Kota Tidore Kepulauan	PERAHU	3.00	1.00	DropOneLargeNatural	715
36	Kota Tidore Kepulauan	PERAHU (MARE)	3.00	2.80	DropOneLargeNatural	715
37	Kota Tidore Kepulauan	RAROMAKE	3.00	2.80	DropOneLargeNatural	715

12.3.3 Follow-up

FLP Goto is a potential place to implement CODRS program because several fishing vessels segments are targeting or dedicated to catch large pelagic tunas.

12.3.4 Important Contact

Name : Djabal Namsa, M.Si
Affiliation : Kabid. Perikanan Tangkap DKP Kep. Tidore
Contact : 081381273341

12.3.5 References

12.3.6 Figures



Figure 12.21: Wharf landing facility and a pole-and-line vessel in FLP Goto



Figure 12.22: Handline 2GT in FLP Goto

12.4 Gurabati Village, Kota Tidore Kepulauan

12.4.1 Background and Survey Practicalities

Background

Gurabati is located in South Tidore District, Tidore Island City. According to information from the fisheries agency staff, the area consists of small fishermen who are supervised by fisheries field-extension. The main catch is tuna and several pelagics. Near the Gurabati location is the Tomalou village, which is the location of the Pole and Line fishing cooperation and several pole and line boat owners from Ternate, Tidore and Bacan.

Survey team

Survey was done by Dimas Galang Fergiawan and Shinta Yuniarta

Period visited

Survey was conducted on May 2019.

How to get there

Gurabati can be accessed by car within 30 minutes from Rum Port in Tidore.

12.4.2 Fleet Description

Fishing fleet segment in Gurabati is dominated by handline small-scale vessels (20-30 vessels). Handliners in Gurabati range between 2 GT and 3 GT. Usually, they have one-day fishing trip. Our interview on fishers showed that there is a buyer who come constantly to this area in the afternoon. The fishers catch between 1 and 3 tuna with 20 kg up in weight per fish.

Table 12.4: Boat Information from Gurabati Village, Kota Tidore Kepulauan

No	Program Site	Boat Name	GT Declared	GT Estimate	Fishing Gear	Fishing Area
1	Kota Tidore Kepulauan	KM. Putra Tubulehu	3.00	1.30	DropOneLargeArtificial	715
2	Kota Tidore Kepulauan	KM. Lumba-lumba	3.00	1.30	DropOneLargeArtificial	715
3	Kota Tidore Kepulauan	Sumleba Mayou	1.00	1.50	DropOneLargeArtificial	715
4	Kota Tidore Kepulauan	Tuna Jaya	3.00	2.20	DropOneLargeNatural	715
5	Kota Tidore Kepulauan	PMN. Bersatu Hati	1.50	1.50	DropOneLargeNatural	715
6	Kota Tidore Kepulauan	PMN. KONAYA	1.50	2.00	DropOneLargeNatural	715
7	Kota Tidore Kepulauan	PMN Gumele	1.00	0.70	TrollMultipleSmallArtificial	715
8	Kota Tidore Kepulauan	PMN. Bersatu Hati	1.50	1.50	DropOneSmallArtificial	715
9	Kota Tidore Kepulauan	PMN Gumele	1.00	0.70	DropOneSmallArtificial	715
10	Kota Tidore Kepulauan	PMN. KONAYA	1.50	2.00	DropOneSmallArtificial	715
11	Kota Tidore Kepulauan	KM. Lumba-lumba	3.00	1.30	DriftOneLargeNatural	715
12	Kota Tidore Kepulauan	Sumleba Mayou	1.00	1.50	DropOneSmallArtificial	715
13	Kota Tidore Kepulauan	Tuna Jaya	3.00	2.20	DropOneSmallArtificial	715
14	Kota Tidore Kepulauan	KM. Putra Tubulehu	3.00	1.30	DropOneSmallArtificial	715
15	Kota Tidore Kepulauan	HL Gurabati 1	2.00	1.29	DropOneLargeNatural	715
16	Kota Tidore Kepulauan	HL Gurabati 2	2.00	1.29	DropOneLargeNatural	715
17	Kota Tidore Kepulauan	HL Gurabati 3	2.00	1.29	DropOneLargeNatural	715
18	Kota Tidore Kepulauan	HL Gurabati 4	2.00	1.29	DropOneLargeNatural	715
19	Kota Tidore Kepulauan	HL Gurabati 5	2.00	1.29	DropOneLargeNatural	715
20	Kota Tidore Kepulauan	HL Gurabati 6	2.00	1.29	DropOneLargeNatural	715
21	Kota Tidore Kepulauan	HL Gurabati 7	2.00	1.29	DropOneLargeNatural	715
22	Kota Tidore Kepulauan	HL Gurabati 8	2.00	1.29	DropOneLargeNatural	715
23	Kota Tidore Kepulauan	HL Gurabati 9	2.00	1.29	DropOneLargeNatural	715
24	Kota Tidore Kepulauan	HL Gurabati 10	2.00	1.29	DropOneLargeNatural	715
25	Kota Tidore Kepulauan	HL Gurabati 11	2.00	1.29	DropOneLargeNatural	715

Table 12.4: Boat Information from Gurabati Village, Kota Tidore Kepulauan

No	Program Site	Boat Name	GT Declared	GT Estimate	Fishing Gear	Fishing Area
26	Kota Tidore Kepulauan	HL Gurabati 12	2.00	1.29	DropOneLargeNatural	715
27	Kota Tidore Kepulauan	HL Gurabati 13	2.00	1.29	DropOneLargeNatural	715
28	Kota Tidore Kepulauan	HL Gurabati 14	2.00	1.29	DropOneLargeNatural	715
29	Kota Tidore Kepulauan	HL Gurabati 15	2.00	1.29	DropOneLargeNatural	715
30	Kota Tidore Kepulauan	HL Gurabati 16	2.00	1.29	DropOneLargeNatural	715
31	Kota Tidore Kepulauan	HL Gurabati 17	2.00	1.29	DropOneLargeNatural	715
32	Kota Tidore Kepulauan	HL Gurabati 18	2.00	1.29	DropOneLargeNatural	715
33	Kota Tidore Kepulauan	HL Gurabati 19	2.00	1.29	DropOneLargeNatural	715
34	Kota Tidore Kepulauan	HL Gurabati 20	2.00	1.29	DropOneLargeNatural	715
35	Kota Tidore Kepulauan	HL Gurabati 21	2.00	1.29	DropOneLargeNatural	715
36	Kota Tidore Kepulauan	HL Gurabati 22	2.00	1.29	DropOneLargeNatural	715
37	Kota Tidore Kepulauan	HL Gurabati 23	2.00	1.29	DropOneLargeNatural	715
38	Kota Tidore Kepulauan	HL Gurabati 24	2.00	1.29	DropOneLargeNatural	715
39	Kota Tidore Kepulauan	HL Gurabati 25	2.00	1.29	DropOneLargeNatural	715
40	Kota Tidore Kepulauan	HL Gurabati 26	2.00	1.51	DropOneLargeNatural	715
41	Kota Tidore Kepulauan	HL Gurabati 27	2.00	1.51	DropOneLargeNatural	715
42	Kota Tidore Kepulauan	HL Gurabati 28	2.00	1.51	DropOneLargeNatural	715
43	Kota Tidore Kepulauan	HL Gurabati 29	2.00	1.51	DropOneLargeNatural	715
44	Kota Tidore Kepulauan	HL Gurabati 30	2.00	1.51	DropOneLargeNatural	715

12.4.3 Follow-up

Gurabati is a potential place to implement CODRS program because several fishing vessels in the area are targeting or dedicated to catch large pelagic tunas.

12.4.4 Important Contact

Name : Djabal Namsa, M.Si
Affiliation : Kabid. Perikanan Tangkap DKP Kep. Tidore
Contact : 081381273341

12.4.5 References

12.4.6 Figures



Figure 12.23: Handiners 2-3 GT in Gurabati.

12.5 Tomalou Village, Kota Tidore Kepulauan

Tomalou Village

12.6 Soasio Village, Kota Tidore Kepulauan

12.6.1 Background and Survey Practicalities

Background

Soasio is one of sub-district region of Ternate. There is a local fishers group (*Kelompok Nelayan*) namely KUB Jiko Macahaya that is supervised by fisheries extension (*penyuluh perikanan*). The typical fishery is capture fisheries with a focus on pelagic fish such as tuna, skipjack and also beaked fish.

Survey team

Survey was done by Dimas Galang Fergiawan and Shinta Yuniarta

Period visited

The survey was conducted on May 21-28, 2019

How to get there

From the airport of Ternate, it continues around 15 minutes traveling by car to the sub-district of Soasio

12.6.2 Fleet Description

There is a small landing area in the coastal of Soasio that is facilitated with jetty, scale and also cool box for the storage. The number of fishing fleet is around 20 vessels with the size range 2-6GT. The fishing trip duration is different depending on the size where the vessels sizing 2-4GT apply one-day fishing and the boat in size 5-6GT can reach 3-7 days. Each vessel consisted of 2-3 fishers. The main catch is pelagic fish such as tuna and skipjack. Their fishing method is closely associated with fish aggregating device (FADs) in the Ternate or Maluku Sea.

Table 12.5: Boat Information from Soasio Village, Kota Tidore Kepulauan

No	Program Site	Boat Name	GT Declared	GT Estimate	Fishing Gear	Fishing Area
1	Kota Ternate	HL Soasio 1	6.00	4.41	KiteOneLargeArtificial	715
2	Kota Ternate	HL Soasio 2	6.00	4.41	KiteOneLargeArtificial	715
3	Kota Ternate	HL Soasio 3	2.00	1.51	DropOneLargeNatural	715
4	Kota Ternate	HL Soasio 4	2.00	1.51	DropOneLargeNatural	715
5	Kota Ternate	HL Soasio 5	2.00	1.51	DropOneLargeNatural	715
6	Kota Ternate	HL Soasio 6	2.00	1.51	DropOneLargeNatural	715
7	Kota Ternate	HL Soasio 7	2.00	1.51	DropOneLargeNatural	715
8	Kota Ternate	HL Soasio 8	2.00	1.51	DropOneLargeNatural	715
9	Kota Ternate	HL Soasio 9	2.00	1.51	DropOneLargeNatural	715
10	Kota Ternate	HL Soasio 10	2.00	1.51	DropOneLargeNatural	715
11	Kota Ternate	HL Soasio 11	2.00	1.51	DropOneLargeNatural	715
12	Kota Ternate	HL Soasio 12	2.00	1.51	DropOneLargeNatural	715
13	Kota Ternate	HL Soasio 13	2.00	1.51	DropOneLargeNatural	715
14	Kota Ternate	HL Soasio 14	2.00	1.51	DropOneLargeNatural	715
15	Kota Ternate	HL Soasio 15	2.00	1.51	DropOneLargeNatural	715
16	Kota Ternate	HL Soasio 16	2.00	1.51	DropOneLargeNatural	715
17	Kota Ternate	HL Soasio 17	2.00	1.51	DropOneLargeNatural	715
18	Kota Ternate	HL Soasio 18	2.00	1.51	DropOneLargeNatural	715
19	Kota Ternate	HL Soasio 19	2.00	1.51	DropOneLargeNatural	715
20	Kota Ternate	HL Soasio 20	2.00	1.51	DropOneLargeNatural	715

12.6.3 Follow-up

This location is recommended for implementing CODRS tuna program since the fishers are dedicated to catch large pelagic fish especially tuna.

12.6.4 Important Contact

Name : Dadang Syaifulah, S.Pi

Affiliation : Fisheries extension of North Maluku Province and the supervisor of KUB Jiko Macahaya

Contact : +62 821-6731-2886

12.6.5 References

12.6.6 Figures

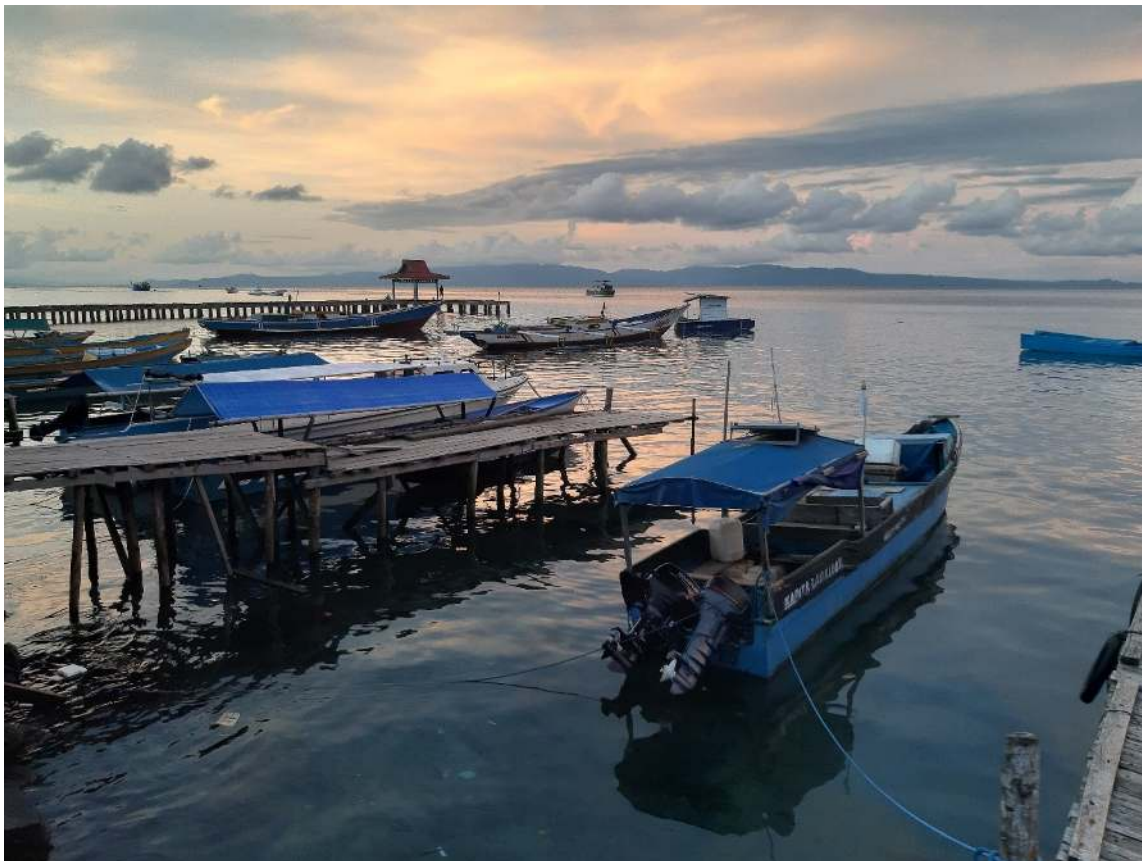


Figure 12.24: Fishing fleet of Soasio village

12.7 Rum Balibunga Village, Kota Tidore Kepulauan

12.7.1 Background and Survey Practicalities

Background

Rum Balibunga belongs to the sub-district of Tidore Utara, Kota Tidore Kepulauan. This region has a big potency of large pelagic fisheries since it is found some tuna fishing fleets in the coastal area.

Survey team

Survey was done by Dimas Galang Fergiawan and Shinta Yuniarta

Period visited

The survey was conducted on May 21-28, 2019

How to get there

From the airport of Ternate, it continues to the ferry harbour of Bastiong around 15 minutes. The travel from the ferry harbour to Tidore island takes around 30 minutes.

12.7.2 Fleet Description

The fishing fleet is dominated by handline vessels either tuna or demersal fish with the size range 1-3GT and length 7-9 meters. Based on the information obtained by locals, there are around 50 vessels base in the village. Tuna handline vessels apply one-day fishing trip with the crew number is 2 fishers per boat. The catch composition consisted of yellowfin tuna with the maximum catch number is 12 fishes per trip. The fish size can reach more than 20Kg.

Table 12.6: Boat Information from Rum Balibunga Village, Kota Tidore Kepulauan

No	Program Site	Boat Name	GT Declared	GT Estimate	Fishing Gear	Fishing Area
1	Kota Tidore Kepulauan	PMN Serba Usaha	1.00	1.20	TrollMultipleSmallArtificial	715
2	Kota Tidore Kepulauan	PMN Serba Usaha	1.00	1.20	DriftOneLargeNatural	715
3	Kota Tidore Kepulauan	HL RumBalibunga 1	2.00	1.29	DropOneLargeNatural	715
4	Kota Tidore Kepulauan	HL RumBalibunga 2	2.00	1.29	DropOneLargeNatural	715
5	Kota Tidore Kepulauan	HL RumBalibunga 3	2.00	1.29	DropOneLargeNatural	715
6	Kota Tidore Kepulauan	HL RumBalibunga 4	2.00	1.29	DropOneLargeNatural	715
7	Kota Tidore Kepulauan	HL RumBalibunga 5	2.00	1.29	DropOneLargeNatural	715
8	Kota Tidore Kepulauan	HL RumBalibunga 6	2.00	1.29	DropOneLargeNatural	715
9	Kota Tidore Kepulauan	HL RumBalibunga 7	2.00	1.29	DropOneLargeNatural	715
10	Kota Tidore Kepulauan	HL RumBalibunga 8	2.00	1.29	DropOneLargeNatural	715
11	Kota Tidore Kepulauan	HL RumBalibunga 9	2.00	1.29	DropOneLargeNatural	715
12	Kota Tidore Kepulauan	HL RumBalibunga 10	2.00	1.29	DropOneLargeNatural	715
13	Kota Tidore Kepulauan	HL RumBalibunga 11	2.00	1.29	DropOneLargeNatural	715
14	Kota Tidore Kepulauan	HL RumBalibunga 12	2.00	1.29	DropOneLargeNatural	715
15	Kota Tidore Kepulauan	HL RumBalibunga 13	2.00	1.29	DropOneLargeNatural	715
16	Kota Tidore Kepulauan	HL RumBalibunga 14	2.00	1.29	DropOneLargeNatural	715
17	Kota Tidore Kepulauan	HL RumBalibunga 15	2.00	1.29	DropOneLargeNatural	715
18	Kota Tidore Kepulauan	HL RumBalibunga 16	2.00	1.29	DropOneLargeNatural	715
19	Kota Tidore Kepulauan	HL RumBalibunga 17	2.00	1.29	DropOneLargeNatural	715
20	Kota Tidore Kepulauan	HL RumBalibunga 18	2.00	1.29	DropOneLargeNatural	715
21	Kota Tidore Kepulauan	HL RumBalibunga 19	2.00	1.29	DropOneLargeNatural	715
22	Kota Tidore Kepulauan	HL RumBalibunga 20	2.00	1.29	DropOneLargeNatural	715
23	Kota Tidore Kepulauan	HL RumBalibunga 21	2.00	1.29	DropOneLargeNatural	715
24	Kota Tidore Kepulauan	HL RumBalibunga 22	2.00	1.29	DropOneLargeNatural	715
25	Kota Tidore Kepulauan	HL RumBalibunga 23	2.00	1.29	DropOneLargeNatural	715

Table 12.6: Boat Information from Rum Balibunga Village, Kota Tidore Kepulauan

No	Program Site	Boat Name	GT Declared	GT Estimate	Fishing Gear	Fishing Area
26	Kota Tidore Kepulauan	HL RumBalibunga 24	2.00	1.29	DropOneLargeNatural	715
27	Kota Tidore Kepulauan	HL RumBalibunga 25	2.00	1.29	DropOneLargeNatural	715
28	Kota Tidore Kepulauan	HL RumBalibunga 26	2.00	1.20	DropOneLargeNatural	715
29	Kota Tidore Kepulauan	HL RumBalibunga 27	2.00	1.20	DropOneLargeNatural	715
30	Kota Tidore Kepulauan	HL RumBalibunga 28	2.00	1.20	DropOneLargeNatural	715
31	Kota Tidore Kepulauan	HL RumBalibunga 29	2.00	1.20	DropOneLargeNatural	715
32	Kota Tidore Kepulauan	HL RumBalibunga 30	2.00	1.20	DropOneLargeNatural	715
33	Kota Tidore Kepulauan	HL RumBalibunga 31	2.00	1.51	DropOneLargeNatural	715
34	Kota Tidore Kepulauan	HL RumBalibunga 32	2.00	1.51	DropOneLargeNatural	715
35	Kota Tidore Kepulauan	HL RumBalibunga 33	2.00	1.51	DropOneLargeNatural	715
36	Kota Tidore Kepulauan	HL RumBalibunga 34	2.00	1.51	DropOneLargeNatural	715
37	Kota Tidore Kepulauan	HL RumBalibunga 35	2.00	1.51	DropOneLargeNatural	715
38	Kota Tidore Kepulauan	HL RumBalibunga 36	2.00	1.51	DropOneLargeNatural	715
39	Kota Tidore Kepulauan	HL RumBalibunga 37	2.00	1.51	DropOneLargeNatural	715
40	Kota Tidore Kepulauan	HL RumBalibunga 38	2.00	1.51	DropOneLargeNatural	715
41	Kota Tidore Kepulauan	HL RumBalibunga 39	2.00	1.51	DropOneLargeNatural	715
42	Kota Tidore Kepulauan	HL RumBalibunga 40	2.00	1.51	DropOneLargeNatural	715
43	Kota Tidore Kepulauan	HL RumBalibunga 41	2.00	1.51	DropOneLargeNatural	715
44	Kota Tidore Kepulauan	HL RumBalibunga 42	2.00	1.51	DropOneLargeNatural	715
45	Kota Tidore Kepulauan	HL RumBalibunga 43	2.00	1.51	DropOneLargeNatural	715
46	Kota Tidore Kepulauan	HL RumBalibunga 44	2.00	1.51	DropOneLargeNatural	715
47	Kota Tidore Kepulauan	HL RumBalibunga 45	2.00	1.51	DropOneLargeNatural	715
48	Kota Tidore Kepulauan	HL RumBalibunga 46	2.00	1.51	DropOneLargeNatural	715
49	Kota Tidore Kepulauan	HL RumBalibunga 47	2.00	1.51	DropOneLargeNatural	715
50	Kota Tidore Kepulauan	HL RumBalibunga 48	2.00	1.51	DropOneLargeNatural	715
51	Kota Tidore Kepulauan	HL RumBalibunga 49	2.00	1.51	DropOneLargeNatural	715
52	Kota Tidore Kepulauan	HL RumBalibunga 50	2.00	1.51	DropOneLargeNatural	715

12.7.3 Follow-up

The location is recommended for deploying CODRS tuna contract since there are many fishers are dedicated to fish tuna.

12.7.4 Important Contact

Name : Djabal Namsa, M.Si
 Affiliation : Coordinator of Capture Fisheries Sector - Fisheries and Marine Agency, Tidore.
 Contact : 081381273341

12.7.5 References

12.7.6 Figures



Figure 12.25: Typical fishing fleet in Rum Balibunga Village.

13 West Papua Province

13.1 AFP. Sorong

13.1.1 Background and Survey Practicalities

Background

AFP. Sorong is located in Sorong city, West Papua in the coordinate -0.880406, 131.254347. This port is not the only one fishing port since there are some potential locations such as the Turi and Kali Remu Markets that give a significant contribution to the fisheries commodity of the city. Most of the vessels have the size <30GT. The target catch is Wahoo (*Scomberomorus guttatus*), the egg of flying fish (*Parexocoetus brachypterus*) and yellowfin tuna (*T. albacares*). Generally, the catch with the large size will be sent to the local company. The rest of catch is distributed to the middlemen to be sold to the local market. There are ice company and cold storage at both Sorong AFP and Pasar Turi that are functioned to store and freeze the catch.



Figure 13.1: Lokasi AFP Sorong

Survey team

Survey was done by Al Aidy and Widhya

Period visited

Survey was conducted on May 16-20, 2019

How to get there

AFP Sorong can be accessed from Domine Eduard Osok Sorong Airport by traveling 15-20minutes traveling by car.

13.1.2 Fleet Description

Following the discussion with the PSDKP officer, Mrs. T. Katharina, there are three main locations for unloading activities, namely AFP. Sorong, Pasar Turi and Kali Remu. These three locations have the similarity of the fishing vessel type such as gill net, and small-motorized boat (here called as jonson) using dropline and trolling line. Based on the data from PSDKP Sorong, there are 378 vessels registered in AFP. Sorong. Particularly on pole and line, this vessel is known to own by the local company and base at the jetty of the company

The dominant fishing vessel in AFP Sorong is gill net targeting wahoo and the egg of flying fish. Meanwhile, there are many gill nets, handline vessels using the small boat (jonson) and collecting boat sizing <10GT in Pasar Turi and Kali Remu. Particularly in Kali Remu, this location is also a place to repair boat and fishing gear. During the survey, there were three gill net vessels were interested in join CODRS program.

Table 13.1: Boat Information from AFP. Sorong

No	Program Site	Boat Name	GT Declared	GT Estimate	Fishing Gear	Fishing Area
1	Kota Sorong	Almaidah Indah 01	17.00	15.00	Gillnet	715
2	Kota Sorong	Almaidah Indah	17.00	15.00	Gillnet	715
3	Kota Sorong	KM. Mulia Karya	20.00	15.70	Gillnet	715
4	Kota Sorong	KM. Aspac-3	58.00	40.90	PoleAndLine	715
5	Kota Sorong	KM. Karya Lestari 01	13.00	9.20	Gillnet	715
6	Kota Sorong	KM. Pangkajene	21.00	15.70	Gillnet	715
7	Kota Sorong	KM. Bone Karya	17.00	17.10	Gillnet	715
8	Kota Sorong	KM. Adi Karya	24.00	19.90	Gillnet	715
9	Kota Sorong	KM. Samudera Manggala	29.00	19.70	Gillnet	715
10	Sorong	KM. Aspac 03	58.00	409.00	PoleAndLine	715
11	Sorong	KM. Fintura 03	58.00	39.60	PoleAndLine	715
12	Sorong	ADIDAS 04	25.00	19.12	PuseSeine	715
13	Fak-Fak	AISAH 32	25.00	19.12	DriftOneLargeNatural	715
14	Kota Sorong	BELLA BETO 02	21.00	16.10	PuseSeine	715
15	Kota Sorong	BINTANG PASIFIK	29.00	23.14	PuseSeine	715
16	Kota Sorong	BINTANG WANA 01	21.00	16.64	PuseSeine	715
17	Kota Sorong	BRITANIC	29.00	28.41	DriftOneLargeNatural	717
18	Kota Sorong	BUNGA WATI	27.00	19.90	PuseSeine	715
19	Fak-Fak	CAHAYA SELAMAT 02	19.00	12.73	DriftOneLargeNatural	717
20	Kota Sorong	DANDI PUTRA 2	24.00	17.03	PuseSeine	715
21	Fak-Fak	DEDY ASLAM 01	17.00	11.81	PuseSeine	715
22	Kota Sorong	DOA BERSAMA 05	15.00	11.57	PuseSeine	715
23	Kota Sorong	DWI BAHARI JAYA 03	18.00	12.18	DriftOneLargeNatural	715
24	Fak-Fak	EMBUN PAGI 02	23.00	19.30	DriftOneLargeNatural	715
25	Kota Sorong	EMPAT LIMA	28.00	18.89	PuseSeine	715
26	Kota Sorong	FAREL ARDAN	20.00	13.61	PuseSeine	715
27	Kota Sorong	HASIL DOA 01	21.00	13.87	PuseSeine	715
28	Kota Sorong	HIDUP BERSAMA 05	26.00	19.99	PuseSeine	715
29	Kota Sorong	JABAL 77	28.00	22.82	PuseSeine	715
30	Kota Sorong	JABAL RAHMAH 889	30.00	23.29	PuseSeine	715
31	Kota Sorong	JIWA RAGA	19.00	12.73	DriftOneLargeNatural	715
32	Fak-Fak	LAGALIGO 02	24.00	15.58	DriftOneLargeNatural	717
33	Fak-Fak	LAGALIGO 05	29.00	28.41	DriftOneLargeNatural	715
34	Fak-Fak	LAMBOROTO 01	24.00	15.58	DriftOneLargeNatural	715
35	Kota Sorong	LEDY STAR 02	27.00	23.52	DriftOneLargeNatural	715
36	Kota Sorong	LU DEN MERU	20.00	12.80	PuseSeine	715
37	Kota Sorong	MAHAKARYA 02	19.00	17.83	DriftOneLargeNatural	715
38	Kota Sorong	MAKASSAR CITI	25.00	19.12	PuseSeine	715
39	Kota Sorong	MALAWALIE	29.00	21.41	PuseSeine	715
40	Fak-Fak	MARWAH 01	16.00	11.06	DriftOneLargeNatural	715
41	Kota Sorong	MATTAJANG	21.00	15.08	PuseSeine	715

Table 13.1: Boat Information from AFP. Sorong

No	Program Site	Boat Name	GT Declared	GT Estimate	Fishing Gear	Fishing Area
42	Kota Sorong	MATTAJANG 02	30.00	23.25	PuseSeine	715
43	Kota Sorong	MEGA 33	30.00	24.97	PuseSeine	715
44	Kota Sorong	MEGA WALIE	27.00	20.53	PuseSeine	715
45	Kota Sorong	MUTIARA 88	29.00	21.37	PuseSeine	715
46	Kota Sorong	NOAH	30.00	28.95	DriftOneLargeNatural	715
47	Kota Sorong	NUR ASIA 77	23.00	17.96	PuseSeine	715
48	Kota Sorong	PANDANG LOLOE 01	27.00	18.27	PuseSeine	715
49	Kota Sorong	PANDANG LOLOE 03	30.00	25.28	PuseSeine	715
50	Kota Sorong	PUTRA BARU 06	30.00	23.13	PuseSeine	715
51	Kota Sorong	PUTRA TANETE	26.00	19.08	PuseSeine	715
52	Kota Sorong	PUTRA TANETE 01	30.00	24.81	PuseSeine	715
53	Fak-Fak	RAHMAT ILAHI 05	23.00	15.02	PuseSeine	715
54	Fak-Fak	RESKI ABADI	18.00	12.18	DriftOneLargeNatural	715
55	Kota Sorong	RIZQULLAH 7 A	20.00	14.19	DriftOneLargeNatural	715
56	Kota Sorong	SEPAKAT 02	14.00	9.47	DriftOneLargeNatural	715
57	Kota Sorong	SEPAKAT 03	15.00	13.20	DriftOneLargeNatural	715
58	Kota Sorong	SINAR MAS JAYA	18.00	13.05	DriftOneLargeNatural	715
59	Kota Sorong	SINAR MULIA 03	27.00	20.12	PuseSeine	715
60	Kota Sorong	TUNA HARAPAN 77	13.00	8.94	DriftOneLargeNatural	715
61	Kota Sorong	WAHYU ABADI 03	29.00	23.67	PuseSeine	715
62	Kota Sorong	Adreena Indah	16.00	15.00	Gillnet	715
63	Kota Sorong	Aidil Syahputra 01	27.00	21.70	Gillnet	715
64	Kota Sorong	KM. Aisyah Anugrah 01	16.00	0.00	Gillnet	715
65	Kota Sorong	KM. Andika Citra Bahari	27.00	0.00	Gillnet	715
66	Kota Sorong	Andika Putera	30.00	21.70	Gillnet	715
67	Kota Sorong	Ani Indah	17.00	15.00	Gillnet	715
68	Kota Sorong	Anugerah Bahari 09	18.00	15.00	Gillnet	715
69	Kota Sorong	Anugerah 13	22.00	20.00	Gillnet	715
70	Kota Sorong	Anugerah Indah	17.00	15.00	Gillnet	715
71	Kota Sorong	Anugerah Indah 01	19.00	15.00	Gillnet	715
72	Kota Sorong	Anugerah Indah 21	21.00	15.70	Gillnet	715
73	Kota Sorong	Anugerah Indah 88	20.00	15.70	Gillnet	715
74	Kota Sorong	Arga	19.00	15.00	Gillnet	715
75	Kota Sorong	Arga 02	20.00	15.70	Gillnet	715
76	Kota Sorong	Ariang 01	13.00	10.00	Gillnet	715
77	Kota Sorong	Ariang 02	18.00	15.00	Gillnet	715
78	Kota Sorong	Arsyila	29.00	21.70	Gillnet	715
79	Kota Sorong	Arung	20.00	15.70	Gillnet	715
80	Kota Sorong	Asira	19.00	15.00	Gillnet	715
81	Kota Sorong	KM. Aspac 01	58.00	40.90	PoleAndLine	715
82	Kota Sorong	KM. Aspac 05	55.00	40.90	PoleAndLine	715
83	Kota Sorong	KM. Aspac 6	52.00	40.90	PoleAndLine	715
84	Kota Sorong	KM. Aspac 09	55.00	40.90	PoleAndLine	715
85	Kota Sorong	KM. Aspac 11	57.00	40.90	PoleAndLine	715
86	Kota Sorong	KM. Aspac 12	56.00	40.90	PoleAndLine	715
87	Kota Sorong	KM. Aspac 15	58.00	40.90	PoleAndLine	715
88	Kota Sorong	KM. Aspac 16	58.00	40.90	PoleAndLine	715
89	Kota Sorong	KM. Aspac 17	57.00	40.90	PoleAndLine	715
90	Kota Sorong	KM. Aspac 18	56.00	40.90	PoleAndLine	715
91	Kota Sorong	Ataufiq Putra 02	25.00	20.00	Gillnet	715
92	Kota Sorong	Ayu 04	19.00	15.00	Gillnet	715
93	Kota Sorong	Ayu Bulukumba	21.00	15.70	Gillnet	715
94	Kota Sorong	KM. Ayu Bulukumba 03	29.00	21.70	Gillnet	715
95	Kota Sorong	KM. Bella Beta 01	27.00	0.00	PurseSeine	715
96	Kota Sorong	KM. Bella Beto 03	21.00	0.00	PurseSeine	715
97	Kota Sorong	KM. Bintang 77	27.00	22.00	PurseSeine	715
98	Kota Sorong	Bintang Bahari 09	19.00	15.00	Gillnet	715
99	Kota Sorong	Bintang Cahaya 01	18.00	15.00	Gillnet	715
100	Kota Sorong	KM. Bintang Pasifik	29.00	22.00	PurseSeine	715
101	Kota Sorong	KM. Bone Maritim 03	14.00	13.20	DriftOneLargeNatural	717

Table 13.1: Boat Information from AFP. Sorong

No	Program Site	Boat Name	GT Declared	GT Estimate	Fishing Gear	Fishing Area
102	Kota Sorong	Bone Raya 77	23.00	20.00	Gillnet	715
103	Kota Sorong	Bone Star 01	18.00	15.00	Gillnet	715
104	Kota Sorong	Bone Star 02	18.00	15.00	Gillnet	715
105	Kota Sorong	Bone Star 03	17.00	15.00	Gillnet	715
106	Kota Sorong	Bone Star 04	24.00	20.00	Gillnet	715
107	Kota Sorong	Buana Jaya 01	17.00	15.00	Gillnet	715
108	Kota Sorong	Buana Jaya 02	18.00	15.00	Gillnet	715
109	Kota Sorong	Buana Jaya 03	26.00	15.00	Gillnet	715
110	Kota Sorong	Buana Jaya 04	24.00	20.00	Gillnet	715
111	Kota Sorong	KM. Bulu Mangendra	27.00	21.70	Gillnet	715
112	Kota Sorong	KM. Bunga Wati	27.00	22.00	PurseSeine	715
113	Kota Sorong	Cahaya Bahari 09	25.00	20.00	Gillnet	715
114	Kota Sorong	Cahaya Bone 77	20.00	15.70	Gillnet	715
115	Kota Sorong	Cahaya Fitra 01	13.00	10.00	Gillnet	715
116	Kota Sorong	Cahaya Fitra 02	17.00	15.00	Gillnet	715
117	Kota Sorong	Cahaya Intan A	22.00	20.00	Gillnet	715
118	Kota Sorong	Cahaya Katapop	20.00	15.70	Gillnet	715
119	Kota Sorong	Cahaya Mekkah III	17.00	15.00	Gillnet	715
120	Kota Sorong	Cahaya Mekka 04	19.00	15.00	Gillnet	715
121	Kota Sorong	Century Sakti	6.00	15.70	Gillnet	715
122	Kota Sorong	KM. Cahaya Risky 03	6.00	6.10	DriftOneLargeNatural	717
123	Kota Sorong	Cinta Alam 01	21.00	15.00	PoleAndLine	715
124	Kota Sorong	Cinta Alam 02	20.00	20.00	Gillnet	715
125	Kota Sorong	Cinta Mekka 01	16.00	20.00	Gillnet	715
126	Kota Sorong	Cinta Mekka 02	22.00	15.00	Gillnet	715
127	Kota Sorong	Citra Bahari Indah 01	58.00	15.00	PoleAndLine	715
128	Kota Sorong	Citra Bahari Indah 02	58.00	10.00	PoleAndLine	715
129	Kota Sorong	KM. Cinta Bahari 7	58.00	40.90	PoleAndLine	715
130	Kota Sorong	KM. Cinta Bahari 8	59.00	40.90	PoleAndLine	715
131	Kota Sorong	Citra Bahari Indah 03	59.00	20.00	PoleAndLine	715
132	Kota Sorong	KM. Cinta Bahari 12	58.00	40.90	PoleAndLine	715
133	Kota Sorong	Cinta Mekka 01	24.00	20.00	Gillnet	715
134	Kota Sorong	Cinta Mekka 02	17.00	15.00	Gillnet	715
135	Kota Sorong	Citra Bahari Indah 01	17.00	15.00	Gillnet	715
136	Kota Sorong	Citra Bahari Indah 02	15.00	10.00	Gillnet	715
137	Kota Sorong	Citra Bahari Indah 03	25.00	20.00	Gillnet	715
138	Kota Sorong	KM. Citra Bahari Indah 04	26.00	21.70	Gillnet	715
139	Kota Sorong	KM. Citra Bahari Indah 05	28.00	21.70	Gillnet	715
140	Kota Sorong	Dedy Jaya 01	14.00	10.00	Gillnet	715
141	Kota Sorong	Dedy Jaya 02	16.00	15.00	Gillnet	715
142	Kota Sorong	KM. Deho 04	4.00	6.10	DriftOneLargeNatural	717
143	Kota Sorong	KM. Deho 05	4.00	6.10	DriftOneLargeNatural	717
144	Kota Sorong	KM. Dika Jaya 01	15.00	13.20	DriftOneLargeNatural	717
145	Kota Sorong	Dika Jaya 02	20.00	15.70	Gillnet	715
146	Kota Sorong	KM. Dioskuri 3A	97.00	68.50	PoleAndLine	715
147	Kota Sorong	KM. Dioskuri 4A	57.00	40.90	PoleAndLine	715
148	Kota Sorong	KM. Dioskuri 6A	87.00	68.50	PoleAndLine	715
149	Kota Sorong	KM. Dioskuri 7A	97.00	68.50	PoleAndLine	715
150	Kota Sorong	KM. Doa Bersama 02	10.00	9.00	DriftOneLargeNatural	717
151	Kota Sorong	KM. Doa Bersama 05	15.00	15.30	PurseSeine	715
152	Kota Sorong	Dwi Bahari Jaya 02	21.00	15.70	Gillnet	715
153	Kota Sorong	Dwi Bahari Jaya 03	18.00	15.00	Gillnet	715
154	Kota Sorong	El Shadai 01	15.00	10.00	Gillnet	715
155	Kota Sorong	KM. El Roi	12.00	9.00	DriftOneLargeNatural	717
156	Kota Sorong	Faisal 01	16.00	15.00	Gillnet	715
157	Kota Sorong	Faisal 02	29.00	21.70	Gillnet	715
158	Kota Sorong	KM. Farel Ardan	20.00	17.60	PurseSeine	715
159	Kota Sorong	Faris Jaya	28.00	21.70	Gillnet	715
160	Kota Sorong	Haidil Jaya	29.00	21.70	Gillnet	715
161	Kota Sorong	KM. Harapan 77	15.00	11.30	Gillnet	715

Table 13.1: Boat Information from AFP. Sorong

No	Program Site	Boat Name	GT Declared	GT Estimate	Fishing Gear	Fishing Area
162	Kota Sorong	KM. Harapan Mujur	16.00	13.20	DriftOneLargeNatural	717
163	Kota Sorong	Hesti Jaya 02	20.00	15.70	Gillnet	715
164	Kota Sorong	Hidup Baru 01	18.00	15.00	Gillnet	715
165	Kota Sorong	KM. Hidup bersama 05	26.00	0.00	PurseSeine	715
166	Kota Sorong	KM. Lis Bahari	15.00	0.00	Gillnet	715
167	Kota Sorong	Indonel	30.00	21.70	Gillnet	715
168	Kota Sorong	KM. Inka Mina 994	33.00	0.00	DriftOneLargeNatural	717
169	Kota Sorong	Inka Mina 995	33.00	26.00	Gillnet	715
170	Kota Sorong	Irfan Jaya 3A	16.00	15.00	Gillnet	715
171	Kota Sorong	Irfan Jaya 5A	15.00	10.00	Gillnet	715
172	Kota Sorong	KM. Jabal 02	18.00	0.00	PurseSeine	715
173	Kota Sorong	KM. Jabal 77	28.00	22.00	PurseSeine	715
174	Kota Sorong	KM. Jabal Nur 03	24.00	22.00	PurseSeine	715
175	Kota Sorong	KM. Jabal Rahmah 889	30.00	0.00	Gillnet	715
176	Kota Sorong	Jaya Bahari 04	20.00	15.70	Gillnet	715
177	Kota Sorong	Jaya Maju 01	20.00	15.70	Gillnet	715
178	Kota Sorong	Jaya Wijaya 01	17.00	15.00	Gillnet	715
179	Kota Sorong	Jei 03	24.00	20.00	Gillnet	715
180	Kota Sorong	Kambuna 02	20.00	15.70	Gillnet	715
181	Kota Sorong	Karya Laut 07	17.00	15.00	Gillnet	715
182	Kota Sorong	KM. P.J Bawang Putih	28.00	0.00	Gillnet	715
183	Kota Sorong	KM. KCBS 03	59.00	40.90	PoleAndLine	715
184	Kota Sorong	Kota Intan 03	25.00	20.00	Gillnet	715
185	Kota Sorong	Laut Papua	17.00	15.00	Gillnet	715
186	Kota Sorong	KM. Lintang	17.00	13.20	DriftOneLargeNatural	717
187	Kota Sorong	Lisa Anugerah 02	17.00	15.00	Gillnet	715
188	Kota Sorong	KM. Luden Meru	20.00	17.60	PurseSeine	715
189	Kota Sorong	KM. Magrifa Ramdani	27.00	22.00	PurseSeine	715
190	Kota Sorong	Malika	13.00	10.00	Gillnet	715
191	Kota Sorong	KM Manunggal 01	10.00	9.00	DriftOneLargeNatural	717
192	Kota Sorong	KM. Maralleng Jaya A	25.00	22.00	PurseSeine	715
193	Kota Sorong	KM. Mattajang	21.00	17.60	PurseSeine	715
194	Kota Sorong	KM. Mattiro Walie 05	30.00	22.00	PurseSeine	715
195	Kota Sorong	KM. Mina Fintura 01	59.00	40.90	PoleAndLine	715
196	Kota Sorong	KM. Mina Fintura 03	58.00	43.70	PoleAndLine	715
197	Kota Sorong	Minasa Indah 13	19.00	15.00	Gillnet	715
198	Kota Sorong	Minasa Indah 17	19.00	15.00	Gillnet	715
199	Kota Sorong	Musdalifah 02	24.00	20.00	Gillnet	715
200	Kota Sorong	Musdalifah 03	20.00	15.70	Gillnet	715
201	Kota Sorong	KM. Mutiara 88	29.00	22.00	PurseSeine	715
202	Kota Sorong	Naga Mas 02	24.00	20.00	Gillnet	715
203	Kota Sorong	Naga Mas 07	22.00	20.00	Gillnet	715
204	Kota Sorong	Najwa Indah	23.00	20.00	Gillnet	715
205	Kota Sorong	Natasyah	15.00	10.00	Gillnet	715
206	Kota Sorong	Nur Alam 02	21.00	15.70	Gillnet	715
207	Kota Sorong	Nur Alamsyah	26.00	21.70	Gillnet	715
208	Kota Sorong	Nur Anul	22.00	20.00	Gillnet	715
209	Kota Sorong	Nur Iftitah	26.00	21.70	Gillnet	715
210	Kota Sorong	Nur Sakinah	19.00	15.00	Gillnet	715
211	Kota Sorong	Nurmia Jaya	30.00	21.70	Gillnet	715
212	Kota Sorong	Nurul Bahari	21.00	15.70	Gillnet	715
213	Kota Sorong	KM. Pandang Loloe 01	27.00	20.00	PoleAndLine	715
214	Kota Sorong	KM. Pandang Loloe 02	24.00	22.00	PurseSeine	715
215	Kota Sorong	KM. Pandang Loloe 03	30.00	22.00	PurseSeine	715
216	Kota Sorong	Pandang Loloe A	26.00	21.70	Gillnet	715
217	Kota Sorong	KM. Pelita Perkasa	77.00	0.00	PurseSeine	715
218	Kota Sorong	Poleang Indah 03	14.00	10.00	Gillnet	715
219	Kota Sorong	Poleang indah 04	27.00	21.70	Gillnet	715
220	Kota Sorong	KM. Pusaka Indah 7	15.00	11.00	Gillnet	715
221	Kota Sorong	KM. Putra Tanete	26.00	22.00	PurseSeine	715

Table 13.1: Boat Information from AFP. Sorong

No	Program Site	Boat Name	GT Declared	GT Estimate	Fishing Gear	Fishing Area
222	Kota Sorong	KM. Putra Tanete 01	30.00	22.00	PurseSeine	715
223	Kota Sorong	KM. Putra Tunggal A1	28.00	22.00	PurseSeine	715
224	Kota Sorong	Putri Tunggal 07	16.00	15.00	Gillnet	715
225	Kota Sorong	Rahmat Bahari	25.00	20.00	Gillnet	715
226	Kota Sorong	Rahmat Ilahi 07	14.00	10.00	Gillnet	715
227	Kota Sorong	Rahmat Ilahi 08	19.00	15.00	Gillnet	715
228	Kota Sorong	Rahmat Indah 01	17.00	15.00	Gillnet	715
229	Kota Sorong	Rahmat Indah 011	22.00	20.00	Gillnet	715
230	Kota Sorong	Rani Resa	22.00	20.00	Gillnet	715
231	Kota Sorong	Ratu Bahari 01	19.00	15.00	Gillnet	715
232	Kota Sorong	Ratu Bahari 02	25.00	20.00	Gillnet	715
233	Kota Sorong	Ratu Indah 01	22.00	20.00	Gillnet	715
234	Kota Sorong	Ratu Indah 02	18.00	15.00	Gillnet	715
235	Kota Sorong	Ratu Indah 03	24.00	20.00	Gillnet	715
236	Kota Sorong	Rezky Anugrah	28.00	21.70	Gillnet	715
237	Kota Sorong	Ria Indah 1	18.00	15.00	Gillnet	715
238	Kota Sorong	Ria Indah 02	22.00	20.00	Gillnet	715
239	Kota Sorong	Rifandi Jaya	20.00	15.70	Gillnet	715
240	Kota Sorong	Rifky Pratama	16.00	15.00	Gillnet	715
241	Kota Sorong	Risky 01	22.00	20.00	Gillnet	715
242	Kota Sorong	Sabri Jaya 02	20.00	15.70	Gillnet	715
243	Kota Sorong	KM. Sepakat 02	14.00	15.70	DriftOneLargeNatural	717
244	Kota Sorong	KM. Sepakat 03	15.00	13.20	DriftOneLargeNatural	717
245	Kota Sorong	Shobat	20.00	15.70	Gillnet	715
246	Kota Sorong	Sinar Fajar 01	21.00	15.70	Gillnet	715
247	Kota Sorong	Sinar Harapan 09	28.00	21.70	Gillnet	715
248	Kota Sorong	KM. Sinar Harapan 2R	29.00	0.00	PurseSeine	715
249	Kota Sorong	Sinar Harapan 47	21.00	15.70	Gillnet	715
250	Kota Sorong	KM. Sinar Mas Jaya	18.00	13.20	DriftOneLargeNatural	717
251	Kota Sorong	KM. Sinar Mulia 03	27.00	22.00	PurseSeine	715
252	Kota Sorong	KM. Solavide	58.00	40.90	PoleAndLine	715
253	Kota Sorong	Sukmawati Indah	21.00	15.70	Gillnet	715
254	Kota Sorong	Teluk Bone 01	22.00	20.00	Gillnet	715
255	Kota Sorong	KM. Teluk Marchesa	57.00	40.90	PoleAndLine	715
256	Kota Sorong	Tenggiri 01	19.00	15.00	Gillnet	715
257	Kota Sorong	Torang Jaya 01	14.00	10.00	Gillnet	715
258	Kota Sorong	KM. Trobos	29.00	22.00	PurseSeine	715
259	Kota Sorong	KM. Trobos 5	24.00	22.00	PurseSeine	715
260	Kota Sorong	Tujuh Pelangi	20.00	15.70	Gillnet	715
261	Kota Sorong	KM. Tunas Jaya 01	56.00	40.90	PoleAndLine	715
262	Kota Sorong	Usaha Baru 04	20.00	15.70	Gillnet	715
263	Kota Sorong	Usaha Karya 01	17.00	15.00	Gillnet	715
264	Kota Sorong	KM. Wahyu Abadi 03	29.00	22.00	PurseSeine	715
265	Kota Sorong	KM. Wahyu Utama 01	30.00	22.00	PurseSeine	715
266	Kota Sorong	KM. Wandu Jaya 01	14.00	0.00	PurseSeine	715
267	Kota Sorong	KM. Watampone Raya 02	23.00	0.00	PurseSeine	715
268	Kota Sorong	Zainal Jaya	13.00	10.00	Gillnet	715
269	Kota Sorong	Adidas 04	25.00	22.00	PurseSeine	715
270	Kota Sorong	Aidil Syahputra 03	22.00	20.00	Gillnet	715
271	Kota Sorong	Aisyah Anugerah 01	16.00	15.00	Gillnet	715
272	Kota Sorong	Andika A ra bahari	27.00	21.70	Gillnet	715
273	Kota Sorong	Arga 02	24.00	15.70	Gillnet	715
274	Kota Sorong	Arsyila	29.00	0.00	Gillnet	715
275	Kota Sorong	Arung 02	18.00	15.00	Gillnet	715
276	Kota Sorong	Aspac 03	58.00	40.90	PoleAndLine	715
277	Kota Sorong	Ataufiq Putra 02	25.00	0.00	Gillnet	715
278	Kota Sorong	Ayu Sulurang 02	20.00	15.70	Gillnet	715
279	Kota Sorong	Bella Beto 01	27.00	22.00	PurseSeine	715
280	Kota Sorong	Bella Beto 02	21.00	17.60	PurseSeine	715
281	Kota Sorong	Berhasil 02	24.00	22.00	PurseSeine	715

Table 13.1: Boat Information from AFP. Sorong

No	Program Site	Boat Name	GT Declared	GT Estimate	Fishing Gear	Fishing Area
282	Kota Sorong	Bone karya	22.00	20.00	Gillnet	715
283	Kota Sorong	Bulu Mangendre	27.00	0.00	Gillnet	715
284	Kota Sorong	Cahaya Fitra 03	27.00	21.70	Gillnet	715
285	Kota Sorong	Cahaya Katapop	20.00	0.00	Gillnet	715
286	Kota Sorong	Cahaya Mekkah III	17.00	0.00	Gillnet	715
287	Kota Sorong	Cahaya risky 03	6.00	0.00	DriftOneLargeNatural	717
288	Kota Sorong	Cinta Bahari 06	59.00	40.90	PoleAndLine	715
289	Kota Sorong	Cinta Bahari 10	59.00	40.90	PoleAndLine	715
290	Kota Sorong	Dandi Putra	24.00	22.00	PurseSeine	715
291	Kota Sorong	Dedy Jaya 02	16.00	0.00	Gillnet	715
292	Kota Sorong	EL Roi	12.00	0.00	DriftOneLargeNatural	717
293	Kota Sorong	Empat lima	28.00	22.00	PurseSeine	715
294	Kota Sorong	Gemilang 03	16.00	15.00	Gillnet	715
295	Kota Sorong	Gemilang 04	25.00	20.00	Gillnet	715
296	Kota Sorong	Gemilang 06	18.00	13.20	DriftOneLargeNatural	717
297	Kota Sorong	Hidup Bersama 05	26.00	22.00	PurseSeine	715
298	Kota Sorong	Iis Bahari	15.00	10.00	Gillnet	715
299	Kota Sorong	Jabal Nur 03	24.00	0.00	PurseSeine	715
300	Kota Sorong	Jabal Nurdin 03	27.00	22.00	PurseSeine	715
301	Kota Sorong	Karya Utama 01	28.00	21.70	Gillnet	715
302	Kota Sorong	LagaLigo 06	16.00	13.20	DriftOneLargeNatural	717
303	Kota Sorong	Lisna Indah 338	27.00	21.70	Gillnet	715
304	Kota Sorong	Magrifa Ramdani	27.00	0.00	PurseSeine	715
305	Kota Sorong	Malawalie	26.00	22.00	PurseSeine	715
306	Kota Sorong	Naufal Zaif 01	18.00	13.20	DriftOneLargeNatural	717
307	Kota Sorong	Nelayan 2007 916	12.00	10.00	Gillnet	715
308	Kota Sorong	Novita Sari 02	30.00	22.00	PurseSeine	715
309	Kota Sorong	Nur Arafah 022	24.00	20.00	Gillnet	715
310	Kota Sorong	Nur Asia 77	23.00	22.00	PurseSeine	715
311	Kota Sorong	Nur Awalia 02	23.00	22.00	PurseSeine	715
312	Kota Sorong	Nur Iftitah 02	24.00	20.00	Gillnet	715
313	Kota Sorong	Pelita perkasa	77.00	68.50	PurseSeine	715
314	Kota Sorong	Pipos 01	27.00	22.00	PurseSeine	715
315	Kota Sorong	Poleang indah 04	27.00	0.00	Gillnet	715
316	Kota Sorong	Puger	20.00	15.70	Gillnet	715
317	Kota Sorong	Putra tunggal A1	28.00	0.00	PurseSeine	715
318	Kota Sorong	Putri Tunggal 07	16.00	0.00	Gillnet	715
319	Kota Sorong	Putri Tunggal 13	25.00	20.00	Gillnet	715
320	Kota Sorong	Rahmat Ilahi 05	23.00	22.00	PurseSeine	715
321	Kota Sorong	Ria Indah 1	18.00	0.00	Gillnet	715
322	Kota Sorong	Riski Anugrah	28.00	21.70	Gillnet	715
323	Kota Sorong	Risky 01	22.00	0.00	Gillnet	715
324	Kota Sorong	Risky 02	29.00	21.70	Gillnet	715
325	Kota Sorong	Samudra Manggala	29.00	21.70	DriftOneLargeNatural	717
326	Kota Sorong	Sinar fajar A	24.00	20.00	Gillnet	715
327	Kota Sorong	Sinar Harapan 2 R	29.00	22.00	PurseSeine	715
328	Kota Sorong	Sinar Indah 07	30.00	22.00	PurseSeine	715
329	Kota Sorong	Sinar Mestika Mulia	188.00	68.50	PurseSeine	715
330	Kota Sorong	Usaha Karya 02	23.00	20.00	Gillnet	715
331	Kota Sorong	Wahyu Abadi 88	27.00	22.00	PurseSeine	715
332	Kota Sorong	Wanemo 05	19.00	17.60	PurseSeine	715
333	Kota Sorong	Yanaa'e	23.00	20.00	Gillnet	715
334	Kota Sorong	Zainal Jaya 03	22.00	20.00	Gillnet	715

13.1.3 Follow-up

This location is recommended for CODRS tuna program since there are many gill net vessels dedicated for tuna with the fishing ground in FMA 715.

13.1.4 Important Contact

Name : Misriadi
Affiliation : Captain of KM. Almaidah Indah 01
Contact : 085254539744

Name : Abidin
Affiliation : Captain of KM. Almaidah Indah
Contact :

Name : Supriadi Asis
Affiliation : Captain of KM. Mulia Karya
Contact : 082198695152

13.1.5 References

13.1.6 Figures



Figure 13.2: Fishing fleet in the jetty of AFP. Sorong



Figure 13.3: Type of handline vessels at Pasar Turi



Figure 13.4

13.2 FP. Wersar, Sorong Selatan

PPWersar.Rnw

13.3 FP. Dulon pok pok, Fak Fak

13.3.1 Background and Survey Practicalities

Background

FP Dulan Pok Pok is located in Fak Fak Regency, West Papua in the coordinate -2.927231, 132.266818. This fishing port is the only one fishing port located in Fak Fak. Most of the vessel are sizing <30GT. The common catch landed in this port has the similarity with the CFP. Sorong such as Wahoo (*Scomberomorus guttatus*), the egg of flying fish (*Parexocoetus brachypterus*) and yellowfin tuna (*T. albacares*). The catch with the large size will be sent to the local companies. The rest of catch is distributed to the middlemen to be sold to the local market.

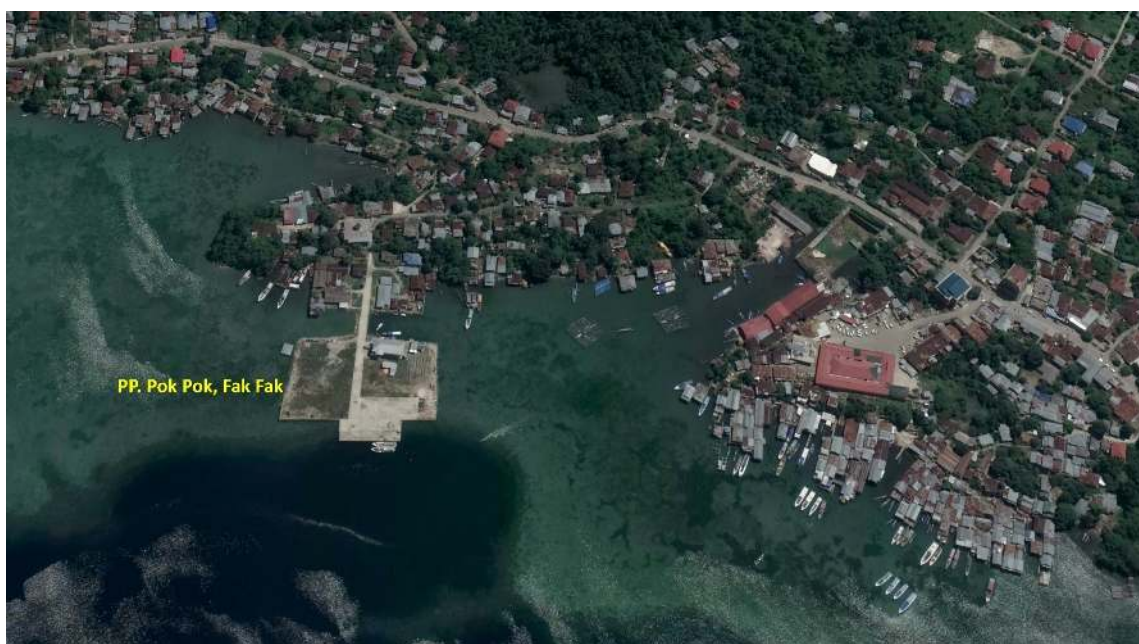


Figure 13.5: Location of FP. Dulan Pok Pok, Fak Fak

Survey team

Survey was done by Al Aidy

Period visited

Survey was conducted on May 21-25, 2019

How to get there

The location of FP Dulan Pok Pok is very close to the Torea airport of Fak Fak. It only takes 5-10 minutes of traveling by car to get the location.

13.3.2 Fleet Description

FP Dulan Fak Fak has become one of the fishing ports the vessels operated in FMA 715 mainly the east side of Papua. Most of the vessels are gill net and small-motorized boat (jonson). There were 3 active pole and line vessel from a total of 7 vessels. This information was provided by Mr. Darto, the head of PSDKP of the fishing port. He also

informed that there was a total of 385 vessels registered in the fishing port consisted of five different fishing gears, gillnet, purse seine, pole and line, trolling line, and dropline targeting snapper. Unfortunately, there was no vessel join the CODRS program during the visit since most of the tuna vessels apply seasonally. They fish tuna only for six months and the rest will be used to fish the egg of flying fish.

13.3.3 Follow-up

This location is not recommended for deploying CODRS tuna since most of the vessels such as gill net, to fish tuna seasonally.

13.3.4 Important Contact

Name : Darto
Affiliation : Head of PSDKP Dulon Pok Pok, Fak Fak
Contact : 081230593680

Name : Yusuf
Affiliation : Captain of KM. Inka Mina 299
Contact :

13.3.5 References

13.3.6 Figures



Figure 13.6: AFishing vessels in FP. Dulan Pok Pok



Figure 13.7: Typical pole and line vessels found in FP. Dulon Pok Pok, Fak Fak

14 East Nusa Tenggara Province

14.1 FP. Amagarapati, Flores Timur

14.1.1 Background and Survey Practicalities

Background

Amagarapati is located in Larantuka, East Flores Regency. The majority of fishing vessels in this port is fiber pole and line vessel. According to the stratification from DGCF, Amagarapati belongs is classified as Coastal Fisheries Harbour (CFH) / Pelabuhan Perikanan Pantai dedicated for small scale industries. There are 3 big suppliers in this harbour where all of vessels land their catch to them. The activity in PP Amagarapati is starting from afternoon until tomorrow morning.



Figure 14.1

Survey team

Survey was done by Dwaitd Kolibonso and Yeremia Apridianto

Period visited

The first survey was conducted on 2 January 2017 and second survey was on 20 February 2018

How to get there

PP. Amagarapati is located in Larantuka and can be reached by 50 minutes flight from Kupang.

14.1.2 Fleet Description

The fishing fleet in PP Amagarapati consisted of from carrier and catcher vessel. There are some of types of catcher: pole and line, mini purse seine, Bagan (lift net) and nano boat (<5 GT). Based on the logbook data originated from the harbour database, there

are 63 pole and line and 11 mini purse seine vessels registered and active in loading and landing process in PP Amagarapati. The target catch for pole and line is large tuna and skipjack. For those purse seine vessels, the target catch is small pelagic (selar and mackerels). The nano boat is prefer to catch demersal fish.

The size of pole and line vessel has a smaller capacity comparing to other region ranged from 16-30 GT. The fishing trip is around 1-3 days with the total number of onboard crew is 13-14 people. The common dimension of boat is 13.52 – 18.5 metres for length, 4.0 – 5.0 metres for width, and 1.6 – 2.4 meters for depth. The main material of vessel is fiberglass, where the engine is located inside the vessel with the specification is Volvo Penta powered 160 PS. Every vessel has 4 storages (palka) with the maximum capacity between 1-1.5 tonnage per palkah and 2 storages for baitfish. Those storages are made from fiberglass.

The onboard crew is separated based on the function:

1. Fisher who sitting in the bridge and fish using pole and line
2. Fishing master or Boboy who decide when and where to throw the bait fish
3. Bait-man who pick up and bring the bait fish to fishing master/boboy
4. Collector who keep the catch to ensure that the fish is not going back to the sea

Every pole and line fleets needs to find or buy the bait fish in lift net before heading to the fishing ground or FADs. The common baitfish is Tembang (*Sardinella fimbriata*), Rambeng (*Stolephorus devisi*), and Lure (*Stolephorus indicus*). In average, it needs 4 – 6 buckets of bait fish with ratio 50:50 for bait and water for each fishing trip. Each bucket bait has a 60 liters of volume.

Pole and line gear has three main components;

1. Joran/stick
2. Line
3. Hook

Joran is made by bamboo with the characteristic elastic and pretty old. The length of stick is 2 - 2.5 metres with pole diameter is 3 - 4 cm and the tip around 1 – 1.5 cm. It takes 20 bamboo stick in one fishing trip. The main line is made from sintetic polyethylene with length around 1.5 – 2 metres. The hook number is 2.5 – 2.8.

Beside using pole and line as the main fishing gear, fisherman always bring another gear of single hook drift line or Known as pancing tomba that targeting large tuna (>105 cm Fork Length). The gear structure is very simple, consisted of the line, jerry can with capacity 5 liter or more as the buoy, and the hook number 5. The bait used is natural dead bait (pieces of baby tuna, skipjack or tongkol).

There are 4 fishing vessels were willing to join CODRS program where one of those vessels joined since January 2017. Their fishing ground is in FMA 714 and 573. The dominant species caught by pole and line is skipjack (*Katsuwonus pelamis*), baby yellowfin

tuna (*Thunnus albacares*), baby bigeye tuna (*Thunnus obesus*), large tuna, rainbow runner (*Elagatis bipinnulata*), dolphinfish (*Coryphaena hippurus*), and albacore (*Thunnus alalunga*).

Table 14.1: Boat Information from FP. Amagarapati, Flores Timur

No	Program Site	Boat Name	GT Declared	GT Estimate	Fishing Gear	Fishing Area
1	Kupang	Saskia Sabar Menanti	2.00	2.00	DropOneLargeNatural	573
2	Flores Timur	KMN FLOTIM 9	22.00	15.10	PoleAndLine	714
3	Flores Timur	KM Anugerah Mina 09	17.00	17.00	PoleAndLine	714
4	Flores Timur	KMN FLOTIM 4	22.00	15.10	PoleAndLine	714
5	Flores Timur	KMN FLOTIM 7	22.00	15.10	PoleAndLine	714
6	Flores Timur	KMN FLOTIM 25	22.00	15.10	PoleAndLine	714
7	Flores Timur	KMN YULIEN	26.00	19.60	PoleAndLine	714

14.1.3 Follow-up

This site is recommended for CODRS program because there are many fishing vessels dedicated for tuna and tuna-like species.

14.1.4 Important Contact

Name : Yohanes Rome Kedang
Affiliation : Boat owner KMN Flotim 9
Contact : 082122241787

Name : Bapak Stef
Affiliation : Kabid Tangkap DKP Kabupaten Flores Timur
Contact : 081348300621

14.1.5 References

14.1.6 Supply Chain

There are 3 big fish processing and storage companies operating in Larantuka. All catches from pole and line fleets are landed to these companies. Those companies are PT Primo Indo Ikan, PT Okhisin, and PT Karya Cipta Buana Sentosa (KCBS). Their products can be fresh and frozen fish, loin, saku, and tuna cubes. Those products are distributed to the international markets like US, Southeast Asia and some local markets like Makassar, Bali, Surabaya, and Jakarta.

14.1.7 Figures



Figure 14.2



Figure 14.3

Typical hook used in pole and line (left); and Stick made from bamboo (right)



Figure 14.4



Figure 14.5

Single hook drift line gear; Hook (left); Jerry can and line (Right)



Figure 14.6



Figure 14.7: a



Figure 14.8: b



Figure 14.9: c



Figure 14.10: d



Figure 14.11: Fishing activity in pole and line vessel; a) Fishing master or Boboy spread out the bait fish; b). Fishing master looking for dolphin and bird as a sign to start fishing c). bait man takes the bait to fishing master and CODRS process on board; d) Catch on the deck are kept by collector, and e). some fishermen are fishing on the bridge



Figure 14.12: Target species of large tuna *Thunnus albacares* from Pole and Line Boats using single hook drift line gears

14.2 FP. Labuhan Bajo, Manggarai Barat

PPILabuanBajo.Rnw

14.3 FP. Alok, Sikka

PPIAlokMaumere.Rnw

14.4 FLP. Kenarilang, Alor

PPIKenalirangAlor.Rnw

14.5 Kokar Village, Alor

14.5.1 Background and Survey Practicalities

Background

Desa Kokar is one of fish landing places located on the southwest of Alor Island. Tuna is the main target catch for the fishers in this village. In general, the most dominant fishing vessel is small-motorized boat or called as *bodi batang* with its various type and size. The fishing gear used is handline (drop line) with its various type and modification. The catch composition of the fishers in Kokar village consisted of large tuna, medium tuna, baby tuna, skipjack, billfish, wahoo, dolphin fish etc.

Most of the catch especially tuna is cut-off on the boat to make loin prior to sell to the local supplier. The main reason is to deal with the limited capacity of the boat and also ice so that the fishers have to do loin in order to accommodate more fish. The local supplier is also aware with this procedure. The average catch of *bodi batang* fishers is between 30-80Kg/trip during the east season and 100-150 in the west season.

Survey team

The survey was done by Duaitd Kolibongso

Period visited

The survey was conducted on May 28-29, 2019

How to get there

Kokar village can be reached through land transportation (car) from Kalabahi by around 2 hours traveling.

14.5.2 Fleet Description

The typical fishing fleet in Kokar village is varied such as small-motorized boat *bodi batang*, non-motorized small boat *sampan* and the modification of small-motorized boat, namely *bodi susun* or in the local name known as *bodi jolor* (Figure 1). The size range of those vessels is 0-2GT with the length 9-11meter, width 1-1.3meter and depth (draft) 0.8-1meter. Based on the local information there are 40-50 active boat based in Kokar village. The fishing gear used is handline gear with its modification following the categorisation on TNC Gear ID report, namely Troll One Large Artificial, Kite One Large Artificial, Drift Single Large Natural, Drop Multiple Small Artificial, Surface One Large Live and Troll Multiple Large Artificial.

Troll Multiple Large Artificial has the specification of main line 80-120meter length in which the length of branch line is around cm, and the distance between branch line is 8-8.5meter. It uses a sinker with 300-500gram weight. The hook has a dimension of total length 6cm, gap 1cm, and throat 3cm with the type of point and eyes is knife and ring respectively.

The target species is large tuna, medium tuna, billfish, dolphin fish, and skipjack. Fishers make use of FADs and also the sign of the dolphin schooling. They apply one-day fishing trip with the fishing ground is in FMA 714. The distance of fishing ground to the land is around 5-10miles.

14.5.3 Follow-up

This location is recommended for implementing CODRS tuna program since the various fishing gears dedicated for tuna.

14.5.4 Important Contact

Name : Boby
Affiliation : Fisher
Contact : 081353754994

Name : Safaruddin
Affiliation : Nelayan
Contact : 081314297985

14.5.5 References

14.5.6 Figures



Figure 14.13



Figure 14.14: The typical fishing vessel of small-motorized boat bodi batang in Kokar village, southwest Alor.



Figure 14.15: The boat of bodi susun in Alor



Figure 14.16: Dropline Multiple Small Artificial Lure



Figure 14.17: Trolling Multiple Large Artificial

14.6 Ampera Village, Alor

Ampera Village

14.7 Balauring Harbour, Lembata

14.7.1 Background and Survey Practicalities

Background

Fishing port Balauring is one of the fish landing places for the fishers originated from Balauring village sub-district Omersuri, Lembata regency. The location of this port is adjacent to the ferry harbour of Balauring. The village is known as the centre of tuna fisheries in Lemabata Regency since most of the people are working as tuna fishers.

The type of fishing fleet found in this village is small-motorized boat of *bodi* batang with the fishing gear of handline with various design and modification. The catch composition consisted of large tuna, medium tuna, skipjack, billfish, dolphin fish etc. Most of the catch especially tuna is cut-off on the boat to make loin prior to selling to the local supplier. The main reason is to deal with the limited capacity of the boat and also ice so that the fishers have to do loin in order to accommodate more fish. The local supplier is also aware of this procedure. The average catch of *bodi* batang fishers is between 30-80Kg/trip during the east season and 50-100Kg/trip in the west season.

There are two local suppliers in this village that are dominant in accommodating the catch from the fishers namely, PT Tritunggal Lintas Benua (TLB) from Larantua, East Flores and PT. Karya Cipta Buana Sentosa (KCBS) from Maumere. These suppliers also require the fishers to make loin of tuna. All catch is valued based on the quality and weight.

Survey team

The survey was done by Duaitd Kolibongso

Period visited

The survey was conducted on May 28-29, 2019

How to get there

Balauring village can be reached through land transportation (car) from Lewoleba by around 2 hours traveling.

14.7.2 Fleet Description

The typical fishing fleet found in Balauring village is small-motorized boat *bodi* batang with size range 0-3GT, length 8-10.8meter, width 1-1.2meter and depth (draft) 0.6-1meter. Based on the local information there are around 50 active boat in this village.

The fishing gear used is handline gear with its modification following the categorisation on TNC Gear ID report, namely Kite One Large Artificial, Drift Single Large Natural, Drop Multiple Small Artificial, Drop Single Large Natural.

There is one new fishing gear found in this survey, Drop Multiple Large Artificial. This gear has the specification of main line 120-150meter length in which the length of branch line is around 0.5 cm, and the distance between branch line is 8-8.5meter. It uses a sinker with 300-500gram weight. The hook has a dimension of total length 6cm, gap 1cm, and throat 3cm with the type of point and eyes is knife and ring respectively. The target species is large tuna, medium tuna, billfish, dolphin fish, and skipjack. Fishers make use

of FADs and also the sign of the dolphin schooling. They fish on one-day fishing trip with the fishing ground is around Komba Island FMA 714.

14.7.3 Follow-up

This location is recommended for implementing CODRS tuna program since the various fishing gears dedicated for tuna.

14.7.4 Important Contact

Name : Jamaluddin
Affiliation : Fisher
Contact : 082145395875

Name : Sam
Affiliation : Fisher
Contact : 081238640880

14.7.5 References

14.7.6 Figures



Figure 14.18: The unloading activity in the jetty of Balauring village



Figure 14.19: The boat of *bodi batang*



Figure 14.20



Figure 14.21



Figure 14.22: Fishing gear of Dropline Multiple Large Artificial



Figure 14.23: Kite One Large Natural; Drift Single Large Natural and Drop Multiple Small Natural



Figure 14.24: Baby tuna catch by using Dropline Multiple Large Artificial

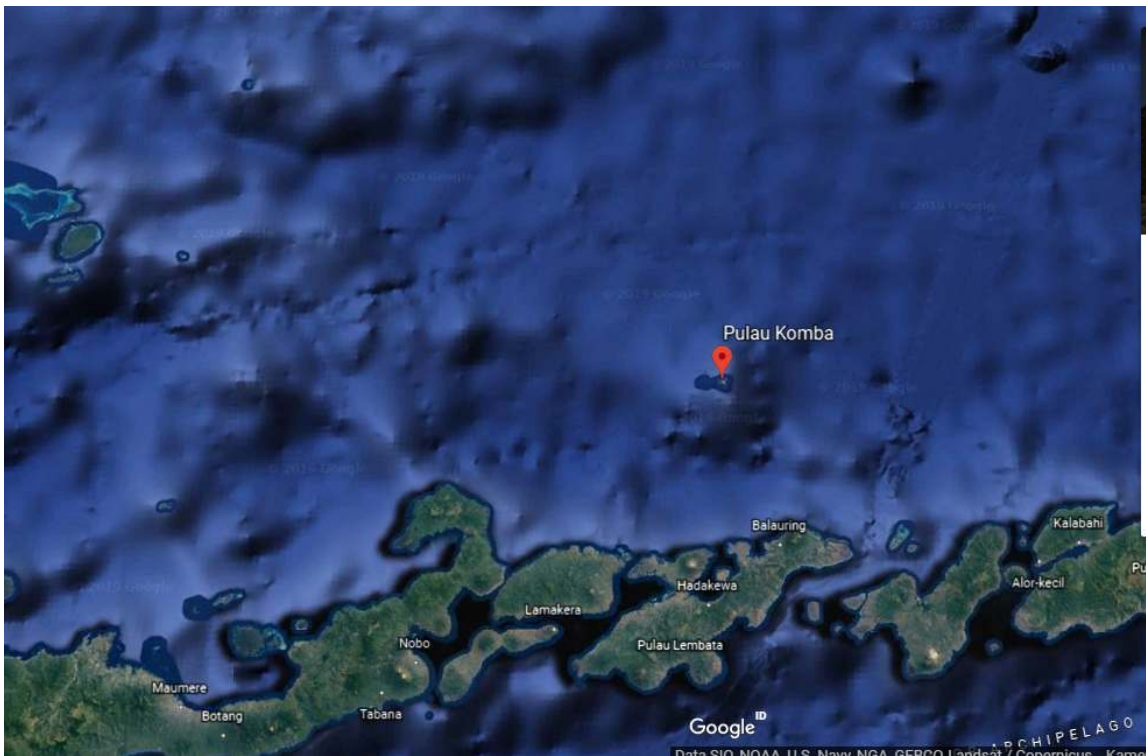


Figure 14.25: The fishing ground of fishers from Balauring located in Komba Island.

14.8 FP. Hukung Lewoleba

PPI Lewoleba

14.9 Waijarang Village, Lembata

Waijaran Village

14.10 FLP. Lewoleba, Lembata

14.10.1 Background and Survey Practicalities

Background

FLP Lewoleba is one of the fish landing places for the purse seine vessel from Lembata regency. Meanwhile, most small vessel of *bodi batang* prefer to unload the catch along the coast. FLP Leowlebo does not have permanent jetty (concrete). The jetty is made from the wood. The location of the FLP is close to the traditional market of Lewoleba with the typical commodity is small pelagic fish such as scads, frigate tuna, baby tuna, skipjack and various species of demersal fish. Since most of the catch from the fishers are distributed to the local market known as papale and local middleman, it is difficult to get the information on the total production of this FLP. However, based on the local's information, the average catch of purse seine vessel is between 500-1000kg/trip depending on the seasonality.

The variation of fishing fleet FLP Lewoleba is limited since it is dominated by mini purse seine that are targeting small pelagic fish. There were only few small-motorized boats of *bodi batang* targeting demersal fish and crab. During the survey, there is no tuna fishing vessel found in this location.

Survey team

The survey was done by Duidt Kolibongso

Period visited

The survey was conducted on May 27, 2019

How to get there

FLP Lewoleba can be reached through airplane transportation (car) from Kupang by around 45 minutes traveling.

14.10.2 Fleet Description

The typical fishing fleet found in FLP Lewoleba is dominated by mini purse seine known as Lempara with the total number is 40 vessels. The size range is 10-15GT in which these vessels are targeting small pelagic fish, baby tuna and skipjack (depending on the seasonality). The fishing trip takes 1-2days. Most of mini purse seine do not have fish storage (palka). All catch is transferred to the collecting boat after the fishing event. Based on the information from local's collecting boat, the average of total landing catch is 500-1000kg/trip.

The purse seine gear used has the specification of length 200-300 meters. The number of crew is 10-15 people/vessel/trip. Meanwhile, the small-motorized boat of *bodi batang* is targeting demersal fish and crab. meters. There are two types of gears used in these vessels, dropline and gillnet.

14.10.3 Follow-up

This location is not recommended for implementing CODRS tuna program due to the limitations of vessels dedicated for tuna.

14.10.4 Important Contact

Name : Lambert

Affiliation : Coordinator of Capture Fisheries Sector of Fisheries and Marine Agency Lembata

Contact : 081353929370

14.10.5 References

14.10.6 Figures



Figure 14.26: The unloading activity of collecting boat on the wood jetty of FLP Lewoleba



Figure 14.27: Mini purse seine in FLP Lewoleba



Figure 14.28: The typical of purse seine gear found in FLP Lewoleba



Figure 14.29: Buoy made from plastic used in purse seine



Figure 14.30: The typical of mesh size of purse seine



Figure 14.31: The typical of sinker of purse seine

14.11 Nangahure Village, Maumere

14.11.1 Background and Survey Practicalities

Background

Nangahure village is located in West Alok District, Maumere. Our interview to fishers showed that the village is one of tuna landing centers in Maumere. The landed vessel's size ranges between 3 GT and 4 GT, and canoe (*jukung boat*).

Survey team

Survey was done by Dimas Fergiawan and Syamsul Bahri

Period visited

The survey was conducted on May 28-29, 2019

How to get there

Nangahure village can be accessed by car for 20 minutes from Franseda Airport, Maumere

14.11.2 Fleet Description

Landing location in Nangahure village is dominated by fishing vessels 2-3 GT, or 12-14 m in length, 1.1 - 1.4 m in width and 0.8 - 1 in height. The fishers use diverse fishing gears such as DropOneLargeNatural, TrollMultipleLargeArtificial, KiteOneLargeArtificial, SurfaceOneLargeLive, dan DropMultipleSmall Artificial. The landed catch consists of yellowfin tuna, small tunas, marlin fish and dolphinfish. Fishers are often associated with FADs and dolphins in their fishing operation. Usually, they have 2-3 people on-boat and a 1-3 day fishing trip. Their fishing ground is Flores Sea and surroundings. The landed catch are range between 200 kg and 1000 kg per trip. Between January and March, their fishing target shift to catch demersal fish due to weather condition.

Table 14.2: Boat Information from Nangahure Village, Maumere

No	Program Site	Boat Name	GT Declared	GT Estimate	Fishing Gear	Fishing Area
1	Sikka	KMN Tiga Putri 02	1.00	1.40	KiteOneLargeArtificial	713
2	Sikka	KMN Salsabila	1.00	1.10	DropOneLargeArtificial	713
3	Sikka	KMN AMAR MAKRUF	0.00	1.70	TrollMultipleSmallArtificial	713
4	Sikka	KMN Gadis Manja	1.00	0.70	TrollOneLargeArtificial	713
5	Sikka	KMN Nur Asifa	0.00	3.80	DriftOneLargeNatural	713
6	Sikka	KMN AMAR MAKRUF	0.00	1.70	DriftOneLargeNatural	713
7	Sikka	KMN Gadis Manja	1.00	2.30	DropOneLargeNatural	713
8	Sikka	KMN Salsabila	1.00	1.10	DriftOneLargeNatural	713
9	Sikka	KMN Tiga Putri 02	1.00	2.20	DropOneLargeNatural	713
10	Sikka	KMN Amista	1.00	1.60	DropOneLargeNatural	713
11	Sikka	KMN Kumis Gatal	0.00	4.10	DriftOneLargeNatural	713
12	Sikka	KM HL Nangahure 1	3.00	3.00	DriftOneLargeNatural	713
13	Sikka	KM HL Nangahure 2	3.00	3.00	DriftOneLargeNatural	713
14	Sikka	KM HL Nangahure 3	3.00	3.00	DriftOneLargeNatural	713
15	Sikka	KM HL Nangahure 4	3.00	3.00	DriftOneLargeNatural	713
16	Sikka	KM HL Nangahure 5	3.00	3.00	DriftOneLargeNatural	713
17	Sikka	KM HL Nangahure 6	3.00	3.00	DriftOneLargeNatural	713
18	Sikka	KM HL Nangahure 7	3.00	3.00	DriftOneLargeNatural	713
19	Sikka	KM HL Nangahure 8	3.00	3.00	DriftOneLargeNatural	713
20	Sikka	KM HL Nangahure 9	3.00	3.00	DriftOneLargeNatural	713
21	Sikka	KM HL Nangahure 10	3.00	3.00	DriftOneLargeNatural	713
22	Sikka	KM HL Nangahure 11	3.00	3.00	DriftOneLargeNatural	713

Table 14.2: Boat Information from Nangahure Village, Maumere

No	Program Site	Boat Name	GT Declared	GT Estimate	Fishing Gear	Fishing Area
23	Sikka	KM HL Nangahure 12	3.00	3.00	DriftOneLargeNatural	713
24	Sikka	KM HL Nangahure 13	3.00	3.00	DriftOneLargeNatural	713
25	Sikka	KM HL Nangahure 14	3.00	3.00	DriftOneLargeNatural	713
26	Sikka	KM HL Nangahure 15	3.00	3.00	DriftOneLargeNatural	713
27	Sikka	KM HL Nangahure 16	3.00	3.00	DriftOneLargeNatural	713
28	Sikka	KM HL Nangahure 17	3.00	3.00	DriftOneLargeNatural	713
29	Sikka	KM HL Nangahure 18	3.00	3.00	DriftOneLargeNatural	713
30	Sikka	KM HL Nangahure 19	3.00	3.00	DriftOneLargeNatural	713
31	Sikka	KM HL Nangahure 20	3.00	3.00	DriftOneLargeNatural	713
32	Sikka	KM HL Nangahure 21	3.00	3.00	DriftOneLargeNatural	713
33	Sikka	KM HL Nangahure 22	3.00	3.00	DriftOneLargeNatural	713
34	Sikka	KM HL Nangahure 23	3.00	3.00	DriftOneLargeNatural	713
35	Sikka	KM HL Nangahure 24	3.00	3.00	DriftOneLargeNatural	713
36	Sikka	KM HL Nangahure 25	3.00	3.00	DriftOneLargeNatural	713
37	Sikka	KM HL Nangahure 26	3.00	3.00	DriftOneLargeNatural	713
38	Sikka	KM HL Nangahure 27	3.00	3.00	DriftOneLargeNatural	713
39	Sikka	KM HL Nangahure 28	3.00	3.00	DriftOneLargeNatural	713
40	Sikka	KM HL Nangahure 29	3.00	3.00	DriftOneLargeNatural	713
41	Sikka	KM HL Nangahure 30	3.00	3.00	DriftOneLargeNatural	713
42	Sikka	KM HL Nangahure 31	3.00	3.00	DriftOneLargeNatural	713
43	Sikka	KM HL Nangahure 32	3.00	3.00	DriftOneLargeNatural	713
44	Sikka	KM HL Nangahure 33	3.00	3.00	DriftOneLargeNatural	713
45	Sikka	KM HL Nangahure 34	3.00	3.00	DriftOneLargeNatural	713
46	Sikka	KM HL Nangahure 35	3.00	3.00	DriftOneLargeNatural	713
47	Sikka	KM HL Nangahure 36	3.00	3.00	DriftOneLargeNatural	713
48	Sikka	KM HL Nangahure 37	3.00	3.00	DriftOneLargeNatural	713
49	Sikka	KM HL Nangahure 38	3.00	3.00	DriftOneLargeNatural	713
50	Sikka	KM HL Nangahure 39	3.00	3.00	DriftOneLargeNatural	713
51	Sikka	KM HL Nangahure 40	3.00	3.00	DriftOneLargeNatural	713
52	Sikka	KM HL Nangahure 41	3.00	3.00	DriftOneLargeNatural	713
53	Sikka	KM HL Nangahure 42	3.00	3.00	DriftOneLargeNatural	713
54	Sikka	KM HL Nangahure 43	3.00	3.00	DriftOneLargeNatural	713
55	Sikka	KM HL Nangahure 44	3.00	3.00	DriftOneLargeNatural	713
56	Sikka	KM HL Nangahure 45	3.00	3.00	DriftOneLargeNatural	713
57	Sikka	KM HL Nangahure 46	3.00	3.00	DriftOneLargeNatural	713
58	Sikka	KM HL Nangahure 47	3.00	3.00	DriftOneLargeNatural	713
59	Sikka	KM HL Nangahure 48	3.00	3.00	DriftOneLargeNatural	713
60	Sikka	KM HL Nangahure 49	3.00	3.00	DriftOneLargeNatural	713
61	Sikka	KM HL Nangahure 50	3.00	3.00	DriftOneLargeNatural	713
62	Sikka	KM HL Nangahure 51	3.00	3.00	DriftOneLargeNatural	713
63	Sikka	KM HL Nangahure 52	3.00	3.00	DriftOneLargeNatural	713
64	Sikka	KM HL Nangahure 53	3.00	3.00	DriftOneLargeNatural	713
65	Sikka	KM HL Nangahure 54	3.00	3.00	DriftOneLargeNatural	713
66	Sikka	KM HL Nangahure 55	3.00	3.00	DriftOneLargeNatural	713
67	Sikka	KM HL Nangahure 56	3.00	3.00	DriftOneLargeNatural	713
68	Sikka	KM HL Nangahure 57	3.00	3.00	DriftOneLargeNatural	713
69	Sikka	KM HL Nangahure 58	3.00	3.00	DriftOneLargeNatural	713
70	Sikka	KM HL Nangahure 59	3.00	3.00	DriftOneLargeNatural	713
71	Sikka	KM HL Nangahure 60	3.00	3.00	DriftOneLargeNatural	713
72	Sikka	KM HL Nangahure 61	3.00	3.00	DriftOneLargeNatural	713
73	Sikka	KM HL Nangahure 62	3.00	3.00	DriftOneLargeNatural	713
74	Sikka	KM HL Nangahure 63	3.00	3.00	DriftOneLargeNatural	713
75	Sikka	KM HL Nangahure 64	3.00	3.00	DriftOneLargeNatural	713
76	Sikka	KM HL Nangahure 65	3.00	3.00	DriftOneLargeNatural	713
77	Sikka	KM HL Nangahure 66	3.00	3.00	DriftOneLargeNatural	713
78	Sikka	KM HL Nangahure 67	3.00	3.00	DriftOneLargeNatural	713
79	Sikka	KM HL Nangahure 68	3.00	3.00	DriftOneLargeNatural	713
80	Sikka	KM HL Nangahure 69	3.00	3.00	DriftOneLargeNatural	713
81	Sikka	KM HL Nangahure 70	3.00	3.00	DriftOneLargeNatural	713
82	Sikka	KM HL Nangahure 71	3.00	3.00	DriftOneLargeNatural	713

Table 14.2: Boat Information from Nangahure Village, Maumere

No	Program Site	Boat Name	GT Declared	GT Estimate	Fishing Gear	Fishing Area
83	Sikka	KM HL Nangahure 72	3.00	3.00	DriftOneLargeNatural	713
84	Sikka	KM HL Nangahure 73	3.00	3.00	DriftOneLargeNatural	713
85	Sikka	KM HL Nangahure 74	3.00	3.00	DriftOneLargeNatural	713
86	Sikka	KM HL Nangahure 75	3.00	3.00	DriftOneLargeNatural	713
87	Sikka	KM HL Nangahure 76	3.00	3.00	DriftOneLargeNatural	713
88	Sikka	KM HL Nangahure 77	3.00	3.00	DriftOneLargeNatural	713
89	Sikka	KM HL Nangahure 78	3.00	3.00	DriftOneLargeNatural	713
90	Sikka	KM HL Nangahure 79	3.00	3.00	DriftOneLargeNatural	713
91	Sikka	KM HL Nangahure 80	3.00	3.00	DriftOneLargeNatural	713
92	Sikka	KM HL Nangahure 81	3.00	3.00	DriftOneLargeNatural	713
93	Sikka	KM HL Nangahure 82	3.00	3.00	DriftOneLargeNatural	713
94	Sikka	KM HL Nangahure 83	3.00	3.00	DriftOneLargeNatural	713
95	Sikka	KM HL Nangahure 84	3.00	3.00	DriftOneLargeNatural	713
96	Sikka	KM HL Nangahure 85	3.00	3.00	DriftOneLargeNatural	713
97	Sikka	KM HL Nangahure 86	3.00	3.00	DriftOneLargeNatural	713
98	Sikka	KM HL Nangahure 87	3.00	3.00	DriftOneLargeNatural	713
99	Sikka	KM HL Nangahure 88	3.00	3.00	DriftOneLargeNatural	713
100	Sikka	KM HL Nangahure 89	3.00	3.00	DriftOneLargeNatural	713
101	Sikka	KM HL Nangahure 90	3.00	3.00	DriftOneLargeNatural	713
102	Sikka	KM HL Nangahure 91	3.00	3.00	DriftOneLargeNatural	713
103	Sikka	KM HL Nangahure 92	3.00	3.00	DriftOneLargeNatural	713
104	Sikka	KM HL Nangahure 93	3.00	3.00	DriftOneLargeNatural	713
105	Sikka	KM HL Nangahure 94	3.00	3.00	DriftOneLargeNatural	713
106	Sikka	KM HL Nangahure 95	3.00	3.00	DriftOneLargeNatural	713
107	Sikka	KM HL Nangahure 96	3.00	3.00	DriftOneLargeNatural	713
108	Sikka	KM HL Nangahure 97	3.00	3.00	DriftOneLargeNatural	713
109	Sikka	KM HL Nangahure 98	3.00	3.00	DriftOneLargeNatural	713
110	Sikka	KM HL Nangahure 99	3.00	3.00	DriftOneLargeNatural	713
111	Sikka	KM HL Nangahure 100	3.00	3.00	DriftOneLargeNatural	713
112	Sikka	KMN PS Nangahure 01	3.00	6.10	PurseSeine	713
113	Sikka	KMN PS Nangahure 02	5.00	6.10	PurseSeine	713
114	Sikka	KMN PS Nangahure 03	5.00	6.10	PurseSeine	713
115	Sikka	KMN PS Nangahure 04	5.00	6.10	PurseSeine	713
116	Sikka	KMN PS Nangahure 05	5.00	6.10	PurseSeine	713
117	Sikka	KMN PS Nangahure 06	5.00	6.10	PurseSeine	713

14.11.3 Follow-up

Nangahure village is a recommended location to deploy CODRS program because their fishing target and fishing gears accord to the program.

14.11.4 Important Contact

Name : Rasyidin
Affiliation : Tuna fisher at Nangahure village
Contact : 081239393741

14.11.5 References

14.11.6 Figures

14.12 Wuring Village, Maumere

14.13 Pemana Island, Maumere

14.13.1 Background and Survey Practicalities

Background

Interview to fishers shows that Pemana village, which is located in Pemana island, is a fisher kampong where the fishers are targeting tuna and skipjack in their fishing trip. Vessels in this location consists of jukung, sampan, bagan and armada (local nama for pole-and-line vessels). Bagan in Pemana village catch small pelagic fish that use both for pole-and-line bait and people consumption in that area.



Figure 14.32

Survey team

Survey was done by Dimas Fergiawan.

Period visited

Survey was conducted on 2 November 2019.

How to get there

Pemana village can be accessed from Airport Franseda in Maumere to Nangahure harbour for about 20 minutes. The travel is continued by a vessels for about 1 hour trip or by a ferry (at Ferry Harbour at Maumere) for about 2 hours trip to Pemana Island.

14.13.2 Fleet Description

Fishing fleet in Pemana island consists of sampan, jukung and pole-and-line. Jukung and sampan vessels are dominated in this area with total number around 200 vessels. Sampan vessel has 7 m in length, while jukung vessel has 9 m in length. Usually, the fishing activity is associated with FADs which is located about 1-2 hours. The fishing trip is one-day fishing. Their fishing target is big tuna, but sometimes they catch juvenile tuna and skipjack. If the fishers able to catch 1 or 2 big tuna, they ended their fishing trip. In average, they use fishing gear DropOneLargeNatural, SurfaceOneLargeLive and TrollMultipleSmallArtificial (interview result). Entering bad weather season, the fishers

switch their fishing target to snapper/grouper fishery.

Total number of pole-and-line vessels in Pemana island, based on interview, is around 100 vessels. The size range from 20GT to 30GT. Those vessels, however, are distributed to several areas such as Larantuka, Maumere, Sape and other areas in East Nusa Tenggara. Usually, those fishers go to Pemana Island on Muslim holiday such as Ied.

Table 14.3: Boat Information from Pemana Island, Maumere

No	Program Site	Boat Name	GT Declared	GT Estimate	Fishing Gear	Fishing Area
1	Sikka	KMN ATM	0.00	2.00	DropOneLargeNatural	713
2	Sikka	KMN ATM	0.00	2.00	DriftOneLargeNatural	713
3	Sikka	KMN HL Pemana 1	0.00	1.23	DriftOneLargeNatural	713
4	Sikka	KMN HL Pemana 2	0.00	1.23	DriftOneLargeNatural	713
5	Sikka	KMN HL Pemana 3	0.00	1.23	DriftOneLargeNatural	713
6	Sikka	KMN HL Pemana 4	0.00	1.23	DriftOneLargeNatural	713
7	Sikka	KMN HL Pemana 5	0.00	1.23	DriftOneLargeNatural	713
8	Sikka	KMN HL Pemana 6	0.00	1.23	DriftOneLargeNatural	713
9	Sikka	KMN HL Pemana 7	0.00	1.23	DriftOneLargeNatural	713
10	Sikka	KMN HL Pemana 8	0.00	1.23	DriftOneLargeNatural	713
11	Sikka	KMN HL Pemana 9	0.00	1.23	DriftOneLargeNatural	713
12	Sikka	KMN HL Pemana 10	0.00	1.23	DriftOneLargeNatural	713
13	Sikka	KMN HL Pemana 11	0.00	1.23	DriftOneLargeNatural	713
14	Sikka	KMN HL Pemana 12	0.00	1.23	DriftOneLargeNatural	713
15	Sikka	KMN HL Pemana 13	0.00	1.23	DriftOneLargeNatural	713
16	Sikka	KMN HL Pemana 14	0.00	1.23	DriftOneLargeNatural	713
17	Sikka	KMN HL Pemana 15	0.00	1.23	DriftOneLargeNatural	713
18	Sikka	KMN HL Pemana 16	0.00	1.23	DriftOneLargeNatural	713
19	Sikka	KMN HL Pemana 17	0.00	1.23	DriftOneLargeNatural	713
20	Sikka	KMN HL Pemana 18	0.00	1.23	DriftOneLargeNatural	713
21	Sikka	KMN HL Pemana 19	0.00	1.23	DriftOneLargeNatural	713
22	Sikka	KMN HL Pemana 20	0.00	1.23	DriftOneLargeNatural	713
23	Sikka	KMN HL Pemana 21	0.00	1.23	DriftOneLargeNatural	713
24	Sikka	KMN HL Pemana 22	0.00	1.23	DriftOneLargeNatural	713
25	Sikka	KMN HL Pemana 23	0.00	1.23	DriftOneLargeNatural	713
26	Sikka	KMN HL Pemana 24	0.00	1.23	DriftOneLargeNatural	713
27	Sikka	KMN HL Pemana 25	0.00	1.23	DriftOneLargeNatural	713
28	Sikka	KMN HL Pemana 26	0.00	1.23	DriftOneLargeNatural	713
29	Sikka	KMN HL Pemana 27	0.00	1.23	DriftOneLargeNatural	713
30	Sikka	KMN HL Pemana 28	0.00	1.23	DriftOneLargeNatural	713
31	Sikka	KMN HL Pemana 29	0.00	1.23	DriftOneLargeNatural	713
32	Sikka	KMN HL Pemana 30	0.00	1.23	DriftOneLargeNatural	713
33	Sikka	KMN HL Pemana 31	0.00	1.23	DriftOneLargeNatural	713
34	Sikka	KMN HL Pemana 32	0.00	1.23	DriftOneLargeNatural	713
35	Sikka	KMN HL Pemana 33	0.00	1.23	DriftOneLargeNatural	713
36	Sikka	KMN HL Pemana 34	0.00	1.23	DriftOneLargeNatural	713
37	Sikka	KMN HL Pemana 35	0.00	1.23	DriftOneLargeNatural	713
38	Sikka	KMN HL Pemana 36	0.00	1.23	DriftOneLargeNatural	713
39	Sikka	KMN HL Pemana 37	0.00	1.23	DriftOneLargeNatural	713
40	Sikka	KMN HL Pemana 38	0.00	1.23	DriftOneLargeNatural	713
41	Sikka	KMN HL Pemana 39	0.00	1.23	DriftOneLargeNatural	713
42	Sikka	KMN HL Pemana 40	0.00	1.23	DriftOneLargeNatural	713
43	Sikka	KMN HL Pemana 41	0.00	1.23	DriftOneLargeNatural	713
44	Sikka	KMN HL Pemana 42	0.00	1.23	DriftOneLargeNatural	713
45	Sikka	KMN HL Pemana 43	0.00	1.23	DriftOneLargeNatural	713
46	Sikka	KMN HL Pemana 44	0.00	1.23	DriftOneLargeNatural	713
47	Sikka	KMN HL Pemana 45	0.00	1.23	DriftOneLargeNatural	713
48	Sikka	KMN HL Pemana 46	0.00	1.23	DriftOneLargeNatural	713
49	Sikka	KMN HL Pemana 47	0.00	1.23	DriftOneLargeNatural	713
50	Sikka	KMN HL Pemana 48	0.00	1.23	DriftOneLargeNatural	713
51	Sikka	KMN HL Pemana 49	0.00	1.23	DriftOneLargeNatural	713
52	Sikka	KMN HL Pemana 50	0.00	1.23	DriftOneLargeNatural	713
53	Sikka	KMN HL Pemana 51	0.00	1.23	DriftOneLargeNatural	713

Table 14.3: Boat Information from Pemana Island, Maumere

No	Program Site	Boat Name	GT Declared	GT Estimate	Fishing Gear	Fishing Area
54	Sikka	KMN HL Pemana 52	0.00	1.23	DriftOneLargeNatural	713
55	Sikka	KMN HL Pemana 53	0.00	1.23	DriftOneLargeNatural	713
56	Sikka	KMN HL Pemana 54	0.00	1.23	DriftOneLargeNatural	713
57	Sikka	KMN HL Pemana 55	0.00	1.23	DriftOneLargeNatural	713
58	Sikka	KMN HL Pemana 56	0.00	1.23	DriftOneLargeNatural	713
59	Sikka	KMN HL Pemana 57	0.00	1.23	DriftOneLargeNatural	713
60	Sikka	KMN HL Pemana 58	0.00	1.23	DriftOneLargeNatural	713
61	Sikka	KMN HL Pemana 59	0.00	1.23	DriftOneLargeNatural	713
62	Sikka	KMN HL Pemana 60	0.00	1.23	DriftOneLargeNatural	713
63	Sikka	KMN HL Pemana 61	0.00	1.23	DriftOneLargeNatural	713
64	Sikka	KMN HL Pemana 62	0.00	1.23	DriftOneLargeNatural	713
65	Sikka	KMN HL Pemana 63	0.00	1.23	DriftOneLargeNatural	713
66	Sikka	KMN HL Pemana 64	0.00	1.23	DriftOneLargeNatural	713
67	Sikka	KMN HL Pemana 65	0.00	1.23	DriftOneLargeNatural	713
68	Sikka	KMN HL Pemana 66	0.00	1.23	DriftOneLargeNatural	713
69	Sikka	KMN HL Pemana 67	0.00	1.23	DriftOneLargeNatural	713
70	Sikka	KMN HL Pemana 68	0.00	1.23	DriftOneLargeNatural	713
71	Sikka	KMN HL Pemana 69	0.00	1.23	DriftOneLargeNatural	713
72	Sikka	KMN HL Pemana 70	0.00	1.23	DriftOneLargeNatural	713
73	Sikka	KMN HL Pemana 71	0.00	1.23	DriftOneLargeNatural	713
74	Sikka	KMN HL Pemana 72	0.00	1.23	DriftOneLargeNatural	713
75	Sikka	KMN HL Pemana 73	0.00	1.23	DriftOneLargeNatural	713
76	Sikka	KMN HL Pemana 74	0.00	1.23	DriftOneLargeNatural	713
77	Sikka	KMN HL Pemana 75	0.00	1.23	DriftOneLargeNatural	713
78	Sikka	KMN HL Pemana 76	0.00	1.23	DriftOneLargeNatural	713
79	Sikka	KMN HL Pemana 77	0.00	1.23	DriftOneLargeNatural	713
80	Sikka	KMN HL Pemana 78	0.00	1.23	DriftOneLargeNatural	713
81	Sikka	KMN HL Pemana 79	0.00	1.23	DriftOneLargeNatural	713
82	Sikka	KMN HL Pemana 80	0.00	1.23	DriftOneLargeNatural	713
83	Sikka	KMN HL Pemana 81	0.00	1.23	DriftOneLargeNatural	713
84	Sikka	KMN HL Pemana 82	0.00	1.23	DriftOneLargeNatural	713
85	Sikka	KMN HL Pemana 83	0.00	1.23	DriftOneLargeNatural	713
86	Sikka	KMN HL Pemana 84	0.00	1.23	DriftOneLargeNatural	713
87	Sikka	KMN HL Pemana 85	0.00	1.23	DriftOneLargeNatural	713
88	Sikka	KMN HL Pemana 86	0.00	1.23	DriftOneLargeNatural	713
89	Sikka	KMN HL Pemana 87	0.00	1.23	DriftOneLargeNatural	713
90	Sikka	KMN HL Pemana 88	0.00	1.23	DriftOneLargeNatural	713
91	Sikka	KMN HL Pemana 89	0.00	1.23	DriftOneLargeNatural	713
92	Sikka	KMN HL Pemana 90	0.00	1.23	DriftOneLargeNatural	713
93	Sikka	KMN HL Pemana 91	0.00	1.23	DriftOneLargeNatural	713
94	Sikka	KMN HL Pemana 92	0.00	1.23	DriftOneLargeNatural	713
95	Sikka	KMN HL Pemana 93	0.00	1.23	DriftOneLargeNatural	713
96	Sikka	KMN HL Pemana 94	0.00	1.23	DriftOneLargeNatural	713
97	Sikka	KMN HL Pemana 95	0.00	1.23	DriftOneLargeNatural	713
98	Sikka	KMN HL Pemana 96	0.00	1.23	DriftOneLargeNatural	713
99	Sikka	KMN HL Pemana 97	0.00	1.23	DriftOneLargeNatural	713
100	Sikka	KMN HL Pemana 98	0.00	1.23	DriftOneLargeNatural	713
101	Sikka	KMN HL Pemana 99	0.00	1.23	DriftOneLargeNatural	713
102	Sikka	KMN HL Pemana 100	0.00	1.23	DriftOneLargeNatural	713
103	Sikka	KMN HL Pemana 101	0.00	1.23	DriftOneLargeNatural	713
104	Sikka	KMN HL Pemana 102	0.00	1.23	DriftOneLargeNatural	713
105	Sikka	KMN HL Pemana 103	0.00	1.23	DriftOneLargeNatural	713
106	Sikka	KMN HL Pemana 104	0.00	1.23	DriftOneLargeNatural	713
107	Sikka	KMN HL Pemana 105	0.00	1.23	DriftOneLargeNatural	713
108	Sikka	KMN HL Pemana 106	0.00	1.23	DriftOneLargeNatural	713
109	Sikka	KMN HL Pemana 107	0.00	1.23	DriftOneLargeNatural	713
110	Sikka	KMN HL Pemana 108	0.00	1.23	DriftOneLargeNatural	713
111	Sikka	KMN HL Pemana 109	0.00	1.23	DriftOneLargeNatural	713
112	Sikka	KMN HL Pemana 110	0.00	1.23	DriftOneLargeNatural	713
113	Sikka	KMN HL Pemana 111	0.00	1.23	DriftOneLargeNatural	713

Table 14.3: Boat Information from Pemana Island, Maumere

No	Program Site	Boat Name	GT Declared	GT Estimate	Fishing Gear	Fishing Area
114	Sikka	KMN HL Pemana 112	0.00	1.23	DriftOneLargeNatural	713
115	Sikka	KMN HL Pemana 113	0.00	1.23	DriftOneLargeNatural	713
116	Sikka	KMN HL Pemana 114	0.00	1.23	DriftOneLargeNatural	713
117	Sikka	KMN HL Pemana 115	0.00	1.23	DriftOneLargeNatural	713
118	Sikka	KMN HL Pemana 116	0.00	1.23	DriftOneLargeNatural	713
119	Sikka	KMN HL Pemana 117	0.00	1.23	DriftOneLargeNatural	713
120	Sikka	KMN HL Pemana 118	0.00	1.23	DriftOneLargeNatural	713
121	Sikka	KMN HL Pemana 119	0.00	1.23	DriftOneLargeNatural	713
122	Sikka	KMN HL Pemana 120	0.00	1.23	DriftOneLargeNatural	713
123	Sikka	KMN HL Pemana 121	0.00	1.23	DriftOneLargeNatural	713
124	Sikka	KMN HL Pemana 122	0.00	1.23	DriftOneLargeNatural	713
125	Sikka	KMN HL Pemana 123	0.00	1.23	DriftOneLargeNatural	713
126	Sikka	KMN HL Pemana 124	0.00	1.23	DriftOneLargeNatural	713
127	Sikka	KMN HL Pemana 125	0.00	1.23	DriftOneLargeNatural	713
128	Sikka	KMN HL Pemana 126	0.00	1.23	DriftOneLargeNatural	713
129	Sikka	KMN HL Pemana 127	0.00	1.23	DriftOneLargeNatural	713
130	Sikka	KMN HL Pemana 128	0.00	1.23	DriftOneLargeNatural	713
131	Sikka	KMN HL Pemana 129	0.00	1.23	DriftOneLargeNatural	713
132	Sikka	KMN HL Pemana 130	0.00	1.23	DriftOneLargeNatural	713
133	Sikka	KMN HL Pemana 131	0.00	1.23	DriftOneLargeNatural	713
134	Sikka	KMN HL Pemana 132	0.00	1.23	DriftOneLargeNatural	713
135	Sikka	KMN HL Pemana 133	0.00	1.23	DriftOneLargeNatural	713
136	Sikka	KMN HL Pemana 134	0.00	1.23	DriftOneLargeNatural	713
137	Sikka	KMN HL Pemana 135	0.00	1.23	DriftOneLargeNatural	713
138	Sikka	KMN HL Pemana 136	0.00	1.23	DriftOneLargeNatural	713
139	Sikka	KMN HL Pemana 137	0.00	1.23	DriftOneLargeNatural	713
140	Sikka	KMN HL Pemana 138	0.00	1.23	DriftOneLargeNatural	713
141	Sikka	KMN HL Pemana 139	0.00	1.23	DriftOneLargeNatural	713
142	Sikka	KMN HL Pemana 140	0.00	1.23	DriftOneLargeNatural	713
143	Sikka	KMN HL Pemana 141	0.00	1.23	DriftOneLargeNatural	713
144	Sikka	KMN HL Pemana 142	0.00	1.23	DriftOneLargeNatural	713
145	Sikka	KMN HL Pemana 143	0.00	1.23	DriftOneLargeNatural	713
146	Sikka	KMN HL Pemana 144	0.00	1.23	DriftOneLargeNatural	713
147	Sikka	KMN HL Pemana 145	0.00	1.23	DriftOneLargeNatural	713
148	Sikka	KMN HL Pemana 146	0.00	1.23	DriftOneLargeNatural	713
149	Sikka	KMN HL Pemana 147	0.00	1.23	DriftOneLargeNatural	713
150	Sikka	KMN HL Pemana 148	0.00	1.23	DriftOneLargeNatural	713
151	Sikka	KMN HL Pemana 149	0.00	1.23	DriftOneLargeNatural	713
152	Sikka	KMN HL Pemana 150	0.00	1.23	DriftOneLargeNatural	713

14.13.3 Follow-up

Our survey found that there were many tuna fishing fleet in the location. However, the small scale converts to snapper or grouper fisheries during bad weather. While the large scale is distributed to other areas such in NTT. Therefore, this place is not recommended to deploy CODRS program.

14.13.4 Important Contact

Name : Edi
Affiliation : Pengumpul Tuna Loin Pulau Pemana & Parumaan
Contact : 08533788393

14.13.5 References

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14.13.6 Figures



Figure 14.33: Pole-and-line vessels at Pemana Island



Figure 14.34: Nano handline vessels (sampan and jukung) at Pemana Island

14.14 Parumaan Island and Kodia, Maumere

14.14.1 Background and Survey Practicalities

Background

Our survey to fishers in Nangahure and Pemana shows that potency of tuna fisheries in Maumere comes from people in Parumanan and Kodia islands. Those islands are facing each other (Figure below). Here is the link to Google Maps <https://www.google.com/maps/@-8.4542496,122.4450895,823m/data=!3m1!1e3>



Figure 14.35

Survey team

Survey was done by Dimas Fergiawan.

Period visited

Survey was conducted on 2 November 2019.

How to get there

Pulau Parumaan and Kodia can be accessed from Airport Franseda in Maumere to Nangahure harbour for about 20 minutes. The travel is continued by a vessels for about 2 hour trip to Parumaan and Kodia islands.

14.14.2 Fleet Description

Tuna vessels in Parumaan and Kodia has a common length for about between 9 to 12 meters. The vessels have a machine 17-35 PK and is usually operated by 1 or 2 people on-board. Dominant fishing gear in Parumaan and Kodia are DropOneLargeNatural and SurfaceOneLargeLive. Sometimes the fishers bring TrollMultipleSmallArtificial dan TrollOneLargeArtificial. The operation of those fishing gears depends on fishing location and situation. The fishing activity is associated with FADs or dolphins. Usually they fishing for one-day trip. The fishers leave for fishing in the afternoon and comeback to the island in the next morning. Interview to fishers mentioned that there are around 70 active vessels in Parumaan and 50 active vessels in Kodia. Tuna catch is cut into loins and accepted by middle-man and then send to Maumere by the collecting vessels. Entering bad weather, the fishers convert to snapper or grouper fishery.

Table 14.4: Boat Information from Parumaan Island and Kodia, Maumere

No	Program Site	Boat Name	GT Declared	GT Estimate	Fishing Gear	Fishing Area
1	Sikka	KM HL Parumaan 1	0.00	1.23	DriftOneLargeNatural	713
2	Sikka	KM HL Parumaan 2	0.00	1.23	DriftOneLargeNatural	713
3	Sikka	KM HL Parumaan 3	0.00	1.23	DriftOneLargeNatural	713
4	Sikka	KM HL Parumaan 4	0.00	1.23	DriftOneLargeNatural	713
5	Sikka	KM HL Parumaan 5	0.00	1.23	DriftOneLargeNatural	713
6	Sikka	KM HL Parumaan 6	0.00	1.23	DriftOneLargeNatural	713
7	Sikka	KM HL Parumaan 7	0.00	1.23	DriftOneLargeNatural	713
8	Sikka	KM HL Parumaan 8	0.00	1.23	DriftOneLargeNatural	713
9	Sikka	KM HL Parumaan 9	0.00	1.23	DriftOneLargeNatural	713
10	Sikka	KM HL Parumaan 10	0.00	1.23	DriftOneLargeNatural	713
11	Sikka	KM HL Parumaan 11	0.00	1.23	DriftOneLargeNatural	713
12	Sikka	KM HL Parumaan 12	0.00	1.23	DriftOneLargeNatural	713
13	Sikka	KM HL Parumaan 13	0.00	1.23	DriftOneLargeNatural	713
14	Sikka	KM HL Parumaan 14	0.00	1.23	DriftOneLargeNatural	713
15	Sikka	KM HL Parumaan 15	0.00	1.23	DriftOneLargeNatural	713
16	Sikka	KM HL Parumaan 16	0.00	1.23	DriftOneLargeNatural	713
17	Sikka	KM HL Parumaan 17	0.00	1.23	DriftOneLargeNatural	713
18	Sikka	KM HL Parumaan 18	0.00	1.23	DriftOneLargeNatural	713
19	Sikka	KM HL Parumaan 19	0.00	1.23	DriftOneLargeNatural	713
20	Sikka	KM HL Parumaan 20	0.00	1.23	DriftOneLargeNatural	713
21	Sikka	KM HL Parumaan 21	0.00	1.23	DriftOneLargeNatural	713
22	Sikka	KM HL Parumaan 22	0.00	1.23	DriftOneLargeNatural	713
23	Sikka	KM HL Parumaan 23	0.00	1.23	DriftOneLargeNatural	713
24	Sikka	KM HL Parumaan 24	0.00	1.23	DriftOneLargeNatural	713
25	Sikka	KM HL Parumaan 25	0.00	1.23	DriftOneLargeNatural	713
26	Sikka	KM HL Parumaan 26	0.00	1.23	DriftOneLargeNatural	713
27	Sikka	KM HL Parumaan 27	0.00	1.23	DriftOneLargeNatural	713
28	Sikka	KM HL Parumaan 28	0.00	1.23	DriftOneLargeNatural	713
29	Sikka	KM HL Parumaan 29	0.00	1.23	DriftOneLargeNatural	713
30	Sikka	KM HL Parumaan 30	0.00	1.23	DriftOneLargeNatural	713
31	Sikka	KM HL Parumaan 31	0.00	1.23	DriftOneLargeNatural	713
32	Sikka	KM HL Parumaan 32	0.00	1.23	DriftOneLargeNatural	713
33	Sikka	KM HL Parumaan 33	0.00	1.23	DriftOneLargeNatural	713
34	Sikka	KM HL Parumaan 34	0.00	1.23	DriftOneLargeNatural	713
35	Sikka	KM HL Parumaan 35	0.00	1.23	DriftOneLargeNatural	713
36	Sikka	KM HL Parumaan 36	0.00	1.23	DriftOneLargeNatural	713
37	Sikka	KM HL Parumaan 37	0.00	1.23	DriftOneLargeNatural	713
38	Sikka	KM HL Parumaan 38	0.00	1.23	DriftOneLargeNatural	713
39	Sikka	KM HL Parumaan 39	0.00	1.23	DriftOneLargeNatural	713
40	Sikka	KM HL Parumaan 40	0.00	1.23	DriftOneLargeNatural	713
41	Sikka	KM HL Parumaan 41	0.00	1.23	DriftOneLargeNatural	713
42	Sikka	KM HL Parumaan 42	0.00	1.23	DriftOneLargeNatural	713
43	Sikka	KM HL Parumaan 43	0.00	1.23	DriftOneLargeNatural	713

Table 14.4: Boat Information from Parumaan Island and Kodia, Maumere

No	Program Site	Boat Name	GT Declared	GT Estimate	Fishing Gear	Fishing Area
44	Sikka	KM HL Parumaan 44	0.00	1.23	DriftOneLargeNatural	713
45	Sikka	KM HL Parumaan 45	0.00	1.23	DriftOneLargeNatural	713
46	Sikka	KM HL Parumaan 46	0.00	1.23	DriftOneLargeNatural	713
47	Sikka	KM HL Parumaan 47	0.00	1.23	DriftOneLargeNatural	713
48	Sikka	KM HL Parumaan 48	0.00	1.23	DriftOneLargeNatural	713
49	Sikka	KM HL Parumaan 49	0.00	1.23	DriftOneLargeNatural	713
50	Sikka	KM HL Parumaan 50	0.00	1.23	DriftOneLargeNatural	713
51	Sikka	KM HL Parumaan 51	0.00	1.23	DriftOneLargeNatural	713
52	Sikka	KM HL Parumaan 52	0.00	1.23	DriftOneLargeNatural	713
53	Sikka	KM HL Parumaan 53	0.00	1.23	DriftOneLargeNatural	713
54	Sikka	KM HL Parumaan 54	0.00	1.23	DriftOneLargeNatural	713
55	Sikka	KM HL Parumaan 55	0.00	1.23	DriftOneLargeNatural	713
56	Sikka	KM HL Parumaan 56	0.00	1.23	DriftOneLargeNatural	713
57	Sikka	KM HL Parumaan 57	0.00	1.23	DriftOneLargeNatural	713
58	Sikka	KM HL Parumaan 58	0.00	1.23	DriftOneLargeNatural	713
59	Sikka	KM HL Parumaan 59	0.00	1.23	DriftOneLargeNatural	713
60	Sikka	KM HL Parumaan 60	0.00	1.23	DriftOneLargeNatural	713
61	Sikka	KM HL Parumaan 61	0.00	1.23	DriftOneLargeNatural	713
62	Sikka	KM HL Parumaan 62	0.00	1.23	DriftOneLargeNatural	713
63	Sikka	KM HL Parumaan 63	0.00	1.23	DriftOneLargeNatural	713
64	Sikka	KM HL Parumaan 64	0.00	1.23	DriftOneLargeNatural	713
65	Sikka	KM HL Parumaan 65	0.00	1.23	DriftOneLargeNatural	713
66	Sikka	KM HL Parumaan 66	0.00	1.23	DriftOneLargeNatural	713
67	Sikka	KM HL Parumaan 67	0.00	1.23	DriftOneLargeNatural	713
68	Sikka	KM HL Parumaan 68	0.00	1.23	DriftOneLargeNatural	713
69	Sikka	KM HL Parumaan 69	0.00	1.23	DriftOneLargeNatural	713
70	Sikka	KM HL Parumaan 70	0.00	1.23	DriftOneLargeNatural	713
71	Sikka	KM HL Kodia 1	0.00	1.23	DriftOneLargeNatural	713
72	Sikka	KM HL Kodia 2	0.00	1.23	DriftOneLargeNatural	713
73	Sikka	KM HL Kodia 3	0.00	1.23	DriftOneLargeNatural	713
74	Sikka	KM HL Kodia 4	0.00	1.23	DriftOneLargeNatural	713
75	Sikka	KM HL Kodia 5	0.00	1.23	DriftOneLargeNatural	713
76	Sikka	KM HL Kodia 6	0.00	1.23	DriftOneLargeNatural	713
77	Sikka	KM HL Kodia 7	0.00	1.23	DriftOneLargeNatural	713
78	Sikka	KM HL Kodia 8	0.00	1.23	DriftOneLargeNatural	713
79	Sikka	KM HL Kodia 9	0.00	1.23	DriftOneLargeNatural	713
80	Sikka	KM HL Kodia 10	0.00	1.23	DriftOneLargeNatural	713
81	Sikka	KM HL Kodia 11	0.00	1.23	DriftOneLargeNatural	713
82	Sikka	KM HL Kodia 12	0.00	1.23	DriftOneLargeNatural	713
83	Sikka	KM HL Kodia 13	0.00	1.23	DriftOneLargeNatural	713
84	Sikka	KM HL Kodia 14	0.00	1.23	DriftOneLargeNatural	713
85	Sikka	KM HL Kodia 15	0.00	1.23	DriftOneLargeNatural	713
86	Sikka	KM HL Kodia 16	0.00	1.23	DriftOneLargeNatural	713
87	Sikka	KM HL Kodia 17	0.00	1.23	DriftOneLargeNatural	713
88	Sikka	KM HL Kodia 18	0.00	1.23	DriftOneLargeNatural	713
89	Sikka	KM HL Kodia 19	0.00	1.23	DriftOneLargeNatural	713
90	Sikka	KM HL Kodia 20	0.00	1.23	DriftOneLargeNatural	713
91	Sikka	KM HL Kodia 21	0.00	1.23	DriftOneLargeNatural	713
92	Sikka	KM HL Kodia 22	0.00	1.23	DriftOneLargeNatural	713
93	Sikka	KM HL Kodia 23	0.00	1.23	DriftOneLargeNatural	713
94	Sikka	KM HL Kodia 24	0.00	1.23	DriftOneLargeNatural	713
95	Sikka	KM HL Kodia 25	0.00	1.23	DriftOneLargeNatural	713
96	Sikka	KM HL Kodia 26	0.00	1.23	DriftOneLargeNatural	713
97	Sikka	KM HL Kodia 27	0.00	1.23	DriftOneLargeNatural	713
98	Sikka	KM HL Kodia 28	0.00	1.23	DriftOneLargeNatural	713
99	Sikka	KM HL Kodia 29	0.00	1.23	DriftOneLargeNatural	713
100	Sikka	KM HL Kodia 30	0.00	1.23	DriftOneLargeNatural	713
101	Sikka	KM HL Kodia 31	0.00	1.23	DriftOneLargeNatural	713
102	Sikka	KM HL Kodia 32	0.00	1.23	DriftOneLargeNatural	713
103	Sikka	KM HL Kodia 33	0.00	1.23	DriftOneLargeNatural	713

Table 14.4: Boat Information from Parumaan Island and Kodia, Maumere

No	Program Site	Boat Name	GT Declared	GT Estimate	Fishing Gear	Fishing Area
104	Sikka	KM HL Kodia 34	0.00	1.23	DriftOneLargeNatural	713
105	Sikka	KM HL Kodia 35	0.00	1.23	DriftOneLargeNatural	713
106	Sikka	KM HL Kodia 36	0.00	1.23	DriftOneLargeNatural	713
107	Sikka	KM HL Kodia 37	0.00	1.23	DriftOneLargeNatural	713
108	Sikka	KM HL Kodia 38	0.00	1.23	DriftOneLargeNatural	713
109	Sikka	KM HL Kodia 39	0.00	1.23	DriftOneLargeNatural	713
110	Sikka	KM HL Kodia 40	0.00	1.23	DriftOneLargeNatural	713
111	Sikka	KM HL Kodia 41	0.00	1.23	DriftOneLargeNatural	713
112	Sikka	KM HL Kodia 42	0.00	1.23	DriftOneLargeNatural	713
113	Sikka	KM HL Kodia 43	0.00	1.23	DriftOneLargeNatural	713
114	Sikka	KM HL Kodia 44	0.00	1.23	DriftOneLargeNatural	713
115	Sikka	KM HL Kodia 45	0.00	1.23	DriftOneLargeNatural	713
116	Sikka	KM HL Kodia 46	0.00	1.23	DriftOneLargeNatural	713
117	Sikka	KM HL Kodia 47	0.00	1.23	DriftOneLargeNatural	713
118	Sikka	KM HL Kodia 48	0.00	1.23	DriftOneLargeNatural	713
119	Sikka	KM HL Kodia 49	0.00	1.23	DriftOneLargeNatural	713
120	Sikka	KM HL Kodia 50	0.00	1.23	DriftOneLargeNatural	713

14.14.3 Follow-up

Our survey found that there were many tuna fishing fleet in the location. However, the small scale converts to snapper or grouper fisheries during bad weather. Therefore, this place is not recommended to deploy CODRS program.

14.14.4 Important Contact

Name : Edi
Affiliation : Pengumpul Tuna Loin Pulau Pemana & Parumaan
Contact : 08533788393

14.14.5 References

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14.14.6 Figures



Figure 14.36: Fishing fleet in Parumaan Island



Figure 14.37: Collecting vessels in Parumaan Island

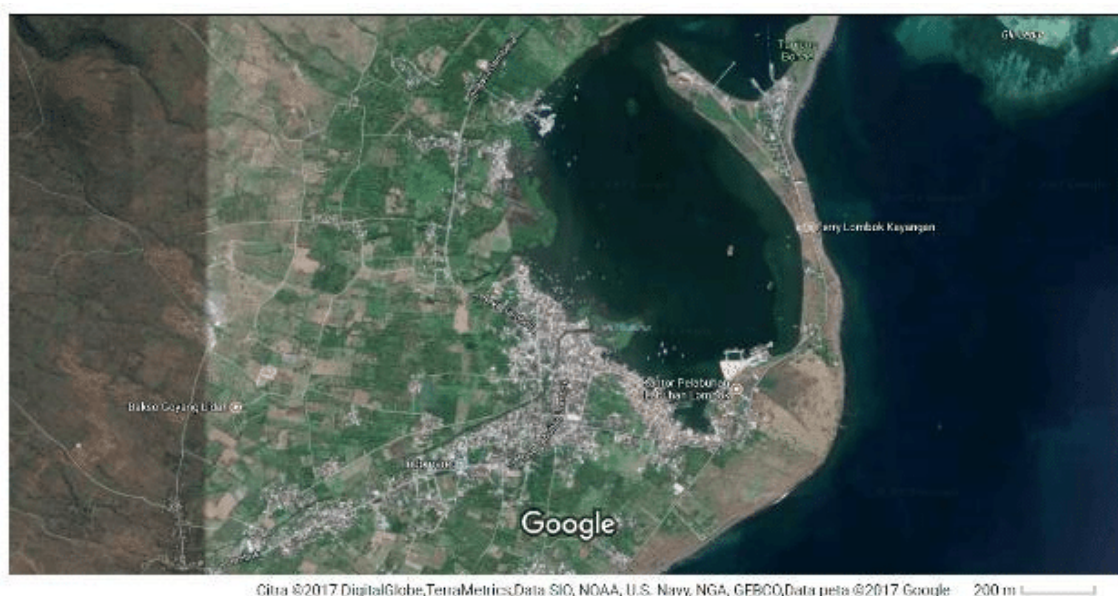
15 West Nusa Tenggara Province

15.1 CFP. Labuhan Lombok, Lombok Timur

15.1.1 Background and Survey Practicalities

Background

Labuhan Lombok is located in Lombok Bay, East Lombok district West Nusa Tenggara Province. This harbour is one of the biggest landing sites in East Lombok besides Tanjung Luar fishing harbour. According to the classification issued by DGCF, Labuhan Lombok belongs to Coastal Fishing Port (CFP) allotted for small scale industries. Small scale industries are characterized by multi-gears and multi-species. The fishing fleet with gross tonnage (GT) >10 are dominant in this area. They use two major fishing gears, i.e. troll line and hand line (with various modification on the design, hook, and bait). Most of tuna vessels here originated from South of Sulawesi (or Known as immigrant /Andon fishermen) in which 60



Location Labuhan Lombok fishing harbour (taken from Google Map)

Survey team

Survey was done by Dwaitd Kolibonso

Period visited

This survey was conducted on 20-23 February 2018.

How to get there

PPP Labuhan Lombok can be accessed by car from Lombok International Airport at Praya (Central Lombok district) by 1.5 hours travelling.

15.1.2 Fleet Description

Based on the license of fish carrier vessel (SIKPI) issued by transportation office (Dinas Perhubungan Laut), there were only two types of fishing vessels with daily-based fishing operation namely carrier vessel and catcher vessel using troll line gear. The size both vessel types are above 10 GT, mostly between 15-29 GT. Based on the data provided by Fisheries and Marine Surveillance Agency (PSDKP) in 2017, there were 399 registered vessels, 16 vessels are recognized as carrier vessels while the rest (383 units) were troll line vessels. Carrier's vessel is not equipped with the fishing gears. It only collects fish from local fishermen around the islands, while troll line vessel uses multi-gears such as: trolling lines (multiple small hook with artificial lure and trolling lines single hook with artificial lure), drift lines with buoy (single hook with dead natural bait), and weighted drop lines (multiple small hook with artificial lure and single hook with dead natural bait). Natural bait is sourced from juvenile tonggol (*Auxis rochei*, *Euthynnus affinis*), and Squid.

Troll line or hand line vessel commonly has the size dimension around 10 - 20 meter for length; 2.5 – 4.5 meter for width; and 0.8 – 2 meter for height. The main material for constructing the vessel is wood. The engine brands and specification are Yanmar and Jian Dong with 30 – 40 PK for power. Every vessel has 3 – 4 unit storages with the maximum capacity around 1 – 1.5 tonnage per storages. The storage is made from fiber and wood. There are 4 – 6 vessel crew join in each fishing trip.

Fishing ground for the most troll line vessels is in FMA 573 southern of West Nusa Tenggara (between Lombok to Sumbawa Island) until Sumba strait to southeast Sumba Island until Savu Sea. However, some vessels occasionally operate in Flores Sea (FMA 713). Troll line or hand line vessels rely on the FADs network anchored in the shallow waters. Those FADs are constructed from Styrofoam cube with 2 x 2 x 1 m as the buoy attached to 20 – 30 pieces of cement concrete as the sinkers. Coconut leaves are used for the fish attractor. Each vessel group consisted of 4-7 vessels has 3-5 FADs. The fishing trip takes around 12-18 days depending on the catch amount. It takes around 2-3 days for the travelling to the fishing ground. They start to fish on one FAD and check on the other FADs. It is very rare fishing on free schools.

The catch composition is yellowfin tuna (*Thunnus albacares*), skipjack (*Katsuwonus pelamis*), kawa-kawa (*Euthynnus affinis*), bigeye tuna (*Thunnus obesus*), bullet tuna (*Auxis rochei*), dolphinfish (*Coryphaena hippurus*), rainbow runner (*Elagatis bipinnulata*), wahoo (*Acanthocybium solandri*), black marlin (*Makaira indica*) and blue Marlin (*Makaira nigricans*). There are 6 fishing vessels joined CODRS program since April 2018.

Table 15.1: Boat Information from CFP. Labuhan Lombok, Lombok Timur

No	Program Site	Boat Name	GT Declared	GT Estimate	Fishing Gear
1	Lombok Timur	KMN RAHMA ABADI 02	19.00	16.00	TrollMultipleSmallArtificia
2	Lombok Timur	KMN SAFIRA LB	15.00	15.00	TrollMultipleSmallArtificia
3	Lombok Timur	KMN SAMPOERNA 05	28.00	28.00	TrollMultipleSmallArtificia
4	Lombok Timur	KMN INDRAKU	22.00	19.30	TrollMultipleSmallArtificia
5	Lombok Timur	KMN PERMATA MERAH 01	27.00	23.20	TrollMultipleSmallArtificia
6	Lombok Timur	KMN RIZKY MAULANA	25.00	20.30	TrollMultipleSmallArtificia
7	Lombok Timur	KMN ARYA JAYA 02	27.00	23.80	TrollMultipleSmallArtificia
8	Lombok Timur	BONE DUA 03	4.00	13.00	Gillnet
9	Lombok Timur	CAHAYA BONE 06	6.00	11.00	Gillnet
10	Lombok Timur	USAHA BARU 20	6.00	21.00	TrollOneLargeArtificial
11	Lombok Timur	ADI JAYA 01	5.00	13.00	TrollOneLargeArtificial

Table 15.1: Boat Information from CFP. Labuhan Lombok, Lombok Timur

No	Program Site	Boat Name	GT Declared	GT Estimate	Fishing Gear
12	Lombok Timur	ADIA 01	6.00	11.00	TrollOneLargeArtificial
13	Lombok Timur	ADIDAS 01	5.00	5.80	TrollOneLargeArtificial
14	Lombok Timur	AIR ZAM ZAM	5.00	11.00	TrollOneLargeArtificial
15	Lombok Timur	AIR ZAM ZAM KECIL	5.00	9.00	TrollOneLargeArtificial
16	Lombok Timur	AISAH 06	21.00	6.00	TrollOneLargeArtificial
17	Lombok Timur	AISAH 17	21.00	13.00	TrollOneLargeArtificial
18	Lombok Timur	AISAH 19	22.00	13.00	TrollOneLargeArtificial
19	Lombok Timur	AISAH 20	21.00	13.00	TrollOneLargeArtificial
20	Lombok Timur	AISAH 23	21.00	13.00	TrollOneLargeArtificial
21	Lombok Timur	AISAH 27	21.00	19.80	TrollOneLargeArtificial
22	Lombok Timur	AISAH 32	25.00	13.70	TrollOneLargeArtificial
23	Lombok Timur	AISAH 34	22.00	20.30	TrollOneLargeArtificial
24	Lombok Timur	AISAH 35	22.00	20.40	TrollOneLargeArtificial
25	Lombok Timur	AKARNI JAYA 06	6.00	4.00	TrollOneLargeArtificial
26	Lombok Timur	AKARNI JAYA 07	20.00	5.00	TrollOneLargeArtificial
27	Lombok Timur	AKARNI JAYA 08	6.00	4.00	TrollOneLargeArtificial
28	Lombok Timur	AKARNI JAYA 09	6.00	5.00	TrollOneLargeArtificial
29	Lombok Timur	AL FAIZ	4.00	6.00	TrollOneLargeArtificial
30	Lombok Timur	AL FAIZ EKS USAHA BARU 10	4.00	6.00	TrollOneLargeArtificial
31	Lombok Timur	AL JASIRA 01	5.00	6.00	TrollOneLargeArtificial
32	Lombok Timur	AL JASIRA 02	5.00	6.00	TrollOneLargeArtificial
33	Lombok Timur	AL MUNAWARA	6.00	6.00	TrollOneLargeArtificial
34	Lombok Timur	AL MUNAWARA 01	4.00	6.00	TrollOneLargeArtificial
35	Lombok Timur	AL MUNAWARA 05	6.00	6.80	TrollOneLargeArtificial
36	Lombok Timur	ALDI	4.00	6.00	TrollOneLargeArtificial
37	Lombok Timur	AMANAH	6.00	6.00	TrollOneLargeArtificial
38	Lombok Timur	AMIRA JAYA	17.00	6.00	TrollOneLargeArtificial
39	Lombok Timur	ANANG JAYA 04	21.00	6.00	TrollOneLargeArtificial
40	Lombok Timur	ANANG JAYA 05	6.00	6.00	TrollOneLargeArtificial
41	Lombok Timur	ANDIKA BL	6.00	6.00	TrollOneLargeArtificial
42	Lombok Timur	ANNISA	5.00	3.10	TrollOneLargeArtificial
43	Lombok Timur	ANUGRAH_LOMBOK_TIMUR	5.00	6.00	TrollOneLargeArtificial
44	Lombok Timur	ARAFA	6.00	6.00	TrollOneLargeArtificial
45	Lombok Timur	ARDILLA 01	16.00	6.00	TrollOneLargeArtificial
46	Lombok Timur	ARDILLA 02	21.00	6.00	TrollOneLargeArtificial
47	Lombok Timur	ARDILLA 03	17.00	6.00	TrollOneLargeArtificial
48	Lombok Timur	ARDILLA 05	16.00	6.00	TrollOneLargeArtificial
49	Lombok Timur	ARJUNA_LOMBOK_TIMUR	5.00	6.00	TrollOneLargeArtificial
50	Lombok Timur	ARMADA 02	6.00	6.00	TrollOneLargeArtificial
51	Lombok Timur	ARRAHMAN	1.00	1.00	TrollOneLargeArtificial
52	Lombok Timur	ARSILA 01	6.00	6.00	TrollOneLargeArtificial
53	Lombok Timur	ARSILA 02	5.00	6.00	TrollOneLargeArtificial
54	Lombok Timur	ARYA JAYA 01	6.00	6.00	TrollOneLargeArtificial
55	Lombok Timur	ASSUMAR	4.00	6.00	TrollOneLargeArtificial
56	Lombok Timur	ASYAHWWAH	23.00	6.00	TrollOneLargeArtificial
57	Lombok Timur	AULIAH 01	6.00	6.00	TrollOneLargeArtificial
58	Lombok Timur	AULIAH 02	23.00	6.00	TrollOneLargeArtificial
59	Lombok Timur	AYU NADIFA	6.00	6.00	TrollOneLargeArtificial
60	Lombok Timur	AZ ZAHRA 04	6.00	6.00	TrollOneLargeArtificial
61	Lombok Timur	BARA JAYA	6.00	6.00	TrollOneLargeArtificial
62	Lombok Timur	BARAKKA TULLAH	3.00	6.00	TrollOneLargeArtificial
63	Lombok Timur	BARUNA 03	5.00	6.00	TrollOneLargeArtificial
64	Lombok Timur	BARUNA 04	5.00	6.00	TrollOneLargeArtificial
65	Lombok Timur	BARUNA 05	5.00	8.00	TrollOneLargeArtificial
66	Lombok Timur	BAURA 06	5.00	8.00	TrollOneLargeArtificial
67	Lombok Timur	BERLIAN_KALAPI	4.00	8.00	TrollOneLargeArtificial
68	Lombok Timur	BERLIAN_HASRUDIN	5.00	8.00	TrollOneLargeArtificial
69	Lombok Timur	BERLIAN 01	3.00	8.00	TrollOneLargeArtificial
70	Lombok Timur	BERLIAN 02	5.00	8.00	TrollOneLargeArtificial
71	Lombok Timur	BERLIAN 03	2.00	8.00	TrollOneLargeArtificial

Table 15.1: Boat Information from CFP. Labuhan Lombok, Lombok Timur

No	Program Site	Boat Name	GT Declared	GT Estimate	Fishing Gear
72	Lombok Timur	BISFALA 08	5.00	7.70	PoleAndLine
73	Lombok Timur	BONE DUA 02	22.00	16.40	PoleAndLine
74	Lombok Timur	BONE RAYA INDAH 01	5.00	8.00	TrollOneLargeArtificial
75	Lombok Timur	BORNEO 01	6.00	8.00	TrollOneLargeArtificial
76	Lombok Timur	BORNEO AFGAN	19.00	9.00	TrollOneLargeArtificial
77	Lombok Timur	BUAH KURMA	3.00	9.00	TrollOneLargeArtificial
78	Lombok Timur	BUANA MANDAR	5.00	9.00	TrollOneLargeArtificial
79	Lombok Timur	BUANA RESKI ILAHI	5.00	13.00	TrollOneLargeArtificial
80	Lombok Timur	BULU KAMASE 03	6.00	13.00	TrollOneLargeArtificial
81	Lombok Timur	BULU KAMASE 06	6.00	13.00	TrollOneLargeArtificial
82	Lombok Timur	BUNGA INDAH	6.00	13.00	Gillnet
83	Lombok Timur	BUNGA MAS 02	6.00	13.00	Gillnet
84	Lombok Timur	BUNGA MAS 04	5.00	15.00	TrollOneLargeArtificial
85	Lombok Timur	BUNGA SELAMAT	5.00	15.00	TrollOneLargeArtificial
86	Lombok Timur	BURA MANDAR	6.00	15.00	TrollOneLargeArtificial
87	Lombok Timur	CAHAYA ABADI 02	4.00	15.00	TrollOneLargeArtificial
88	Lombok Timur	CAHAYA ABADI 03	4.00	15.00	TrollOneLargeArtificial
89	Lombok Timur	CAHAYA ANISA	6.00	17.00	TrollOneLargeArtificial
90	Lombok Timur	CAHAYA ARFAH	3.00	17.00	TrollOneLargeArtificial
91	Lombok Timur	CAHAYA DINI 02	6.00	9.00	TrollOneLargeArtificial
92	Lombok Timur	CAHAYA DINI EKS. EKA JAYA 03	6.00	9.00	TrollOneLargeArtificial
93	Lombok Timur	CAHAYA FITRAH	5.00	9.00	TrollOneLargeArtificial
94	Lombok Timur	CAHAYA INDAH_LOMBOK_TIMUR	5.00	9.00	TrollOneLargeArtificial
95	Lombok Timur	CAHAYA INDAH 03	4.00	5.25	TrollOneLargeArtificial
96	Lombok Timur	CAHAYA INDAH 06	6.00	9.06	TrollOneLargeArtificial
97	Lombok Timur	CAHAYA KEMBAR	16.00	15.08	TrollOneLargeArtificial
98	Lombok Timur	CAHAYA MADINAH 02	6.00	6.16	TrollOneLargeArtificial
99	Lombok Timur	CAHAYA MERPATI (BH)	6.00	9.06	TrollOneLargeArtificial
100	Lombok Timur	CAHAYA SAKRA	26.00	17.80	TrollOneLargeArtificial
101	Lombok Timur	CAHAYA SUKRAN	4.00	2.65	TrollOneLargeArtificial
102	Lombok Timur	CARI RUPIAH	5.00	3.23	TrollOneLargeArtificial
103	Lombok Timur	CENDANA WANGI	30.00	26.97	TrollOneLargeArtificial
104	Lombok Timur	CINTA BERKAH 01	6.00	10.11	TrollOneLargeArtificial
105	Lombok Timur	CINTA MEKAH 02	6.00	6.24	TrollOneLargeArtificial
106	Lombok Timur	CINTA MEKAH 03	19.00	16.30	TrollOneLargeArtificial
107	Lombok Timur	CINTA MEKAH 04	6.00	6.47	TrollOneLargeArtificial
108	Lombok Timur	CINTA MEKAH 05	6.00	5.67	TrollOneLargeArtificial
109	Lombok Timur	CINTA MEKAH 06	6.00	6.52	TrollOneLargeArtificial
110	Lombok Timur	CINTA MEKAH 07	6.00	6.64	TrollOneLargeArtificial
111	Lombok Timur	CINTA MEKAH 08	6.00	9.24	TrollOneLargeArtificial
112	Lombok Timur	CINTA MEKKAH - 05	6.00	5.67	TrollOneLargeArtificial
113	Lombok Timur	CINTA MEKKAH 02	6.00	6.24	TrollOneLargeArtificial
114	Lombok Timur	CINTA MEKKAH 04	6.00	6.47	TrollOneLargeArtificial
115	Lombok Timur	CINTA MEKKAH 05	6.00	5.67	TrollOneLargeArtificial
116	Lombok Timur	CINTA MEKKAH 06	6.00	6.52	Gillnet
117	Lombok Timur	CINTA MEKKAH 07	6.00	6.64	TrollOneLargeArtificial
118	Lombok Timur	CINTA MEKKAH 08	6.00	9.24	TrollOneLargeArtificial
119	Lombok Timur	CINTA MEKKAH-SL	1.00	1.23	TrollOneLargeArtificial
120	Lombok Timur	CITRA TAMMAJARRA	5.00	5.91	TrollOneLargeArtificial
121	Lombok Timur	COMANDO 05	5.00	5.25	TrollOneLargeArtificial
122	Lombok Timur	DAMAI	6.00	5.69	TrollOneLargeArtificial
123	Lombok Timur	DAMAI 02	6.00	5.69	TrollOneLargeArtificial
124	Lombok Timur	DAMAI UTAMA	5.00	8.33	TrollOneLargeArtificial
125	Lombok Timur	DIPA EKS.JAMILA 01	6.00	7.97	TrollOneLargeArtificial
126	Lombok Timur	DOA SUCI	5.00	6.16	TrollOneLargeArtificial
127	Lombok Timur	EKA JAYA 04	5.00	6.83	TrollOneLargeArtificial
128	Lombok Timur	ELO PUANG 03	5.00	5.91	TrollOneLargeArtificial
129	Lombok Timur	ELO PUANG 04	5.00	5.91	TrollOneLargeArtificial
130	Lombok Timur	ELONA PUANG	5.00	5.69	TrollOneLargeArtificial
131	Lombok Timur	EMPAT PUTRA EKS.H.B.03	4.00	5.25	TrollOneLargeArtificial

Table 15.1: Boat Information from CFP. Labuhan Lombok, Lombok Timur

No	Program Site	Boat Name	GT Declared	GT Estimate	Fishing Gear
132	Lombok Timur	ERNA MANDIRI	6.00	4.89	TrollOneLargeArtificial
133	Lombok Timur	ERNA MANDIRI 002	18.00	17.83	TrollOneLargeArtificial
134	Lombok Timur	ERNA MANDIRI 007	18.00	11.24	TrollOneLargeArtificial
135	Lombok Timur	FANTASIRU	5.00	3.94	TrollOneLargeArtificial
136	Lombok Timur	FIRA INDAH 01	6.00	8.86	TrollOneLargeArtificial
137	Lombok Timur	FIRA INDAH 02	6.00	10.78	TrollOneLargeArtificial
138	Lombok Timur	FITRA INDAH	3.00	3.36	TrollOneLargeArtificial
139	Lombok Timur	FITRI INDAH	5.00	5.01	Gillnet
140	Lombok Timur	GAIRAH KEMBALI 02	5.00	5.69	Gillnet
141	Lombok Timur	GAIRAH KEMBALI 03	6.00	11.16	Gillnet
142	Lombok Timur	GARUDA 01	7.00	6.83	Gillnet
143	Lombok Timur	GARUDA SAKTI 02	21.00	16.56	TrollOneLargeArtificial
144	Lombok Timur	GARUDA SAKTI 03	6.00	6.83	TrollOneLargeArtificial
145	Lombok Timur	GARUDA SAKTI 04	21.00	18.27	TrollOneLargeArtificial
146	Lombok Timur	GOA HIRO	5.00	6.30	TrollOneLargeArtificial
147	Lombok Timur	GUMBANG SARI 02	4.00	5.69	TrollOneLargeArtificial
148	Lombok Timur	HADIRAT	5.00	5.91	TrollOneLargeArtificial
149	Lombok Timur	HAJARATUL ASWAD	3.00	2.04	TrollOneLargeArtificial
150	Lombok Timur	HAJARATUL ASWAD 02	4.00	2.89	TrollOneLargeArtificial
151	Lombok Timur	HAJARATUL ASWAD 03	4.00	5.32	TrollOneLargeArtificial
152	Lombok Timur	HAJRATUL ASWAD 03	4.00	5.32	TrollOneLargeArtificial
153	Lombok Timur	HALOAN	5.00	3.70	TrollOneLargeArtificial
154	Lombok Timur	HARAPAN BARU_LOMBOK_TIMUR	5.00	6.26	TrollOneLargeArtificial
155	Lombok Timur	HARAPAN BARU 01	4.00	5.25	TrollOneLargeArtificial
156	Lombok Timur	HARAPAN BARU 03	6.00	10.63	TrollOneLargeArtificial
157	Lombok Timur	HARAPAN BARU 04	6.00	8.82	TrollOneLargeArtificial
158	Lombok Timur	HARAPAN BARU EKS.ALFIALIMA 01	5.00	6.26	TrollOneLargeArtificial
159	Lombok Timur	HARAPAN JAYA 02	5.00	5.67	TrollOneLargeArtificial
160	Lombok Timur	HARDIANI JAYA 02	6.00	6.24	TrollOneLargeArtificial
161	Lombok Timur	HARDIANI JAYA 04	6.00	6.74	TrollOneLargeArtificial
162	Lombok Timur	HASIL BERSAMA	6.00	8.23	TrollOneLargeArtificial
163	Lombok Timur	HASIL BERSAMA 02	5.00	10.11	TrollOneLargeArtificial
164	Lombok Timur	HASIL BERSAMA 03	4.00	5.25	TrollOneLargeArtificial
165	Lombok Timur	HASIL BERSAMA 04	6.00	8.23	TrollOneLargeArtificial
166	Lombok Timur	ILHAM JAYA 01	6.00	6.83	TrollOneLargeArtificial
167	Lombok Timur	INDO TUNA 02	6.00	8.66	TrollOneLargeArtificial
168	Lombok Timur	INDRAKU	6.00	6.70	TrollOneLargeArtificial
169	Lombok Timur	IRSANDI 01	6.00	8.50	PurseSeine
170	Lombok Timur	ISRAFIL	6.00	9.45	TrollOneLargeArtificial
171	Lombok Timur	ISTIQOMAH	4.00	4.73	TrollOneLargeArtificial
172	Lombok Timur	JABAL NUR	6.00	7.71	TrollOneLargeArtificial
173	Lombok Timur	JABAL RAHMAT	6.00	7.19	TrollOneLargeArtificial
174	Lombok Timur	JAWAHIR AL-BIHAR II	5.00	6.89	TrollOneLargeArtificial
175	Lombok Timur	JEFRI 01	6.00	8.03	TrollOneLargeArtificial
176	Lombok Timur	JEFRI 02	5.00	7.35	TrollOneLargeArtificial
177	Lombok Timur	JOJO JAYA 01	6.00	8.09	TrollOneLargeArtificial
178	Lombok Timur	JOJO JAYA 03	6.00	8.09	TrollOneLargeArtificial
179	Lombok Timur	JUTA RASA 02	6.00	13.38	PoleAndLine
180	Lombok Timur	KAMI JAYA 05	14.00	15.12	TrollOneLargeArtificial
181	Lombok Timur	KARNILA 02	6.00	6.30	TrollOneLargeArtificial
182	Lombok Timur	KASIH IRMA	30.00	25.19	PoleAndLine
183	Lombok Timur	KMN. BONE RAYA INDAH 03	5.00	5.25	TrollOneLargeArtificial
184	Lombok Timur	KMN. BONE RAYA INDAH 06	5.00	5.25	TrollOneLargeArtificial
185	Lombok Timur	KURNIA ILAHI	6.00	6.30	TrollOneLargeArtificial
186	Lombok Timur	KURNIA RAHMAT	4.00	4.59	TrollOneLargeArtificial
187	Lombok Timur	LAPPA MAS 02	24.00	21.89	TrollOneLargeArtificial
188	Lombok Timur	LAPPA MAS 04	26.00	24.77	TrollOneLargeArtificial
189	Lombok Timur	LAROSA 03	23.00	21.89	TrollOneLargeArtificial
190	Lombok Timur	LAROSA 04	25.00	22.73	TrollOneLargeArtificial
191	Lombok Timur	MADANI 02	6.00	7.88	Gillnet

Table 15.1: Boat Information from CFP. Labuhan Lombok, Lombok Timur

No	Program Site	Boat Name	GT Declared	GT Estimate	Fishing Gear
192	Lombok Timur	MADANI 78	24.00	23.33	LongMultipleLargeNatural
193	Lombok Timur	MADANI 79	25.00	23.27	Gillnet
194	Lombok Timur	MAMMENASAE 03	6.00	7.56	Gillnet
195	Lombok Timur	MAMMENASAE 04	6.00	7.35	TrollOneLargeArtificial
196	Lombok Timur	MAMMENASAE 05	6.00	6.35	TrollOneLargeArtificial
197	Lombok Timur	MAMMENASAE 07	6.00	6.83	TrollOneLargeArtificial
198	Lombok Timur	MANDIRI 01 EKS. FIRA INDAH 02	6.00	10.47	TrollOneLargeArtificial
199	Lombok Timur	MARHABAN WASSALAM	5.00	5.69	TrollOneLargeArtificial
200	Lombok Timur	MASRIA 01	24.00	22.50	LongMultipleLargeNatural
201	Lombok Timur	MASYA ALLAH 02	5.00	7.14	LongMultipleLargeNatural
202	Lombok Timur	MATAWARA PAINDO	6.00	7.51	LongMultipleLargeNatural
203	Lombok Timur	MAWAR INDAH 02	17.00	11.67	Gillnet
204	Lombok Timur	MAWAR INDAH 03	20.00	15.07	TrollOneLargeArtificial
205	Lombok Timur	MAWAR MERAH	6.00	6.30	TrollOneLargeArtificial
206	Lombok Timur	MAWAR MERAH 01	6.00	16.85	TrollOneLargeArtificial
207	Lombok Timur	MAYANA 01	21.00	20.19	TrollOneLargeArtificial
208	Lombok Timur	MAYANA 02	21.00	20.19	TrollOneLargeArtificial
209	Lombok Timur	MAYANA 03	21.00	21.45	TrollOneLargeArtificial
210	Lombok Timur	MEGA BUANA	5.00	7.51	TrollOneLargeArtificial
211	Lombok Timur	MEGA BUANA 01	6.00	9.19	TrollOneLargeArtificial
212	Lombok Timur	MEGA BUANA 02	6.00	6.30	TrollOneLargeArtificial
213	Lombok Timur	MEGA BUANA 03	3.00	3.70	TrollOneLargeArtificial
214	Lombok Timur	MEGA BUANA DMP 02	24.00	23.11	TrollOneLargeArtificial
215	Lombok Timur	MEGA BUANA DMP 03	24.00	22.84	TrollOneLargeArtificial
216	Lombok Timur	MEGA INDAH	6.00	6.83	TrollOneLargeArtificial
217	Lombok Timur	MEGA INDAH 001	15.00	15.49	TrollOneLargeArtificial
218	Lombok Timur	MEGA NUSA 02	5.00	5.25	TrollOneLargeArtificial
219	Lombok Timur	MEGA NUSA 03	5.00	5.25	TrollOneLargeArtificial
220	Lombok Timur	MEGA NUSA 04	5.00	5.82	TrollOneLargeArtificial
221	Lombok Timur	MEGA NUSA 05	5.00	5.25	TrollOneLargeArtificial
222	Lombok Timur	MENTARI MAS	3.00	3.08	TrollOneLargeArtificial
223	Lombok Timur	MERPATI 02	6.00	5.69	TrollOneLargeArtificial
224	Lombok Timur	MINA MARITIM 087	29.00	23.92	TrollOneLargeArtificial
225	Lombok Timur	MINASA DECENG 03	6.00	7.17	TrollOneLargeArtificial
226	Lombok Timur	MULTI KARYA	6.00	7.88	TrollOneLargeArtificial
227	Lombok Timur	MUTIARA_LOMBOK_TIMUR	5.00	6.83	TrollOneLargeArtificial
228	Lombok Timur	MUTIARA 02	6.00	6.83	TrollOneLargeArtificial
229	Lombok Timur	MUTIARA BURUNG LOE 02	24.00	22.64	TrollOneLargeArtificial
230	Lombok Timur	MUTIARA INDAH 03	6.00	8.66	TrollOneLargeArtificial
231	Lombok Timur	MUTIARA LAUT	5.00	6.83	TrollOneLargeArtificial
232	Lombok Timur	MUTIARA TURINGAN 01	5.00	6.26	TrollOneLargeArtificial
233	Lombok Timur	MUTIARA TURINGAN 03	4.00	5.15	TrollOneLargeArtificial
234	Lombok Timur	N.F 01	5.00	5.25	TrollOneLargeArtificial
235	Lombok Timur	NABILA	5.00	6.83	TrollOneLargeArtificial
236	Lombok Timur	NAFA UTAMA	19.00	17.99	TrollOneLargeArtificial
237	Lombok Timur	NANTI DULU	4.00	10.71	TrollOneLargeArtificial
238	Lombok Timur	NAS NURUL ARAFAH	5.00	5.69	TrollOneLargeArtificial
239	Lombok Timur	NATASYA	6.00	6.70	TrollOneLargeArtificial
240	Lombok Timur	NATASYA 03	21.00	20.03	TrollOneLargeArtificial
241	Lombok Timur	NIRWANA	6.00	5.25	TrollOneLargeArtificial
242	Lombok Timur	NUR ALAM	5.00	5.91	TrollOneLargeArtificial
243	Lombok Timur	NUR ALAM EKS.NURHAYATI	6.00	7.56	TrollOneLargeArtificial
244	Lombok Timur	NUR AMELIA	6.00	6.30	TrollOneLargeArtificial
245	Lombok Timur	NUR LAGI	3.00	3.97	TrollOneLargeArtificial
246	Lombok Timur	NUR NASILA	5.00	5.82	TrollOneLargeArtificial
247	Lombok Timur	NUR RAHMAH	4.00	4.03	TrollOneLargeArtificial
248	Lombok Timur	NUR RAHMAN	4.00	4.03	TrollOneLargeArtificial
249	Lombok Timur	NURALYA	6.00	5.51	TrollOneLargeArtificial
250	Lombok Timur	NURHAYATI	5.00	6.83	TrollOneLargeArtificial
251	Lombok Timur	NURHAYATI EKS.DOA IBU 03	5.00	6.83	TrollOneLargeArtificial

Table 15.1: Boat Information from CFP. Labuhan Lombok, Lombok Timur

No	Program Site	Boat Name	GT Declared	GT Estimate	Fishing Gear
252	Lombok Timur	NURHIKMAH	5.00	5.67	TrollOneLargeArtificial
253	Lombok Timur	NURLAELA	6.00	6.96	TrollOneLargeArtificial
254	Lombok Timur	NURLAELA 02	6.00	9.45	TrollOneLargeArtificial
255	Lombok Timur	NURLAELAH 03	6.00	6.83	TrollOneLargeArtificial
256	Lombok Timur	NURLINA 01	6.00	6.76	TrollOneLargeArtificial
257	Lombok Timur	NURLINA 02	6.00	9.06	TrollOneLargeArtificial
258	Lombok Timur	NURLINA BL 01	24.00	22.20	TrollOneLargeArtificial
259	Lombok Timur	NURLINA BL 02	23.00	22.12	TrollOneLargeArtificial
260	Lombok Timur	NUSA INDAH 02	6.00	9.45	TrollOneLargeArtificial
261	Lombok Timur	NUSA INDAH BL 01	24.00	22.66	TrollOneLargeArtificial
262	Lombok Timur	PANTER LAUT 01	21.00	20.18	TrollOneLargeArtificial
263	Lombok Timur	PANTER LAUT 02	6.00	5.69	TrollOneLargeArtificial
264	Lombok Timur	PATUH KARYA	5.00	8.82	TrollOneLargeArtificial
265	Lombok Timur	PELITA ILHAM	4.00	4.62	TrollOneLargeArtificial
266	Lombok Timur	PERMATA RINJANI 03	6.00	5.78	TrollOneLargeArtificial
267	Lombok Timur	PERMATA RINJANI 03 EKS HARAPAN BARU	6.00	5.78	TrollOneLargeArtificial
268	Lombok Timur	POLE WALIE	6.00	6.68	TrollOneLargeArtificial
269	Lombok Timur	POLITA RAHMAN SUKURILLAH	6.00	7.88	TrollOneLargeArtificial
270	Lombok Timur	PRIMA EKS AMALIA 03	6.00	8.19	TrollOneLargeArtificial
271	Lombok Timur	PUJANGGA IV	6.00	3.77	TrollOneLargeArtificial
272	Lombok Timur	PUNCAK JAYA ST 01	16.00	15.74	TrollOneLargeArtificial
273	Lombok Timur	PURNAMA SIDI	4.00	7.09	TrollOneLargeArtificial
274	Lombok Timur	PURNAMA SIDI 54	4.00	7.09	TrollOneLargeArtificial
275	Lombok Timur	PUTRA BONE 01	6.00	8.53	TrollOneLargeArtificial
276	Lombok Timur	PUTRA BONE 02	4.00	4.81	TrollOneLargeArtificial
277	Lombok Timur	PUTRA HARAPAN	6.00	6.23	TrollOneLargeArtificial
278	Lombok Timur	PUTRA KEMBAR 01	23.00	21.65	TrollOneLargeArtificial
279	Lombok Timur	PUTRA KEMBAR 02	24.00	22.29	TrollOneLargeArtificial
280	Lombok Timur	PUTRA KEMBAR BL 01	23.00	21.65	TrollOneLargeArtificial
281	Lombok Timur	PUTRA KEMBAR BL 02	24.00	22.29	TrollOneLargeArtificial
282	Lombok Timur	PUTRA KEMBAR BL 06	24.00	14.23	TrollOneLargeArtificial
283	Lombok Timur	PUTRA KEMBAR BL 07	23.00	21.41	TrollOneLargeArtificial
284	Lombok Timur	PUTRA KEMBAR BL-03	23.00	21.59	TrollOneLargeArtificial
285	Lombok Timur	PUTRA KEMBAR BL-04	23.00	22.10	TrollOneLargeArtificial
286	Lombok Timur	PUTRA KEMBAR BL-05	6.00	20.04	TrollOneLargeArtificial
287	Lombok Timur	PUTRI 01	5.00	5.78	TrollOneLargeArtificial
288	Lombok Timur	PUTRI 01 EXS.USAHA BARU 12	5.00	5.78	TrollOneLargeArtificial
289	Lombok Timur	PUTRI KAYANGAN 01	6.00	8.86	TrollOneLargeArtificial
290	Lombok Timur	PUTRI KAYANGAN 02	4.00	5.25	TrollOneLargeArtificial
291	Lombok Timur	PUTRI MELANI	5.00	5.88	TrollOneLargeArtificial
292	Lombok Timur	RAHMAT (NR)	5.00	7.39	TrollOneLargeArtificial
293	Lombok Timur	RAHMAT ABADI 01	6.00	8.09	TrollOneLargeArtificial
294	Lombok Timur	RAHMAT ABADI 03	6.00	8.42	TrollOneLargeArtificial
295	Lombok Timur	RAHMAT ABADI 04	6.00	8.42	TrollOneLargeArtificial
296	Lombok Timur	RAHMAT EKS.JABAL RAHMA	6.00	7.88	TrollOneLargeArtificial
297	Lombok Timur	RAHMAT ILAHI	3.00	2.37	TrollOneLargeArtificial
298	Lombok Timur	RAHMAT ILAHI 03	4.00	3.85	TrollOneLargeArtificial
299	Lombok Timur	RAHMAT ILAHI 04	4.00	3.09	TrollOneLargeArtificial
300	Lombok Timur	RASMAL	5.00	6.83	TrollOneLargeArtificial
301	Lombok Timur	RESKI	5.00	7.11	TrollOneLargeArtificial
302	Lombok Timur	RESKY	6.00	6.70	TrollOneLargeArtificial
303	Lombok Timur	RISAL HIDAYAT 01	6.00	8.66	TrollOneLargeArtificial
304	Lombok Timur	RISKI JAYA 01 EKS.RIZKI BERSAMA 01	6.00	8.56	TrollOneLargeArtificial
305	Lombok Timur	RIVAL JAYA	24.00	22.62	TrollOneLargeArtificial
306	Lombok Timur	RIZKI BAROKAH	4.00	5.69	TrollOneLargeArtificial
307	Lombok Timur	RIZKI BAROKAH 03	6.00	7.56	TrollOneLargeArtificial
308	Lombok Timur	RIZKI BERSAMA 01	6.00	9.00	PurseSeine
309	Lombok Timur	RIZKI BERSAMA 02	5.00	7.17	TrollOneLargeArtificial
310	Lombok Timur	RIZKI BERSAMA 05	5.00	7.17	TrollOneLargeArtificial
311	Lombok Timur	RIZKI BERSAMA 06	29.00	23.15	TrollOneLargeArtificial

Table 15.1: Boat Information from CFP. Labuhan Lombok, Lombok Timur

No	Program Site	Boat Name	GT Declared	GT Estimate	Fishing Gear
312	Lombok Timur	RUA PIOLO	3.00	4.91	TrollOneLargeArtificial
313	Lombok Timur	RUA PI'OLO	4.00	4.83	TrollOneLargeArtificial
314	Lombok Timur	RUAFIOLO (CKR)	5.00	6.60	TrollOneLargeArtificial
315	Lombok Timur	RUAPIOLO (CKR)	5.00	6.60	TrollOneLargeArtificial
316	Lombok Timur	RYANG 03	21.00	20.17	TrollOneLargeArtificial
317	Lombok Timur	RYANG 04	20.00	11.73	TrollOneLargeArtificial
318	Lombok Timur	RYANG 05	22.00	21.43	TrollOneLargeArtificial
319	Lombok Timur	RYANG 07	20.00	19.51	TrollOneLargeArtificial
320	Lombok Timur	RYANG 08	23.00	14.54	TrollOneLargeArtificial
321	Lombok Timur	RYANG 11	24.00	22.09	TrollOneLargeArtificial
322	Lombok Timur	RYANG 12	23.00	22.09	TrollOneLargeArtificial
323	Lombok Timur	RYANG 13	25.00	23.59	TrollOneLargeArtificial
324	Lombok Timur	RYANG 14	25.00	23.01	TrollOneLargeArtificial
325	Lombok Timur	RYANG 15	27.00	25.66	TrollOneLargeArtificial
326	Lombok Timur	SAHABAT NELAYAN	2.00	1.69	TrollOneLargeArtificial
327	Lombok Timur	SALMA	6.00	7.51	TrollOneLargeArtificial
328	Lombok Timur	SALZABILA (BL)	6.00	8.66	TrollOneLargeArtificial
329	Lombok Timur	SAMA ENRE 02	6.00	9.07	TrollOneLargeArtificial
330	Lombok Timur	SAMA INDAH 02	6.00	9.19	TrollOneLargeArtificial
331	Lombok Timur	SAMA INDAH 03	6.00	9.45	TrollOneLargeArtificial
332	Lombok Timur	SAMPURNA 01	6.00	7.56	TrollOneLargeArtificial
333	Lombok Timur	SAMPURNA 02	5.00	7.56	TrollOneLargeArtificial
334	Lombok Timur	SANDI JAYA	6.00	7.09	TrollOneLargeArtificial
335	Lombok Timur	SARANGGANI 01	6.00	6.30	TrollOneLargeArtificial
336	Lombok Timur	SARI JAYA 03	5.00	11.81	TrollOneLargeArtificial
337	Lombok Timur	SASNAILA	5.00	6.37	TrollOneLargeArtificial
338	Lombok Timur	SATRIANI 02	5.00	4.73	TrollOneLargeArtificial
339	Lombok Timur	SATU LB	5.00	4.03	TrollOneLargeArtificial
340	Lombok Timur	SERIBU DINAR	6.00	7.85	TrollOneLargeArtificial
341	Lombok Timur	SETIA BUDI	4.00	4.16	TrollOneLargeArtificial
342	Lombok Timur	SETIA BUDI 01	5.00	3.08	TrollOneLargeArtificial
343	Lombok Timur	SINAR ALAM 01	5.00	5.39	TrollOneLargeArtificial
344	Lombok Timur	SINAR KUMALA 02	6.00	6.30	TrollOneLargeArtificial
345	Lombok Timur	SINAR KUMALA 03	28.00	26.15	TrollOneLargeArtificial
346	Lombok Timur	SINAR LAUT 02	6.00	8.19	Gillnet
347	Lombok Timur	SIPAKAINGA	5.00	8.82	TrollOneLargeArtificial
348	Lombok Timur	SIPASARO	4.00	6.14	TrollOneLargeArtificial
349	Lombok Timur	SONIA UTAMA	1.00	1.01	TrollOneLargeArtificial
350	Lombok Timur	SUBAEDAH	6.00	7.88	TrollOneLargeArtificial
351	Lombok Timur	SUKA DAMAI	6.00	9.24	TrollOneLargeArtificial
352	Lombok Timur	SUKRAN	6.00	6.40	TrollOneLargeArtificial
353	Lombok Timur	SULAWESI RAYA 07	5.00	5.03	TrollOneLargeArtificial
354	Lombok Timur	SUTRA BIRU	5.00	5.99	TrollOneLargeArtificial
355	Lombok Timur	TAKDIR ANUGRAH	6.00	8.66	TrollOneLargeArtificial
356	Lombok Timur	TAKDIR BL 01	26.00	24.05	TrollOneLargeArtificial
357	Lombok Timur	TANDA DAERAH 01	14.00	9.01	TrollOneLargeArtificial
358	Lombok Timur	TELUK BONE 06	17.00	15.58	TrollOneLargeArtificial
359	Lombok Timur	TERKABUL 01	4.00	5.25	TrollOneLargeArtificial
360	Lombok Timur	TERKABUL 02	5.00	5.69	TrollOneLargeArtificial
361	Lombok Timur	TERKABUL 02 EKS.VERSACE 01	5.00	5.69	TrollOneLargeArtificial
362	Lombok Timur	TERKABUL 03	6.00	7.88	TrollOneLargeArtificial
363	Lombok Timur	TERKABUL 04	6.00	6.26	TrollOneLargeArtificial
364	Lombok Timur	TERKABUL 05	6.00	6.83	TrollOneLargeArtificial
365	Lombok Timur	TIGA PUTRA 01	6.00	9.92	TrollOneLargeArtificial
366	Lombok Timur	TIGA PUTRI 01	6.00	6.37	TrollOneLargeArtificial
367	Lombok Timur	TIMUR LAUT	5.00	5.20	TrollOneLargeArtificial
368	Lombok Timur	TIMUR LAUT 011	19.00	11.60	TrollOneLargeArtificial
369	Lombok Timur	TIMUR LAUT 02	26.00	24.04	TrollOneLargeArtificial
370	Lombok Timur	TIRTA RASA	3.00	3.53	TrollOneLargeArtificial
371	Lombok Timur	TITIPAN ILAHI 02	5.00	5.78	TrollOneLargeArtificial

Table 15.1: Boat Information from CFP. Labuhan Lombok, Lombok Timur

No	Program Site	Boat Name	GT Declared	GT Estimate	Fishing Gear
372	Lombok Timur	TITIPAN ILAHI 03	5.00	5.00	PurseSeine
373	Lombok Timur	TRIBUN TIMUR 08	15.00	13.94	PurseSeine
374	Lombok Timur	TUNAS HARAPAN 25	6.00	6.26	TrollOneLargeArtificial
375	Lombok Timur	TURU CINNAE	6.00	8.58	TrollOneLargeArtificial
376	Lombok Timur	TURU"CINNAE	6.00	7.47	TrollOneLargeArtificial
377	Lombok Timur	ULAN SARI 01	4.00	5.25	TrollOneLargeArtificial
378	Lombok Timur	USAHA ABADI IRW-04	18.00	17.44	TrollOneLargeArtificial
379	Lombok Timur	USAHA BARU	6.00	7.56	TrollOneLargeArtificial
380	Lombok Timur	USAHA BARU 01	4.00	3.94	TrollOneLargeArtificial
381	Lombok Timur	USAHA BARU 03	6.00	6.40	TrollOneLargeArtificial
382	Lombok Timur	USAHA BARU 05	6.00	7.70	TrollOneLargeArtificial
383	Lombok Timur	USAHA BARU 15	6.00	7.70	TrollOneLargeArtificial
384	Lombok Timur	USAHA BARU 17	4.00	5.78	TrollOneLargeArtificial
385	Lombok Timur	USAHA BARU 18	6.00	8.40	TrollOneLargeArtificial
386	Lombok Timur	VERSACE 03	4.00	5.69	TrollOneLargeArtificial
387	Lombok Timur	VERSACE 04	5.00	6.26	TrollOneLargeArtificial
388	Lombok Timur	VERSACE 05	5.00	5.02	TrollOneLargeArtificial
389	Lombok Timur	VERSACE 10	6.00	9.06	TrollOneLargeArtificial
390	Lombok Timur	VERSACE 11	6.00	7.56	TrollOneLargeArtificial
391	Lombok Timur	VERSACE 12	5.00	7.38	TrollOneLargeArtificial
392	Lombok Timur	VERSACE 13	5.00	7.61	TrollOneLargeArtificial
393	Lombok Timur	VERSACE 14	6.00	9.07	TrollOneLargeArtificial
394	Lombok Timur	WARDA 01	6.00	6.14	TrollOneLargeArtificial
395	Lombok Timur	WAWAN	15.00	15.11	TrollOneLargeArtificial
396	Lombok Timur	ZAMRUD 01	3.00	3.47	TrollOneLargeArtificial
397	Lombok Timur	ZAMRUD 02	3.00	2.31	TrollOneLargeArtificial
398	Sinjai	Adia 07	20.00	20.00	TrollOneLargeArtificial
399	Sinjai	ADHY MANDIRI 02	18.00	17.30	TrollOneLargeArtificial
400	Sinjai	KARUNIA TERATAI	19.00	18.50	TrollOneLargeArtificial
401	Sinjai	KURNIA ILAHI BL 02	27.00	26.70	TrollOneLargeArtificial
402	Sinjai	LAPPA MAS 03	27.00	26.70	TrollOneLargeArtificial
403	Sinjai	MUTIARA BURUNGLOHE 03	22.00	21.10	TrollOneLargeArtificial
404	Sinjai	PUTRA KEMBAR BL 03	23.00	22.30	TrollOneLargeArtificial
405	Sinjai	RADIT RAFLI	19.00	18.50	TrollOneLargeArtificial
406	Sinjai	RAHIM BL	26.00	25.10	TrollOneLargeArtificial
407	Sinjai	RAHMI JAYA 01	24.00	23.00	TrollOneLargeArtificial
408	Sinjai	RYANG 19	25.00	24.50	TrollOneLargeArtificial
409	Sinjai	RYANG 20	26.00	25.10	TrollOneLargeArtificial
410	Sinjai	RYANG 21	27.00	26.70	TrollOneLargeArtificial
411	Sinjai	RYANG 22	26.00	25.10	TrollOneLargeArtificial
412	Sinjai	TUNAS MEKAR PANGASA	19.00	18.50	TrollOneLargeArtificial

15.1.3 Follow-up

Despite many fishing vessels dedicated for tuna fisheries, this location however is not recommended for CODRS program because most of them operated in FMA 573 that is not part of IAW and only small number that operate in IAW occasionally.

15.1.4 Important Contact

Name : Samsir
Affiliation : Boat owner of KMN Permata Merah 01
Contact : 08214536111

Name : Bpk Herman
Affiliation : Syahbandar Head PPP Labuhan Lombok
Contact : 081343003660

Name : Bapak Rio
Affiliation : PSDKP Labuhan Lombok
Contact : 0856363426

15.1.5 References

15.1.6 Supply Chain

There are fish storage and processing company in Labuhan Lombok, but the main product is only frozen and chill fish. Fish will be delivered to Bali, Surabaya, and Jakarta. Those tuna processing companies are UD Baura, UD Versace, UD Eka Tirta, UD Lautan Mas, and UD Erpa Utama. UD Baura is the biggest company in Labuhan Lombok in which it has around more than 100 active fishing vessels.

15.1.7 Figures



Figure 15.2: Troll line or handline vessel in Labuhan Lombok



Figure 15.3: Carrier vessel in Labuhan Lombok



Figure 15.4: Catch from Troll line vessel (*Thunnus albacares*, *Euthynnus affinis*, *Elagatis bipinnulata*)



Figure 15.5: Typical FAD used by fishermen in Labuhan Lombok



Figure 15.6



Figure 15.7: Troll line vessel at FADs network

15.2 FP. Teluk Santong, Sumbawa

PPTelukSantongSumbawa.Rnw

15.3 FP. Labuhan Terata, Sumbawa

PPTerataSumbawa.Rnw

15.4 FP. Sape, Bima

PPISape.Rnw

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