

GCP/RAS/269/GFF

SOUTHEAST ASIA TRAWL FISHERIES ROUND-TABLE MEETING

21 September 2016, Bangkok, Thailand

Summary

As the REBYC-II CTI project was coming to an end it was decided that a round-table meeting involving the Fishing Industry of the REBYC-II CTI countries and other SEAFDEC member countries should be organized in order to have clear recommendations from the industry how the trawl fishing could be made more sustainable and profitable in Southeast Asia. The round-table meeting was organized on 21 September 2016, prior to the regional workshop on the Future of Trawl Fisheries Management, with 42 participants representing the key stakeholders and especially the private fishing industry. First, the key outcomes of the project was presented to the industry participants. One of these outcomes was that effective stakeholder participation in the development of the fisheries management plans is fundamental. Another major factor in the successful process is the acceptance and adoption of the Ecosystem Approach to Fisheries Management (EAFM). The participants then discussed widely of the current constraints in trawl fisheries in SE Asia. By the end of the day they came up with a large number of suggestions on how the private sector can contribute to the effective management of trawl fisheries and what should be the role of the regional and international organizations in this regard. These outputs were used in the subsequent regional meeting on the Future of Trawl Fisheries Management in Southeast Asia.



Background and Objectives of the Roundtable meeting

The Project 'Strategies for trawl fisheries bycatch management (REBYC-II CTI)' is contributing to the sustainable use of fisheries resources and healthier marine ecosystems in the Coral Triangle and Southeast Asia waters by reducing bycatch, discards and fishing impacts by trawl fisheries. 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 implementation partner. The Project, which began work in April 2012, is being implemented by FAO with the implementation partner the Southeast Asian Fisheries Development Center (SEAFDEC) and the governments of Indonesia, Papua New Guinea, Philippines, Thailand and Viet Nam, in partnership with the private sector and relevant national, regional and international organizations.

The REBYC-II CTI project is coming to an end by December 2016. One of the key recommendations of the Project Steering Committee meeting of REBYC-II CTI project and the Lessons Learnt workshop held in June 2016 was to hold a regional meeting on the *Future of Trawl Fisheries Management in Southeast Asia* before the closure of the project. It was also decided that a round table meeting involving the Fishing industry of REBYCC II CTI countries and other SEAFDEC member countries be organized prior to the regional consultations so as to take the recommendations from such a group to the regional consultation

Southeast Asia Trawl Fisheries Round-table Meeting was organized by the Regional Facilitation Unit (RFU) of REBYC-II CTI project and Southeast Asian Fisheries Development Center. The meeting was held in Bangkok on 21 September 2016.

The objectives of the meeting were

1. Sharing overall lessons learned during the implementation of the REBYC-II CTI project with the Private sector;
2. To take forward the policy recommendations from Private sector to manage trawl fisheries in Southeast Asia;
3. Awareness building of regional trawl fisheries management for the private sector

The agenda of the workshop is give as **Annexure 1**

There were 42 participants representing the fishing industry, Government and the support agencies of the REBYCC II CTI project countries and the other SEAFDEC member countries. The list of participants is given in **Annexure 2**.

The recommendations from the meeting was the input to the Meeting on Regional Trawl Fisheries Management in Southeast Asia that followed the Round-table meeting. The private sector was to be sensitized and encouraged for active engagement in the improvement of the management of trawl fisheries in Southeast Asia.

Agenda 1: Opening of Workshop

On behalf of the REBYC-II CTI Project, Mr C. M. Muralidharan extended a hearty welcome to all participants. He then made a very brief presentation on the key objectives and outcomes of the REBYC-II CTI project and the background of the meeting. The REBYC-I project implemented in 2002-2008 was a technically orientated project, focusing on bycatch reduction technologies whereas REBYC-II CTI (2012-2016) project took a more holistic approach which comprised the following components: (1) Policy, legal and institutional framework; (2) Resource management and fishing operations; (3) Information management and communication; and (4) Awareness and knowledge. The highlights of the achievements from these components were then briefed, including (i) Fisheries management plans and policies in the member countries; (ii) Socio economics studies of trawl fisheries in pilot sites; and (iii) Capacity building on Ecosystem Approach to Fisheries Management (EAFM) which led the member countries to successfully to use EAFM principles in their fisheries management planning. The presentation can be seen as **Annexure 3**.

Dr. Kom Silapajarn, SEAFDEC Secretary-General and Chief of Training Department, gave the opening address. He started with a warm welcome to all and was glad to note a good representation of the private sector involvement with trawl fishing and fish processing industries, as it signals their interest and cooperation for the sustainable trawl fisheries management in the region, as well as in the long-term sustainability of safe seafood supply from the Southeast Asian region. Reflecting back on what the REBYC-II CTI project and its predecessor project had achieved, its time to get the insights and recommendations of the fishing and fish processing industries for the improvement of trawl fisheries management which could support the trawl fisheries bycatch management in Southeast Asia both at the national and regional level. He noted that active participation especially of the private sector was requested for as the outputs and recommendations from this meeting will be taken up as inputs for the REBYC-II CTI meeting on Future Regional Trawl Fisheries Management which will take place from 23 to 25 September 2016.

Mr Petri Suuronen (Project Lead Technical Officer, FAO) noted in his opening address that the REBYC-II CTI project has significantly improved our understanding of the complexity of the trawl fisheries and its management in the Southeast Asia. We know that there is still a long way to go but some of the key barriers have been identified and addressed, and there is a common understanding of the nature of the bycatch issue in the region. It is now generally agreed by the key stakeholders that to be able to further develop fisheries livelihoods in the region, trawl fishery has to become more sustainable and also more profitable. In this context issues such as depleted fish stocks, high trash fish catches, excessive capture of juvenile fish, destructed breeding and nursery grounds, illegal fishing activities, poor compliance, and the low catch-per-unit-effort (CPUE) need to be addressed. The REBYC-II CTI project has raised the awareness of these problems and promoted potential solutions that would help to reach the goal of a more sustainable trawl fishing. The project has also significantly increased the understanding of the socio-economic conditions under which the fishing sector is working and which strongly affects the possibilities to make a change. Finally, the project has provided extensive training on the Ecosystem Approach to Fisheries Management (EAFM) which offers a holistic approach to fisheries management

and encourages stakeholder participation. This approach has been well received by all stakeholders. He noted that more work, however, is still needed also on this issue. There are no easy solutions.

Mr David Brown, representing the FAO Regional Office for Asia Pacific, emphasized how FAO see the REBYC-II CTI project as an important initiative in the region on sustainably managing trawl fisheries. Therefore the interaction with the industry at this stage of the project is crucial also for FAO to know the future direction of action.

Agenda 2: Why Management of Trawl Fisheries is Important for Long term Production, and Stakeholder Analysis

SEAFDEC presentation started by describing the rich resource base of the South East Asia and Coral triangle waters, with 5.7 million square kilometers of coastline and oceans rich in marine biodiversity – corals, fishes, other invertebrates. The associated population is 363 million with 120 million directly dependent on marine resources for livelihoods. The major issues are overfishing for food, ornamentals, curios, destructive fishing methods, increasing human populations (growth, migration), unsustainable fishing methods, loss of critical habitats, land-based sources of pollution and climate change impacts.

Taking Gulf of Thailand as an example the trawl fisheries issue was described. With 3193 units, the biomass of many demersal stocks are down by 5 - 30 % of levels prior to expansion of fisheries (Gulf of Thailand). As a result of fishing down the food chain, the abundance of larger and more valuable fish has decreased sharply while those of smaller, less valuable species have increased. The ecosystems services have deteriorated and reached a cut off where the total value does not increase further. While IUU fishing is a major concern, consumer pressure based traceability and certification is likely to be a way forward. The need of detailed comprehensive data on different parameters apart from catch data for effective stock assessment was stressed. The use of Ecosystem Approach to Fisheries Management for developing fisheries management plan of Gulf of Thailand was described. The steps included detailed stakeholder analysis and interaction, identification of issues and developing a plan participatively, applying the 7 key principles of EAFM. The balancing of ecosystem well being and human well being through proper governance was the he core. Measures to manage bycatch include capacity and effort controls, measures on fishing gears and their use, spatial and temporal fishing restrictions, no discard regimes, by catch quota, technologies to reduce ghost fishing, and economic incentives. The presentation is given as **Annexure 4**.

Discussions

It was pointed out that it is time to look at trawl fisheries Management as a whole and not just from the bycatch point of view alone. Countries like Indonesia and Venezuela had gone to the extreme step of banning trawl fishing. But trawl fisheries can be done in a sustainable manner if managed well.

It is important that the effectiveness of management plan is monitored and corrected periodically.

There is difficulty in distinguishing between bycatch and target fish over time as priorities change. There is need of balancing between the actual demand for seafood and the fishmeal for aquaculture while addressing the ecosystem health.

Agenda 3: Achievement of REBYC-II CTI project in National and Regional level

3.1 Indonesia

The presentation of Indonesia focused on the impacts of the trawl ban, the moratorium on the ex foreign vessels and the fisheries management plan concentrating on the Mapping, Gear Selection and Total Effort Management (MGT) approach. The main impact of the 2015 trawl ban in Indonesia and the moratorium had been serious on the livelihoods of fishers and the fact was that no effective alternate gear to harvest shrimps have emerged yet and the effect. The approach of MGT had been promoted under the REBYC-II CTI project in order to eliminate environment impact and reduce unsustainable trawl fishing practices. Established 2 (two) Local Consultative Groups in Sorong and Ambon and more participatory planning and management of fisheries is another major outcome from the project. Among the recommendations was the proposal for market linked certification programme for sustainable fisheries. The presentation is given as **Annexure 5A**.

Discussion

From FAO end it was explained that total ban on trawling was not promoted by the project. The project encouraged well managed trawl fishery. However the detailed study deciding on fishing efforts is really appreciated. FAO is willing to help further.

2. Papua New Guinea

The PNG presentation acknowledged that the REBYC-II CTI project helped incorporate the three EAFM concepts of Environmental Well-being (Biological Study - TED/BRD Trial study), Economic Well-being (Trawl Economic Study), and Human Well-being (Socio-Economic Study) into the Gulf of Papua Prawn Fishery Management Plan (GOPPMP). Getting MSC accreditation for the fishery is a continuing effort. PNG also continue working more effectively with the industries and resource owners to address bycatch issues for a win-win situation. The presentation is given as **Annexure 5B**.

Discussion

The results of earlier Bycatch Reduction Device (BRD) trial under support from CSIRO could be taken forward under REBYC-II CTI project. It was also mentioned that square mesh at codend gave better results.

3. Philippines

The main achievement of the project in Philippines has been developing the Samar sea Fisheries Management Plan (SSFMP). The socio economic studies conducted under the project had been the base to develop the mangemnt measures in the SSFMP. Formation of National Working group and Technical groups, Samar Sea Alliance of Local Government Units (LGUs) and their involvement along with other stakeholders in developing and deciding on the plan implementaion had been the strong feature of the project. Some other activities that were completed under the project were completion of Catalogue of Fishing Gears of Samar Sea, coral reef surveys (for critical habitat mapping) covering 19 sites in 6

municipalities/cities, ichthyo-plankton and bycatch survey, mapping of fishing grounds and critical habitats in Samar Sea and training/workshop on the inventory of fishing gears and boats. Capacity building on EAFM had really contributed to the SSFMP. The presentation is given as **Annexure 5C**.

4. Thailand

The REBYC-II CTI project in Thailand were taken up in two pilot sites: Site 1 at Chumphon-Prachuaup Kiri Khan for codend mesh size-experiments comparison between 2.5 and 4.0 cm for otter board and pair trawlers, and site 2 at Ao Trat for area and season closure experiment. The works were taken up under all the four project components. Studies on status of fisheries, socio economics of fisheries and study on fish larvae provided inputs for better trawl fisheries management in Thailand. The capacity building on EAFM at different levels have helped a lot. The key lessons learned from the project were 1) Resource management plans must be responding to prioritized issues, identified by communities and harmonized with national and provincial legislation, policy and plans, 2) Management process must be participated by stakeholders in every step for encouraging acceptance and strengthen the management plan implementation. The presentation is given as **Annexure 5D**.

5. Vietnam

In Vietnam the main achievement was the development of Kien Giang Fisheries Management plan. The project involved various stakeholders including national and local agencies and associations apart from the fishers. While the regional guidelines on trawl fisheries had been translated to Vietnamese, national guidelines is also developed. A National plan of Action on fishing capacity is developed. Study on square mesh for trawler codend recommendation of mesh regulations an closed season for fishing are other developments. Importance of data collection is established. The capacity building and introduction of EAFM has been a major achievement. The presentation is given as **Annexure 5E**.

6. SEAFDEC

SEAFDEC presented its achievements as the regional agency providing administrative and technical support for the project. The focus was on support to the development of the regional bycatch policy/strategy and training activities and promotion of standardized methods and approaches. SEAFDEC had been organising all the important regional meetings and workshops from steering committee meeting, various regional orientation, capacity building and experience sharing and planning workshops and trainings. Support to develop the regional guidelines on trawl fisheries, promotion and help in translation of the FAO guidelines on bycatch management and reduction of discards were others. Capacity building in EAFM and support to incorporate EAFM into the fisheries management plans of the member countries had been the major contribution.

The main regional lessons learnt were presented by SEAFDEC. Participating countries have different background of trawl fisheries and management needs which need to be recognized when harmonising policies and approaches. Stakeholders of trawl fisheries should be clearly identified and prioritized. Public Private Partnership (PPP) identification and prioritization is very important for project start up phase. Data collection is one the major challenges. Gear modifications are important but they are not

always the most appropriate tool. Understanding socio economic aspects and working accordingly is important. Scientific information from one country can be shared with other countries. EAFM is the important tool for manage trawl fisheries. MCS in fishing operation is key issue for trawl management. Collaboration and support by FAO and organizations/projects like APFIC, SIDA, BOBLME and SEAFDEC, is one of the factor that helped the project reach its outcome. The presentation is given as **Annexure 5F**.

Discussions

The important role played by SEAFDEC in providing technical guidance was acknowledged well. In the process it also enhanced the capacity of SEAFDEC.

Agenda 4: Fisheries Improver Program – how it can utilize the achievement of Trawl fisheries management

Fisheries Improvement programme - SFP Vietnam

The Fisheries Improvement Programme (FIP) was presented as a step wise approach starting from the current fishery status and proceeding to the expected/desired fishery. This involves reference points/standards/criteria/benchmarks in many cases with regard to certifications schemes such as MSC. The involvement of different stakeholders through meetings was stressed. In Vietnam, the FIP is taken up in Kien Giang and Ben Tre provinces. The presentation is given as **Annexure 6**.

Discussions

It was discussed that the success of FIP depends on the commitment of the stakeholders including the Government mandate and the private sector commitment. Better price realization is another possibility.

Perspectives of MSC programme - WWF

WWF made a presentation on MSC Principles and indicators of Fishery Improvement Projects (FIPs) in the Andaman Trawl Fishery Project. The Marine Stewardship Council (MSC) was described as an international not for profit NGO promoting sustainable wild fisheries and product traceability through eco-labeling and certification programmes. The basis of the standard is sustainability of stock, ecosystem impact and effective management. The importance of the FIP with a principle of market recognition and access with demonstrated improvement was stressed. The approach for FIP in South Asia involves risk-based strategies suitable for data-deficient fisheries, delivering ecosystem (EAFM) outcomes, incorporating socio-cultural, livelihood and economic aspirations and encouraging private and public sector cooperation. The methodology followed are Consequence Analysis (CA), Productivity Susceptibility Analysis (PSA), Consequence Spatial Analysis (CSA) and Scale Intensity Consequence Analysis (SICA).The different stages at which FIP is progressing in the Gulf of Thailand and Andaman Seaside of Thailand was described.

Views of Thai Net makers group

The representative of the Thai Fishing net makers group expressed that when the Thai fishers believe in the viability of a particular type of net, it is difficult to convince them to change to anything else. In that case they need to be convinced through the community leaders. The net manufacturers are ready to support the Government and the Industry in any technology change and technology transfer.

Agenda 5: Group discussion with Fishing Industry on effective Fisheries management

The participants were divided into four groups based on geographical proximity of participating countries and each group was asked to work on the following questions.

- What are the current constraints of trawl fisheries in SE Asia
- Suggestions on managing sustainable trawl fisheries
- How the private sector can contribute to the effective management of trawl fisheries
- What should be the role of the regional and international organizations in this regard

Agenda 6: Presentation of Group discussion results

The four groups presented the points under the four questions asked. The consolidated version of the four groups is as follows:

1. What are the current constraints of trawl fisheries in SE Asia

- Multiple objectives in trawl fisheries
- High pressure on fisheries livelihoods
- Negative perception of the fishery due to inadequate studies and misinformation
- Ineffective/inefficient fisheries
- Over fishing / Over capacity
- Fish trawl and shrimp trawl not adequately specified in registrations
- Serious bycatch problem and also discards in some cases
- High demand for fishmeal and feed
- Poor compliance with management measures
- Weak enforcement
- Trawls operate near coast line in spite of zoning regulations
- Fishing grounds limited by stringent regulations
- Countries with high fishing fleet power are taking non-proportionately large share of fisheries resources from common waters or from each other fishing zone
- Conflicts among fisheries
- Weak cooperative organizations among fishers and poor collaboration among stakeholders
- Inadequate fisheries data collection and scientific analysis
- Ineffective traceability
- Lack of VMS in small trawlers and no VMS in Myanmar
- Labour problem in particular in Thailand and poor perception of human values
- Lack of capacity and technical support

2. Suggestions on managing sustainable trawl fisheries

- Apply EAFM and implement appropriate management plans
- Promote co-management / Community based fishing
- Involve private sector through co-management
- Improve the control of fishing effort (Closed seasons/areas - Input control/zonation)
- Strengthen MCS and develop VMS system
- Improve law enforcement
- Manage licenses for trawling taking into account specific target species (shrimp or fish)
- Set number of licenses to ensure fishing effort maintains sustainable fishing
- Control/reduce capacity, especially number of trawlers
- Select of fishing gear/modification that can reduce the environmental impact
- Recognize critical habitats that should be avoided in fishing activities, as well as set up the maps of fishing areas;
- Set acceptable standards (best practices) for trawling
- Promote best practices
- Shift to other gears when necessary
- Capacity building /sensitizing private sector/practitioners on sustainable practices
- Promote alternate livelihoods/ Collaborate with other sectors
- Improve post harvest handling practices
- Raise awareness on market driven approach
- Improve data collection /Catch Documentation scheme
- Strengthen stock assessment
- Educate fishermen/stakeholders through consultations
- Build awareness and capacity among younger generations
- Improve regional cooperation and knowledge sharing

3. How the private sector can contribute to the effective management of trawl fisheries

- Involve in development of management plan and develop sense of ownership
- Promote partnership in management /improvement
- Be part of and apply co-management
- Coordinate with DoF to drive management measures
- Compliance to regulations / responsible fisheries
- Fulfill Log-book
- Actively respond to the information of catch (non-target, discard)
- Participate / cooperate in data collection and M&E and IPS
- Support and promote collective efforts
- Promote market driven approach that buy from good practices
- Incentives to develop sustainable fisheries
- Apply traceability
- Increase funding

4. What should be the role of the regional and international organizations in this regard

- Increase technical support and capacity building for stock assessment, understanding impact on ecosystems gear modifications etc.

- Improve scientific research collaboration
- Develop common trawler guidelines
- Improve monitoring
- Fund raising
- Set functional regional forum/ platform
- Improve regional facilitation / coordination/networking
- Set up training programmes to younger generation
- Develop communication channel to global developments
- Develop data repository
- Increase the awareness on certification programs
- Promote the development of standard fishing gear (bottom trawl) for demersal fish in contiguous area.

Agenda 7: Wrap up Session

During the Wrap up session Mr David Brown pointed out that the results of REBYC-II CTI project and recommendations from the groups clearly show that there is scope for taking the work forward in the region for sustainable trawl fisheries.

Mr Petri Suuronen emphasized the importance of identifying and clearly prioritizing the key issues in the follow-up project.

The Secretary General of SEAFDEC thanked the participants for their valuable participation wished them a safe journey back.

Annexure 1

Agenda

SOUTHEAST ASIA TRAWL FISHERIES ROUND-TABLE MEETING

21 September 2016

Time	Agenda	Remark
08:30-09:00	Registration	Administrative
09:00-09:10	Administrative and Logistic Announcement	Administrative
09:10-09:45	<p>Agenda 1 Opening of Workshop</p> <ul style="list-style-type: none"> ▪ Welcome Remark by REBYC-II CTI project ▪ Opening Remark by SEAFDEC SG ▪ Keynote address by FAO, Rome ▪ Opening remarks by FAORAP, Bangkok 	Facilitator: RFU
09:45-11:00	<p>Agenda 2. Background – Why management of trawl fisheries is important for long term production, and stakeholder analysis SEAFDEC/RFU</p> <p>Agenda 3. Achievement of REBYC-II CTI project in National and Regional level</p> <ul style="list-style-type: none"> ▪ Indonesia ▪ PNG ▪ Philippines ▪ Thailand ▪ Viet Nam ▪ SEAFDEC 	Country representatives and SEAFDEC
11:00-12:30	<p>Agenda 4. Fisheries Improver Program – how it can utilize the achievement of Trawl fisheries management</p> <ul style="list-style-type: none"> ▪ SFP-Viet Nam ▪ WWF (also to explain the MSC perspective) ▪ Thai fish net makers group ▪ Thai Sustainable Fisheries Roundtable (TSFR) 	
12:30-13:30	Lunch Break	
13:30-15:00	Agenda 4. Group discussion with Fishing Industry on effective Fisheries management	
15:00-15:30	Agenda 6. Presentation of recommendations from the group discussions	

15:30-15:45	Refreshment Break	
15:45-16:30	Agenda 6. Presentation of recommendations from the group discussions (cont)	
16:30	<p>Agenda 7. Wrap up the meeting</p> <p>Closing Remark by FAO Representative</p> <p>Closing remarks by SG, SEAFDEC</p>	<p>Results from this workshop will be a major input to the Regional Meeting on Trawl Fisheries Management in SE Asia</p>

Annexure 2

List of participants

CAMBODIA	
<p>Dr. Chea Tharith Deputy Director Department of Fisheries Affairs Fisheries Administration/MAFF # 186 Preah Norodom Blvd, Khan Chamkar Mon Phnom Penh, Cambodia P. O. Box 582 Tel: 855 17 272 896 E-mail: kimchhea@yahoo.com</p>	<p>Mr. Yin Liseng Chief Fisheries Community Koh Kong Province Village 3, Backlong commune, Koh Kong Province, Cambodia Tel: 855 978177277</p>
INDONESIA	
<p>Mr. Ir. Endroyono, SE MM Sub Directorate of Fisheries Labour and Certification Ministry of Marine Affair and Fisheries Directorate General of Capture Fisheries Directorate of Fishing Vessel and Fishing Gear Jl. Medan Merdeka Timur No. 16 Jakarta 10110, Indonesia Tel: +62 21 351 9070; Fax.: +62 21 3520726 E-mail : endroyono.semm@gmail.com</p>	<p>Ms. Ligga Prawitaningrum Ministry of Marine Affair and Fisheries Directorate General of Capture Fisheries Directorate of Fishing Vessel and Fishing Gear Jl. Medan Merdeka Tinur No. 16 Jakarta 10110 Indonesia Tel: +62 21 351 9070 Fax.: +62 21 3520726 E-mail: linggaprawita@yahoo.com</p>
<p>Mr. I Gusti Ngurah Merthawibawa HPPI – association of Indonesia shrimp Indonesia Tel: 62 21 579 30286 Fax: 62 21 579 30286 E-mail: hppishrimp@yahoo.com</p>	
MALAYSIA	
<p>Ms. Tengku Balkis Binti Tunku Shahar Head of Section Department of Fisheries Malaysia Level 1, Wisma Tani, 4G2, No. 30, Persiaran Perdana Presint 4, 62628 Putrajaya, Malaysia Tel: +603 88704405 Fax: +603 88891233 E-mail: balkis@dof.gov.my</p>	<p>Mr. Kee Yau Leng Manager Leng Wah Fishery Sdn. Bhd. 9131, Jalan Tepi Sungai, 36400, Hutan Melintang, Perak, Malaysia Tel: + 605 6415699 Fax: + 605 6414542 E-mail: Leng31411@gmail.com</p>
MYANMAR	
<p>Mr. Myint Shwe Deputy Director Department of Fisheries for Myanmar Shan Chi Quartor, Dawei T/S, Taninhary Region Myanmar Tel: + 95 9 449004650</p>	<p>Mr. Thet Soe Secretary Tamintharyi Region Fisheries Federation Myanmar Tel : 09 421129552, 098762663 E-mail: myeikmpc@gmail.com,</p>

Fax: +95 59 21235 E-mail: myintshwedof@gmail.com	Thetsoe.Lwinn@gmail.com
PAPUA NEW GUINEA	
Mr. Ian Liviko Manager – Trawl Fisheries Fisheries Management Unit (Lobster/Prawns) PNG National Fisheries Authority (PNG NFA) Port Moresby, Papua New Guinea Tel: +675 3090444 Fax: +675 3202061 E-mail: iliviko@fisheries.gov.pg	Mr. Joseph Posu Fisheries Management Officer Fisheries Management Unit (Lobster/Prawns) National Fisheries Authority (NFA) Port Moseby, Papua New Guinea Tel: +675 3090444 Fax: +675 3202061 E-mail: jposu@fisheries.gov.pg
PHILIPPINES	
Mr. Rafael V. Ramiscal Officer-in-charge, Capture Fishery Division Bureau of Fisheries and Aquatic Resources (BFAR) PCA Building, Elliptical Road Diliman, Quezon City, Philippines Tel/Fax: +63 2 9294296 E-mail: rv_ram55@yahoo.com	Mr. Jonathan O. Dickson National Technical Officer for REBYC-II CTI Food and Agriculture Organization 29 th Floor, RCBC, Buildina, Ayala Avenue Makati city, Philippines Cellphone: +639178588404 E-mail: jod_bfar@yahoo.com
Dr. Juan D. Albaladejo Regional Director Bureau of Fisheries and Aquatic Resources Regional Office VIII (Eastern Visayas) SDC Bldg. 1, Barangay 77, Marasbaras, Tacloban City, 6500 Leyte Province, Philippines Telefax : (6353) 3211732 Mobile Phone No.: +63 917 5271355 E-mail: jalbaladejo99@yahoo.com	Mr. Virgilio Tomnob Executive Assistant II Office of the City Mayor Sen. JD Avelino street Calbayog city, Samar, Philippines 6710 Tel: 63 55 2094031, Mobile: 63 9173214406 E-mail: virtomnob6709@yahoo.com , virtomnob@gmail.com
THAILAND	
Mr. Suchart Sangchan Director Andaman Sea Fisheries Research and Development Center 77 Moo 7, Sakdidej Road, Makham Bay Amphur Muang, Phuket 83000 Tel: 66 76 391138, 66 918257528 E-mail: sangchansu@gmail.com	Dr. Mala Supongpan Consultant of the Project REBYC-II CTI 378 Onnut 17, Yak 16 Onnut Sukhumvit 77 Bangkok 10250 Tel: 668 5649 9654 E-mail: m.supongpan@gmail.com
VIET NAM	
Mr. Nguyen Phu Quoc Deputy Director Capture Fisheries Department Directorate of Fisheries 10 Nguyen Cong Hoan Street Ba Dinh District	Ms. Nguyen Thi Hong Nhung Department of Science Technology & International Cooperation under DFISH Directorate of Fisheries 10 Nguyen Cong Hoan Street

Hanoi, Viet Nam Tel: +84 915977227 E-mail: nguyenphuquoc.mard@yahoo.com	Ba Dinh District Hanoi, Viet Nam Tel: +84 915977227 E-mail: nhung.doa@gmail.com
Mr. Pham Hung Directorate of Fisheries 10 Nguyen Cong Hoan Street Ba Dinh District Hanoi, Viet Nam Tel: 84 916118294 E-mail: hungfam83@gmail.com	
SEAFDEC	
Dr. Kom Silapajarn Secretary General and Chief of Training Department SEAFDEC Secretariat P.O. Box 1046, Kasetsart Post Office Bangkok 10903, Thailand Tel: 66 2 9406326 E-mail: sg@seafdec.org	Mr. Bundit Chokesanguan SEAFDEC/Training Department P.O. Box 97, Phrasamutchedi Samut Prakan 10290 Tel:+66 2425 6100 Fax:+66 2425 6110 E-mail: bundit@seafdec.org
Dr. Somboon Siriraksophon Policy and Program Coordinator SEAFDEC Secretariat P.O. Box 1046, Kasetsart Post Office Bangkok 10903, Thailand Tel: +66 29406326, 091 7596259 Fax: +66 29406336 E-mail: somboon@seafdec.org	Mr. Isara Chanrackij Capture Fishery Technology Division Head (ad interim) / Fishing Technology Section Head SEAFDEC/Training Department P.O. Box 97, Phrasamutchedi Samut Prakan 10290 Tel:+66 2425 6100 ext. 140; Fax:+66 2425 6110 E-mail: isara@seafdec.org
SEAFDEC/RFU	
Mr. C.M. Muralidharan Field Administrative Officer/FAO Consultant Training Department P.O. Box 97, Phrasamutchedi Samut Prakan 10290 Tel:+66 2425 6100 Fax:+66 2425 6110 E-mail: havakat.muralidharan@boblme.org	Mr. Sayan Promjinda Project Technical Advisor and Fishing Gear Technologist Training Department P.O. Box 97, Phrasamutchedi Samut Prakan 10290 Tel:+66 2425 6100; Fax:+66 2425 6110 E-mail: sayan@seafdec.org
FOOD AND AGRICULTURE ORGANIZATION OF THE UNITED NATIONS	
Mr. Petri Suuronen Fishery Industry Officer and Project Lead Technical Officer, Fishing Operations and Technology Branch (FIAO), Fisheries and Aquaculture Department Food and Agriculture Organization of the United Nations Viale delle Terme di Caracalla, 00153 Rome, Italy Tel: +39 06 5705 5153	Mr. David Brown FAO Regional Fisheries Programme Consultant FAO Regional Office for Asia and the Pacific 39 Phra Athit Road, Phra Nakorn Bangkok 10200, Thailand Tel: 66 2 6974173 Fax: 66 2 6974445 E-mail: David.brown@fao.org

E-mail: petri.Suuronen@fao.org	
OTHER DEVELOPMENT AGENCIES	
Mr. Len Garces Fisheries Management Specialist USAID/ The Oceans and Fisheries Partnership 208 Wireless Rd., 12 th Floor Lumpini Pathumwan, Bangkok 10330, Thailand Tel: (+63 917) 822 0637 Email: Len.Garces@oceans-partnership.org	Ms. Pakawan Talawat WWF-Thailand 92/2 Soi Paholyothin 5 Samsen Nai Phyathai, Bangkok Thailand Tel: 66 2 6198534-37 ext. 516, 091 4635412 E-mail: pTalawat@wwfgreatermekong.org
Mr. Nguyen Ba Thong Sustainable Fisheries Partnership (SFP) Dai Do-Vong La Dong Anh Ha Noi, Viet Nam Tel: 84 983992633 E-mail: thong.nguyen@sustainablefish.org	
ASSOCIATIONS AND PRIVATE SECTOR	
Mr. Vorapong lamtrakul Thai Feed Mill Association 43 Thai CC Tower, RM 170 17 th Floor, South Sathorn Rd. Bangkok 10500 Thailand Fax: 02-6756265 Email: tfma44@yahoo.com	Mr. Komprat Boodsri Thai Feed Mill Association 43 Thai CC Tower, RM 170 17 th Floor, South Sathorn Rd. Bangkok 10500 Thailand Fax: 02-6756265 Email: tfma44@yahoo.com
Ms. Suppamas Sawatyanon Siam Brothers Corp 65 Moo 3 Suksawad Rd., Bangkru, Prapradang, Samutprakan, 10130 E-mail: suppamas@siambrothers.com	
OBSERVERS	
Mr. Isao Koya Manager for the Japanese Trust Fund Programs SEAFDEC Secretariat P.O. Box 1046, Kasetsart Post Office Bangkok 10903, Thailand Tel: 66 2 9406326 E-mail: atfm@seafdec.org	Mr. Santiphong Putsa Assistant Researcher on Fishing Technology SEAFDEC Training Department P.O. Box 97 Phrasamutchedi Samut Prakan 10290 Tel: 662 4256100 E-mail: santiphong@seafdec.org
Mr. Suppachai Ananpongsuk Senior Researcher SEAFDEC Training Department P.O. Box 97 Phrasamutchedi Samut Prakan 10290 Tel: 662 4256100 E-mail: suppachai@seafdec.org	Mr. Nopporn Manajit Fisheries Resources Enhancement Scientist SEAFDEC Training Department P.O. Box 97 Phrasamutchedi Samut Prakan 10290 Tel: 662 4256100 E-mail: nopporn@seafdec.org
Mr. Nakaret Yasook Fishing Gear Technologist	Mr. Weerasak Yingyuad Fisheries Resources Enhancement Scientist

<p>SEAFDEC Training Department P.O. Box 97 Phrasamutchedi Samut Prakan 10290 Tel: 662 4256100 E-mail: nopporn@seafdec.org</p>	<p>SEAFDEC Training Department P.O. Box 97 Phrasamutchedi Samut Prakan 10290 Tel: 662 4256100 E-mail: weerasak@seafdec.org</p>
ADMINISTRATIION OF THE MEETING	
<p>Ms. Nathacha Sornvaree Regional Administrative Officer for REBYC-II CTI project Training Department P.O. Box 97, Phrasamutchedi Samut Prakan 10290 Tel:+66 2425 6137 Fax:+66 24256110, 2 4256110 E-mail: natha@seafdec.org</p>	

Food and Agriculture Organization of the United Nations
 SEAFDEC RFU
 Strategies for trawl fisheries bycatch management (REBYC-II CTI)

Background of REBYC II CTI PROJECT and context of the Round table meeting

Presented by
C.M.Muralidharan,
 Representative of RFU, REBYC II CTI

Food and Agriculture Organization of the United Nations
 SEAFDEC RFU
 Strategies for trawl fisheries bycatch management (REBYC-II CTI)

REBYC-II CTI (2011-2016)

- Follow up of REBYC I project(2002-2008) covering larger number of SE Asian countries and focused on by catch reduction devices.
- REBYC II CTI was more focused in five countries and realising that
 - A hoholistic approach is needed
 - ‘Bycatch’ is largely utilised and considered an important part of the total catch;
 - Gear modification solutions need to be supported by appropriate legal and economic incentive frameworks
 - Understanding of, and close cooperation with stakeholders are crucial for success


Food and Agriculture Organization of the United Nations
 SEAFDEC RFU
 Strategies for trawl fisheries bycatch management (REBYC-II CTI)

REBYC-II CTI Objectives (2011-2016)

- **The Global Environment Objective:** Responsible trawl fisheries that result in sustainable fisheries resources and healthy marine ecosystems in the Coral Triangle and Southeast Asian waters by reduced bycatch, discards and fishing impact on biodiversity and the environment.
- **The Project Development Objective:** Effective public and private sector partnership for improved trawl and bycatch management and practices that support fishery dependent incomes and sustainable livelihoods.

Food and Agriculture Organization of the United Nations
 SEAFDEC RFU
 Strategies for trawl fisheries bycatch management (REBYC-II CTI)

REBYC II CTI Countries and Pilot sites



Indonesia: Arafura Sea
 Papua New Guinea: Gulf of Papua
 Philippines: Samar Sea
 Thailand: Chumpon Province, Trat Province
 Viet Nam: Kien Giang Province

Food and Agriculture Organization of the United Nations
 SEAFDEC RFU
 Strategies for trawl fisheries bycatch management (REBYC-II CTI)

Four components:

- Policy, legal and institutional frameworks;
- Resource management and fishing operations;
- Information management and communication;
- Awareness and knowledge.






Food and Agriculture Organization of the United Nations
 SEAFDEC RFU
 Strategies for trawl fisheries bycatch management (REBYC-II CTI)

Highlights

Results-Component 1: Policy, legal and institutional frameworks

Contributions to




- APFIC Regional Trawl Fisheries Guidelines;
- Fisheries management plans and policies in the member countries;


 Food and Agriculture Organization of the United Nations
SEAFDEC RFU
 Strategies for trawl fisheries bycatch management
 (REBYC-II CTI)
 


Highlights




Results - Component 2: Resource management & fishing operations

- Study on developing guidelines for fishing gear selection; Habitat mapping
- Cod end mesh size regulation in trawling in some countries,
- Study of commercial trawl fisheries


 Food and Agriculture Organization of the United Nations
SEAFDEC RFU
 Strategies for trawl fisheries bycatch management
 (REBYC-II CTI)
 


Results - Component 3: Information management & communication




- Key documents translated in local languages;
- Socio economics study of fisheries especially trawl fisheries in most pilot sites
- Workshops held to standardize methodologies on data collection, data indicators for bycatch/ biological surveys;
- Trawler Energy Audit Study completed and communicated.


 Food and Agriculture Organization of the United Nations
SEAFDEC RFU
 Strategies for trawl fisheries bycatch management
 (REBYC-II CTI)
 


Highlights

Progress - Component 4: Awareness & knowledge

- EAFM Training Courses and EAFM LEAD workshop;
- A series awareness building/ information dissemination/training workshops held in all five countries on the results of the various studies and works of REBYC II CTI work


 Food and Agriculture Organization of the United Nations
SEAFDEC RFU
 Strategies for trawl fisheries bycatch management
 (REBYC-II CTI)
 


Context of this this round table meeting on Trawl Fisheries management

- The REBYC II CTI project is concluding now
- The results from the project has to be taken forward with
 - a broader objective of sustainable trawl fisheries management in SE Asia
 - beyond just the REBYC II CTI countries
- For this all important stakeholders especially the private sector in fisheries need to be informed and involved


 Food and Agriculture Organization of the United Nations
SEAFDEC RFU
 Strategies for trawl fisheries bycatch management
 (REBYC-II CTI)
 



Objectives of the round table meeting

- Sharing overall lessons learned during the implementation of the REBYC-II CTI project to Private sector;
- Awareness building of Regional trawl fisheries management for the private sector
- Policy recommendations from Private sector to be generated to manage trawl fisheries in Southeast Asia;
- The outputs of this workshop to be further discussed in a regional conference


 Food and Agriculture Organization of the United Nations
SEAFDEC RFU
 Strategies for trawl fisheries bycatch management
 (REBYC-II CTI)
 


Thank you





Why Management of Trawl Fisheries is Important for long term Production, and Stakeholder Analysis

ISARA CHANRACHKIJ

FAO/GEF/SEAFDEC/ REBYC-II CTI PROJECT
A Fishing Industry Round-Table Meeting
21 September 2016
Bangkok, Thailand

Southeast Asia and Coral Triangle


- Most Diverse Ecological Complexes on Earth
- Defined by greater than 450 species of corals
- Global center of marine biodiversity – corals, fishes, other invertebrates
- Includes Indonesia, Philippines, Papua New Guinea, Malaysia, East Timor, and the Solomon Islands (CT6 countries)
- 5.7 million square kilometers of ocean and coastlines in Southeast Asia and the Pacific

Project Countries – Project Area

**-South China Sea-
-Coral Triangle Area-**

Project Countries

- Indonesia:** Arafura Sea (Maluku-Papua)
- Papua New Guinea:** Gulf of Papua
- Philippines:** Samar Sea for small-scale trawlers; whole country large-scale trawlers
- Thailand:** Gulf of Thailand (Chumphon Province)
- Viet Nam:** Southern part of Vietnam (Kien Giang Province)

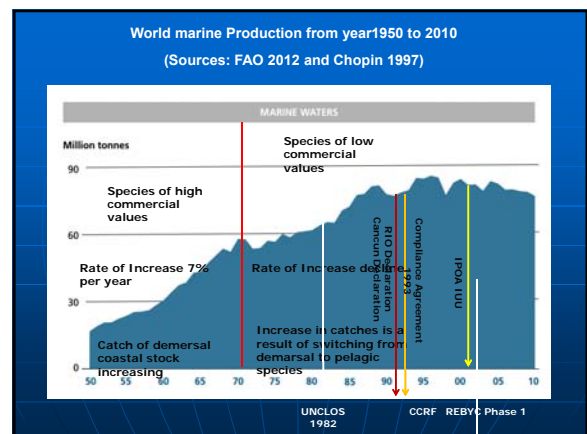


Importance of Southeast Asia and Coral Triangle to Food Security and Livelihoods

- 363 million people
- 120 million directly dependent upon marine resources for livelihoods, more for food security
- Healthy coral reefs support \$12 billion/year tourism industry
- Tuna spawning and nursery grounds support multi-billion dollar tuna fishery
- Healthy reef systems protect communities from storms, reducing damage and future reconstruction costs

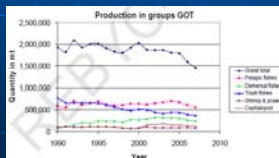
Threats of Southeast Asia and Coral Triangle to Food Security and Livelihoods

- Overfishing for food, ornamentals, curios
- Destructive fishing methods
- Increasing human populations (growth, migration)
- Unsustainable fishing methods
- Loss of critical habitats
- Land-based sources of pollution
- Climate change impacts



Trawl fisheries in SEA and CT

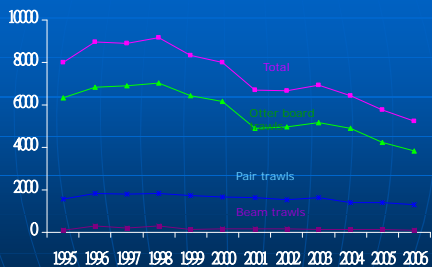
- Due to multi-species in tropical zone, bottom trawling tends to generate large quantities of bycatch and/or low-value fish and trash fish.
- Trawl subsector in the REBYC-II CTI Participating Countries is diverse in scale and type. Estimated total of some 57000 vessels/boats
- Total marine capture fisheries employment of 8 percent (268 000 fishers) and 18 percent of total reported marine catches (2 230 000 MT annually)
- A large amount of these catches is bycatch, including low-value and trash fish – Report by Kongprom 2008, Thailand 35–50% is trash fish in 2003-2005



Example : Gulf of Thailand



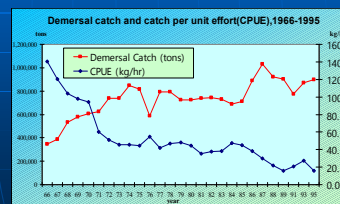
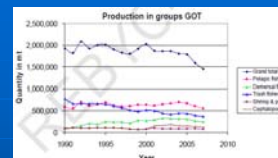
Total number of trawlers registered from 1998 to 2006



2016 DOF (Thailand) – 3193 Unit

Biomass of many demersal stocks down to 5 - 30 % of levels prior to expansion of fisheries (Gulf of Thailand). CPUE is 18-20 kg./hr.

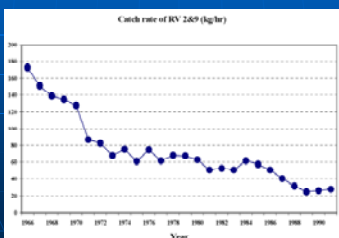
Trash fish: 40-50 %
Juvenile: 6.5-25%



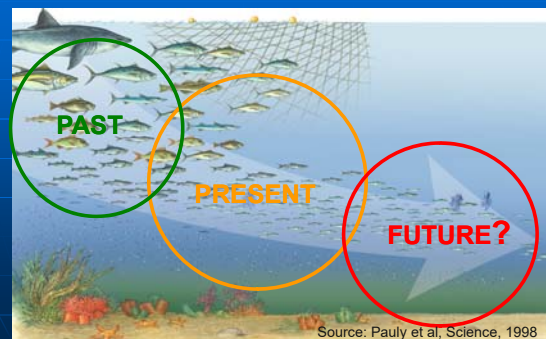
Gulf of Thailand (Dr. Mala et al. 2003 and 2010)

Main conclusion: Gulf of Thailand

- The abundance of larger and more valuable fish has decreased sharply while those of smaller, less valuable species has increased (WorldFish, 2009)




"Fishing down the food chain"



Impacts on ecosystem structure and functioning

- Ecosystems are complex and diverse systems
- Increase in effort and catches may hide the trends in stock status
 - significant decrease of key predators
 - increase of smaller and faster maturing species
- Overall biomass may increase, but fish generally of lower value
- Ecosystem services deteriorate (in the long run)
- There is a cut-off where the total value does not increase further



IUU Fishing International Concerns



Tackling illegal, unreported and unregulated (IUU) fishing

Fishing is illegal if:

- no authorisation
- against fundamental RME management measures by RFMOs
- against national laws or international obligations

Fishing is unreported if:

- not reported, or the reporting contradicts international, ARO or national laws and regulations


Fishing is unregulated if:

- the fishing vessel has no nationality
- fishing as tactics to evade fish stocks

INTERNATIONALLY AGREED MARKET-RELATED MEASURES See article No.66724

SEAFDEC www.seafdec.or.th <http://www.globavista.co.uk/>, <http://www.foa.org/>, <http://www.mms.gov/ia/iuu/> 14

Public awareness is increasing and International Concern



CERTIFIED SUSTAINABLE SEAFOOD MSC www.msc.org

FARMED RESPONSIBLY CERTIFIED ASC www.asc-aqua.org

IFFORS ASSURED www.iffors.com

Certified Bodies

SEAFOOD IN THE CORAL TRIANGLE

Total industry: **US\$ 1 billion** (1991-2012)

Live Reef Food Fish industry: **US\$ 610 million** (2011-2013)

STATUS OF www.iffors.com

Consumer pressure increasing



Tackling illegal, unreported and unregulated (IUU) fishing

SEAFOOD WATCH Choose an industry standard

CATCH CERTIFICATION SCHEME

All Regulation No. 1005/2008 on establishing a community system to prevent, deter and eliminate illegal, unreported and unregulated (IUU) fishing in EU regulation for EU member state applies since 1 January 2010

The prohibit the fishery products originating from IUU fishing activities from the EU market


Fishery products must be accompanied with Catch Certificate (effective since 1 January 2010)

Exempted for: farmed fishery products, freshwater fishery products, ornamental fish, bivalves, seaweed, scallops, and oyster


How to assess stock status?

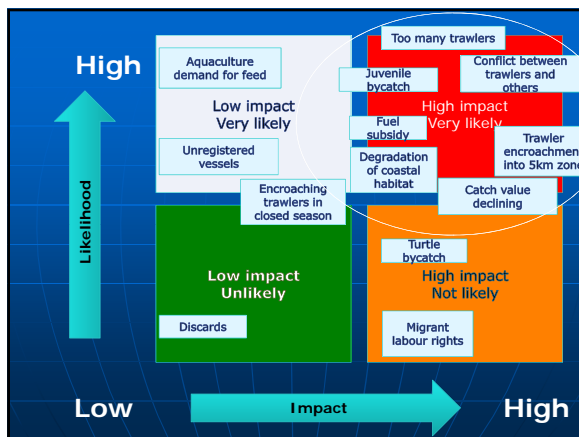
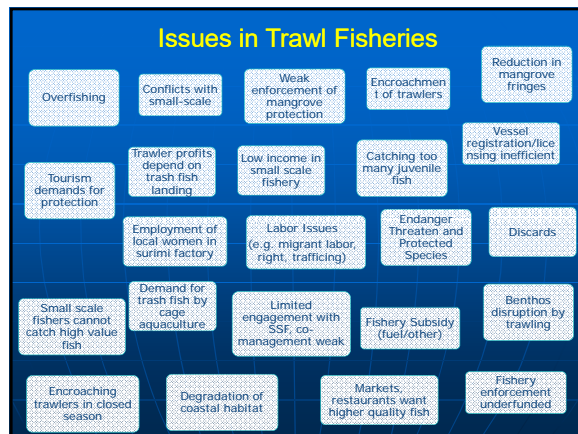
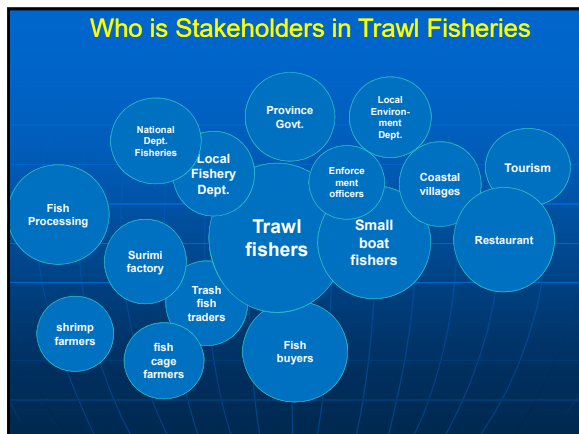
- Catch data (alone) is insufficient for stock assessment in some countries of SEA
- Life history parameters & abundance info needed
- Commercial CPUE data
 - Time series often not long enough
 - How to deal with increase in fishing power over time?
 - How to link CPUE with stock abundance?
- Fishery independent surveys
 - Spatial coverage, costs ?
 - How to link survey abundance index to stock abundance?
 - Length of time series?

How to manage multispecies fisheries?



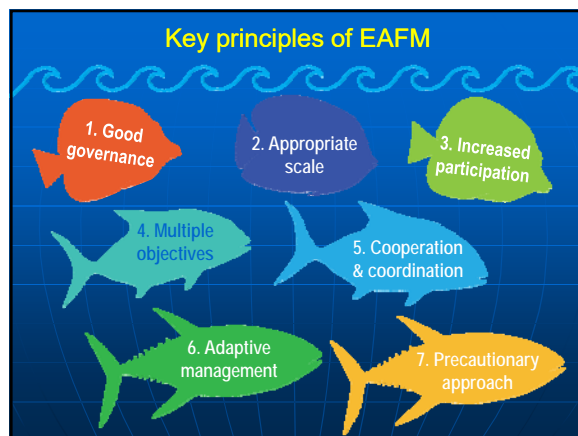
- How to maintain ecosystem integrity?
- How to improve human well-being and equity?
- FAO is promoting fisheries management through the application of an **Ecosystem Approach to Fisheries (EAFM)**
 - It gives major considerations on the balance between ecological – human wellbeing through **bycatches** and habitats
 - Reduction and management of bycatch is an important step in adopting EAF






Why EAFM?

- Integrated approach that allows trade-offs when balancing human and ecological well-being
- Allows adaptive management – leading to more effective planning
- Increased stakeholder participation
- Provides a way to consider large-scale, long-term issues (e.g. climate change)
- Increased political support
- Can help unlock financial resources





Measures to manage bycatch

- Capacity and effort controls
- Measures relating to fishing gears and their use
 - e.g. mesh and hook size, BRDs, TEDs, SMPs
 - alternative fishing gears and practices
- Spatial and temporal fishing restrictions, fishing bans
- No-discard regimes
- Bycatch quotas
- Technologies to reduce ghost fishing
- Limiting entry
- Economic incentives



Consider

- Performance of bycatch management measures/tools is case specific.
- Problems of bycatch occur onshore and at sea.
- Costs associated with implementation and enforcement vary considerably.
- Prior to implementation, assessment of:
 - biological effectiveness
 - socio-economic cost
 - Other implementation
- Taking into account the different fleet segments and their interests.
- Strong economic incentives are needed to encourage fishers uptake of measures !
- We need "buy in" of industry and government

<http://www.rebycti.org>

Dr. Petri Suuronen (Petri.Suuronen@fao.org)
 Mr. Richard Gregory (rickgregory1@gmail.com)
 Mr. Sayan Promjinda (sayan@seafdec.org)
 Mr. Isara Chanrachkij (isara@seafdec.org))

Indonesia: Mr. IR Endroyono SE, MM., Mr. Imron Rosyidi S.PI
 Philippines: Mr. Rafael Ramiscal Dr. Jonathan Dickson
 Papua New Guinea: Mr. Leban Gisawa, Mr. Ian M. Ijviko
 Thailand: Mr. Suchart Sanchang, Dr. Mala Supongpan
 Vietnam: Ms. Nguyen Thi Trang Nhung, and Mr. Pham



ACHIEVMENT of REBYC-II CTI project
in National and Regional Level

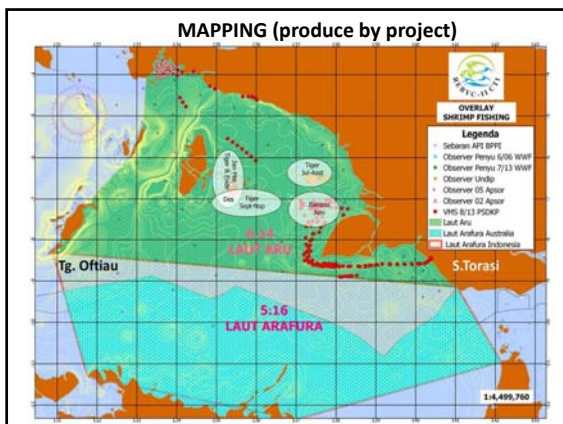
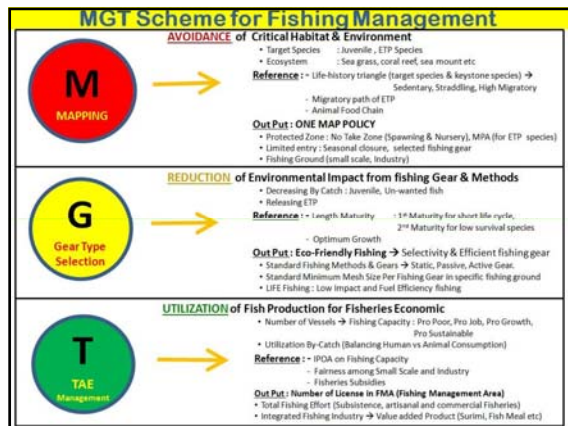
National Project Coordinator of REBYC-II CTI

ENDROYONO

Bangkok, 21 September 2016

- 1. Indonesia current national policy of trawl fisheries management including problem and future direction**
- a) Trawl Banning in Indonesia (Ministry Decree No.2/PERMEN-KP/2015), impact are:
- Since 2015, there is no selected fishing gear can replace for shrimp exploitation.
 - How to direct fishing activity in order to reduce unsustainable fishing.
- b) Moratorium of Ex-Foreign vessels (Ministry Decree No.56/PERMEN-KP/2014), impact are:
- No fishing vessels in Indonesia Archipelagic water (up 12 NM) and EEZ.
 - Specially in Aru-Arafura Sea, →
 - several small scales still operate near coastal. Less exploitation (shrimp resource) in fishing ground up 12 nautical mile.
 - small scale have low fishing power index.
 - Un employment fishing crew
 - Decreasing National Production on shrimp.
- c) Fisheries Management Plan WPP-718 in (Ministry Decree No.54/KEPMEN-KP/2014), impact:
- How to implement Mapping, Gear Selection and Total Effort Management.
 - Aru-Arafura sea → focus Shrimp, Red snapper and demersal fish

- 2. REBYC-II CTI**
- Rebyc-I : Understanding on ETP Species, TED & JTED (Seafdec)
 - Collaboration with IMAc Project to conduct observer on board.
 - Establish 2 (two) Local Consultative Group in Sorong & Ambon.
 - Better communication during among stakeholder project.
[Website: rebyc-cti.kkp.go.id](http://www.rebyc-cti.kkp.go.id)
 - We have finalized 3 guideline (MGT) : we can eliminate environment impact and **reduce unsustainable trawl fishing practices.**
 - Translate FAO reference in bahasa.
 - Promote and establish MGT Scheme (Mapping, Gear selection, Total Allowable Effort) as a new approach to Managing Fishing Activities.
 - The participation of members of the association have strengthened the discussion on fisheries management to reduce unsustainable fishing practices.



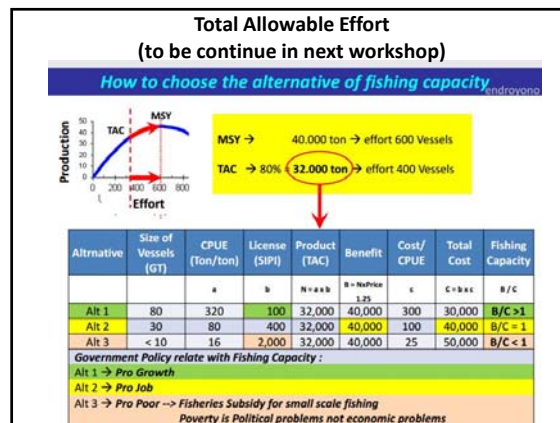
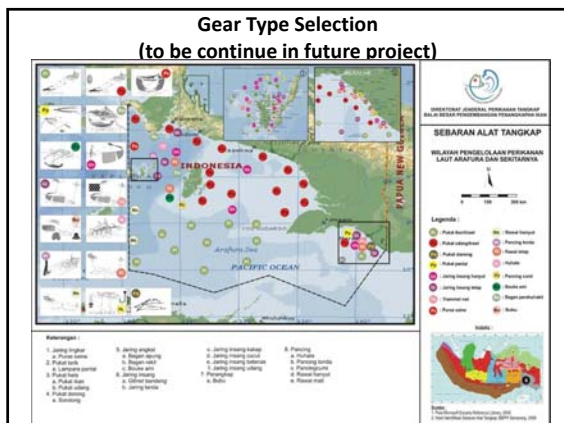
Gear Type Selection (to be continue in future project)

Eco-Friendly Fishing, LIFE Fishing

	Handtrawl	Demersal	Open Net	Deep & Long Pelagic	Surface	Midwater	Circle & Gyro	Other
Bottom Gillnet	High Impact	Medium High Impact	Medium Impact	Low Impact	Low Impact	Low Impact	Low Impact	Low Impact
Bottom Longline	High Impact	Medium High Impact	Medium Impact	Low Impact	Low Impact	Low Impact	Low Impact	Low Impact
Bottom Trawl	High Impact	Medium High Impact	Medium Impact	Low Impact	Low Impact	Low Impact	Low Impact	Low Impact
Dredge	High Impact	Medium High Impact	Medium Impact	Low Impact	Low Impact	Low Impact	Low Impact	Low Impact
Harpoon	High Impact	Medium High Impact	Medium Impact	Low Impact	Low Impact	Low Impact	Low Impact	Low Impact
Hook and Line	Low Impact	Low Impact	Low Impact	Low Impact	Low Impact	Low Impact	Low Impact	Low Impact
Midwater Trawl	High Impact	Medium High Impact	Medium Impact	Low Impact	Low Impact	Low Impact	Low Impact	Low Impact
Pelagic Longline	Low Impact	Low Impact	Low Impact	Low Impact	Low Impact	Low Impact	Low Impact	Low Impact
Pot and Trap	Low Impact	Low Impact	Low Impact	Low Impact	Low Impact	Low Impact	Low Impact	Low Impact
Purse Seine	High Impact	Medium High Impact	Medium Impact	Low Impact	Low Impact	Low Impact	Low Impact	Low Impact


Key

- High Impact
- Medium High Impact
- Medium Impact
- Medium Low Impact
- Low Impact




- 3. Recommendations for trawli shrimp fisheries management in Aru and Arafura Sea**
- REBYC-II CTI Indonesia has been developing your management concepts through MGT Scheme (Mapping, Gear type selection, TAE management)
 - Mapping : Based on the fishermen experience, the government can create a map of fishing areas, in order to reduce negative impact and avoiding fishing activities in critical habitat. Manage Zone of fishing area, seasonal closure ect.
 - Gear Type selection : choose an alternative fishing gear to catch fish shrimp with quality and a good performance.
 - TAE Management : The government can monitor more accurately the shrimp resource potential so as to determine the trapping capacity appropriate to limit the fishing license.
 - Develop business shrimp fishery, which can reduce fishing activities are unsustainable
 - Standardization fishing gear.
 - Certification fishing activities related to marked.
 - Contribution of Shrimp Fisheries to local communities and local economic
 - the issue of by-catch should be maintained to reduce unsustainable fishing. By-Catch (ETP Species, juvenile & unwanted fish) in fishing ground.
 - the target species (Life cycle)
 - the marine food chain
 - refugee
 - balance human consumption with animal consumption


FAO/GEF/SEAFDEC/REBYCII CTI PROJECT
GULF OF PAPUA TRAWL FISHERIES
PAPUA NEW GUINEA NATIONAL FISHERIES AUTHORITY



1) Brief overview of national Project REBYC-II CTI;
 1.1 Area of Operation
 1.2 Overall project implementation
 1.3 What is topic of trawl fisheries management that countries focus:
 "Timely Bycatch data collection, management and management"
 1.4 Lesson Learnt of Project





GULF OF PAPUA TRAWL FISHERIES PROJECT AREA



1) Brief overview of national Project REBYC-II CTI;
 GOP Trawl Fisheries Management Plan Review by incorporating the 3 E-EAFM Pillars
 - Environmental Well-being (Biological Study - TED/BRD Trial study)
 - Economic Well-being (Trawl Economic Study)
 - Human Well-being (Socio-Economic Study)

2. Planned Activities
 -Reviewing of GOPPMP to incorporate changes from the studies
 -TED/BRD implementation and initial assessment for MSC accreditation by US Team
 -Bycatch data maintenance and storage for management

3. Way forward and remarks
 - Continue working more effectively with the industries and resources owners to address bycatch issues for a win-win situation
 - positive remarks and comments by FAO delegation to PNG to review funded projects in PNG and encourage us for further funding opportunities.



ACHIEVEMENTS OF REBYC-II CTI PROJECT - PHILIPPINES

REBYC-II CTI project will contribute to more sustainable use of fisheries resources and healthier marine ecosystems in the Coral Triangle and Southeast Asia waters by reducing bycatch, discards and other impacts of trawl fisheries



- o Establishment of the Project Team and
 - Project Technical Working Group
 - National Advisory Group
- o Socio economic studies carried out under project, used in determining local level management measures and feature as a chapter in the SSFMP
- o Samar Sea Fisheries Management Plan (SSFMP) was finalized after presentation to stakeholders/TWG, BFAR Regional Fisheries Office Staff, Public, the Members of the Samar Sea Alliance of Local Government Units (LGUs) and the National Advisory Group



Component I Policy, Legal and Institutional Framework

- o Consultative group and stakeholder participation to plan, coordinate and monitor project activities
- o Establishment/Integration of local management council (Alliance of Samar Sea Local Government Units / LGUs) for Samar Sea management.



Component I Policy, Legal and Institutional Framework

- o Completion of Catalogue of Fishing Gears of Samar Sea
- o Coral reef surveys (for critical habitat mapping) covered 19 sites in 6 municipalities/cities, completed.
- o Ichthyo-plankton and by-catch survey completed.
- o Fishing grounds and critical habitats in Samar Sea mapped.
- o Training/workshop on the inventory of fishing gears and boats




Component II Resource Management and Fishing Operations

- o Inventory of trawl and other fishing gears in 11 municipalities, Samar Sea
- o Workshop to review and consolidate data.
- o Establishment of implementation, monitoring and evaluation scheme for the SSFMP
- o Provision of alternative livelihood



Component II Resource Management and Fishing Operations

- o Established a website for the project
- o Baseline data on socioeconomics of trawl fisheries in the pilot site
- o Technical paper on the socioeconomic survey
- o Catalogue of Fishing Gears in Samar Sea (In Press)




Component III: Information and Management Communications

Spawning months of selected commercial species as basis for the 4 month Close Season


Species	J	F	M	A	M	J	J	A	S	O	N	D
Bisogo (<i>Oreogobius</i> spp.)								1, 2				
Kalaso (<i>Saurida</i> sp.)								1, 2				
Saramulyete								1, 2			1	
Tambong (<i>Leiognathus equulus</i>)								2				
Baga-baga (<i>Pristigaster</i> spp.)								2				
Lawayan (<i>Leiognathus</i>)												2
Agomas (<i>Rastrelliger faughni</i>)				1, 2	1							
Gahungong (<i>Decapterus</i> spp.)												1, 2
Basral				2	2							
Hasa- hasa(<i>Rastrelliger brachyotus</i>)								2				
Talumahan, Buras(<i>Rastrelliger kanagurta</i>)				2	2	2						
Matambaka (<i>Selanx culantrapus</i>)								2				


Source :
 1 Results of study during REBYC 1, 2005-2006
 2 Results of assessment conducted by SSII, 2013-2014
 1, 2 Month of high proportion of matured (stage IV-V)
 Anticipated high occurrence of juvenile



IMPLEMENTATION, MONITORING AND EVALUATION PLANNING FOR SSFMP

- Establishment and Operationalization of Alliance Fisheries Law Enforcement Team (AFLET)
 - Capacity building for Fisheries Law Enforcers
 - Establishment of Alliance Technical Working Group
 - Establishment of Adjudication Mediation Board
- 

- Establishment and Operationalization of Cyanide Detection Laboratory
 - Provision of alternative Livelihood component
 - Implementation of the 4-months Closed Season and Prohibition on the catching of juvenile
 - Moratorium on the number of boats
- 

- Zoning and Exclusive Fishing Rights
 - Establish a Forum under the Samar Sea Alliance
 - Implementation of National Stock Assessment Program
 - Conduct EAFM-LEAD orientation for Local Chief Executives (LCE)
- 



FAO/GEF/SEAFDEC/ REBYC-II CTI PROJECT

SOUTHEAST ASIA TRAWL FISHERIES
ROUND-TABLE MEETING

Thailand “Trawl fisheries and
by-catch Management”

Dr. Mala Supongpan

Novotel Hotel, Pleonchit, Bangkok
21 September 2016

Background

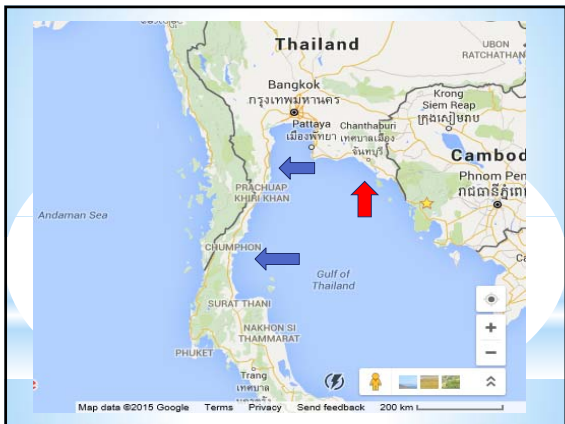
Between April 2013 and September 2016, The Food and Agriculture Organization of the United Nations (“FAO”) and the Department Of Fisheries, Thailand collaborated in the Execution of the GEF supported project “Strategies for trawl fisheries by-catch management”

The Project was implemented by the Marine Fisheries Research and Development Division, DOF in two sites of the Gulf of Thailand

The two project sites were selected:

Project site 1. At Chumphon-Prachuap Kiri Khan for mesh size cod end Experiments comparison between 2.5 and 4.0 cm for Otter board and pair trawlers.

Project site 2. At Ao Trat for Area and Season Closure



Objectives of the Project
(REBYC-II CTI; GCP /RAS/269/GFF).

Objectives

1. To formulate management measure for trawl cod-end mesh size to use 4.0 cm,
2. To formulate closed area and closed season management measure in Ao Trat.

Thailand: FAO/GEF have signed agreement with the Department of Fisheries for three times:
(LOA = Letter of Agreement)

- o LOA 1 in 2013
- o LOA2 in 2015
- o LOA3 in 2016

All of these LOAs have been integrated to implement with four components.

Component 1.

The Policy, legal and institutional frameworks component:

Work towards the establishment of national or area specific trawl fisheries by-catch management plans and building institutional capacity for their implementations.

Component 2.

The Resource management and fishing operations component:

Lead to the adoption of more selective fishing gear and practices, provide a basis for implementing zoning of fishing areas and developing spatial-temporal closure management measures, and generate better data on number of vessels and recommendations for fishing effort and capacity management.

Component 3.

The information management and communication component:

Include by-catch data collection (at landing sites and onboard vessels), mapping of fishing grounds, establishment of socio-economic monitoring procedures, and means for communicating by-catch data and information (website and information, education and communication - IEC - material).

Component 4.

The Awareness and knowledge component:

Address the awareness of and knowledge on trawl fisheries by-catch management issues and how they relate to sustainability, and what measures that are available to make fishing more responsible.

OUTPUTS (component 1)

Establishment of Advisory Committee, Establishment of Working Groups, in Bangkok, Chumphon and Trat provinces, Existing Natural Conservation Committee of DOF.

All of these committee and groups are always working and been consulted for project development and progression up until to formulate management measures.

OUTPUTS (component 1 continue)

One technical document on Legal framework (Fisheries Act 1947) reviewed for trawl fisheries and related issues.

Management for cod end mesh 4.0 of Trawlers is enforced by the present government

Area and Season Closure in Ao Trat was considered by the Natural conservation Committee in BKK and sent back to the Trat Provincial Fisheries Committee to reconsider. Then the Trat Provincial Fisheries Committee consider to extend the shore line area for 5 nm which the area is wider than the first proposal. Now it is in the process of the Minister to sign.

OUTPUT (Component 2)

1. Results from trawl cod-end mesh sizes experiments using 2.5 comparing to 4.0 cm,
2. Comparing for loss and gain for good fish and trash fish,
3. Fisheries status of Trawl fisheries in Prachuap Kiri Khan- Chumphon and Trat provinces,

OUTPUT (Component 2 continue)

4. Socioeconomic studies for trawl fisheries and small scale fishers in Prachuap Kiri Khan- Chumphon and Trat provinces
5. Fish larvae distribution and abundance in Ao Trat

OUTPUTS (Component 3)

1. Data collection for landing and socioeconomic studies,
2. Fishing area mapping and season closure area,
3. Networking among DOF, Marine Research and Development Division, Mar Fish Res Cent,
4. Mar Fish Div Link to SEAFDEC/RFU (Plan).

OUTPUTS (Component 3 continue)

5. Translation English documents into Thai versions:
 - a) LOA1, LOA2 and LOA3,
 - b) EAFM document in Thai version,
 - c) By-catch Management and Reduction of Discards.

OUTPUTS (Component 3 continue)

6. The information management and communication by producing vinyl posters, stickers and other means of materials (bag, T-shirt and flash drive) to promote the sustainable project, communication among fishers, officials. Campaign not to use small mesh to catch small fish and persuade fishers to releasing mature female fish.

OUTPUTS (Component 4)

1. To seek for public hearing ideas, opinions as well as consult to the stakeholders for better understand and closed collaboration, supporting the management schemes,
2. Training course EAFM for local fishers, university and fisheries officials,
3. Consultation and Public Hearing Meetings.

4. Conferences: Make known for the trawl fishers and small scale fishers about the results of the project and Royal Fisheries Ordinance 2558 (2015) related to them.

5. Provide Training course on fisheries Management in cooperated with RFU for young Researchers (Port-In and Port-Out officials)

List of publication outputs:

1. Chintana Nettasna. 2014. Review of Thai Laws in Relation to Trawl Fisheries, by-catch Management.
2. Pavarot Noranarttragoon. 2014. Review of the Marine Fisheries in Trat Province, Thailand.

3. Pavarot Noranarttragoon. 2016. Fisheries Resources in Trat Province, Thailand.

4. Pavarot Noranarttragoon. 2015. Baseline surveys in Prachuap Khiri Khan and Chumphon Provinces.

5. Pavarot Noranarttragoon. 2016. Fisheries Resources from Trawlers in Prachuap Khiri Khan and Chumphon Provinces, Thailand.

6. Sirisuda Jumnongsong. 2016. Socio-Economic Status of Trawl Fishers in Prachuap Khiri Khan - Chumphon and Trat Provinces, Thailand.

7. Ratanawalee Phoosawat, Udomsin Auksonphaob, Thitipon Cheumankong and Sampan Panjarat. 2016. The trawling experiment by using the extending mesh size cod end net.

8. Apichart Termvidckakorn. 2016. Biodiversity, abundance and distribution of fish larvae in Ao Trat.

9. Piyachoke Sinanun and Thiwarat Sinanun 2016. The Compilation of Thailand Research Works for policy making under the REBYCTII-CI project.

However, DOF also has a series of activity reports under LOA as following:

- Summary of Activity report from LOA 1
- Summary of Activity report from LOA 2
- Summary of Activity report from LOA 3

Policy brief from consultant report under LOA 2

This all documents will be published and distributed worldwide.

Lessons and Learned by Component

Component 1: Policy, Legal and Institutional Frameworks

Resource management plans must be responded to prioritized issues, identified by communities and harmonize with national and provincial legislation, policy and plans.

Management process must be participated by stakeholders in every steps for encouraging acceptance and strengthen the management plan implementation.

Component 2: Resource Management & Fishing Operations

Accurate and up-to-date knowledge on fisher numbers, gear types, fish landings quantity, fishing activities, resource mapping, socio-economic of fisher, law and regulation etc. , in fisheries is the key of the management planning.

Fisheries administration agencies and communities should have a common understanding on fisheries and fisheries resources for improving fisheries management program.

For implementing any fisheries management measures, such as seasonal and area closure, fishing gear restriction, etc., It should be supported by scientific evidences that can be monitored and evaluated continuously.

In 2015, Thailand has significantly improved registration system of fishing vessels and fishing licenses for both small scale and commercial scale fisheries. This improvement may provide a reliable number of fishing vessels and fishing licenses which can be used for research and management.

The enumerators who will conduct the interviews should have a good clear understanding on small scale and commercial fisheries. In this study, all enumerators were carried out by the officers of EMDEC and CMDEC. These officers have good background knowledge on fishing activities in the study area. From enumerations, it was found that the enumerators who are scientist were not familiar with socio-economic interviewing.

It should keep in mind that, in fisheries management, we have to manage the fishers who exploit the resources, not fisheries resources. Therefore, the understanding on socio-economic conditions of the fishers is the key factor for success management

Component 3: Information Management & Communication

One of the key factors to achieve a success in every step of participatory fisheries management processes, is *the inter-intra relationships among fishing communities, government agencies and other institutions* should be taken into account. These relationships will lead to obtain reliable data and information collection.

The relationships can be created through data gathering and discussion of the results, all stakeholders should be involved or at least to be consulted.

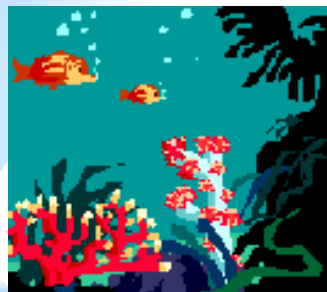
However, in practice, it takes a long time in data collection planning process, therefore community consultation as well as developing training mechanisms, training, data collection, analysis etc., are hardly to complete within limited time frame

Component 4: Awareness & Knowledge

Fisheries department staff may have a good experience on scientific finding, but they are not familiar with social interactive. From this project, the staff got more experiences on social interactive through stakeholder consultation meetings that they play an important role as trainers or resource persons.

In addition, in order to encourage awareness of the stakeholders, continuous campaigns and wide spread public hearing should be done.

Provide knowledge for local fishers and private sector about the present marine fisheries status, mesh size enlargement for trawlers and area and season closure, Royal Fisheries Ordinance 2558 (2015) related to them.



- Healthy Ecosystem
- Good Governance
- Social Welfare
- Sustain Resources

Thank you




Vietnam Directorate of Fisheries

FAO/GEF/SEAFDEC/REBYC-II CTI PROJECT
SOUTHEAST ASIA TRAWL FISHERIES ROUND-TABLE MEETING
September 21st 2016

STRATEGIES FOR TRAWL FISHERIES BYCATCH MANAGEMENT
IN VIET NAM

Mr. Nguyen Phu Quoc
Mr. Pham Hung
Ms. Nguyen Thi Hong Nhung



Vietnam Directorate of Fisheries
 Strategies for trawl fisheries bycatch management
 (REBYC-II CTI)

Out line of presentation

- Stakeholders involved in the Project
- Overall project implementation
- Provincial trawl fishery management plan
- Lesson learnt from implementation project
- Recommendation



Vietnam Directorate of Fisheries
 Strategies for trawl fisheries bycatch management
 (REBYC-II CTI)

1. Stakeholders involved in the Project

- Government agencies (Directorate of Fisheries)
- Local management agencies (Kien Giang DARD and SubDECAFISH)
- Research Institute for Marine Fisheries (Branch in Vung Tau)
- Fisheries associations (Kien Giang fisheries association)
- Private sector : fishing industries, middleman, processing companies, fishmeal companies
- NGO: FSP, WWF...



Vietnam Directorate of Fisheries
 Strategies for trawl fisheries bycatch management
 (REBYC-II CTI)

2. Overall project implementation


Component 1: Policy, Legal and Institutional Frameworks
 Component 2: Resource Management & Fishing Operations
 Component 3: Information Management & Communication
 Component 4: Awareness & Knowledge



Vietnam Directorate of Fisheries
 Strategies for trawl fisheries bycatch management
 (REBYC-II CTI)

Component 1: Policy, Legal and Institutional Frameworks




- Regional guidelines was already translated into Vietnamese so that local authorities can use for future development of local trawl fisheries management plan;
- A national guideline was produced following the APFIC's guidelines and this is also a good reference for future trawl fisheries management at local level;
- A National Plan of Action to manage fishing capacity approved by Decision No. 787/QD-BNN-TCTS dated on 21 April 2014 to manage fishing capacity including trawl fisheries will recover marine resources in the future;
- A provincial trawl fisheries management plan approved (Binh Thuan and Kien Giang);
- A legal framework to freeze all trawl fisheries vessels.



Vietnam Directorate of Fisheries
 Strategies for trawl fisheries bycatch management
 (REBYC-II CTI)




Component 2: Resource Management & Fishing Operations

- A trial using square mesh size cod-end tested can be reference for policy making;
- Minimum mesh size and closed season regulations on trawl fisheries can sustain trawl fisheries resources in the longer term.

 Food and Agriculture Organization of the United Nations
Vietnam Directorate of Fisheries
 Strategies for trawl fisheries bycatch management
(REBYC-II CTI)






Component 3: Information Management & Communication

- Improved data (socio-economic, port sampling, logbook, bycatch data, etc.) can ensure long-term economic sustainability of trawl fisheries
- In addition, outcomes of data collection will be evident to convince stakeholders in management actions

 Food and Agriculture Organization of the United Nations
Vietnam Directorate of Fisheries
 Strategies for trawl fisheries bycatch management
(REBYC-II CTI)



Component 4: Awareness & Knowledge:




- Attending the regional workshop to share and exchange experience on trawl fisheries management.
- Capacity building for fisheries officers throughout training workshop
- Introduction EAFM for trawl fisheries management

 Food and Agriculture Organization of the United Nations
Vietnam Directorate of Fisheries
 Strategies for trawl fisheries bycatch management
(REBYC-II CTI)



3. Trawl fisheries management plan in Kien Giang province

- Goals of the PTFMP**




Trawl fisheries managed sustainably to balance socio-economics and ecosystem in Kien Giang by 2020 and management effectiveness is enhanced for trawl fisheries in particular and fisheries in Kien Giang in general.

 Food and Agriculture Organization of the United Nations
Vietnam Directorate of Fisheries
 Strategies for trawl fisheries bycatch management
(REBYC-II CTI)



3. Trawl fisheries management plan in Kien Giang province

Objectives of the PTFMP

- Objective 1:** Reduced loss of port harvesting in trawl fisheries
- Objective 2:** Reduced bycatch proportion and reduced negative impacts of trawl fisheries on related ecosystems (coral reef, sea grass and benthic habitats).
- Objective 3:** Enhanced and improved monitoring, controlling and surveillance system on trawl fisheries and enhanced stakeholders' roles and responsibilities to cooperate among management agencies.




 Food and Agriculture Organization of the United Nations
Vietnam Directorate of Fisheries
 Strategies for trawl fisheries bycatch management
(REBYC-II CTI)



3. Trawl fisheries management plan in Kien Giang province

Detail activities of the PTFMP

Activity 1: Developing and implementing actions to reduce loss of post harvesting on trawl fisheries; enhancing competitive ability of trawl fisheries products in Viet Nam and in the international markets.

Activity 2: Developing and implementing appropriate mechanisms and solutions to minimize negative impacts of trawl fisheries on marine resources and related ecosystems.




 Food and Agriculture Organization of the United Nations
Vietnam Directorate of Fisheries
 Strategies for trawl fisheries bycatch management
(REBYC-II CTI)



3. Trawl fisheries management plan in Kien Giang province

Detail activities of the PTFMP (cont)

Activity 3: Developing and completing MCS system on trawl fisheries management and establishing and maintaining data collection system for trawl fisheries stock assessment and management.

Activity 4: Enhancing legal and policy frameworks on trawl fisheries management to improve roles, responsibilities, rights and actions on cooperation of relevant stakeholders on trawl fisheries management.

 Food and Agriculture Organization of the United Nations
 





Vietnam Directorate of Fisheries
 Strategies for trawl fisheries bycatch management
(REBYC-II CTI)

3. Trawl fisheries management plan in Kien Giang province

Solutions to implement the PTFMP

➤ **Legal and policy solutions**

- Review and propose to Government, MARD to amend and add Circulars or Decrees regarding trawl fisheries management.
- Review and propose legal framework and policies in relation to financial mechanisms to establish and implement trawl fisheries data collection systems.

 Food and Agriculture Organization of the United Nations
 





Vietnam Directorate of Fisheries
 Strategies for trawl fisheries bycatch management
(REBYC-II CTI)

3. Trawl fisheries management plan in Kien Giang province

Solutions to implement the PTFMP

➤ **Raising awareness**

- Enhancing full participation of all stakeholders including fisheries associations to involve effectively and actively trawl fisheries management actions.
- Using flexible forms of propaganda; developing and maintaining regular propagation channels on radio, television, newspapers; compilation and distribution of publications and legal inquiry documents.
- Investigating and producing appropriate propagation materials

 Food and Agriculture Organization of the United Nations
 


Vietnam Directorate of Fisheries
 Strategies for trawl fisheries bycatch management
(REBYC-II CTI)

3. Trawl fisheries management plan in Kien Giang province

Solutions to implement the PTFMP

➤ **State management solutions**

- Strengthen the capacity of State management of fishery agencies at different levels
- Establish a mechanism for data collection
- Develop a mechanism for coordination between the relevant units
- Develop mechanisms to coordinate and promote the participation and strengthen practical responsibilities of the stakeholders in fishing, processing and sale of trawl fisheries products.
- Apply and trial implementation of co-management model
- Establish of MPAs,

 Food and Agriculture Organization of the United Nations
 





Vietnam Directorate of Fisheries
 Strategies for trawl fisheries bycatch management
(REBYC-II CTI)

3. Trawl fisheries management plan in Kien Giang province

Solutions to implement the PTFMP

➤ **Financial mechanisms**

- Integrating trawl fisheries management fund into the existing program or plans of the province
- Coordinate with the departments concerned, the Ministry of Agriculture and Rural Development to review and propose supports on the implementation of management activities as authorized.

 Food and Agriculture Organization of the United Nations
 





Vietnam Directorate of Fisheries
 Strategies for trawl fisheries bycatch management
(REBYC-II CTI)

3. Trawl fisheries management plan in Kien Giang province

Solutions to implement the PTFMP

➤ **International cooperation**


- Cooperation with international organizations to enhance capacity on managing, fishing, and trading of trawl fisheries.
- Propose foreign support to introduce environmental friendly and selective fishing methods/gears and advanced technologies on preservation of post harvesting to minimize loss of post harvesting quality.
- Conduct study tours and exchange information on trawl fisheries management with regional countries and international fisheries management organizations.


 Food and Agriculture Organization of the United Nations
 


Vietnam Directorate of Fisheries
 Strategies for trawl fisheries bycatch management
(REBYC-II CTI)



4. Lesson learnt from implementation project

- Identification relevant stakeholders
- Identification management groups
- Cooperation with relevant stakeholders
- Collection input information
- Starting from small scale to large scale



 Food and Agriculture
Organization of the
United Nations

Vietnam Directorate of Fisheries
Strategies for trawl fisheries bycatch management
(REBYC-II CTI)


 

5. Recommendation

- Implementation the PTFMP in Kien Giang
- Supporting the provinces to develop the PTFMP

THANK YOU VERY MUCH!


Annexure 5F



REBYC-II CTI LESSONS LEARNED

STRATEGIES FOR TRAWL FISHERIES BYCATCH MANAGEMENT: REBYC-II CTI

Sayan Promjinda Richard Gregory and Isara Chanrachkij
 Regional Facilitation Unit (RFU)
 Southeast Asian Fisheries Development Center / Training Department



SEAFDEC/Training Department www.seafdec.or.th

Outline

- ❖ SEAFDEC Background
- ❖ Role of REBYC-II CTI
- ❖ Key Activities REBYC-II CTI
- ❖ Project Implementation
- ❖ Lesson Learnt of REBYC-II CTI
- ❖ Lesson Learnt of REBYC-II CTI (Administration)
- ❖ Recommendation

SEAFDEC/Training Department www.seafdec.or.th

SEAFDEC Background

Who is SEAFDEC?

- The Southeast Asian Fisheries Development Center (SEAFDEC) is an autonomous inter-governmental body established in 1967.



- SEAFDEC comprises 11 Member Countries: Brunei Darussalam, Cambodia, Indonesia, Japan, Lao PDR, Malaysia, Myanmar, Philippines, Singapore, Thailand, and Vietnam.



Who is SEAFDEC?

SEAFDEC/Training Department www.seafdec.or.th

SEAFDEC Background

Mandate


“ to develop and manage the fisheries potential of the region by rational utilization of the resources for providing food security and safety to the people and alleviating poverty through transfer of new technologies, research and information dissemination activities”

(endorsed by the 41st Meeting of the SEAFDEC Council)

What SEAFDEC does?

Reference

RESOLUTION ON SUSTAINABLE FISHERIES FOR FOOD SECURITY FOR THE ASEAN REGION TOWARDS 2020
<http://www.seafdec.org/documents/ref02-4.pdf>



SEAFDEC/Training Department www.seafdec.or.th

SEAFDEC Background

Functions

1. To offer training courses, and organize workshops and seminars in fishing technology, marine engineering, extension methodology, post harvested technology and aquaculture;
2. To undertake study on fisheries resources in this region;
3. To conduct the research on fishing technology and aquaculture;
4. To examine problem related to the handling of fish at sea and quality control; and
5. To facilitate transfer of technology to the countries in the region and to provide information material including publication of statistic bulletin and reports for disseminate of survey, research and other data on fisheries and aquaculture


Role of SEAFDEC in SE



SEAFDEC/Training Department www.seafdec.or.th

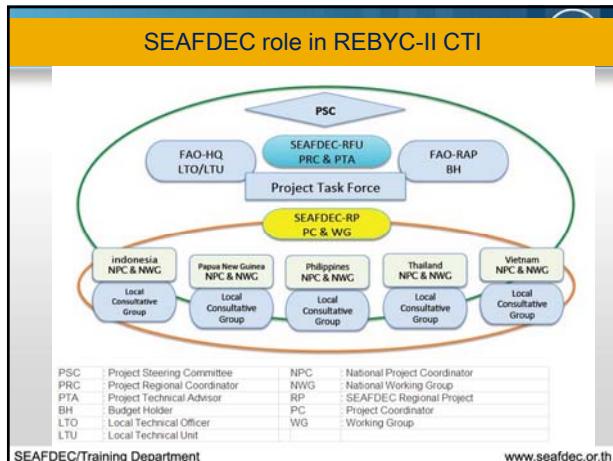
SEAFDEC Background

STRUCTURE AND ROLE OF SEAFDEC IN THE SOUTHEAST ASIAN REGION



Who is SEAFDEC?

SEAFDEC/Training Department www.seafdec.or.th



Role of REBYC-II CTI

- Collaboration with the FAO, LTU and FAO-RAP to provide administrative and technical support to the national fisheries authorities with regard to project implementation.
- Implement regional project activities –
 - support to the development of the regional bycatch policy/strategy,
 - training activities and promotion of standardized methods and approaches. Such support will be provided in a manner consistent with the FAO Code of Conduct for Responsible Fisheries.
- SEAFDEC will facilitate national-regional-international linkages, including contacts with, inter alia, ASEAN.
- The institutional arrangements for project implementation provide for the use of existing structures within SEAFDEC allowing for capitalizing on existing partnerships.
- Project Regional Facilitation Unit (RFU) will be established at TD

SEAFDEC/Training Department www.seafdec.or.th

Key Activities REBYC-II CTI

Administrative Support

- Project Inception Workshop (2012)
- Project Steering Committee Meeting (2013, 2014, 2015, and 2016)
- Regional Workshop Work Planning (2013, 2014) & Update on Country Project Progress (2015)
- Regional Training on Project Planning, Monitoring & Evaluation
- Regional Workshop FAO Administrative Systems and Financial Operations

Financial Support

Regular work to support RFU

Key Activities REBYC-II CTI

Technical Support Training - Workshop

- Regional Technical Workshop on Data Collection - Trawl Fisheries Management Information and Data Requirements (SEAFDEC Thailand)
- Regional Training-cum-Workshop on Co-Management and Trawl Selective Fishing Gears and Other Practices (SEAFDEC/TD, Thailand)
- Mini Symposium & ICES-FAO Meeting
- APFIC Regional Expert Workshop on Tropical Trawl Fishery Management
- Regional Training Course Essential Ecosystem Approaches For Fisheries Management (EEAFM)
- Regional Workshop on Economic Drivers and Incentives in Trawl

Key Activities REBYC-II CTI

Technical Support Training – Workshop

- Regional Workshop on Trawl Fisheries Socio-Economics

Technical Support Support Participating Countries

- PNG- EAFM and Fishing Technology, Economic cost and return
- Philippines – EAFM and Socio-economic
- Viet Nam – EAFM
- Thailand Fishing Technology

Project Implementation

1. Policy, Legal and Institutional framework	2. Resource management and Fishing operations
3. Information management and Communication	4. Awareness Building

1. Policy, Legal and Institutional framework

- **Establishment** of national trawl fisheries bycatch management plans
- **Adequate legislation and regulations** to support the implementation of improved management measures
- **Developing** Regional bycatch policy/strategy

- Support to FAO APFIC to develop Regional Guidelines on Tropical Trawl Fisheries in Asia Pacific
- Promote the FAO International Guideline on bycatch management and reduction of Discards
- SEAFDEC support to local fisheries management planning using EAFM principles in Indonesia, Philippines, PNG, Thailand & Vietnam

Oncoming Regional Trawl Fisheries Management Meeting/Workshop September 2016 (Bangkok Thailand)




2. Resource management and Fishing operations

- **Adoption of selective fishing gear and practices**
- **Basis for implementing zoning of fishing areas and Developing spatial-temporal closure management measures**
- **Generate better data on number of fishing vessel + Recommendations for fishing effort and capacity management**

Technical Support to REBYC-II CTI Participating Countries

- **Participate the Mini Symposium & ICES-FAO Meeting 2013**
- **Training-cum-Workshop on Co-management and Trawl Selective Fishing Gears and Other Practices**
- **Involvement in JTED study in Samar, PHP**
- **Consultation and participation in the Gulf of Thailand to develop trawl codend mesh size experiment.**
- **Underwater camera recorder (Thailand)**
- **Commercial trawl Fisheries in PNG**




2. Resource management and Fishing operations

- **Adoption of selective fishing gear and practices**
- **Basis for implementing zoning of fishing areas and Developing spatial-temporal closure management measures**
- **Generate better data on number of fishing vessel + Recommendations for fishing effort and capacity management**

Technical Support to REBYC-II CTI Participating Countries

- **Facilitate for data collection on SEAFDEC Member Countries done by national consultants - PRC and PTA work**




3. Information management and Communication

- **Bycatch data collection (e.g. at landing sites and onboard vessels, and mapping of fishing ground characteristics)**
- **Standardized methods for bycatch data collection will be promoted across project countries**
- **Communicating bycatch data and information (through website and information, education and communication (IEC) material)**

Technical Support to REBYC-II CTI Participating Countries

- **Standardized methods for bycatch data collection will be promoted across project countries through;**
- **Training-cum-Workshop on Co-management and Trawl Selective Fishing Gears and Other Practices**
- **Regional Technical Workshop on Data Collection - Trawl Fisheries Management Information and Data Requirements**
- **Application of Resources Mapping and Geographic Information System GIS**
- **Enhance Capacity of Participating Countries in Socio-economic through;**
- **Economic Drivers and Incentives In Trawl Fisheries**
- **Regional Workshop on Trawl Fisheries Socio-Economics**




3. Information management and Communication

- **Bycatch data collection (e.g. at landing sites and onboard vessels, and mapping of fishing ground characteristics)**
- **Standardized methods for bycatch data collection will be promoted across project countries**
- **Communicating bycatch data and information (through website and information, education and communication (IEC) material)**

Technical Support to REBYC-II CTI Participating Countries

- **Fishing Industry Round-Table Meeting of the REBYC-II CTI Project (Bangkok, Thailand)**
- **Support Thai Sustainable Fisheries Roundtable**
- **Provide EFAFM training course to project staff and stakeholder**
- **Network through application**
- **Website**




4. Awareness Building

- **Fishers and other relevant stakeholders have improved their knowledge on bycatch, sustainability issues and collaborative managements**
- **Regional and national policy and decision-makers have been sensitized with regard to responsible trawl fisheries management**
- **Private sector, technical officers and extension workers (Government and NGOs) have improved their knowledge on management measures**


Technical Support to REBYC-II CTI Participating Countries

- **Provide EFAFM training course to project staff and stakeholder**
- **Establish network through application**
- **Ecosystem Approach to Fisheries Management (EAFM) for Leaders, Executives And Decision-makers (LEAD)**
- **The 2nd LEAD EAFM Writeshop**
- **The final LEAD EAFM Writeshop**
- **Fishing Industry Round-Table Meeting of the REBYC-II CTI Project (Bangkok, Thailand)**
- **Support Thai Sustainable Fisheries Roundtable**




Lesson Learnt of REBYC-II CTI

- Participating Countries have different background of trawl fisheries and management need conduct with different concept
- The countries have different interests to develop management. Project goal(s) should be harmonized with national fisheries management plan
- Establishment of stakeholders of trawl fisheries should be clearly identified and prioritized
- Public Private Partnership identification and Prioritization is very important for project start up phase. Project has never identified stakeholder and private sector.
- Data collection is one the major challenges, Hindrances are different in each countries
- Gear modifications are important but they are not always the most appropriate tool.
- Socio-economic study and the research on the Incentives of fishers to comply with measures and encourage responsible practices is key to develop sustainable fisheries.



Lesson Learnt of REBYC-II CTI

- Scientific information from one country can be shared with other countries
- EAFM is the important tool for manage trawl fisheries however identification on the issues and stakeholder prioritization
- MCS of fishing operation is key issue for trawl management, however, the requirements are different between the countries. Only Indonesia strengthened on this issue.
- Collaboration and supported by FAO and organizations e.g. APFIC, SIDA, BOBLME and SEAFDEC, is one of the factor to reach the project outcome




Lesson Learnt of REBYC-II CTI Administration

- Trend of global fisheries management can be reflected by project initiative by FAO
- Hindrance of project administrative and management
- Co - Finance not familiarize with the scheme
- Delay starting project made fisheries situation is different from the period of project development
- Project need adaptive management
- Lead Technical Officer station at FAO-HQ
- Project Document, for local project staffs, is very important but it difficult to understand.
- SEAFDEC get good lesson learn from the project management that can be applied oncoming coordination with future donors organization and alignment with other SEAFDEC activity



Recommendation

- Need to extent the result of REBYC-II CTI from SEA Region and other region.
- Follow up measure/result established during the project implementation.
- Apply Social and Economic Aspect in the Trawl Fisheries Management Plan
- Need for further improvement on key scientific topic e.g. stock assessment and population study, Fishing technology, and etc.
- Strengthen PPP in particular Industrial side e.g. Fishery Association, Fishmeal, fish processing association, NGO both local and international however identification and prioritization is important.
- Seek coordination with certify bodies e.g. MSC, IFFO and etc to support the certifying trawl fisheries in SEA region.
- Promote trawl fisheries management in SEA Region through the principle of Ecosystem Approaches For Fisheries Management (EAFM)



Recommendation

- Linking the results with the other regional fisheries requirement e.g. improvement fish handling onboard, reduce number of crew, energy optimization, development and promotion on catch traceability system.
- Translation the International Guidelines to local language
- Seek for the expansion of project result as material for the fisheries management
- Seek for other project to continue implementation in particular M&E the policy that formulated by REBYC-II CTI project




<http://www.rebycti.org>

Dr. Petri Suuronen (Petri.Suuronen@fao.org)
 Mr. Richard Gregory (rickgregory1@gmail.com)
 Mr. Sayan Promjina (Sayan@seafdec.org)
 Mr. Isara Chanrachkij (Isara@seafdec.org)

Mr. IR Endroyono SE, MM. (Indonesia), Mr. Imron Rosyidi S.Pi (Indonesia),
 Mr. Rafael Ramiscal (Philippines), Dr. Jonathan Dickson (Philippines),
 Mr. Leban Gisawa (Papua New Guinea), Mr. Ian M. Liviko (Papua New Guinea),
 Mr. Suchart Sanchang (Thailand), Dr. Mala Supongpan (Thailand).

Annexure 6

Sustainable Fisheries PARTNERSHIP

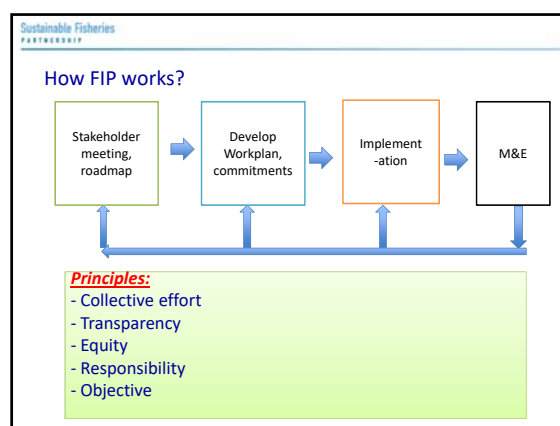
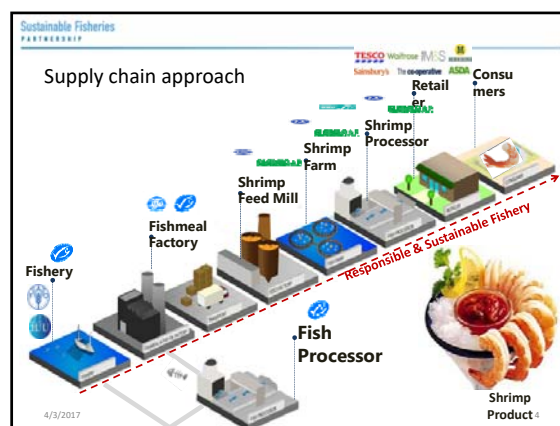
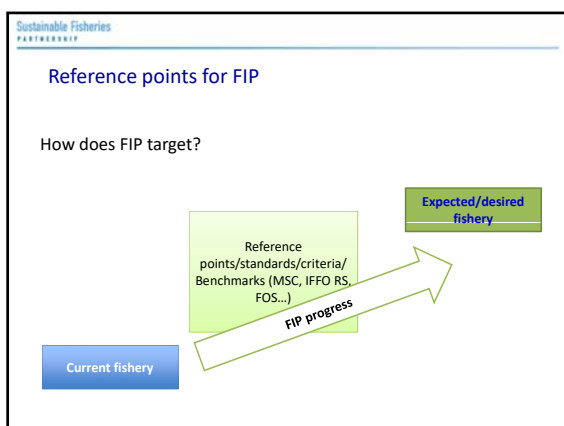
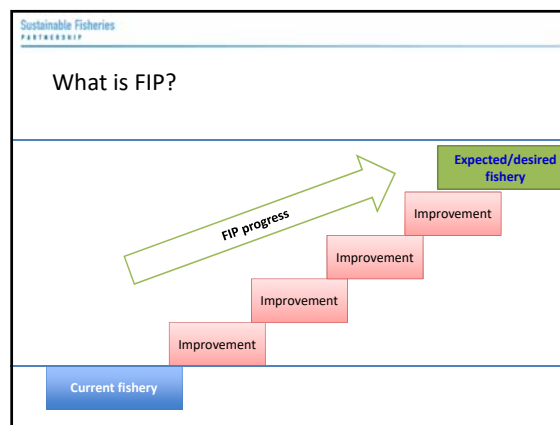
Southeast Asia Trawl Fisheries Round -Table Meeting

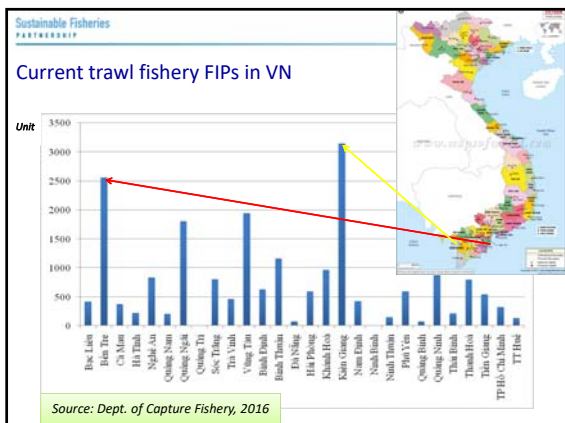
Fisheries Improvement Project (FIP):
private sector involvement in trawl fisheries management

Thong Ba Nguyen
thong.nguyen@sustainablefish.org
www.sustainablefish.org



Bangkok, 21 September 2016





Sustainable Fisheries PARTNERSHIP

Who involve in the FIP?

Ben Tre trawl fishery improvement project (FIP):

- Fishers: Ben Tre Fisheries Association
- Local NGO: FACOD/VINAFIS, RECERD...
- INGO: SEAFISH, OXFAM, GAA...
- Seafood processors: Hung Vuong
- Fishmeal processors: Viet Tien
- Aquafeed producer: Viet Thang
- Farmer: Hung Vuong
- Seafood trader: Amanda Seafood...
- Retailer: Morrisons, Icelandic...
- Local government: DARD

Sustainable Fisheries PARTNERSHIP

Who involve

Kien Giang trawl fishery improvement project (FIP):

- Fishers: Kien Giang Fisheries Association
- Local NGO: FACOD/VINAFIS, RECERD...
- INGO: SEAFISH, OXFAM, GAA...
- Seafood processors: KIHUSEA, AOKI
- Fishmeal processors: KIHUSEA, Ha Tien
- Aquafeed producer: Grobest VN, Sheng Long Biotech International, InVivo NSA
- Seafood trader: Amanda Seafood...
- Retailer: Morrisons, Icelandic...
- Local government: DARD

Sustainable Fisheries PARTNERSHIP

Why we need FIP?

- Requirements on: environmental/social responsibility, friendly, hygiene, transparency, equity and sustainability
- Global integration
- Market access and
- Better management of the fishery

Sustainable Fisheries PARTNERSHIP

What are issues of the fishery concerned?

- Vessel registration
- Data collection
- Traceability
- Social issues: crew, healthy, insurances, working condition/well being, equity and responsibility
- Fisheries resources (stock assessments/ quotas/ good practices ...)
- Critical habitats and ETP species
- Handling and post harvest lost

Sustainable Fisheries PARTNERSHIP

What improvements identified?

1. **Improve administrative management of fishing vessels:** licenses, registration... to hand the exact number of fishing vessels, fishing efforts
2. **Improve monitoring fishing operation:** VMS, Logbook, landing data... input for policy decision making
3. **Improve efficiency of resources use:** mitigate post harvest losses; upgrade fish preservation facility on board, BRD, ETP...
4. **Improve social responsibility:** crew/labour management, equity, work contract...
5. **Building capacity:** for relevant stakeholders

Sustainable Fisheries
PARTNERSHIP

Some remarkable milestones achieved

- Kien Giang trawl fishery management plan was approved in early Sept. 2016, emphasized the importance of FIP
- The industry (private sector) in Kien Giang is in progress to establish themselves the arrangements for the FIP
- Industry/private sector involved in number of events organized by SFP or co-hosted meetings
- Advices/consultation made by SFP, local NGOs, INGOs to the industry on development and implementation FIP
- Aquafeed/fishmeal producers are more and more interested in FIPs

Sustainable Fisheries
PARTNERSHIP

Some remarkable milestones achieved

- Workplan for improvement projects are fully in line with local and central policies/strategies on fisheries development
- Some improvements are being conducted (logbook records, management strategy amended, awareness raised...)
- Public – Private Partnerships (PPP) model in Fishery sector has been initiated since 2015 in VN and under the development process, (key founders are VASEP, DFISH, VINAFIS, SNV, IDH, GIZ, WWF)
- Some private company (fishmeal/aquafeed producers e.g. Skretting, CP Vietnam... are developing their own FIPs...

Sustainable Fisheries
PARTNERSHIP

Some remarkable milestones achieved

- REBYC2 –CTI: contribution to the FIP (capacity building, technical measures (BRD), critical habitats, fisheries independent data, EAFM...
- Mangement plan for trawl fisheries development in KG was a part of the FIP's workplan...
- Other provinces have some benefits from the project via capacity building activities, meetings/forum...
- Provide relevant information for FIP's workplan development..

Sustainable Fisheries
PARTNERSHIP

Recommendations made to private sector (buyers):

- Seek & communicate to SFP information on products sourced from Asian fisheries (fresh/frozen fish, surimi, fish sauce, etc.) – species, product form, and country source information.
- Seek information from farmed shrimp producers about a) where they source their shrimp feed from and b) where fish used for fishmeal in the feed are caught (need specific species/country information).
- Seek information from surimi producers about species and fisheries that provide raw material.
- SFP partners and partners' suppliers to join/support the SFP Asia Feed Fisheries Supplier Roundtable in Asia.
- Support the four proposed trash fish FIPs – two in Vietnam; two in Thailand.

The Asia Feed Fisheries SR is a platform to catalyze fishery improvements in EEZs of China, Philippines, Vietnam, Thailand, Indonesia, Malaysia, Myanmar, Brunei, Cambodia, Bangladesh, and India. Current focus on Thailand and Vietnam.

Sustainable Fisheries
PARTNERSHIP

Thank you!

4/3/2017 17