“Strategies for Trawl Fisheries Bycatch Management”
GCP/RAS/269/GFF

REBYC-II CTI INDONESIA

Local Consultative Group (LCG) Meeting

19-20 May 2016

Directorate General of Capture Fisheries
Ministry of Marine Affairs and Fisheries
2016
1. Background

This Project – Strategies for trawl fisheries bycatch management (REBYC-II CTI; GCP/RAS/269/GFF) – is contributing to the more sustainable use of fisheries resources and healthier marine ecosystems in the Coral Triangle and Southeast Asia waters by reducing bycatch, discards and fishing impact by trawl fisheries. It is being executed by the Southeast Asian Fisheries Development Centre (SEAFDEC), based in Bangkok, Thailand, and the governments in the participating countries Indonesia, Papua New Guinea, Philippines, Thailand and Viet Nam in partnership with the private sector and relevant national, regional and international organisations. The Food and Agriculture Organization of the United Nations (FAO) is the Global Environment Facility (GEF) agency for the project that is funded jointly by GEF and the implementing and executing partners.

The Project is structured around four interrelated components:

a. The Policy, legal and institutional frameworks component works towards the establishment of national or area specific trawl fisheries bycatch management plans and building institutional capacity for their implementation. The need for adequate legislation and regulations to support the implementation of improved management measures is also being addressed.

b. The Resource management and fishing operations component is leading to the adoption of more selective fishing gear and fishing practices, and provides a basis for implementing the zoning of fishing areas and developing spatial-temporal closure management measures, as well as generating data on the number of vessels and making recommendations for fishing effort and capacity management. Results from this component are informing regional bycatch policy/strategy and the national and/or area specific trawl fisheries bycatch management plans.

c. The information management and communication component includes bycatch data collection (at landing sites and onboard vessels), the mapping of fishing grounds, establishment of socio-economic monitoring procedures, and means for communicating bycatch data and information, including a project website and information, education and communication through IEC materials.

d. The Awareness and knowledge component seeks to raise awareness of and knowledge on, trawl fisheries bycatch management issues and how they relate to sustainability, and what measures can make trawl fishing more responsible. Under this component, private sector/fishers, policy makers, fisheries managers, officials, extension officers and NGOs attend training and workshops to enhance their knowledge of best management practices and responsible fisheries.

This LOA will support the national activities in Indonesia relating to all four components of the REBYC-II CTI Project described above.
The Directorate General of Capture Fisheries, Ministry of Marine Affairs and Fisheries, in Indonesia is one of the Executing Agencies for this GEF-funded project where FAO is the Implementing Agency. The DGCF has primary responsibility for national project activities in Indonesia, and provides substantial co-financing to the project (estimated at close to 50,000 US$ over 5 years, as per the Project Document). The Project Regional Facilitation Unit, based at SEAFDEC TD, and FAO Operational and Technical staff, provided operational and technical support to DGCF for implementation of this LOA.

Under the 2nd LOA between DGCF and FAO under component 3 (information management and communication), an activity entitled **The Local Consultative Group (LCG) Meeting is taken up.** Under the LOA, DGCF agreed to produce English language reports on the activity. This report covers the proceedings of the final discussion held on 19-20 May 2016.

### 2. Organization of the Meeting

The event was held at Marina Mamberamo Hotel in Sorong-West Papua on Thursday-Friday, 19-20 May 2016 involving 30 participants as attached. The meeting was chaired by National Project Coordinator (Mr. Endroyono) and attended by LCG Members: representative of Fisheries Academy in Sorong (Poltek Sorong), Province Marine and Fisheries Office of Papua Barat in Sorong, Directorate General of Capture Fisheries, the Agency for Marine Affair and Fisheries Research (Balitbang), Indonesian Shrimp Catching Entrepreneurs Association (HPPI), other fisheries associations, and fishing port of Sorong.

The meeting agenda was made up for two days, i.e:

a. The first day focused on establishment of a data collection program for trawling-related stakeholders located in Sorong.

b. The second day focused on the potential actions during the trawling ban.

### 3. Minutes from the meeting

The main goal of the LCG meeting was to have a common understanding and agreement on the development of Total Allowable Effort (TAE) guidelines for a sustainable fishery in Aru Sea and to inform the local stakeholders on the activities done and results achieved by the REBYC-II CTI project that is coming to an end in June 2016. In addition, the socio-economic impacts of trawl ban were thoroughly discussed.

**The First Day Meeting**

The first day of the workshop was a consultative discussion with the stakeholders mainly regarding the TAE management issues. The National consultant presented the proposed methodology for developing the TAE guidelines, the data needed, the theoretical background to be used and examples of calculations in determining technical efficiencies and fishing capacity for the Aru Fishery. The day was led and facilitated by Ms. Umi
Muawanah, fishery economist and the expert in charge of drafting the TAE guidelines. She was assisted by Mr. Eris Mulyadi and Mr. Widodo (BPPI Semarang), and Mr. Abu Darda Razak (APSOR, Sorong).

The meeting agenda included the establishment of a data collection program for trawling-related stakeholders located in Sorong. Data collection was discussed to pursue opportunities to support the data availability for developing the TAE Management guidelines. It was suggested that the data obtained in the calculation TAE management needs to pay special attention to parameters related to technical efficiency, among others:

- Miscellanies equipment in the vessel which would affect the technical efficiency;
- Resource productivity as a determinant factor; and
- Age of vessels operated and related technical issues.

By the end of the first day of the workshop, the fishing sector agreed to supply the needed data so that the estimation of TAE in Aru Sea would be based on a real and reliable fisheries data. That would also increase the bargaining power of the industries towards the government both local and national government related to the management of the Aru fishery.

During the discussion all participants also agreed that the common goal is sustainable fishery in Aru. However, there are some recent policies from the central government that impacts particularly the large scale trawl fisheries operating in Aru Sea. The moratorium of foreign made vessels and the trawling ban was enforced in October 2015. Only a very limited amount of larger scale bottom trawling has been allowed since then. The stakeholders discussed about the situation and explored various solutions. Among other, potential alternative gear and fishing practices able to replace trawl gears were discussed.

The Second Day Meeting

The second day started with the following background presentations which focused on the potential actions during the trawling ban. The following background presentations were given:

1. Endroyono “REBYC-II CTI project and socio-economic considerations after the 2nd trawl ban”.
2. Tri Antoro “Impact of Moratorium Policy and Trawl Ban on Industrial Fisheries located in Sorong”.
3. Widodo “Alternative Technology as Substitute to Trawl fishing gear in Aru-Arafura Sea”.
4. Abu Darda Razak “Alternative Shrimp Trawl Fishing”.
5. Petri Suuronen “Challenges and opportunities to develop alternative capture methods for bottom trawling”.

Mr. Endroyono, the National Project Coordinator (NPC) of REBYC-II project, presented the key output of the project in Indonesia. The project has among others mapped the sensitive fishing grounds, translated five FAO technical guide books and is now developing two new guidelines, namely guidelines for evaluating fishing gears that are both environment friendly and consume less fuel and guidelines for Total Allowable Catch. A review dealing with the socio-economic impact of trawl ban in Aru Sea is under final revision.

The current policy in Indonesia, particularly the ban of trawling, was discussed in length. The biggest fishery association for shrimp trawls in Aru (HPPI) supported the conclusions of the REBYC-II CTI project regarding the regulation of the fishing effort. Representative from HPPI presented the consequences the trawl companies have suffered due to the recent trawl ban imposed by the MMAF. One of the major factor is the layout of around 900 crew members working onboard the trawlers and the loss of profit at about 610 billion rupiah. Furthermore, a large number of people who worked in the shrimp processing sector have lost their jobs. About 55 trawlers have stopped their operation. About 35 vessels are still operating under this association, but they are operating with other fishing practices. The detailed report from the association will be included in the overview report on the socio-economic impact of trawl ban for Aru Trawl Fishery. The review will include an estimation of the jobs lost in the shrimp and fish capture and processing sector.

The fishing industry association noted that they have been very supportive to government and universities programs such as having the university students to do an internship and being observer on their boats. The industry agreed to collaborate with the government also in the future in the Aru fishery such as imposing limitation on the allowed effort. The association also recommended that MMAF should revise the policy on trawl ban and emphasized that the industry is ready to manage their fishing activities as strictly as is needed.

The last two sessions included presentation with regard to models and several alternatives gears to replace trawls. In short, it was concluded and agreed that there is no other gear as effective as trawls in harvesting shrimp resources. However, because trawling is no more allowed, it was acknowledged that there is a need to develop and test alternative gears and practices. The conclusions of the discussion related to alternative fishing gear to exploit the shrimp in ARU-ARAFURA Sea were the following:

- Shrimp has special habitats such as sandy or muddy seabed. These habitats are not as sensitive to bottom trawl activities as are hard bottom grounds such as coral reefs.
- BPPI institute and APSOR has made several experiments with alternative fishing gear like encircling gillnets, trammel nets and traps, but their capture efficiency cannot be compared to the commercial scale of shrimp trawling. Furthermore, these gears are limited only to shallow waters and in case of gillnet and with trammel net the quality
of shrimp landed is not adequate for processing. There is need to develop better
techniques applicable in deeper water and more consideration should be paid to the
quality of shrimp caught.

- It was agreed that there is a need to further innovate and test the suitability of other
alternative fishing gear (Low Impact and Fuel Efficient fishing practices, LIFE) to
exploit shrimp.

- It was noted that shrimp is a resource that has a very high value and is currently
(almost) being left unexploited in Aru sea due to the trawl ban. The shrimp stocks are
able recover very fast. This is illustrated by the observation that the CPUE went up
significantly in 6 months after the foreign-made vessel moratorium. When boats
went fishing again they caught shrimp at 700-1000 kg/vessel/day compared to an
amount of around 300-400 kg/vessel/day prior to the 6 months of moratorium. But
now all the boats are idle due to trawl ban.

4. Recommendations and conclusions

To pursue sustainable fishing:

1) The management of shrimp trawl fishing areas can be done by setting specific shrimp
fishing areas that have been identified. This information is available in the mapping
guidelines produced by the REBYC-II CTI.

2) The number of vessels that should be allowed to operate should be restricted in
order to maintain optimum productivity of each trawl vessel so as to provide profits
for the fishing company.

3) Seasonal-closure should be established if there are indications of a decrease in
shrimp stocks.

4) Trammel nets can be used by fishermen to support the shrimp fishery in the ARU-
ARAFURA Sea. It will require further development to improve the efficiency and to
have better quality of the shrimp (acceptable in the export market)

Finally, it was noted change is often a very hard thing to do. Currently, fishing
industries/large scale fishing industries are facing enormous pressures for not being
environmentally friendly enough. Proactive actions from the fishing industries are
needed to prove that industry is able and willing to act in responsible manner. Many
fishing industries have pursued certification in order to prove their fishing practices are
sustainable. Although the cost of the certification is high, it opens up an opportunity for
expanding the market for the particular fishery that the industries are engaged at. That
is something that could be considered in the future also in the Indonesian industrial
shrimp fishing. Industries should also move forward with the testing of alternative gears.

By the end of the second day, the group went to one of shrimp trawl fishery to observe
closely the immediate impact from the 2nd trawl ban. The cold storage is empty and
many boats stopped operating. Furthermore, the shrimp processing plants were inactive
and closed.
### Annex 1. List of organizations invited to the “The Local Consultative Group (LCG) Meeting”
19-20 May 2015

<table>
<thead>
<tr>
<th>No.</th>
<th>Organization</th>
<th>Participant</th>
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<tbody>
<tr>
<td>1</td>
<td>Directorate of Fishing Vessel and Fishing Gear</td>
<td>4</td>
</tr>
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<td>2</td>
<td>FAO Fisheries and Aquaculture Department Fishing Operations and Technology Service</td>
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<tr>
<td>3</td>
<td>Agency for Marine Affair and Fisheries Research</td>
<td>1</td>
</tr>
<tr>
<td>4</td>
<td>Fishing Technology Development Center</td>
<td>2</td>
</tr>
<tr>
<td>5</td>
<td>Association of Indonesia Shrimp Catching Companies</td>
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</tr>
<tr>
<td>6</td>
<td>Sorong Fisheries Academy</td>
<td>8</td>
</tr>
<tr>
<td>7</td>
<td>Quarantine Station in Sorong</td>
<td>1</td>
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<tr>
<td>8</td>
<td>Marine and Fisheries Resources Surveillance and Controlling in Sorong</td>
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<tr>
<td>9</td>
<td>Province Marine and Fisheries Office of Papua Barat in Sorong</td>
<td>1</td>
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<td>10</td>
<td>Fishing Port of Sorong</td>
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<tr>
<td>11</td>
<td>Fisheries High School in Sorong</td>
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<tr>
<td>12</td>
<td>PT. Lines Irian Marine Product Development (IMPD)</td>
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<td>13</td>
<td>PT. Minatama Mutiara</td>
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<td>PT. Ombre Lines</td>
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<td>15</td>
<td>PT. Dwi Bina Utama</td>
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<tr>
<td>16</td>
<td>PT. Citra Raja Ampat</td>
<td>1</td>
</tr>
</tbody>
</table>

**Jumlah**: 30
Annex 2. List of Participants “Local Consultative Group (LCG) Meeting”

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Annex 3. Documentations “Local Consultative Group (LCG) Meeting”