

Training on Fisheries Traceability Technologies for Sustainable Fisheries Management Activity Report May 30, 2022

Sustainable Fish Asia (SUFIA) Local Capacity Development (LCD) Activity

Training on Fisheries Traceability Technologies for Sustainable Fisheries Management

Activity Report 30 May 2022

Prepared for: Sustainable Fish Asia Local Capacity Development Activity RTI International 208 Wireless Road Bldg. Wireless Road, Lumpini, Pathumwan Bangkok 10330 Thailand

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Executive Summary

The USAID Sustainable Fish Asia (SUFIA) Local Capacity Development (LCD) Activity aims to facilitate the organizational capacity development of regional fisheries organizations, and conduct a regional Private Sector Landscape Assessment of the fisheries sector in Asia. As part of the LCD Activity, SUFIA LCD organized an online training on *Fisheries Traceability Technologies for Sustainable Fisheries Management* for interested fisheries stakeholders in the region, including partner organizations' fisheries technical staff. The training aimed to provide knowledge and enable discussions on feasible traceability solutions that can be applied by the member countries especially for small-scale fisheries. The event also facilitated the development of an action plan related to advocacy on fisheries traceability through social media.

Based on these objectives, this SUFIA LCD activity accomplished three things: (1) compiled existing traceability technologies that are feasible for small-scale fisheries that can be applied for Asia-Pacific region; (2) drafted a cooperative action plan for advocacy on traceability through social media for information on the importance of fisheries traceability and availability of tools; and, (3) documented the event's processes and contents for participants' future reference.

The training was structured with five sessions presented by four resource persons. Mr. Len R. Garces, the main technical resource person, discussed the Ecosystem Approach to Fisheries Management (EAFM) and how it is enhanced by the Electronic Catch Documentation (eCDT) System. In the second session, he described the fisheries traceability technologies that were currently in use in the Region. In both sessions, Mr. Garces shared access to various resources on the topics, especially those that arose from the SEAFDEC-USAID Oceana and Fisheries Partnership project (2015-2020).

In the third session, Dr. Christopher Elvidge discussed the VIIRS Boat Detection (VBD) being done by the Earth Observation Group in the Colorado School of Mines in the USA. He showed that the system is able to detect boats that do not carry either AIS or VMS. The system is also capable of outlining fishing grounds and thus show patterns of fishing in these areas, as well. Finally, he showed that the system is able to predict the origin of boats based on the intensity of illumination.

Also in the same session, Mr. Kongpathai Saraphaivanich of SEAFDEC Training Department, Thailand, presented the electronic ASEAN Catch Documentation Scheme (eACDS). He explained the system requirements, its Key Data Elements (KDEs), the process involved in the documentation, and which ASEAN countries had adopted the scheme. He then detailed each of the nine steps in the process, and concluded by encouraging the participants to consider implementing the eACDS with a description of the module implementation process.

Participants were then grouped into three: Government; NGO and private sector; and, CTI-CFF and SEAFDEC, for the small group workshops on the cooperative action plan for advocacy on fisheries traceability (communication plan). Prior to the workshop break out, they were given a short briefing on communication, advocacy and messaging. Using a template prepared by the facilitator, the breakout groups proceeded to discuss the options they wanted to consider for the communication advocacy. A group representative then presented the group's output to plenary. The workshop group outputs were consolidated to serve as a suggestion toward building a more detailed plan, with more stakeholders involved, if necessary. Participants thanked the organizers for the training and said that they learned a lot, especially on the new technologies for fisheries traceability. On the other hand, they thought that the time for the training was not enough to cover the subject matter deeply, and suggested that the training on the technologies should be separate from the communication action planning. Participants agreed that there is a need to collectively combat IUU fishing in the region through traceability. They pointed out the need for traceability systems that are responsive to the multigear and multi-species fishery that is characteristic among small-scale fisheries in the region. Finally, the participants recommended that the technologies described could be pursued at regional scale with support from regional initiatives such as the new USAID SUFIA Technical Support (TS), so that eCDT could be advanced and fisheries data analysis could be linked to EAFM.

1. Introduction and Objectives of the Course / Event

The purpose of the USAID Sustainable Fish Asia (SUFIA) Local Capacity Development (LCD) Activity is to facilitate the organizational capacity development of regional fisheries organizations, and conduct a regional Private Sector Landscape Assessment of the fisheries sector in Asia. SUFIA LCD Activity is a component of the larger SUFIA Project whose goal is to improve the management of marine biodiversity and fisheries resources in the Indo-Pacific region by reducing illegal, unreported, and unregulated (IUU) fishing. USAID SUFIA LCD Activity is implemented by RTI International.

It is in this light that USAID SUFIA LCD organized an online training on Fisheries Traceability Technologies for Sustainable Fisheries Management for interested fisheries stakeholders in the region, including partner organizations' fisheries technical staff and working groups (Annex 1). The training was aimed to provide knowledge and enable discussions on feasible traceability solutions that can be applied by the member countries especially for small-scale fisheries. The event also facilitated the development of an action plan related to advocacy on fisheries traceability through social media.

The virtual event was conducted on May 30, 2022 from 9:00am to 1:00pm (UTC +8) with the following objectives:

- Share knowledge and information regarding existing fisheries traceability technologies.
- Identify tools and resources such as fishing technologies used for traceability that are suitable for small-scale fisheries.
- Develop a cooperative action plan to advocate for fisheries traceability through social media.

Based on these objectives, the following outputs were obtained:

- Compilation of existing traceability technologies that are feasible for small-scale fisheries that can be applied for Asia-Pacific region.
- A cooperative action plan for advocacy on traceability through social media for information on the importance of fisheries traceability and availability of tools.
- Training Report and Activity Report documenting the event's processes and contents for participants' future reference.

The contact persons for the training were the Dr. Arlene Satapornvanit and Ms. Novena Rena Parengkuan, both of USAID SUFIA. Their contact details are presented below:

Dr. Arlene Nietes Satapornvanit Project Manager USAID SUFIA LCD Activity Bangkok, Thailand Email: **Ms. Novena Rena Parengkuan** Organizational Development Consultant USAID SUFIA LCD Activity Bali, Indonesia Email:

2. Agenda/Topics/Program

The following table shows the program followed for the training, with little adjustment for the time to accommodate the needs of the participants. The schedule was first developed by the technical expert in consultation with SUFIA LCD staff. Afterward, he met with the SUFIA LCD staff involved and the facilitator to discuss and finalize the program.

TIME (UTC +8)	DURATION (minutes)	NAME OF SESSION	DESCRIPTION
9:00 – 9:25 AM	25	Opening preliminaries and Introductions	Dr. Lily Ann Lando, Facilitator Dr. Arlene Nietes Satapornvanit, SUFIA LCD Activity Ms. Novena Rena
			Parengkuan, SUFIA
9:25 – 9:40 AM	15	Training Objectives and Overview	Dr. Lily Ann Lando, Facilitator
9:40 – 10:25 AM	45	Session 1: Electronic Catch Documentation (eCDT) and Traceability System with the Ecosystem Approach to Fisheries Management (EAFM)	Mr. Len Regidor Garces, Technical Trainer
		 EAFM Context and Approach eCDT Overview EAFM and eCDT Nexus 	
10:25 – 10:30 AM	5	Break	
10:30 – 11:00 AM	30	Session 2: Fisheries traceability technologies for sustainable fisheries management relevant to small scale fisheries and data analytics	Mr. Len Regidor Garces, Technical Trainer
11:00 – 11:30 AM	30	Session 3: Examples of technologies being applied in the region:	Invited Resource Persons:
		 Visible Infrared Imaging Radiometer Suite (VIIRS) Boat Detection (VBD) alerts technology 	Dr. Christopher Elvidge, Colorado School of Mines, U.S.A.
		 SEAFDEC's electronic ASEAN Catch Documentation Scheme (eACDS) 	Mr. Kongpathai Saraphaivanich, SEAFDEC Training Department,

TIME (UTC +8)	DURATION (minutes)	NAME OF SESSION	DESCRIPTION
			Thailand
11:30 – 11:45 AM	15	Session 4: Action Planning: Presentation on the pre-drafted cooperative action plan to advocate for fisheries traceability	Dr. Lily Ann Lando and Mr. Len Regidor Garces
11:45 AM – 12:15 PM	30	Lunch Break	
12:15 – 12:45 PM	30	Session 5: Discussion and Action Planning	Dr. Lily Ann Lando and Mr. Len Regidor Garces
12:45 – 1:00 PM	15	Wrap – up and Next Steps Post-training assessment	Dr. Lily Ann Lando Ms. Novena Rena Parengkuan

3. Participants

There were 64 participants registered for the training. Of these, 55 participated in the training, whereas five were online for less than one hour. The profile of participants is summarized below:

PARTICIPANT TYPE	MALE	FEMALE	TOTAL
Government	7	15	22
Regional Organization (SEAFDECD, CTI)	6	3	9
Private Sector/ Fishing Industry	0	1	1
NGOs/Civic Organizations	5	3	8
Academia	5	6	11
USAID SUFIA Technical Support (TS)	2	1	3
TOTAL	25	29	54

4. Session Details

The training was divided into five sessions: the first two were on fisheries traceability technologies, the third was on regional examples of fisheries traceability (VIIRS and eACDS), and the last two sessions covered the communication action planning.

3.1 Session 1: Electronic Catch Documentation and Traceability (eCDT) System with the Ecosystem Approach to Fisheries Management (EAFM)



This session sought to provide the background to the Ecosystem Approach to Fisheries Management (EAFM) and to describe the place of electronic catch documentation and traceability (eCDT) in achieving the EAFM aims. Mr. Len Garces was the technical expert for this session, as well as for session 2.

Mr. Garces first reviewed the concepts of EAFM with the participants, emphasizing that it can be used for developing nested initiatives in fisheries management

planning. He emphasized further that such nested initiatives could be linked upward and downward across scales and thus, can be effectively integrated into national, as well as regional and international plans. Examples of these include the Philippines' National Tuna Management Plan and the Sustainable Fisheries Management Plan for the Sarangani Bay and Sulawesi Sea.

He then defined and described eCDT and how it is connected to EAFM and/or Fisheries Management Plans. Other concepts were then defined, such as key data elements (KDEs) and critical tracking events (CTE), followed by the description of the information architecture of eCDT. The confluence of EAFM and eCDT was discussed, especially as related to CDT data capture. Mr. Garces proceeded to expound the benefits and impacts of eCDT and closed by sharing resources available online from the SEAFDEC-USAID Oceans program.

There were no questions from the participants for this session.

3.2 Session 2: Fisheries traceability technologies for sustainable fisheries management relevant to small scale fisheries and data analytics

Mr. Garces opened the session with an enumeration of the fisheries traceability technologies that were in current use by various stakeholders. These included technologies developed by SEAFDEC and USAID partners in the Philippines and Indonesia. He highlighted the features of each system and described, as well how these were employed within the fisheries value chain.

The USAID Oceans project on Development of Innovative Digital Solutions (IDS) was then described. Specifically, the initiatives of two IDS grantees from Indonesia and from the

Philippines were compared to show the range of possibility that can be explored regarding traceability.

Examples of data analytics and visualization were then shown, This was followed by the sharing of resources on technology solutions mostly from the SEAFDEC-USAID Oceans partnership and the FAO.

3.3 Session 3: Examples of technologies being applied in the region eACDS (SEAFDEC & Colorado School of Mines, USA)



Dr. Christopher Elvidge spoke about the Visible Infrared Imaging Radiometer Suite (VIIRS) Boat Detection (VBD). Dr. Elvidge belongs to the Earth Observation Group (EOG) in the Payne Institute for Public Policy at the Colorado School of Mines, in the USA.

Dr. Elvidge first gave an overview of the VBD and described the near-real time email detection alerts that countries receive. He related that the VIIRS was initially developed for weather prediction and climate monitoring.

He then compared the VBD with the AIS and the Vessel

Monitoring System (VMS). He explained that VIIRS could detect many vessels which are not carrying either AIS or VMS. Next, he discussed the mapping and characterization of fishing grounds, ending with the next potential use of VBD – providing a clue for the origin of vessels based on their brightness.

In conclusion, he stressed that VBD provides locations and radiances for lit fishing boats on 24-hour increments back to 2012. From these observations, it enables near-real time VBD detection alerts for EEZs, marine protected areas, and fishery closures.

An additional benefit to VBD, is that cumulative VBD grids reveal fishing ground outlines and fishing density features inside individual fishing grounds. In relation to the fishing grounds, the VBD is able to identify a class of super-bright fishing vessels associated with international fishing fleets because of radiances in excess of 160 nanowatts.

The most common question asked is whether the governments use the information for enforcement. Dr. Elvidge says that the intention really is for enforcement but EOG provides only the information and has no hand on what the governments do with the information.



Mr. Kongpathai Saraphaivanich of the SEAFDEC Training Department spoke on the Electronic ASEAN Catch Documentation Scheme (eACDS). He started by introducing SEAFDEC to the body, highlighting its vision, membership, and structure.

He then explained the eACDS, its objectives and the KDEs, emphasizing that it required Good Governance in Fisheries Management: Port control, catch reporting, recording movement of fish in the supply chain, and export-import, among others. He proceeded to enumerate and then describe the applications in

the system, the requirements as well as the flow of the process.

The participants were given a detailed description of what happens in each of the nine steps of the eACDS process. In ASEAN, only four countries are implementing eACDS – Brunei Darussalam, Malaysia, Myanmar and Vietnam. Indonesia and Thailand have their own nation eCDT system. Adoption by other countries may have been constrained by the recent pandemic and the restrictions it brought about. However, there is a very clear-cut module for implementation of the system

3.4 Session 4: Communication Advocacy Planning (Small group workshops)



Prior to the workshop, the facilitator first introduced the concepts of communication and advocacy to the participants. She then explained the messages drafted earlier, emphasizing that these are suggested messages and they can still identify other messages that they think would be more appropriate to their target audiences.

In preparation for the workshop, the facilitator helped identify key messages for the communication plan. To wit, the **topline** or **overall** message is

"Fisheries traceability enables the sustainable exploitation of marine biological resources through management guided by the principles

of good governance including decision making based on ecological, economic and social components of the ecosystem."

In addition, the following secondary messages were drawn and presented for consideration:

- a. The broad participation and engagement of all stakeholders is integral to the success of fisheries traceability at all stages.
- b. Fisheries traceability tools and guidance can be integrated into fisheries action plans. These tools & guidance are appropriate, available & accessible, and are interoperable with other systems.

c. Successful traceability entails the capture and sharing of adequate quality data, investment in enabling infrastructure and implementation of an effective and enforceable regulatory framework.

Considering that the participants would have only a short time to do the workshop, the facilitator prepared a template for the communication plan (Annex 3). The template was explained to participants and they were requested to add and/or revise as they saw fit.

Participants were allowed to self-select into one of three workshop groups: (1) Government, (2) NGO & private sector, and (3) CTI and SEAFDEC. Staff of SUFIA LCD and TS facilitated the discussions in these breakout groups. Specifically, we requested the assistance of Dr. Arlene Satapornvanit (LCD), Mr. Frengky Sihombing (TS), and Mr. Joey Pedrajas (TS).

Participation was affected greatly by the strength of the WIFI signal obtained by the participants. Some were not able to participate in the workshops because they lost the signal, were dropped from the link or had issues with lack of electricity.

The Government Workshop Group was active in discussion, but many were disconnected during the workshop. Many of them agreed that their respective governments had fisheries traceability initiatives that were being conducted at various levels. However, they also agreed that these initiatives were hardly ever communicated and most communication regarding traceability were on the negative side such as on IUU, and on certain food products not meeting the standards of importing countries (e.g., Japan, US and EU).

The NGO and Private Sector Workshop Group animatedly discussed the possible communication initiatives specifically for NGOs and for processors only because they said that being representatives of these two groups, they knew what the two groups needed or lacked. They thus, identified specific messages to be used for the two groups especially on transparency, clarity on KDEs, and the benefits of VMS to the private sector. The latter message would address the recent issue where boat owners declared that the institution of a VMS would be a violation of their rights.

The CTI Workshop Group agreed that all the identified audiences should be targeted for communication advocacy especially around the message that sustainable fisheries is linked to the eACDS and eCDT. They agreed that all the other messaging proposed is acceptable but that the message that should be stressed is the link mentioned earlier. This group was supposed to include participants from SEAFDEC but they had to leave after the break due to another meeting elsewhere.

3.4 Session 5: Communication Advocacy Planning (Presentation of Outputs)

Participants in each workshop group developed a draft communication advocacy plan. With the time that they had, they were able to put together suggestions that they think would contribute towards the development and finalization of a more comprehensive plan, that can reflect common actions at the regional level, as well as highlight unique national or organizational initiatives across the region.

The draft outputs were presented to plenary by group representatives (please see Annex 4). Other group members were asked to supplement the information as necessary. The participants mentioned the need to have a bigger workshop in which these draft proposed communication action plans would be discussed and the entire plan finessed for consideration by all. They also thought that representatives from among communications officers or coordinators would be able to contribute to the finalization of the action plan, especially on the aspect of tactics/strategies, and on messaging. The issue of building capacity for advocacy

and communication among fisheries stakeholders was also brought up but not listed in the matrices.

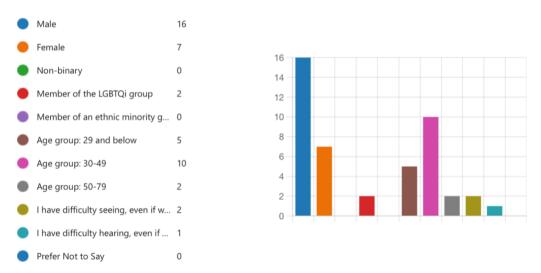
4. Participants' Training Assessments

Twenty-five participants submitted their respective assessment of the training. It is noted that each one took about 25 minutes in which to complete the assessment. The average respondent was male, aged 30 to 49 years old. Among those responding, Thailand was the most represented country, followed by the Philippines and Indonesia. There was one respondent from PNG.

Two respondents align with the LGBTQi group while none of them belonged to any ethnic minority group. Notably, there were more respondents from the 29 years and below age group than the 50 to 79 years group. It may be an indication of the latter's difficulty with online/virtual engagement. However, this is not proven and should be taken only as the opinion of the facilitator.

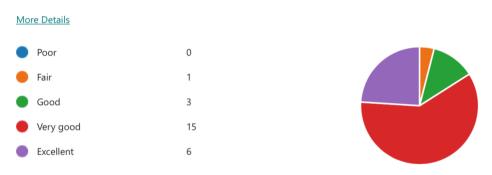
1. We are collecting demographic information to ensure gender equality and social inclusion measures. Please select all that applies.

More Details



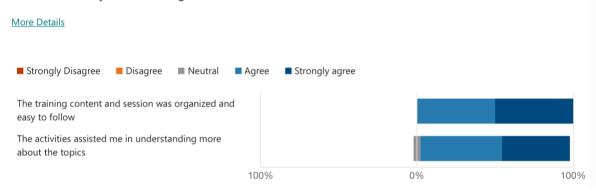
Sixty percent of the respondents rated as VERY GOOD the quality, content and overall process of the training session, while 24% rated the same as EXCELLENT. If these proportions are combined, we have a 84% positive rating. None of the respondents gave a POOR rating.

3. How would you rate the quality, content and the overall process of the training session?



Two additional questions were asked to further clarify the above response regarding the quality, content and overall process of the training session. All the respondents agreed that the training content and session was organized and easy to follow, with half of them in STRONG agreement. This trend is reflected in the next question, with almost all agreeing that the activities assisted them in understanding more about the topics. There was one respondent, however, who was neutral.

4. Please indicate your level of agreement on the statement below



5. Comments and Recommendations

Comments contributed by the respondents (Annex 5) cluster into three groups: (1) conduct of the sessions, (2) expression of thanks, and (3) recommendations.

Participants wanted a deeper or more detailed session, where the discussion of the traceability technologies is separate from the communication planning. In relation, they suggested a follow-on training specifically on the traceability technologies and which should have a demonstration of the use of such technologies. They thought that more material is needed (for sharing with participants) and because the topic was important to the region, there should be more participants.

On the other hand, the same participants expressed their thanks for the training. They thanked the organizers and appreciated the new information and knowledge that they gained from the training. They said the training was timely, and the content is helpful to their work. Those

whose first language is not English mentioned that they were able to follow and understanding all the content.

WAYS FORWARD

The following ways forward were proposed for consideration by the appropriate stakeholders:

- Identify public, private and non-governmental management constituencies to support eCDT and its links to fisheries management
- Advance legal and policy support to mainstream eCDT and EAFM at national and local levels
- Work towards interoperability of various fisheries information and eCDT systems
- Harness the potential use of eCDT for EAFM through capacity building, data and technology sharing, and coordination
- Resource and implement the communication advocacy plan, considering possible intergovernment/interagency collaboration at various scales

Annexes

The following are the annexes to this report:

- 1 List of Participants
- 2 Screen shots of the participants
- 3 Communication Plan Template
- 4 Consolidated Communication Plan (from workshop outputs)
- 5 Comments from the Post-Training Assessment

Annex 1. List of Participants

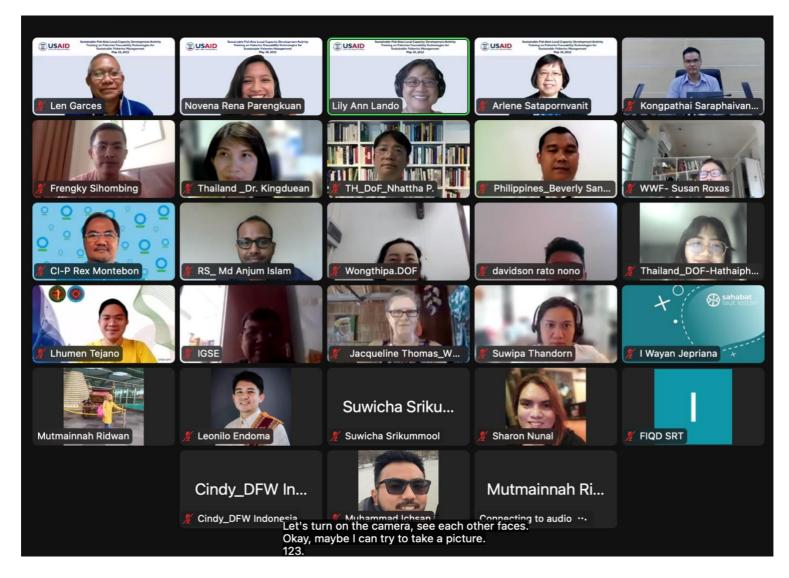
First Name	Last Name	Email	Organization	Job Title	Country/ Region	Gender	Age group
Mateus	Salvador	mateus.ait.asia@gmail.com	University of Oriental Timor Leste	Head, Department of Fisheries	Timor-Leste	M	30-49
Trini	Pratiwi	trini@asicollaborative.org	ASIC (Asian Seafood Improvement Collaborative)	Project Manager	Indonesia	F	≤ 29
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First Name	Last Name	Email	Organization	Job Title	Country/ Region	Gender	Age group
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Francisco	Abilio	atceongcosta@gmail.com	UNITAL	Fisheries	Timor-Leste	М	≤ 29
Augustus Rex	Montebon	amontebon@conservation.org	Conservation International Philippines	Marine Program Director	Philippines	М	50-79
Wunlaya	Homhual	Wunlaya.h@dof.mail.go.th	Department of fishery	Food Technologist	Thailand	F	30-49
Suwicha	Srikummool	suwicha999@hotmail.com	Department of Fisheries	Fishery Biologist, Practitioner Level	Thailand	М	30-49
Rungsiman	Chobkatanyoo	pungman32@gmail.com	Department of Fisheries	Food Technologist	Thailand	М	30-49
Nhattha	Permpoolsombat	nhattha.p@outlook.com	Department of Fisheries	Food Technologist	Thailand	М	30-49
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Daream	Sok	daream.sok@gmail.com	Fishery administration	Deputy Director	Cambodia	F	30-49
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Suwipa	Thandorn	suwipa.thandorn@effem.com	Mars	Sustainability Field Manager	Thailand	F	30-49
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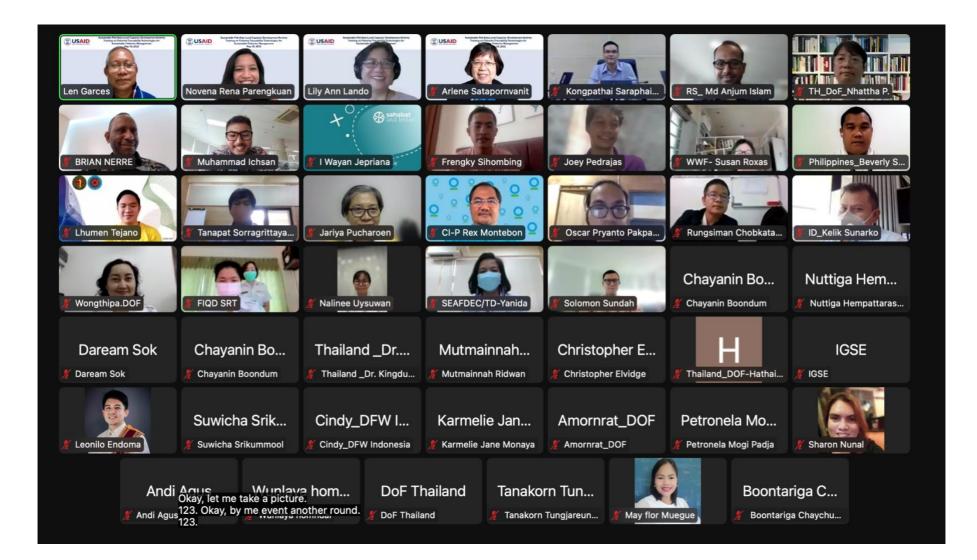
First Name	Last Name	Email	Organization	Job Title	Country/ Region	Gender	Age group
Sharon	Nunal	snnunal@up.edu.ph	University of the Philippines Visayas	Associate Professor	Philippines	F	30-49
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Davidson	Rato Nono	dratonono@gmail.com	Udayana University	Postgraduate student	Indonesia	М	30-49
Andi	Agus	andi.agus3@gmail.com	Faculty of Fisheries and Marine Science, University of Khairun	Lecturer/Researcher	Indonesia	М	30-49
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registered
participated more than 1hr
participated less than 1hr



Annex 2. Screenshots of the Training Participants



Annex 3. Communication Plan Template

Communication Plan for the Advocacy of Fisheries Traceability for Sustainable Fisheries Management

BREAKOUT GROUP (Please tick the appropriate box):

□ Governments/Institutions □ NGOs □ Private Sector □ SEAFDEC & CTI

Strategic Advocacy Tactic: Social Media

Key Messages:

- 1. Topline/Overall Message: Fisheries traceability enables the sustainable exploitation of marine biological resources through management guided by the principles of good governance including decision making based on ecological, economic and social components of the ecosystem
- 2. Secondary Messages:
 - a. The broad participation and engagement of all stakeholders is integral to the success of fisheries traceability at all stages
 - b. Fisheries traceability tools and guidance can be integrated into fisheries action plans. These tools & guidance are appropriate, available & accessible, and are interoperable with other systems.
 - c. <u>Successful traceability entails the capture and sharing of adequate quality data, investment in enabling infrastructure and implementation of an effective and enforceable regulatory framework.</u>

AUDIENCE	MESSAGE	ACTIVITY & PLATFORM	ACTIVITY LEAD	MESSENGER	POSSIBLE FUNDING
The people who can potentially directly or indirectly have an influence in achieving your objective	(See above, use numbers, e.g., 1, 2a, 2b, etc.) You may add other messages especially pertinent to your context.	What will be done to disseminate the message, engage audiences, trigger action, etc.? What platform do we use? (e.g., FB, Twitter, Instagram, branded webpage, etc.)	Who will lead, as well as manage the conduct of the activity? [Individual or agency/organization or country]	Who will be the most credible source in the eyes of the target audience? [i.e., known, trusted, has knowledge/insight, valued opinion, link to issue or groups affected]	What agencies, groups or programs (existing or to be proposed) can resource the plan or parts of it?
Fishers, Fishers organizations, Fishing communities					
Local Government					
National Governments and/or officials					
NGOs					
Academe					
Processors/Private sector					

Annex 4. Draft Communication Plan (consolidated from outputs of the workshop groups)

Communication Plan for the Advocacy of Fisheries Traceability for Sustainable Fisheries Management

Strategic Advocacy Tactic: Social Media

Key Messages:

1. Topline/Overall Message:

Fisheries traceability enables the sustainable exploitation of marine biological resources through management guided by the principles of good governance including decision making based on ecological, economic and social components of the ecosystem

2. Secondary Messages:

- d. <u>The broad participation and engagement of all stakeholders is integral to</u> <u>the success of fisheries traceability at all stages.</u>
- e. <u>Fisheries traceability tools and guidance can be integrated into fisheries</u> <u>action plans. These tools & guidance are appropriate, available &</u> <u>accessible, and are interoperable with other systems.</u>
- f. <u>Successful traceability entails the capture and sharing of adequate quality</u> <u>data, investment in enabling infrastructure and implementation of an</u> <u>effective and enforceable regulatory framework.</u>

AUDIENCE	MESSAGE	ACTIVITY & PLATFORM	ACTIVITY LEAD	MESSENGER	POSSIBLE FUNDING
CTI & SEAFDE	C				
Fishers, Fishers organizations, Fishing communities Local Government National Governments and/or officials NGOs Academe Processors/Pr ivate sector	Make people realize and be aware how to make sustainable fisheries (<i>link to</i> <i>eCDT</i> , <i>eACDS</i>) All messages	Platform on FB, Twitter, Instagram, webpage (with interesting animation targeting young generation)	National: Governments with support environmental NGOs (working Oceans and Fisheries) Regional: CTI-CFF will coordinate the activity with member country, with monitoring and improvements later; SEAFDEC in collaboration with SUFIA (Proposed)	Fisheries agency (e.g., MMAF) with NGOs CTI Regional Secretariat (communicati ons) in coordination with the NCCCs and TWGs	National Governme nts Developm ent grants Internation al NGOs (e.g., CI, Rare, TNC, WWF, etc.) Private sector (e.g., Astra Daihatsu [Indonesia sea turtle conservati on], CSR programs.
NGO & Private	Sector				
NGOs	 Accurate data for stock assessm ents VMS for transpar ency 	 Provide training in technolo gy and traceabil ity systems Initiate introduct ions to technolo gy solution s websites of NGOs, 	 Raising awareness of the need for traceability systems and explain the systems, led by NGO communic ations managers and Technical Lead 		Grant Donors

AUDIENCE	MESSAGE	ACTIVITY & PLATFORM	ACTIVITY LEAD	MESSENGER	POSSIBLE FUNDING
		social media platforms, i.e. Twitter	(Program Person)		
Processors/ Private sector	 Access to markets with traceabili ty data; other incentive s Express the compelli ng benefits of VMS to commer cial sector (specific to the Philippin es) Clarity on KDEs, use a standard list for consiste ncy 	 provide a factshee t and informati on of the traceabil ity system and procedu re to be provided by technolo gy develop ers; provide training Private sector provides solution s for traceabil ity i.e. profitabil ity i.e. profitabil ity impacts Systems experts in-house to maintain traceabil ity system 	 Technolog y developers Large (global) seafood industry players and industry alliances, Global Tuna Alliance, SeaBOS 	Consumers	Seafood industry
GOVERNMENT	GOVERNMENT				
Fishers, Fishers organizations, Fishing communities	All messages	Whichever is most popular that is being used in each country for eg.			

AUDIENCE	MESSAGE	ACTIVITY & PLATFORM	ACTIVITY LEAD	MESSENGER	POSSIBLE FUNDING
		Philippines – FB, SMS;			
		Thailand – Line; etc.			
National Governments and/or officials		Government Website, Facebook,			
DOF – Thailand from different		Twitter and TikTok;			
divisions – some from processing dept in-		Developme nt and Disseminati on of IEC			
charge of processing companies, some from the division		Materials			
working small scale fisheries					

Annex 5. Other comments from the post-training assessment

5. Additional comments:

25 Responses

$ID \uparrow$	Name	Responses
1	anonymous	None
3	anonymous	The inclusion of eACDS and VIIRS Session has provided additional information of available technologies that could be pursued at a regional scale including data visualization and analysis for fisheries data. Could be perhaps supported by SUFIA TS including country level interventions for advancing eCDTS and fisheries data analysis linked to EAFM.
4	anonymous	I've appreciated it all due to the new updated sharing technology for traceability.
5	anonymous	Thank you for the training. I got more knowledge from this training.
6	anonymous	Although I'm not good and speaking and understanding English I can still follow and understand all the content overall. Thank you.
7	anonymous	Thank you for making this training I had a lot of information and knowledge on Fisheries Traceability Technologies for Sustainable Fisheries Management
8	anonymous	Thank you very much for organizing this workshop. It is very helpful.
10	anonymous	Thank you for the training. I learn new knowledge
11	anonymous	Thank you
12	anonymous	We have to combat the IUU-Fishing together through using the traceability system
13	anonymous	timely webinar on eCDT
14	anonymous	Great online training, we should have more material and involve more participants
15	anonymous	Good job.
16	anonymous	Thank you for imparting their knowledge on fisheries traceability using new technologies.
17	anonymous	If there is a demonstration of the use of the mentioned technology, that would be great.
18	anonymous	
19	anonymous	Thank you for providing this course. Please kindly set this kind of training again but in deeper detail or it could be more specifically focus in action plan to make the full traceability available to all food chain especially in small & medium size of business.
20	anonymous	None

21	anonymous	Specific online training on traceability technologies please. Thanks.
22	anonymous	Need more deeper elaboration regarding the system infrastructure needed to support eACDS
23	anonymous	No comment
24	anonymous	Small scale fisheries in Indonesia totally different with other countries. mostly the fishermen not only using 1 fishing gear on their boat. their target also not only 1 species. So, it will need some strategies to trace their fishing, that easy, efficient and cheap to apply.
25	anonymous	some session should be haved more retailed