USAID SUSTAINABLE ECOSYSTEMS ADVANCED (SEA) PROJECT

WORKSHOP REPORT:

STOCK ASSESSMENT WORKSHOP DATA and METHODOLOGY

Santika Hotel, Bogor; 28 February – 1 March 2017

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ACRONYMS AND ABBREVIATIONS

BPPL	Balai Penelitian Perikanan Laut *(Sea Fishery Research Office)*
KA BPPL	Kepala Balai Penelitian Perikanan Laut *(Head of Sea Fishery Research Office)*
BP2KSI	Balai Penelitian Pemulihan dan Konservasi Sumberdaya Ikan *(Fish Stock Restoration and Conservation Research Office)*
FGD	Focus Group Discussion
FMA	Fisheries Management Areas
KOMNAS KAJISKAN	Komisi Nasional Pengkajian Sumber Daya Ikan *(National Committee on Fish Stock)*
MDPI	Masyarakat dan Perikanan Indonesia *(Indonesia Fishery & Society)*
MMAF	Ministry of Marina Affairs and Fisheries
MSC	Marine Stewardship Council
NGO	Non-Governmental Organisation
NTB	Nusa Tenggara Barat (West Nusa Tenggara province)
PERMEN	Ministerial decree
PUSDATIN	Pusat Data dan Informasi *(Data & Information Center)*
PUSRISKAN	Pusat Riset Perikanan *(Fishery Research Center)*
KAPUS RISKAN	Kepala Pusat Riset Perikanan *(Head of Fishery Research Center)*
SDI DJPT	Direktorat Sumber Daya Ikan, Direktorat Jenderal Perikanan Tangkap *(Fish Stock Directorate, DirGen Captured Fish)*
TNC	The Nature Conservancy (an NGO)
WCS	Wildlife Conservation Society
WWF	World Wildlife Fund

INTRODUCTION

The Fishery Law No. 31 2004 states that the "Fishery management is all efforts, including integrated process in collecting information, analysis, planning, consultation, decision making, allocation of fisheries resources, implementation and enforcement of laws and regulation of fisheries, carried-out by the government or other authority geared towards achieving the sustainable productivity of the living resources (of the waters) for agreed purposes".

PERMEN.01/MEN/2009 has stated that Indonesia waters is divided into eleven (11) Fishery Management Areas (*Wilayah Pengelolaan Perikanan Indonesia*). The Indonesian government has drafted a fishery management plan for 715 FMA. Demersal small- and big-pelagic fisheries are the management priorities stated in 715 FMA. Most of the fisheries within 715 FMA are categorized as fully exploited, with prawn and big-eye tuna are categorized as over–exploited. This condition is a threat to the fisheries stock and the sustainability of fisheries production in the area. To reduce this threat, an improved policy is needed to manage the fishery resources. One aspect to address the sustainability of stock is to control the allowable catches for species to develop harvest strategies and for this knowledge and understanding of fisheries stock is needed. For this purpose, stock assessments for developing harvest strategies are required.

The USAID Sustainable Ecosystem Advanced (USAID SEA) Project provides support to strengthen Indonesian fishery management including harvest strategy development for targeted species (red-snapper, grouper, and small-pelagic). To carry-out the stock assessment, the SEA team is working with MMAF research unit – Pusat Riset Perikanan (Puriskan) – that will lead the study.

To advance the understanding, knowledge, and operationalizing the stock assessment, data and its methodology to develop harvest strategy for target fisheries in FMA 715, the USAID SEA Project conducted series of workshops aim to support the strengthening of guidelines and methodologies for stock assessment, harvest strategy development, and evaluation strategy, implemented by various organizations.

WORKSHOP OBJECTIVES

A pre-workshop on stock assessment conducted in December 2016 has identified various forms of catch data collection carried out by MMAF units and private sectors. The pre-workshop also discussed the capacity building needs for the Pusriskan's researchers on stock assessment and harvest strategy development. The pre-workshop was not able to discuss existing data and to address methodology that suits Indonesia's fisheries data. The pre-workshop aimed to synchronize researchers' perspective within the MMAF units on the stock assessment approach (detail is presented in the Activity Report). Thus, it did not involve NGOs; including SEA-Project's partners. This workshop on STOCK ASSESSMENT, DATA, AND METHODOLOGY aimed to fill in this gap.

The objectives of this workshop are:

- To gather information on data and its availability for the targetted species collected by various organizations.

- To identify gaps in data available (parameters), data collections methodology, and collection points within FMA 715.
- To determine a follow-up action plan.

SUMMARY OF AGENDA AND RESULT

The workshop was held on:

> Date: 28th of February to 1st of March 2017
>
> Time: 08.00 am – 5.00 pm
>
> Venue: Santika Hotel Bogor

There were not significant changes in agenda planned (Annex 1), an amendment of the agenda was only taken to accommodate the time for two presenters of KOMNAS KAJISKAN and PUSDATIN.

The first day activities focused on explaining the need for premium data and standardized method in fishery data collection to support fishery management. The activities also focused on exploring the available data and data collection protocols used by various organizations.

The second day session focused on identifying the target species within the group of species: red-snapper, grouper and small-pelagic using Focus Group Discussion approach, and developing mechanism for the data collection. Detail on this is presented in the OUTPUT session below. In the second day, there were also two presentations by KOMNAS KAJISKAN and PUSDATIN explained the need for premium quality fishery data and the MMAF's One Data initiative developed by MMAF to establish a centralized data management.

The summary of the presentations is presented in Table 1 below and detail materials presented are attached as Annex 4.

Table 1: Summary of materials presented in the Stock Assessment, Data, and Methodology Workshop

	Materials
Day 1 28 Feb 2017	1. The importance of a standardized method in data collection for fishery stock assessment in PUSRISKAN current and future works, presented by the Head of PUSRISKAN, MMAF. The presentation highlighted that all the parties (NGOs and private sectors) engaged in fishery data collection need to use the approach developed by PUSRISKAN. 2. Data collection and approaches for deep-water red-snapper and grouper by The Nature Conservancy (TNC) – Indonesia Fisheries Conservation Program, presented by Dr. Peter Mous, Director of Indonesia Fisheries Conservation Program – TNC. TNC has been working together with boat captains of industrial-scale deep water fishers/fishing companies to collect

| | catch data covering length, volume, species, and locations fishing ground. The initiative is directed at obtaining MSC certification.

3. Data collection approach and analysis of WCS, presented by Dr Irfan Yulianto MSi, Fisheries Program Manager WCS. The presentation described WCS's ongoing work in NTB Province and the data collected cover volume, length, fishing grounds, cost, fishing gear, etc.

4. The I-Fish Approach presented by Dierdre, Communications and Development Manager at MDPI.

5. Protocol of Stock Assessment Data Collection to Support Fisheries Management presented by A. Damora, WWF.

6. The need for science-based approach to fishery management, presented by Dr. Besweni – SDI DJPT. It highlighted the integrated effort between MMAF units – fisheries researchers and fisheries managers; to support sustainable fisheries management.

7. The role of private sector in stock data assessment by Heru Purnomo, PT. PULOMAS. It presented an alternative mechanism to improve fishery data where the measures of fishery management are forced by the buyers to the suppliers (fisheries). However, scientific parameter of data provided to buyers is still limited - the data collected is focus on the volume and size.

8. Methods and catch data collection in FMA 715 by the head of BPPL, Dr. Fayakun.

9. Catch Data Collection Approach, by Mahiswara a BPPL researcher.

10. Procedures, format, data collection, and analysis in 715 FMA, presented by Tri Ernawati, a BPPL researcher. |
|---|---|
| Day 2

1 March 2017 | 1. Focus Group Discussion to identify target species: red-snapper, grouper, and small pelagic, and data collection mechanism
2. Presentation from KOMNAS KAJISKAN and PUSDATIN, on the need for premium quality data and on One Data concept on centralized data management respectively. |

SUMMARY OF PARTICIPANTS

The participants came from MMAF units and NGOs including TNC, MDPI, WWF, WCS and the business entity (PT. Pulomas), with a total of 45 participants (detail is presented in the

attendance list in Annex 3. The participants from MMAF were mainly from MMAF research unit, but also from PUSDATIN and SDI. PUSDATIN was engaged because their roles in marine and fisheries data management, ensuring that the data collected by PUSDATIN can serve the fisheries management's need. PUSDATIN also lead the establishment of One Data Initiative. SDI was invited for their role as the fishery management authority, also, for their role in managing the implementation of fisheries logbook. The fisheries logbook system needs to be improved for the need of fishery management. The NGOs were invited to establish a collaborative strategy to improve the Indonesian fishery data for stock assessment for Indonesia with large geographic areas and limited budget. The strong engagement of NGOs with communities is beneficial to facilitate data submission from community to the government at different levels.

KEY OUTPUTS, OUTCOMES, AND ACHIEVEMENTS

The workshop has resulted in outputs that can be used as the basis for future work in developing a model for co-management in stock assessment. However, not only the workshop had served the need for the stock assessment/harvest strategy development supported by USAID SEA Project, it also had contributed to the development of **a model for a collaborative approach between government and non-government agencies to improve data for fishery management.** A small group has synthesized the agreement and follow-up actions of the workshop (Annex 5). The workshop concluded a standardized approach in data collection and synchronized data collection points within 715 FMA.   The participants of the meeting identified:

- Species targets for each commodity
- Protocols /forms for data collection
- Sampling /data collection sites
- Data flow mechanism from the data collection sites to be centralized at the MMAF's research unit. These outputs will lead to a better fishery data, which can improve fishery management strategy and measure.
- Roles of the MMAF's research unit and NGOs, the number of enumerators, distribution of site coordinators, and contact persons for each task assigned.
- Process for supervision, validation, analysis, and reporting mechanisms to ensure data collected in compliance to the protocols.

Species targets

Based on the TNC and WCS data collected for red-snapper and grouper, the following are the most common species caught summarized in Table 2. Data of most common species of red snapper and grouper collected by TNC and WCS. These species are identified as target species for stock assessment under the support of USAID SEA.

Table 2. Data of most common species of red snapper and grouper collected by TNC and WCS

Data of most frequent caught species by TNC	Data of most frequent caught species by WCS
Pristipomoides filamentosus *Aphareus rutilans*	**Lutjanidae**

Pristipomoides multidens	*Apncens tulilans*
Etelis sp.	*Etelis coruscans*
Lutjanus erythropterus	*Lutjanus bohar*
Paracaesio kusakarii	*Lutjanus malabaricus*
Lutjanus timorensis	*Lutjanus erythropterus*
Etelis coruscans	*Lutjanus carponotatus*
Wattsia mossambica	*Lutjanus argentimaculatus*
Pinjalo lewisi	*Aphareus rutilans*
Etelis radiosus	*Etelis cf. carbunculus*
Gymnocranius grandoculis	*Aprion virescens*
Paracaesio stonei	
Epinephelus areolatus	**Epinephelidae**
Aprion virescens	*Cephalopholis miniata*
Pristipomoides typus	*Cephalopholis sonnerati*
Erythrocles schlegelii	*Variola louti*
Pristipomoides sieboldii	*Cephalopholis microprion*
Seriola rivoliana	*Carangoides orthogrammus*
Lutjanus argentimaculatus	*veriola albimarginata*
	Chromileptes altivelis
	Epinephelus foscoguttatus
	Ephinephelus morrhua
	Plectropomus sp

For the small-pelagic, *Rastreliger kanagurta* and *Decapterus ruselli* are the species targets for stock assessment and harvest strategy development.

Data collection protocols

Existing protocols developed by the MMAF research agencies (BPPL) are minimal guidelines (forms) and data collected by partners include fisheries data for stock assessment of the targeted species mentioned above. The data cover necessary and voluntary data, which should include:

- Landing catch data and information in accordance with the guidelines established
- Species and size data using the sampling method.
- The fishing unit, effort, and operational attributes data.

In addition to the above data, biological information including gonad and sex maturity is also needed. However, the cost to obtain this data is more expensive because fish need to be purchased to enable the gonad extraction. Due to the cost limitation, biological information about fish maturity is not mandatory.

Sampling sites

The FGD has successfully mapped and synchronized existing and potential sites for data collection of the targeted species in 715 FMA between the parties; MMAF research unit, TNC, WWF, WCS; as depicted in Figures 1 and 2.
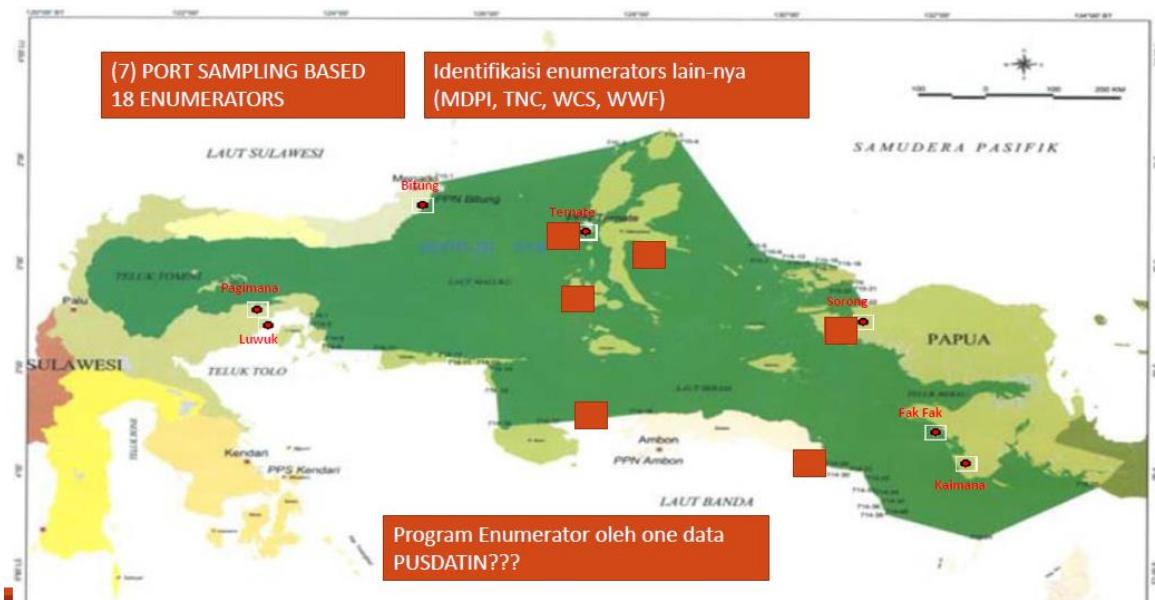
Figure 1. Data collection sites 2017 for small pelagic caught using purse seine, mini purse seine, gill net
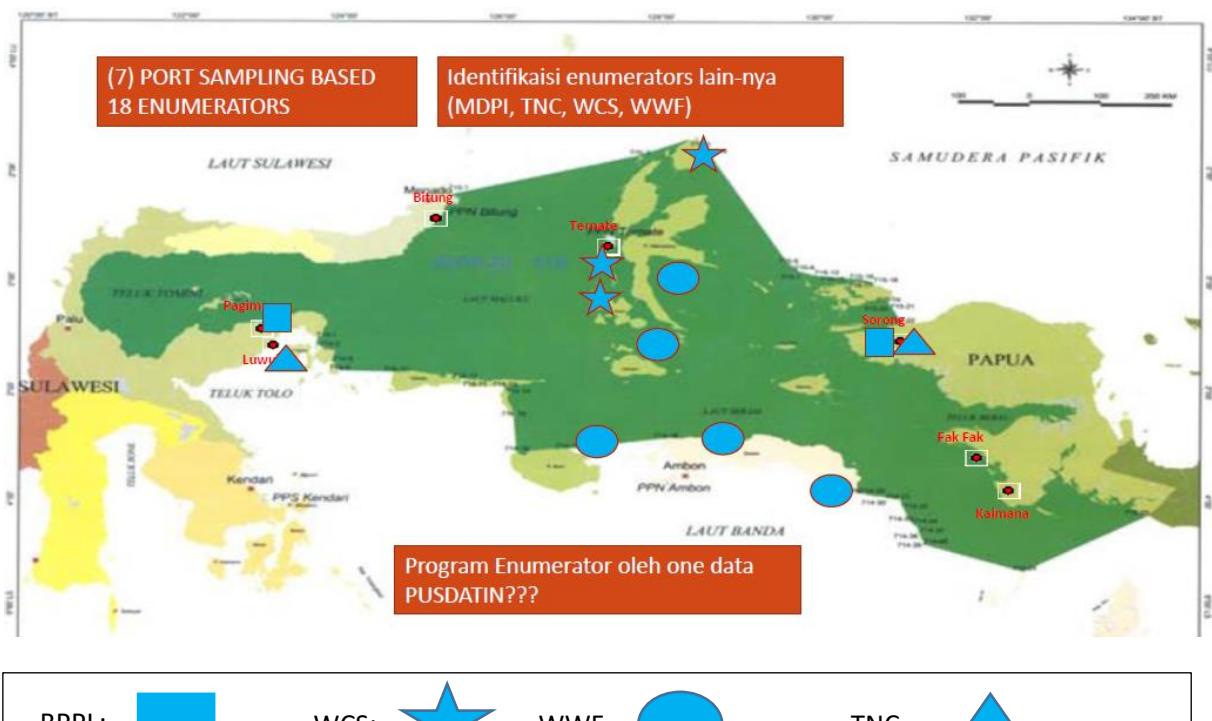

Figure 2. Data collection sites 2017 for coral fish; red-snapper and grouper using long bottom line, drop line

Information and database system

The discussion concluded that I-FISH, or a system compatible with I-FISH where data can be integrated, will be used as the platform of the database for data collected by all organizations

involved in data collection. Training on I-FISH for all organizations (WCS, WWF, and BBPL) is needed, and I-FISH training will be integrated with data collection training scheduled in July 2017. Prior this, I-FISH will be re-activated in BBPL office to house the data collected.

The discussion also identified the data flow and verification mechanisms at each level as presented in the Figure 3. below:

A. *Field and NGO level*
  1. Data will be collected by enumerators, to be verified by field coordinators of each organization (first tier data screening/verification).
  2. Data are compiled at organization level (e.g. WWF, WCS, TNC and MDPI) and are verified by data/stock assessment specialist/NGO managers (second level screening/verification).

B. *BBPL (MMAF) level*
  3. Data from each organization are compiled at BBPL office using I-FISH interface mechanism, which is going to be managed by data managers based in BBPL office.
  4. BBPL will produce regular report using aggregated data submitted by all parties at BBPL level to provide updates for 715 FMA level. Detail protocol will be developed.

To evaluate the collected data, workshops were planned to identify any possible bias and error in data collection approaches. The format for data collection will be discussed and developed by a small team that consist of Puriskan and SEA-Partners. Puriskan and SEA Project will develop a detail work plan and will discuss the budget needed
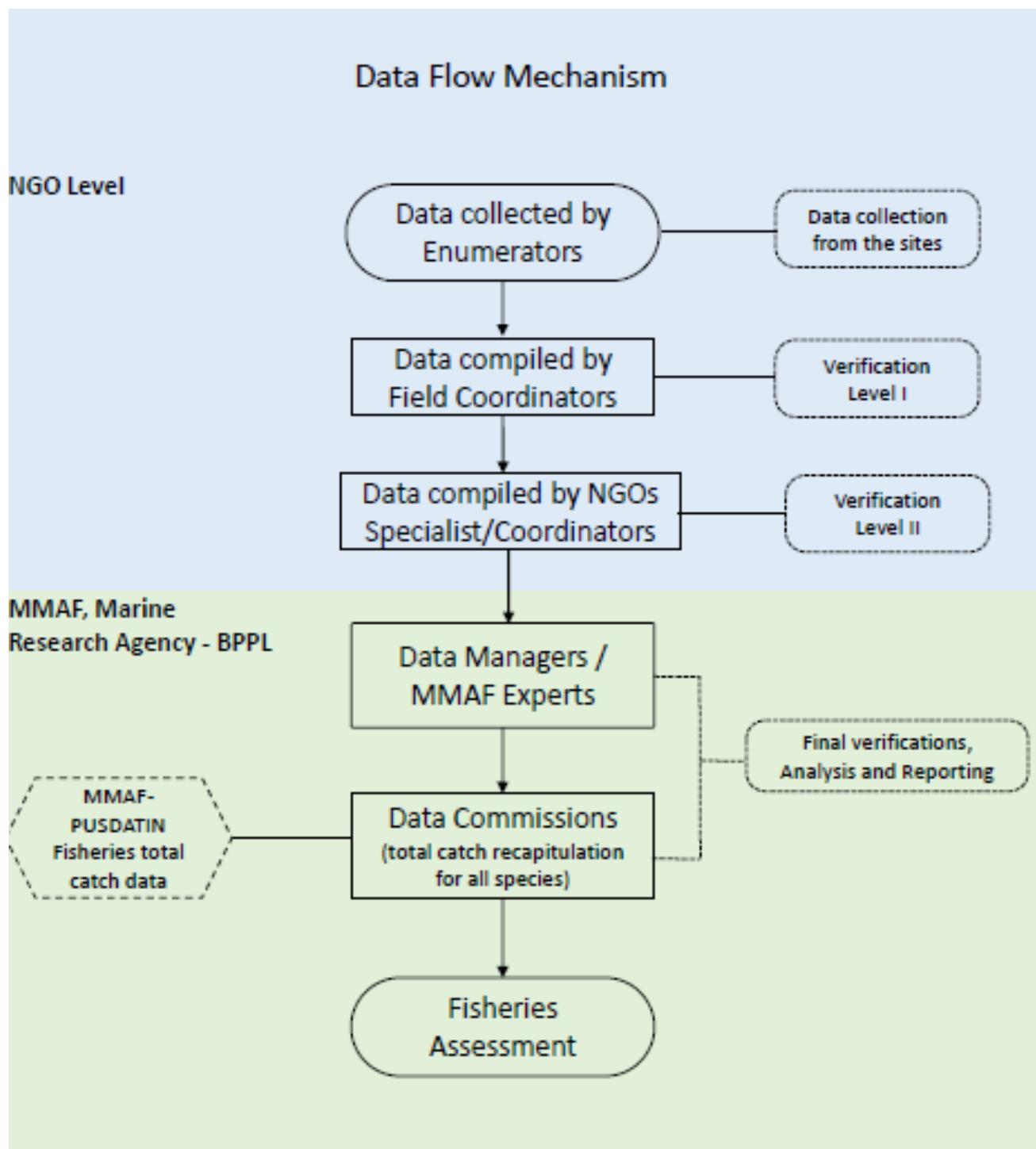
Figure 3: Data flow mechanism

Contact person and distribution of site coordinators

The meeting had identified the role and contact person of each party with a structure presented in Tables 3 and 4 below and the distribution of site coordinators (Figure 3). MMAF's research unit (BBPL) has also appointed responsible researchers for conducting the stock assessment for the targeted commodities identified: red-snapper, grouper, and small-pelagic.

Table 3: Names of contact person of organizations involved in the stock assessment

PI of the stock assessment (Project)	KAPUS RISKAN
Data Endorsement	KA BPPL
Person In charge	- PUSRIS: MOH. Natsir and KUSNO SUSANTO - SEA: Purwanto and Irna Sari - TNC : Peter, Rizal Pramana, Larastiti. - MDPI: Deirdre (15 Enumerators) - WWF: Maskur (18 Enumerators) - WCS: Siska (8 Enumerators) - BPPL : Anthony Sisco (18 Enumerators
Supervisi dan Validasi	Tim Komite Data: Mahiswara, Budi Nugraha, Perwakilan NGO
Manager sistem informasi	Wawan+teknisi, Bayu & Azim+Budi Rahmat BPPL, Edit BP2KSI

Table 4: Names of responsible researchers for the commodity targets.

| Name	Commodities
Achmad Zamroni	Small pelagic
Heri Widyastuti	
Herlisman	
Siti Mardlijah	Big pelagic
Budi Nugraha	
Yoke Hanny	
Asri Patadjangi	
Anthony Sisco	Demersal
Muhammad Taufik	
Nurulludin	
Isa Nagib Edrus	
Wahyuningsih	
Koderi	
Prof. Ali Suman	Prawn-Crustacean
Tirtadanu	
Ap'idatul Hasanah	
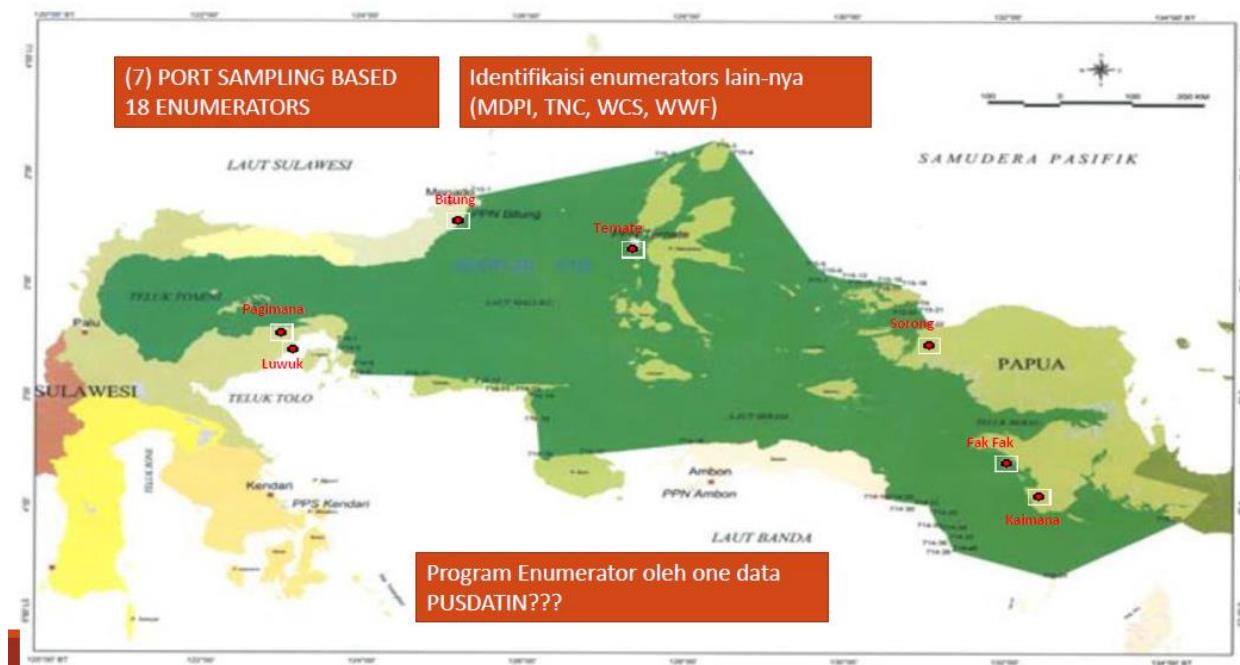
Figure 4. Distribution of site coordinators of various organizations involved in catch data collection within the 715 FMA

RECOMMENDATIONS

The meeting has achieved its objectives and has a high engagement of the MMAF researchers in facilitating the identification of data collection approach. The formats and data flow mechanism have been agreed. To ensure implementation of agreed formats and data flows mechanism, a strong coordination among related agencies is critical. USAID SEA project will facilitate the coordination for FMA 715.

The meeting has acknowledged the important role of NGOs in improving Indonesian fishery data. The government needs to play their roles to ensure the data are collected and meet the need for fishery management development. The government also has to ensure that data will be managed and utilized for fishery management strategic planning. Capacity building for MMAF research unit in data management is, therefore, necessary.

The discussion has demonstrated that there were many data being collected by MMAF units. One Data Initiative was established by MMAF with PUSDATIN as the leading agency. However, the data format used by One Data Initiative still focused on collecting catch production. Such information can only serve the need of production statistics and is not sufficient for fishery management and stock assessment. The data collection mechanism as one of the results of this meeting can fill the gap of premium data needed for fishery management (Figure 3). This mechanism however still needs to be integrated with the One Data Initiative managed by PUSDATIN.

ANNEXES

Annex 1: WORKSHOP AGENDA PLANNED

Lampiran Surat
Nomor : 248 / BRSDM.03 /TU.330/II/2017
Tanggal : 23 Februari 2017

Agenda Pertemuan "Workshop on Stock Assessment Data Collection Protocol and Methodology Developing to Support Fisheries Management"

Selasa, 28 Februari 2017

No	Waktu	Kegiatan	Keterangan
Registrasi (08.30 – 09.00 WIB)			
1.	09.00 – 09.15	Pembukaan dan Sambutan	Kepala Pusat Riset Perikanan
2.	09.15 – 09.35	Sambutan dan Paparan Program SEA	Project Leader SEA: Dr. Alan White
3.	09.35 – 10.00	Program Pengkajian Stok Ikan (KOMNASKAJISKAN) 2017-2019	Ketua KOMNASKAJISKAN
Coffee Break (10.00-10.15 WIB)			
4.	10.15 – 10.45	Presentasi Kebutuhan Standarisasi Metodologi Pengumpulan Data dan Pengkajian Stok SDI saat ini dan Rencana Pengembangan Ke Depan	Kepala Pusat Riset Perikanan
5.	10.45 – 11.30	Kebutuhan rekomendasi ilmiah bagi pengelolaan perikanan oleh KKP	Direktur SDI
6.	11.30 – 12.00	Kebijakan "One Data" KKP	Kepala Pusdatin
ISHOMA (12.00-13.00 WIB)			
7.	13.00 – 13.30	Metode, Hasil Pengumpulan data dan Rencana kerja pengkajian SDI untuk Kakap Merah, Kerapu dan Pelagis Kecil	TNC
8.	13.30 – 14.00	Metode, Hasil Pengumpulan data dan Rencana kerja pengkajian SDI untuk Kakap Merah, Kerapu dan Pelagis Kecil	WCS
9.	14.00 – 14.30	Metode, Hasil Pengumpulan data dan Rencana kerja pengkajian SDI untuk Kakap Merah, Kerapu dan Pelagis Kecil	MDPI
10.	14.30 – 15.00	Metode, Hasil Pengumpulan data dan Rencana kerja pengkajian SDI untuk Kakap Merah, Kerapu dan Pelagis Kecil	WWF
11.	15.00 – 15.30	Peran swasta dalam pengumpulan	Pulomas

No.	Waktu	Kegiatan	Keterangan
		data untuk pengkajian SDI	
12.	15.30 – 16.00	Metode dan Hasil Pengumpulan data dan pengkajian SDI di WPP 715	Kepala BPPL
13.	16.00	Penutup Hari Pertama	Panitia

Rabu, 01 Maret 2017

No	Waktu	Kegiatan	Keterangan
1.	09.00 – 09.30	Format, prosedur, dan sistem pengumpulan data pengkajian stok untuk WPP NRI	Kepala BPPL Peneliti BPPL: Prof. Ali Suman, Ernawati, Suwarso, Budi Nugraha dan Program WPEA: Bayu dan Ignatius
2.	09.30 – 12.00	Diskusi Roundtable: 1. Existing Data dan Analisis. 2. Metode dan Protokol Sampling 3. Mekanisme kerja, pengumpulan data, analisis Data serta peran masing-masing stakeholder	Moderator: Ir. Duto Nugroho M.Si.
		ISHOMA (12.00-13.00 WIB)	
3.	13.00 – 14.00	Formulasi Kesepakatan Metode dan Protokol Sampling, Mekanisme pengumpulan data, analisis dan Output	Moderator: Ir. Duto Nugroho M.Si. dan Dr. Purwanto
4.	14.00 – 14.30	Pembacaan Rumusan dan Penutupan	Kepala BPPL dan Kepala Pusriskan

## Annex 2: PHOTOS AND CAPTIONS

Below is the documentation during the workshop.

The head of BBPL (Dr. Fayakun) explaining the data collection sites where BBPL's team is working on.
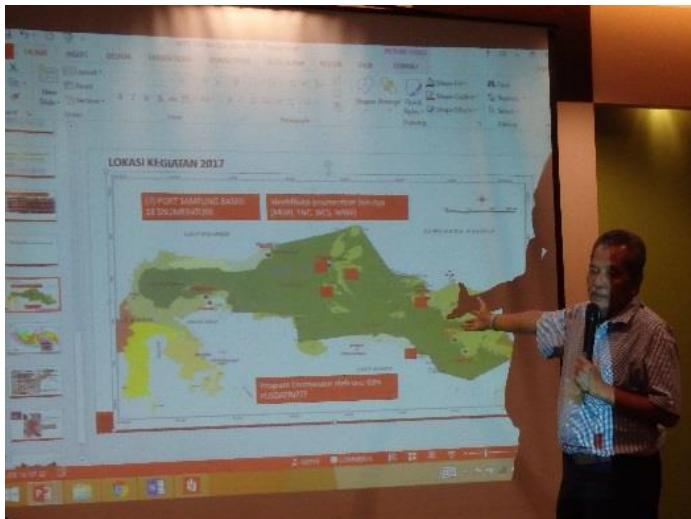
The Pusriskan researcher (Pak Duto Nugroho) facilitating the synchronization data collection sites
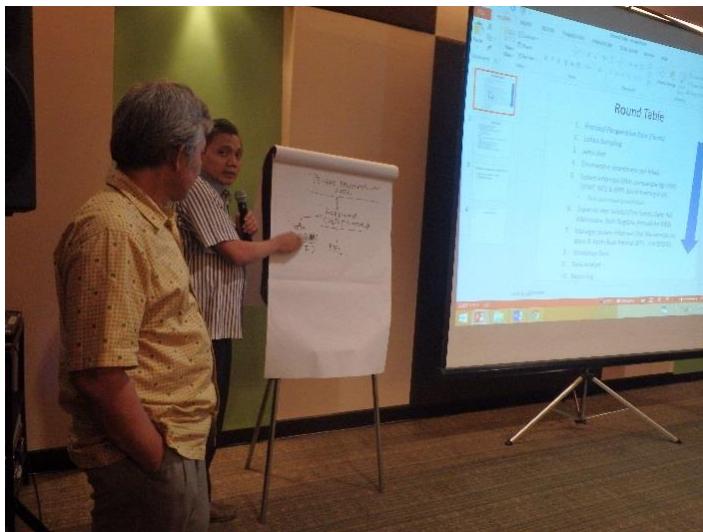
The head of BBPL (Dr. Fayakun) and Pak Purwanto facilitating the discussion for developing data flow mechanism

KOMNAS KAJISKAN (Prof. Wudi) highlighting the need for PREMIUN FISHERY DATA for fishery management needs.

Participants from various organizations

Attached in a separate file

Attached in a separate file

RUMUSAN/CATATAN
Workshop on Stock Assessment Data Collection Protocol and Methodology Development to Support Fisheries Management

PUSAT RISET PERIKANAN
Bogor, 28 Februari – 1 Maret 2017

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  Sustainable Ecosystem Advanced (SEA) merupakan salah satu program *United States Agency for International Development* (USAID) di Indonesia untuk mendukung KKP melalui (1) peningkatan konservasi dan pemanfaatan berkelanjutan sumber daya laut dengan mereformasi pengelolaan perikanan dan mempromosikan daerah perlindungan laut untuk meningkatkan produktivitas perikanan, pangan dan keamanan gizi, serta mata pencaharian yang berkelanjutan dalam area target, yaitu WPP 715 (khususnya Propinsi Maluku, Maluku Utara dan Papua Barat), dan (2) penguatan peran kepemimpinan dan kapasitas Kementerian Kelautan dan Perikanan dan pemerintah daerah untuk mendorong konservasi dan perikanan yang berkelanjutan.

  Dalam rangka pelaksanaan salah satu dukungan dari Project SEA yaitu "Mendukung penguatan protokol dan metodologi termasuk sinkronisasi metodologi yang digunakan oleh berbagai organisasi untuk pengkajian stok, mengembangkan *harvest strategy*, dan strategi evaluasi pengelolaan", telah dilaksanakan pre-workshop pada bulan Desember 2016.

  Pada pre-workshop yang berfokus pada koordinasi internal tersebut telah dilakukan identifikasi mengenai; pengumpulan data hasil tangkapan yang dilakukan oleh unit KKP, beberapa LSM dan juga sektor swasta/asosiasi, selain itu juga diidentifikasi kebutuhan peningkatan kapasitas bagi para peneliti Pusriskan pada bidang pendugaan stok dan pengembangan *harvest strategy*. Pada pre-workshop tersebut belum melihat secara rinci mekanisme pengumpulan data, protokol dan metode yang akan dilakukan oleh beberapa stakeholder yang menjadi mitra SEA-Projek. Untuk mengisi kesenjangan dan menindaklanjuti pre-workshop tersebut, perlu dilaksanakan workshop mengenai ***"Stock Assessment Data Collection Protocol and Methodology Developing to Support Fisheries Management"*** yang diperlukan untuk pelaksanaan pengumpulan data dan pengkajian stok SDI yang akan dilaksanakan di WPP 715 dengan keikutsertaan *stakeholders*- yang terlibat di dalamnya.

Workshop mengenai *Stock Assessment Data Collection Protocol and Methodology Developing to Support Fisheries Management* merupakan salah satu kegiatan yang dibiayai oleh SEA Project USAID yang bertujuan:

- Untuk melakukan rincian metode dan ekspektasi hasil pengumpulan data (*available data*) yang telah dilaksakan untuk spesies yang ditargetkan yang sedang dan akan dikumpulkan oleh berbagai organisasi di WPPNRI 715.
- Untuk mengidentifikasi kesenjangan (*gaps*) ketersediaan data (parameter); metode pengumpulan data dan lokasi pengumpulan data yang dilaksanakan di WPPNRI 715.
- Untuk menyepakati format metode dan protokol sampling, mekanisme pengumpulan data, analisis data serta peran masing-masing stakeholder.
- Untuk mengidentifikasi kebutuhan pengingkatan kapasitas kemampuan peneliti dan rencana tindak lanjut.

"Workshop on Stock Assessment Data Collection Protocol and Methodology Developing to Support Fisheries Management" telah dilaksanakan pada tanggal 28 Februari – 1 Maret 2017 di Hotel Santika, Bogor. Workshop dibuka secara resmi oleh Kepala Pusat Riset Perikanan Dr. Toni Ruchimat, peserta workshop berjumlah 45 orang terdiri dari pejabat struktural Direktorat Pengelolaan SDI – DJPT, pejabat struktural lingkup Pusat Riset Perikanan (Kepala BPPL Muara Baru, Kepala BP2KSI Jatiluhur), pejabat fungsional lingkup PRP. Pemaparan yang dilakukan oleh narasumber yang dilaksanakan pada workshop tersebut adalah:

1. Presentasi "Kebutuhan Standarasisasi Metodologi Pengumpulan Data dan Pengkajian Stok SDI saat ini dan rencana Pengembangan ke Depan" oleh Kepala Pusat Riset Perikanan
2. Presentasi "The Nature Conservancy – Indonesia Fisheries Conservation Program" oleh Dr. Peter Mous, Director of Indonesia Fisheries Conservation Program - TNC
3. Presentasi "Metode Pengumpulan dan Analisis Data Perikanan" Oleh Irfan Yulianto, Dr Irfan Yulianto M Si, Fisheries Program Manager WCS
4. Presentasi "The I-Fish Approach" Oleh Dr. Dierdre, Communications and Development Manager MDPI
5. Presentasi "Protocol of Stock Assessment Data Collection to Support Fisheries Management" Oleh A. Damora divisi sustainable fisheries WWF
6. Presentasi "Kebutuhan Rekomendasi Ilmiah Bagi Pengelolaan Perikanan oleh KKP" Oleh Besweni – SDI DJPT
7. Presentasi "Peran Swasta dalam Pengumpulan Data Stok" Oleh Heru Purnomo. pemilik perusahaan perdagangan ikan hidup PT. PULOMAS
8. Presentasi "Metode dan Hasil Pengumpulan Data Pengkajian SDI di WPP 715" oleh Kepala BPPL
9. Presentasi "Pendataan Pendaratan Ikan Hasil Tangkapan" oleh Mahiswara, peneliti BPPL
10. Presentasi "Prosedur, Format dan Sistem Pengumpulan Data Pengkajian Stok untuk WPP NRI 715" Oleh Tri Ernawati, peneliti BPPL

11. Presentasi Mekanisme Kerja Pengkajian dan Perumusan Potensi SDI oleh Prof. Wudianto ,sekretaris KOMNAS KAJISKAN

12. Presentasi "Satu data KKP" oleh Ismayanti, Kabid data PUSDATIN

Presentasi dan diskusi dilakukan dengan moderator Mohamad Natsir dari Pusriskan. Materi presentasi dan proses diskusi pada pelaksanaan Workshop dapat dilihat pada lampiran dari rumusan ini.

Diskusi rountable terkait existing data dan analisis, metode dan protokol sampling, mekanisme kerja, pengumpulan data, analisis dan peran masing-masing stakeholder dipimpin oleh Duto Nugroho MSi. Diskusi formulasi kesepakatan metode dan protokol sampling, mekanisme pengumpulan data, analisis dan output dipimpin oleh Dr. Purwanto dan Dr. Fayakun Satria.

Hasil Catatan/kesepakatan dari Workshop adalah sebagai berikut:

A. Target Speies dan Perikanan di WPP 715
   1) Ikan Karang (TNC):
      1.1. TNC
      TNC terutama mengumpulkan data ikan karang laut dalam (deep waters) dengan species utama sebagai berikut:

      Pristipomoides filamentosus
      Aphareus rutilans
      Pristipomoides multidens
      Etelis sp.
      Lutjanus erythropterus
      Paracaesio kusakarii
      Lutjanus timorensis
      Etelis coruscans
      Wattsia mossambica
      Pinjalo lewisi
      Etelis radiosus
      Gymnocranius grandoculis
      Paracaesio stonei
      Epinephelus areolatus
      Aprion virescens
      Pristipomoides typus
      Erythrocles schlegelii
      Pristipomoides sieboldii
      Seriola rivoliana
      Lutjanus argentimaculatus

      1.2. *WCS*
         a. WCS akan memantau data ikan karang berikut ini:
         Lutjanidae

1	*Apncens tulilans*	Lompa-lompa
2	*Etelis coruscans*	Bai
3	*Lutjanus bohar*	Singaru
4	*Lutjanus malabaricus*	Kakap merah
5	*Lutjanus erythropterus*	Dalise
6	*Lutjanus carponotatus*	Gurara
7	*Lutjanus argentimaculatus*	Somasi
8	*Aphareus rutilans*	Bodabo
9	*Etelis cf. carbunculus*	Ihe
10	*Aprion virescens*	Hadi

Epinephelidae

1	*Cephalopholis miniata*	Goropa macan
2	*Cephalopholis sonnerati*	Goropa merah
3	*Variola louti*	Goropa gunting
4	*Cephalopholis microprion*	Goropa hitam
5	*Carangoides orthogrammus*	Baubara
6	*veriola albimarginata*	goropa ekor bulan
7	*Chromileptes altivelis*	Goropa tikus
8	*Epinephelus foscoguttatus*	Goropa Tiger
9	*Ephinephelus morrhua*	Rajabau
10	*Plectropomus sp.*	Sunu

2) Ikan Pelagis Kecil:
   b. Species ikan pelagis kecil yang akan dipantau mencakup:
   Rastreliger kanagurta
   Decapterus ruselli

B. Pembagian Kerja antara SEA-Patners (WWF, WCS, TNC dan MDPI) dengan PUSRISKAN/BPPL
   - SEA-Patners dan PUSRISKAN akan berkolaborasi untuk mengumpulkan data di WPP 715, SEA Patners dan PUSRISKAN akan melakukan sinkronisasi dan koordinasi pengumpulkan data pada lokasi-lokasi yang sudah disepakati untuk menghindari double effort dan menghasilkan coverage data yang lebih baik.

C. Penggunaan Metode dan Protokol Sampling
   – Metode dan Protokol Sampling yang akan digunakan adalah protokol sampling yang direkomendasikan oleh KOMNAS KAJISKAN untuk menghasilkan Data PREMIUM sebagaimana penjelasan KOMNASKAJISKAN
   – Protokol Sampling akan segera disiapkan agar dapat dilakukan pelatihan kepada petugas pengumpul data

D. Mekanisme Kerja dan Penyampaian Data

- Pusriskan dan SEA Patner akan menunjuk penanggung jawab enumerator dan pengumpulan data
- Data hasil pengumpulan data akan melalui proses verifikasi di masing-masing manajers (di Pusriskan dan SEA-Patnes) dan akan disampaikan ke Data manager + Expert specialist di BPPL yang kemudian akan menghasilkan Laporan sesuai dengan format yang disepakati
- Pengumpulan data akan dimulai pada pertengahan Juli 2017 dan diawali dengan pelatihan pada awal bulan Juni 2017

E. Analisis dan Penyiapan Laporan
- Workshop Data akan dilakukan melibatkan seluruh komisi data untuk menghasilkan final report, periode workshop data akan disepakati (Quartely, annualy..STD)
- Format laporan/template akan didiskusikan lebih detail dalam tim kecil yang terdiri Pusriskan dan SEA-Patners

F. Kebutuhan Peningkatan Kapasitas
- Kebutuhan peningkatan kapasitas akan mengacu pada diskusi tim kecil dan identifikasi yang telah dilakukan pada pre-workshop dan workshop.

G. Mekanisme Penganggaran/Financial Mechanism
- Tim Pusriskan dan SEA – Patners akan menyusun Workplan detail terkait pelaksanaan kegiatan.
- Kebutuhan financial untuk pelaksanaan workplan tersebut akan didiskusikan dan disepakati oleh Tim PUSRISKAN dan SEA - Patners

Hasil catatan/rumusan Workshop ini merupakan kesepakatan dan pedoman yang harus dilaksanakan oleh pihak-pihak yang disebut dan berperan dalam .

Tim Perumus :
Pengarah   :   Dr. Toni Ruchimat
Ketua   :   Duto Nugroho MSi.
Sekretaris   :   Moh. Natsir MSi
Anggota   :   Dr. Fayakun Satria
                         Dr. Purwanto
                         Ir. Kusno Susanto
                         Ria Faizah, M.Si
                         Pratiwi Lestari S.Si.