ITTO PD 599/11 Rev. 1 (M)
EX-POST EVALUATION REPORT

Development and Testing of National Forest Stock Monitoring System (FSMS) with Improved Governance Capabilities at all levels of the Forest Administration (Philippines)

ITTO COUNCIL SESSION 59
13 - 17 November 2023 | Pattaya, Thailand

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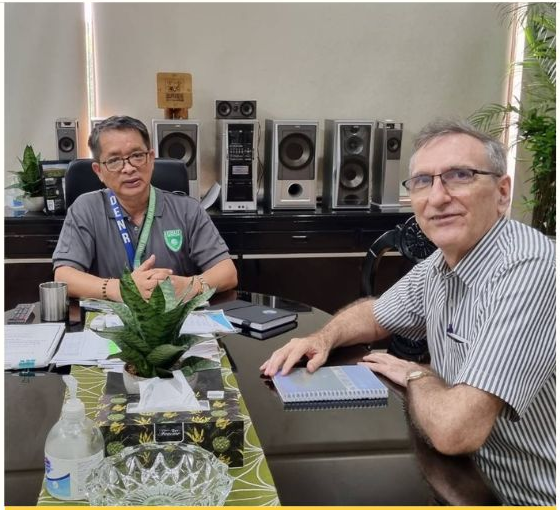
Evaluation Approach

Review of Literature

Relevant ITTO manuals, project documents, reports, project brochure, and correspondence, as well as reviewing relevant literature and information on timber tracking and traceability.



Meetings and Interviews

With representatives from the Department of Environment and Natural Resources (DENR) and Forest Management Bureau (FMB), members of the project implementation team, the contractor, and other stakeholders;

Field Visits

Performed visits to field locations where the National Forest Stock Monitoring System (NFSMS) developed under the project was tested.

Project justification

At the time the project was formulated in 2009, a relatively small volume of timber was still being legally harvested from natural forests in the Philippines.

While most of the country's timber harvest had shifted to plantation-grown wood, various officials in government and the private sector were advocating for an increased volume of timber harvest from natural forests and a revitalization of the timber sector.

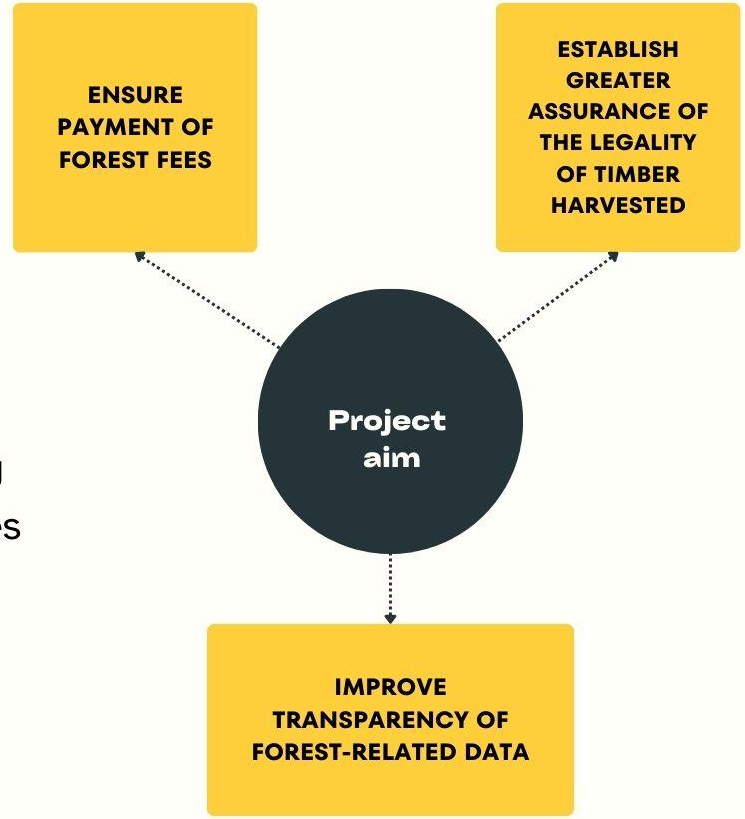
For this to happen, it was necessary to develop assurances of timber legality and curtail the illegal logging that was prevalent throughout much of the country.

Project facts

Starting date	Approved and financed in 2011; First disbursement from ITTO in May 2013
Planned duration	18 months (May 2013 - November 2014)
Actual duration	88 months (May 2013 - September 2020)
Project budget	US $788,043 Total US $497,930 ITTO contribution US $290,113 Government of the Philippines contribution
Executing Agency (EA)	The Philippines Forest Management Bureau (FMB)

Project aim

The Specific Objective (SO) of the project was to **develop and test** an integrated, real-time, multi-tiered, configurable, online **National Forest Stock Monitoring System (NFSMS)** with improved governance capabilities at all levels of the Forest Administration.



Project outputs

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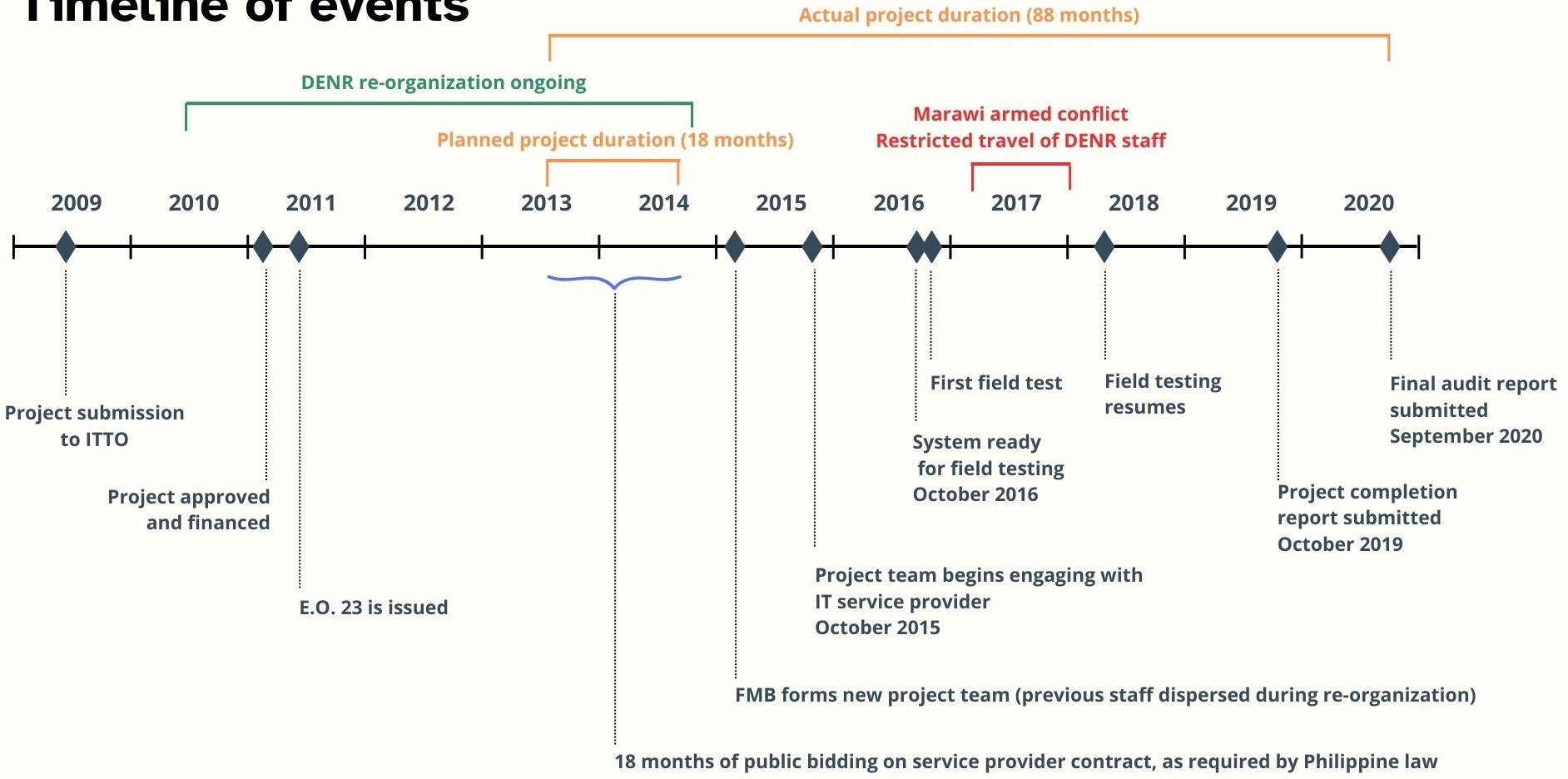
3 Configuration of an online, multi-tiered and integrated NFSMS environment with field data entry modules.

An avalanche of adversity

- **Initial 18 months spent on efforts to contract an IT service provider** through international public bidding (as required by Philippine law), after which the EA was allowed to directly negotiate a contract with a service provider.
- **Re-organization in the EA** had dispersed many staff on original project implementation team.
- **Lack of continuity in managerial oversight** of the project, with FMB being headed by no less than five different directors over the course of the project.
- **Funding suspension** due to ITTO funding impairment in 2015 (DENR provided bridging funds which enabled work to continue).
- **Armed conflict** in Mindanao delayed system field testing.

Timeline of events



National Forest Stock Monitoring System (NFSMS)

The EA worked closely with a specialized software service provider to develop the NFSMS. It is an integrated web-based system with six modules:

Registration

Inventory

Felling, bucking, and scaling

Transport

Wood processing

Verified legal origin

National Forest Stock Monitoring System (NFSMS)

Registration

All DENR-issued permits and agreements that involve timber harvesting are entered into the NFSMS.

These are registered along with supporting authorization documentation, permits, long-term management plans, environmental compliance certificates, free and prior informed consent agreements, etc.

National Forest Stock Monitoring System (NFSMS)

Inventory

Community Environment and Natural Resources Office (CENRO) staff inventory trees to be harvested. RFID tags are nailed to the base of all trees and inventory data is written into the RFID tag.

National Forest Stock Monitoring System (NFSMS)

Felling, bucking, and scaling

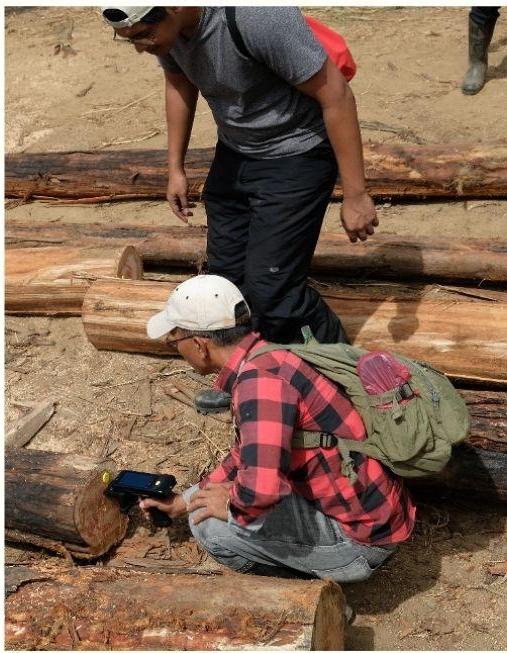
When harvesting is approved, a CENRO scaling team verifies the timber volume to be transported. RFID tags are attached to each log and linked to the stump tag.




National Forest Stock Monitoring System (NFSMS)

Transport

Permit holders apply for a Certificate of Timber Origin (CTO) to authorize transport. The legitimacy and legality of the load can be verified at any DENR checkpoint by scanning the RFID tags.



National Forest Stock Monitoring System (NFSMS)

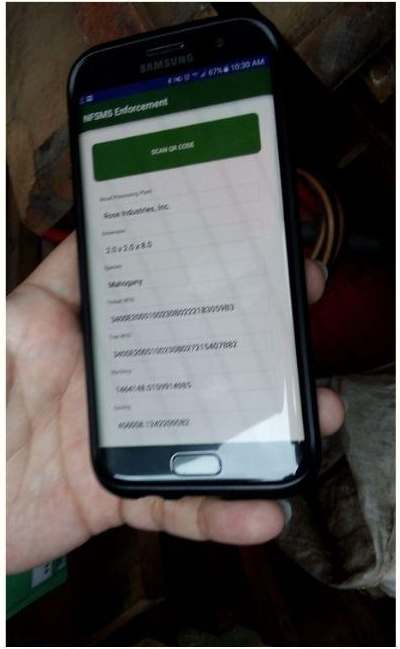
Wood processing

Logs are further validated upon arrival at a wood-processing plant and cleared for entry. The lumber produced from each log receives a QR code linked to the original RFID log tag.

National Forest Stock Monitoring System (NFSMS)

Verified legal origin

A verified-legal-origin (VLO) certificate can be issued by the system, which shows documentary evidence of the lumber's legal harvest, transport, and processing.



Achievement

The project's principal achievement was the successful development and testing of a workable NFSMS.

1. National Forest Stock Monitoring System (NFSMS) module to support 100% "back-to-stump" traceability for wood production,
2. NFSMS module to support Verifications of Legal Origin (VLO) of timber, and
3. Configuration of an online, multi-tiered and integrated NFSMS environment with field data entry modules.

However, the NFSMS was not deployed nationwide as originally intended.

Executive Order No. 23, s. 2011

Signed on February 1, 2011

MALACAÑAN PALACE

MANILA

BY THE PRESIDENT OF THE PHILIPPINES

EXECUTIVE ORDER NO. 23

DECLARING A MORATORIUM ON THE CUTTING AND HARVESTING OF TIMBER IN THE NATURAL AND RESIDUAL FORESTS AND CREATING THE ANTI-ILLEGAL LOGGING TASK FORCE

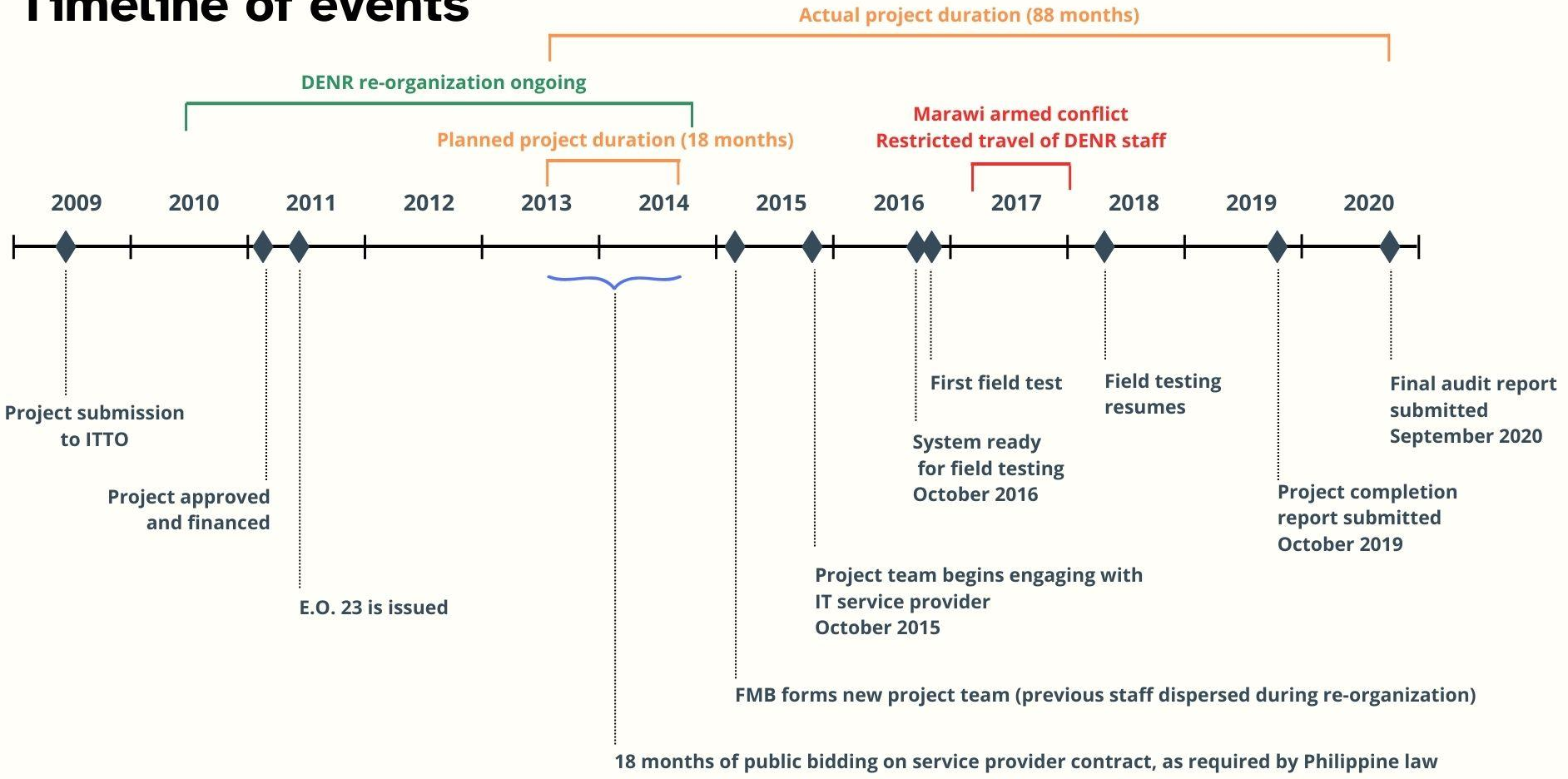
Pre-moratorium (2009)

Moratorium (2011) continues to present

At present...

- The project was **unable to expand the system to address** timber sourced from private plantations and is not currently in use.
- Some **aspects of the system have fallen behind current technology advances**. Although the EA possesses the source code, the revisions are beyond the capacity of EA team members.
- Many DENR staff initially trained have either moved positions or have had **skills relating to the NFSMS diminish over time** as a result of not having continued exposure to the system.
- **Field units are not currently equipped** with data recorders or other hardware that would be needed to utilize the system.

Timeline of events



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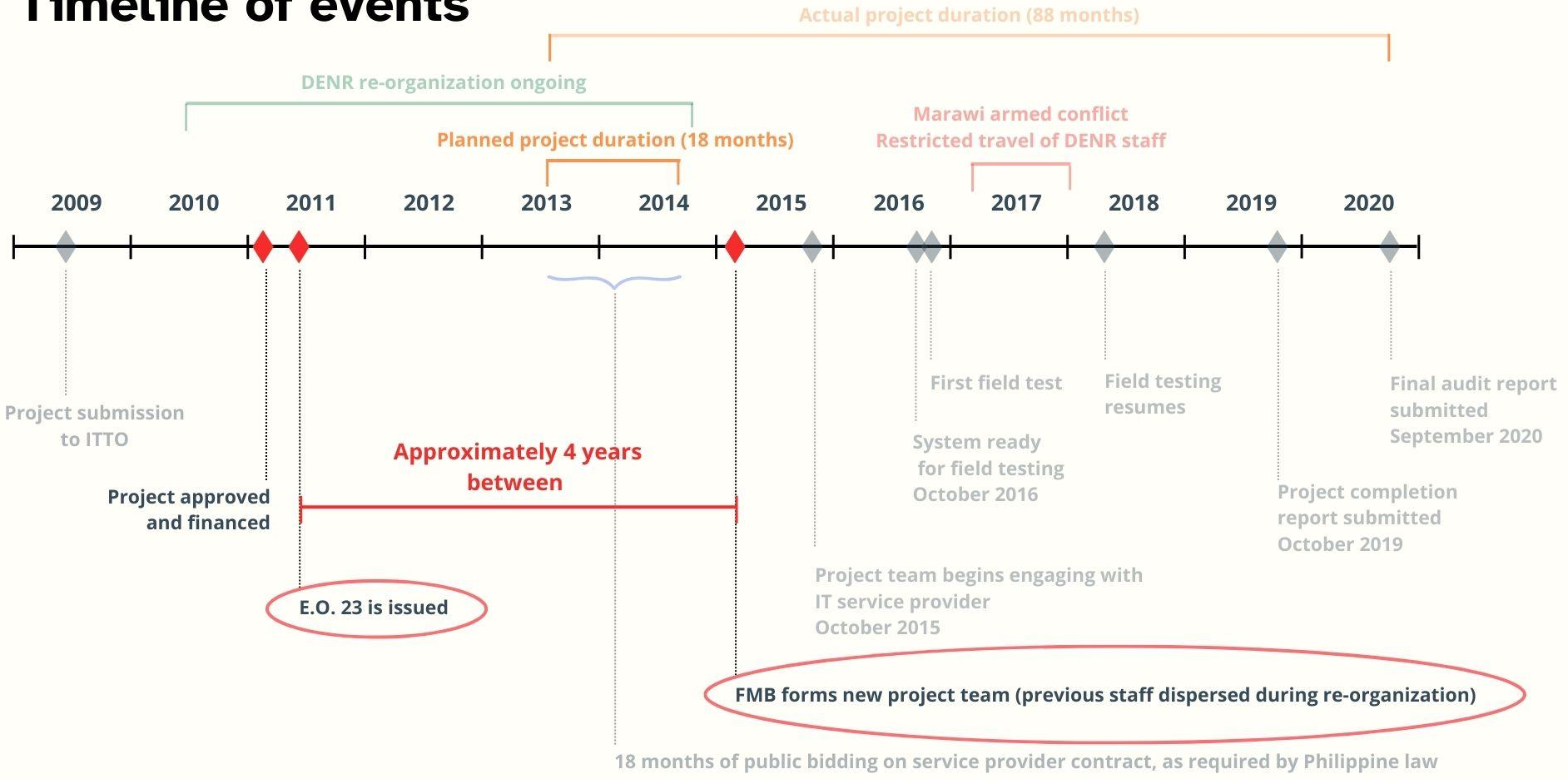

Conclusions

- The **project achieved the basic objectives** outlined in the project document and produced expected outputs, but took far longer to implement than anticipated.
- **Changed policies** and context of forestry in the country **diminished the relevance** and urgency of the originally planned project approach.
- **Reconsideration of the project objectives, outputs, and activities was warranted but did not occur.**
- Because of the evolving nature of timber harvesting in the Philippines, full **deployment of the NFSMS was not accomplished**.
- The NFSMS could be the basis for a relevant broad-based timber monitoring system, but **requires additional functionalities and updating** to be compatible with current technologies.
- **Without re-orientation** to focus on timber sourced from plantations and imported raw materials, **there will be negligible lasting project impact**.

Lessons learned

- Consistent and **active stakeholder engagement** strengthens project design and execution, resulting in more relevant outcomes and stronger buy-in.
- Staff movements within EAs can be highly disruptive. **Contingencies should be planned** to ensure continuity of project implementation in the face of possible staff transfers.
- Strong fundamental political **commitment to smoothly implement projects** is essential to transcend frequent changes in government administrations and leadership.

Lessons learned

- **Projects that experience long delays** between project formulation and effective start-up **should be routinely subjected to rigorous review** before commencing operations to ensure the original assumptions, risks, planned activities and outputs are still valid.
- Projects should be cognizant of **technological requirements and the capacities and limitations of countries**, especially concerning aspects such as internet connectivity, financial resources for maintaining and supporting systems, etc.
- When specialized IT systems are being developed, **long-term IT maintenance and support** should be contracted well beyond the initial system development phase.

Recommendations for DENR and FMB

- Undertake a thorough review to determine if the developed NFSMS can [still] be adapted for effective and efficient monitoring of timber sourced from plantations and imported raw material.
- For plantation-grown timber, consider simple, cost-efficient approaches:
  - geo-referencing and photo documentation of the plantations harvested
  - tracking of timber by “batches” rather than individual logs
- If an updated and relevant NFSMS is developed, DENR should follow through with comprehensive training and equipment purchases to facilitate the rollout of the revised system nationwide, with priority given to the CARAGA region.
- Implementing rules and regulations should be finalized and issued to facilitate field deployment.

Recommendations for ITTO

- **Adopt more rigorous project formulation practices** that better identify and assess risks related to administrative, regulatory, legal, and bureaucratic requirements of member countries and the potential adverse consequences of frequent turnover of staff in EAs.
- **Lengthy gaps** (e.g., more than two years) between the time a project is formulated and approved and the start of actual project implementation **should automatically trigger a rigorous review of the project context, assumptions, and relevance** of the logical framework before the project is allowed to commence.
- **For projects with unusually long delays** in implementation and/or numerous extensions, **the frequency of backstopping monitoring visits should be increased**.
- More effort should be made to **facilitate the learning and sharing of experiences** from past and ongoing projects of related nature across member countries.

THANK YOU

Special thank you to DENR-FMB for supporting the evaluation and providing many of the photos used in this presentation.