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USAID Oceans and Fisheries Partnership (May 2015 – May 2020)

E-CDT: Legacy and Update

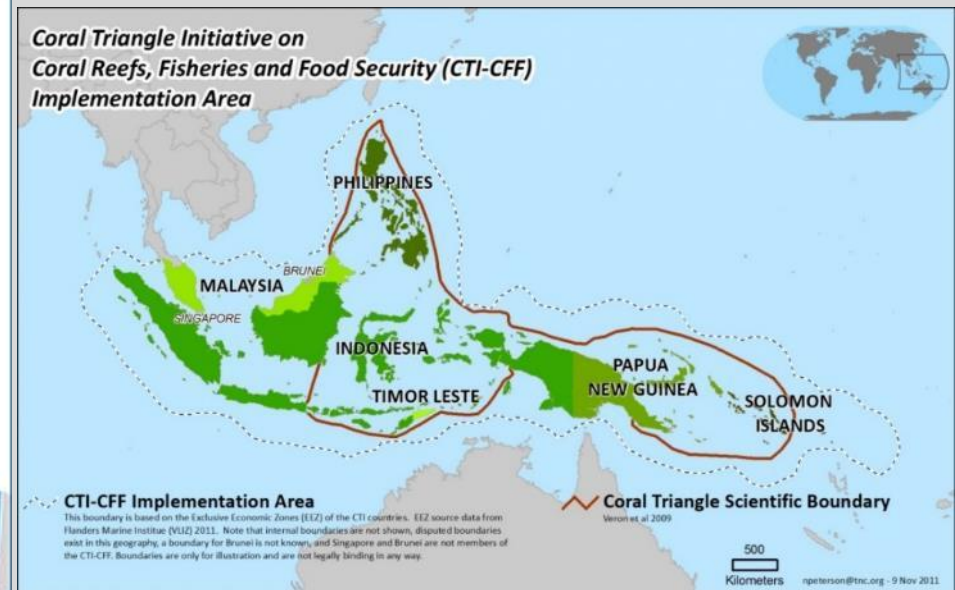
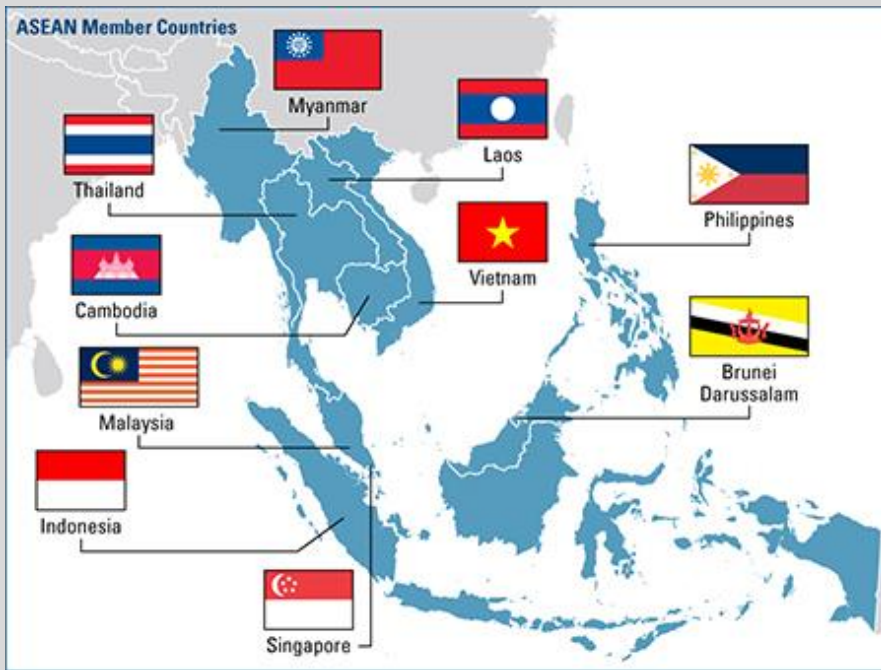
Farid Maruf faridmaruf21@gmail.com

PURPOSE

To combat **illegal, unreported, and unregulated (IUU) fishing** and seafood fraud, promote **sustainable fisheries**, and **conserve marine biodiversity**.

SCOPE

USAID Oceans is a 5-year (May 2015 – May 2020) regional project engaging with the 10 ASEAN and 6 Coral Triangle (CTI-CFF) Member Countries.

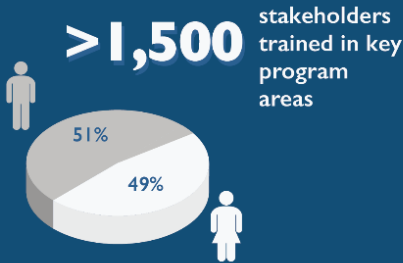
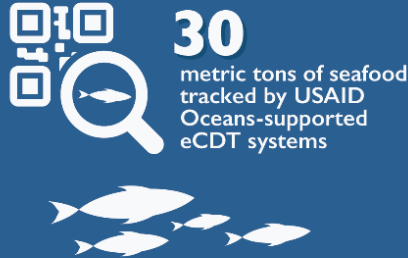




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USAID OCEANS AND FISHERIES PARTNERSHIP IMPACTS

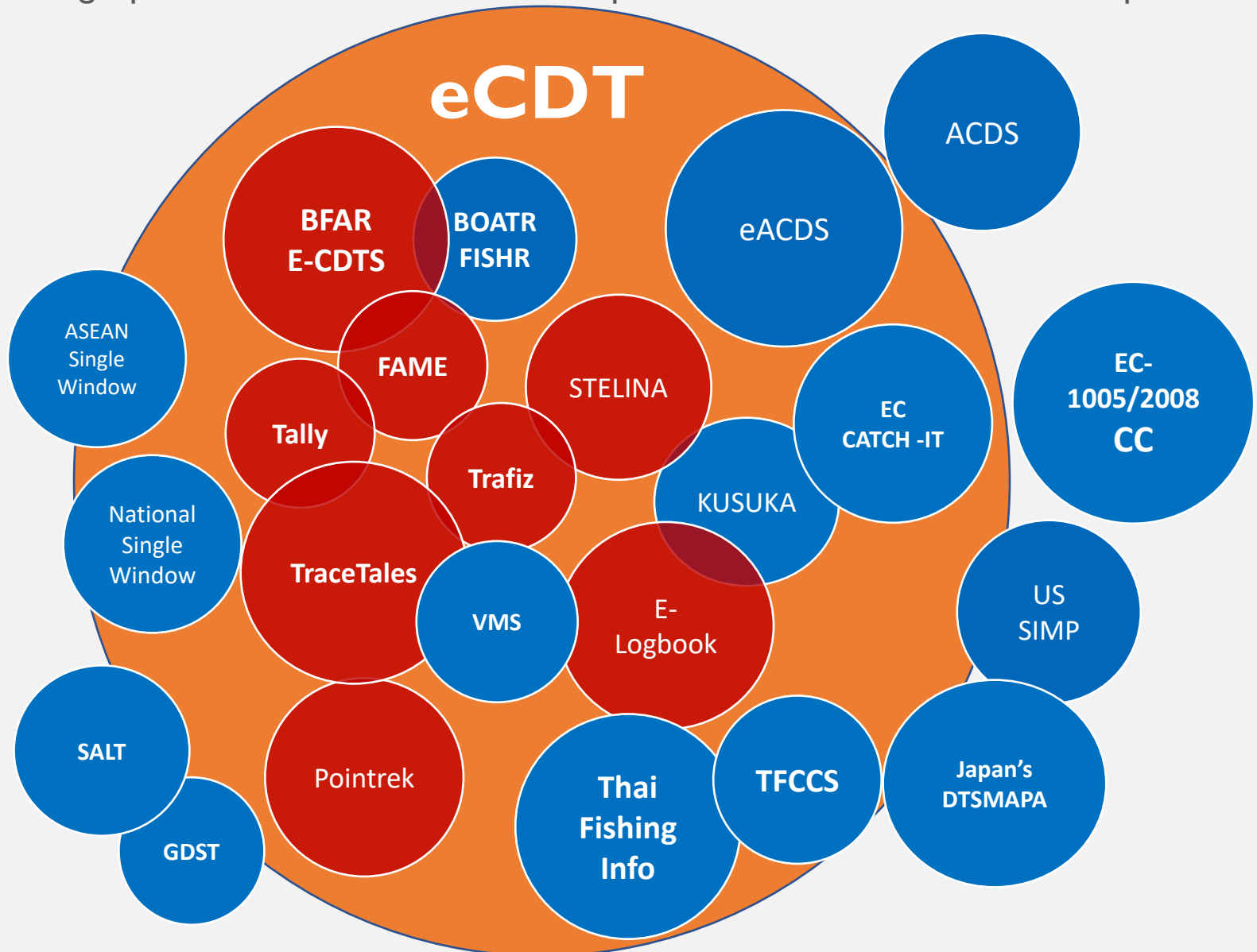


USAID Oceans - May 2015 - April 2019



The Universe of Seafood Electronic Traceability

Rather than a single product **eCDT** is a tool set comprised of data, tools, standards and process



USAID Oceans' collaboration with Government Fisheries Agencies



Philippines
BFAR Region 12 eCDTS

Indonesia
MMAF- STELINA
MMAF- E-logbook

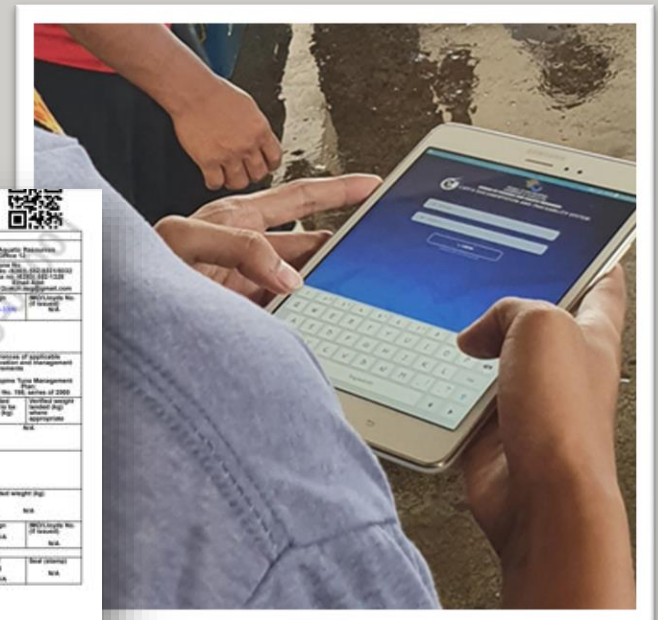
USAID Oceans' collaboration with Government Fisheries Agencies

Philippines BFAR eCDT SYSTEM

is a upstream and at-sea catch documentation developed by the BBFAR

USAID Oceans Supports:

- Development support and funding
- Technical design and expertise
- Socialization and training
- Recruited First Mover with SFFAI
- Equipment for early adopters
- Establishment Fishery Monitoring Centers (FishMon), 2 at BFAR offices and 7 at the LGUs



PHILIPPINE CATCH CERTIFICATE			
<p>Document Number: BBAR-CC-0016-2018-0001</p> <p>Issuing Authority: Bureau of Fisheries and Aquatic Resources</p> <p>Office: Regional Office, 20th St., Marikina City, Philippines</p>			
1. Fishing Vessel	2. Flag	3. Vesselport and Registration Number	4. Call Sign
5. Fishing Gear	6. Species	7. Description of Catch	8. Management of applicable conservation and management provisions
9. Species	10. Product Code	11. Estimated weight (kg)	12. Declaration of Management of the fishing vessel
13. Master of Fishing Vessel	14. Signature and Date	15. Estimated weight (kg)	16. Declaration of Management of the fishing vessel
17. Name	18. Authority	19. Address	20. Date of Issuance

USAID Oceans' collaboration with Government Fisheries Agencies

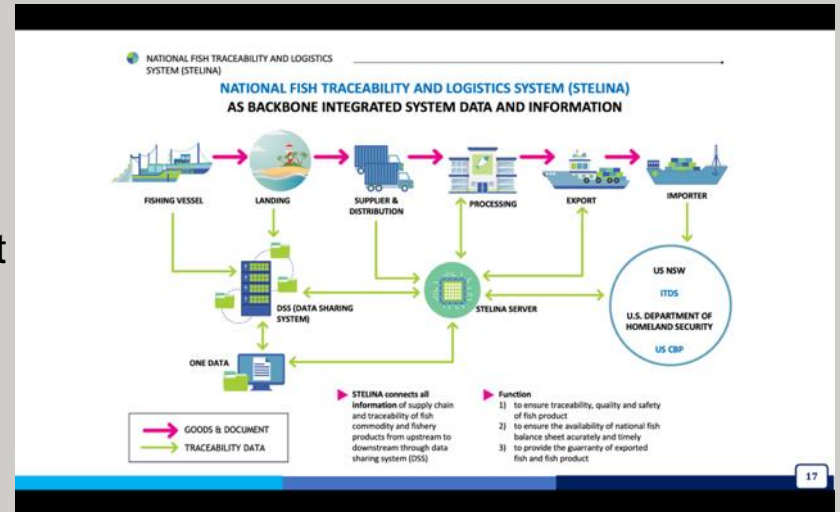
Indonesia

MMAF- STELINA

is a downstream national fish and fishery product traceability information system that was developed by the Ministry of Maritime Affairs and Fisheries (MMAF)

USAID Oceans Supports:

- Technical design and expertise
- Socializations and trainings
- Early adopter recruitments
- Equipment for early adopters
- Fishery Monitoring Center (FishMon)



USAID Oceans' collaboration with Government Fisheries Agencies

Indonesia

MMAF- E-LOGBOOK

is a upstream and at-sea catch documentation developed by the Ministry of Maritime Affairs and Fisheries (MMAF)

USAID Oceans Supports:

- Socializations and trainings
- Early adopter recruitments
- Equipment for early adopters
- Fishery Monitoring Center (FishMon)

The diagram illustrates the features of the eLogbook app, which are represented by five colored arrows pointing towards a smartphone displaying the app's interface. The features are:

- SIMPLE**: Data collection will be simpler and efficient.
- PAPERLESS**: Does not use any paper.
- REPORT**: Online report, the fishermen do not need to go the fishing port office.
- INTEGRATED**: Data is integrated to Fishing Logbook Information System.
- OFFLINE MODE**: Can be operated in offline mode and be sent when online.

The smartphone screen displays the eLogbook app interface with the following details:

- Header: eLogbook
- Location: HONG TJAI ABADI MAKMUR
- Setting mulai 25/10/2018 23:27: -6.34980915 106.73129689
- Setting sampai 25/10/2018 23:27: -6.34981061 106.73129677
- Cakalang [SKJ]: 55kg
- Madidihang [YFT]: 100 kg / 5 ekor
- Layang Deles
- Button: SIMPAN DATA

eCDT TECHNOLOGY



FAME

Small-Scale Vessel Transponders

A 2-way small boat tracking technology that uses LoRA. Employs on-board “transponders” and land-based “gateways” to collect and transmit eCDT data.

Each transponder equipped with near-field communication (NFC) reader-writer. Data is initially collected at the point-of-catch when the fisher taps a “NFC” card to the transponder, automatically capturing essential catch data such as location, date and time, captain’s name, boat name, gear type, etc



eCDT TECHNOLOGY



LANDING



PROCESSING



EXPORT



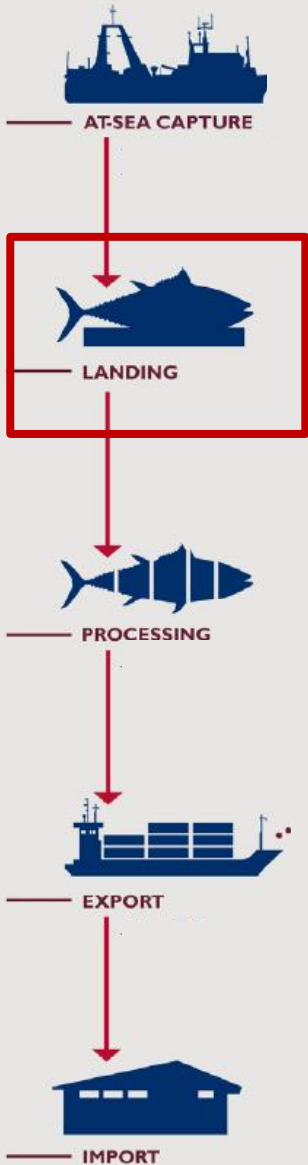
IMPORT



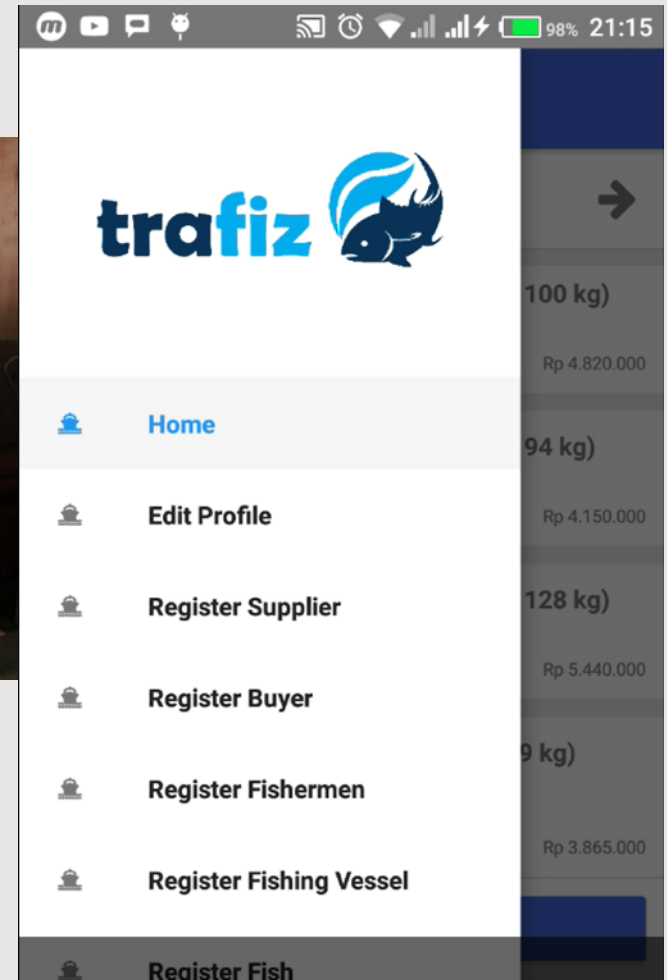
Pointrek/Inmarsat Two-Way Vessel Monitoring System

- Connected via Inmarsat satellite networks
- Fleet management: vessel speed, heading, distance, storage temperature, fuel consumption
- Two-way communication to on shore including text/SMS and email
- Real-time catch reporting and print government Logbook

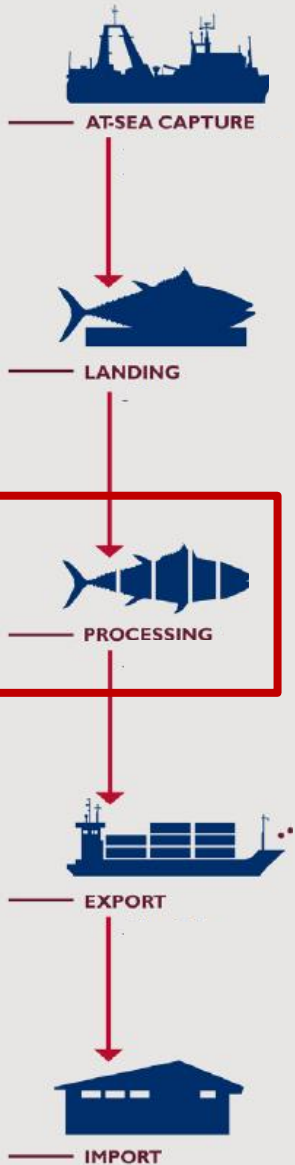
eCDT TECHNOLOGY



Trafiz is an Android mobile application for small-scale fish **suppliers** that provides a first data entry point for seafood products originating from small-scale fishers at the landing site.



eCDT TECHNOLOGY



Trace Tales

Internal traceability for small to medium processors

- TraceTales, developed by USAID Oceans' grantee MDPI, enables processing companies to capture data throughout the processing stage.
- Processors can quickly and easily compile the information required by various national and international traceability requirement
- Tracetales brings paper-based record keeping online for improved business and resource management

LESSONS LEARNED

eCDT TECHNOLOGY –

- “**One size fits all**” solutions can be challenging to implement and ineffective – systems must be **interoperable and accessible**.
- eCDT systems should be **built upon the strengths of existing CDT protocols**.
- Critical for support from **strong enforcement** (including validation and verification) among government agencies and a **clear** (private sector) **business model**.

FISHERIES MANAGEMENT –

- Effective fisheries management plans should **incorporate and be backed by eCDT systems**, in concert with other management measures.
- The use of eCDT data for **informing fisheries management** is relatively new, thus it requires the development of new tools, methodologies, and software.

LESSONS LEARNED

PARTNERSHIPS –

- **The most successful partnerships are formed between multiple parties** (i.e. private sector, government, and local community groups).
- **Periodic partnership reviews and evaluation** can optimize existing partnerships and identify new opportunities to support priorities.

HUMAN WELFARE –

- **Human welfare and gender have become key considerations for traceability**, including the roles of women and men, their working conditions, policies, business environments, and markets.
- eCDT systems can be a **valuable human welfare tool**.
- If developed holistically, **eCDT can enable valuable human welfare-related functions**, including non-compliance and abuse alerts.

Updates

- **BFAR eCDTS**

- BFAR FAO 251 (traceability) revised twice to accommodate E-CDTS
- BFAR National Director issued Memorandum on 8 March 2022 regarding the implementation of eCDTS in BFAR-12
- Incorporated with EAFM as a foundation, as part of the proposed Fisheries and Coastal-Resilient Resource Planning and Management (FishCRRM) component of the upcoming WB-funded project of BFAR, with proposed sites in the West Philippine Sea (Ilocos region to Zambales-Manila Bay area) and in the Northern Mindanao (Bohol sea area).
- USAID Oceans experiences and documents were cited in the Feasibility Study report which has already been approved by the National Economic Development Authority (NEDA) and awaiting approval from the Philippine government.

Updates

- **MMAF E-Logbook**

- Activated and used by **12,648** boats (5 tons and up) in **64 fishing ports**.
- Used as the basis for government levy (nontax income) collection.
- Used for assigning catch quota
- Requirement for sailing permit and license extension
- Data has been used for regulation review and formulation

- **MMAF STELINA**

- Implemented in number of main export-oriented ports in Indonesia
- Sanctioned by Ministerial Decree **Permen KP No 29 / 2021**
- MDPI has been working with MMAF to develop interoperability between STELINA and TraceTales.
- Developing open APIs to enable STELINA connect to other systems.
- Advance analytics and reporting is under development

Updates

- **FAME**

- Continues expanding implementation in the Philippines and Indonesia
- Changed business model from subscription to per kilogram of catch
- Currently working with WWF, giving per kilo incentive to the fisherman upon successful NFC tapping with complete fish catch documentation (catch to cash)
- FAME is having a pilot also in Bitung, Indonesia
- Developing API with TraceTales to enable data can be pass automatically

- **TraceTales**

- The product has been spined of to into commercial product
- Currently implemented in 8 medium-large fish processing companies
- MDPI has established a new for-profit company to implement TraceTales
- Working closely with MMAF to develop interoperability with STELINA

- **Trace.AI**

- A women lead tech start ups that won USAID Oceans hackathons
- Develop end to end traceability system that focused targeting women actor on fishery supply chain
- Employ Artificial Technology (AI) in fish recognition and fish size estimation

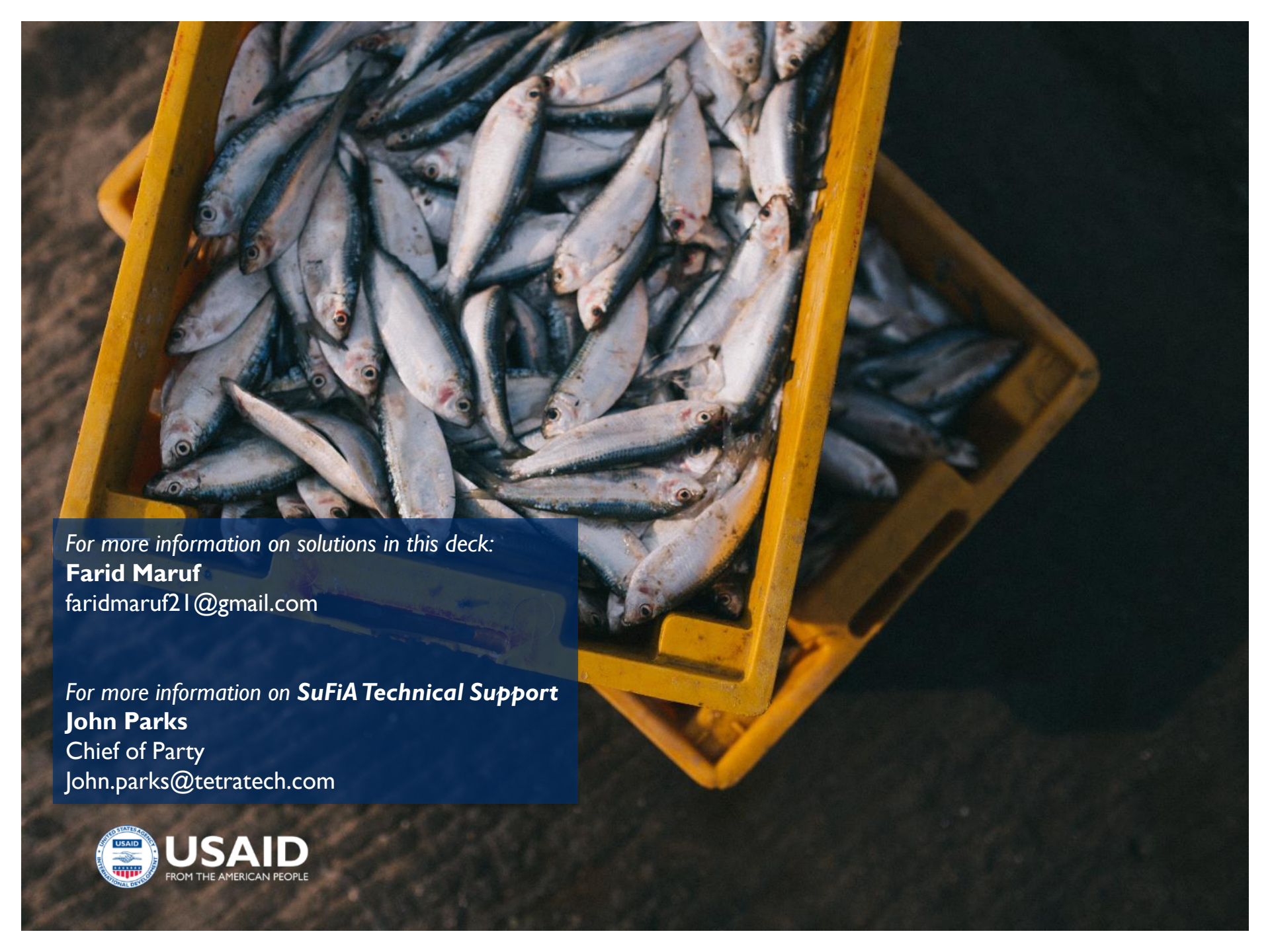
Updates

- **SuFiA**

Capitalizing in USAID Oceans' success and investment, SuFiA project is established with the prime goal to improve the management of marine biodiversity and fisheries resources in the Indo-Pacific region by reducing unsustainable fishing and IUU fishing.

SuFiA Technical Support (part of SuFiA project, Nov 2021 - Nov 2025) works, among others:

- Advance fisheries traceability regionally
- Increase private sector engagement and investment in support of regional fisheries management
- Promote adoption of sustainable fishing practices by seafood supply chain actors regionally
- Strengthen the leadership and commitment of regional institutions to advance sustainable fisheries management
- Strengthen the regional capacity for fisheries enforcement and combatting IUU fishing



For more information on solutions in this deck:

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*For more information on **SuFiA Technical Support***

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