

Lessons learned from the Validation and Verification



MRV



Present

- *First from 47 FCPF countries to certify carbon credits under the FCPF system*

ER Certified: 2 040 904,50 ERs

ER transacted Carbon Fund: 1 286 049,42 ERs

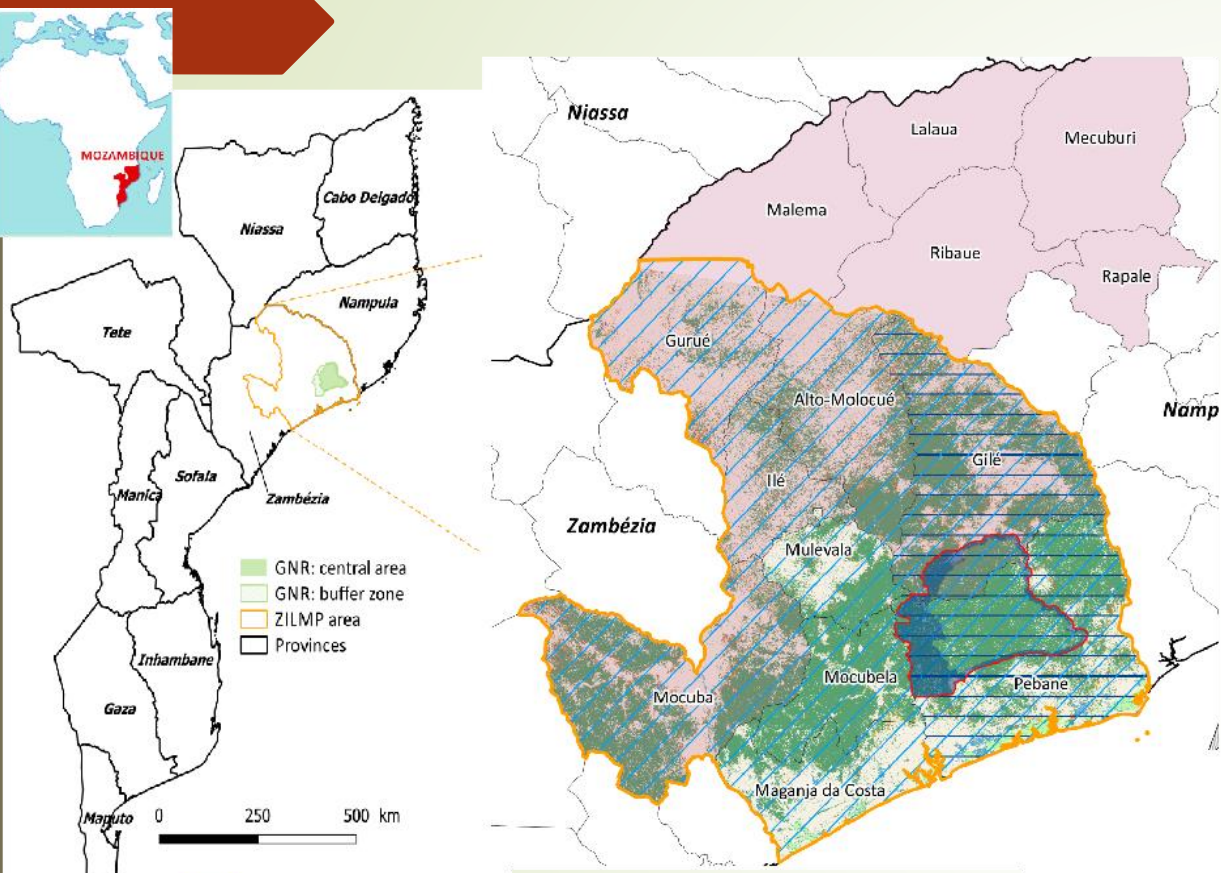
Revenues: 6 430 247,10 USD

Expected revenues in 2021: 7 to 15 millions USD

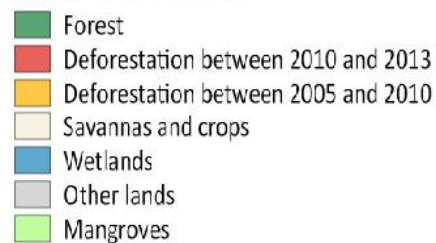
Accumulated revenues in 2022: up to 23 millions USD

Background

ZILMP

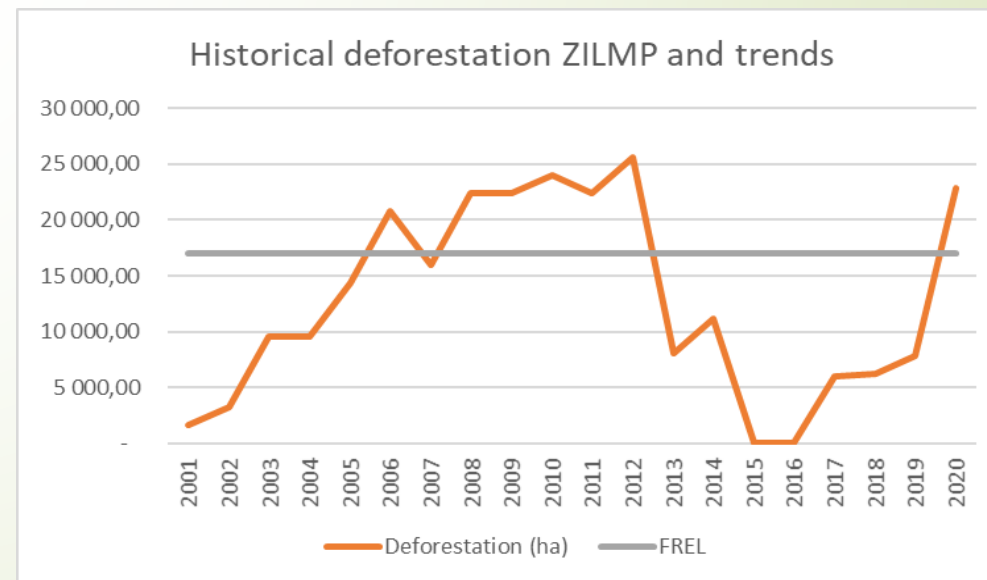


Forest cover changes



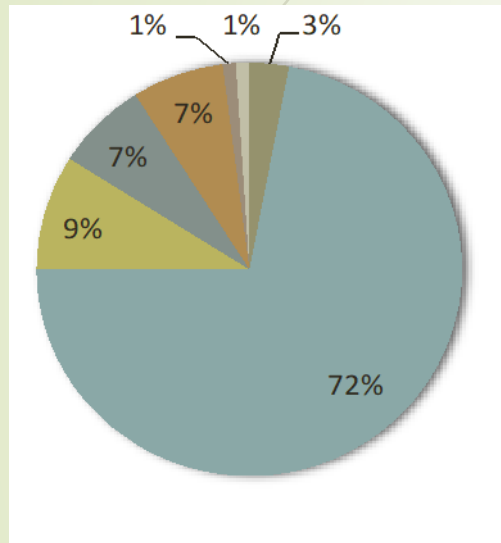
- Total area: 5.3 million ha
- Forest area: 2.2 million ha
- Annual deforestation: 17 023 ha

Trends of deforestation



Background

Drivers



Agriculture, Forest activities,
Human settlement

Projects

- MozFip
- MozBio
- Sustenta
- MozDGM
- Other initiatives

**The goal is: 10 000 000 ERs
(2018-2024)**

Activities

- Certification
- EFF
- Biomass
- AFS
- Conservation
- Law enforcement
- Community land delimitation
- Infrastructure development
- Capacity building
- Promotion of non timber forest products
- Improve the Value chain in agriculture
- Restoration



How did Mozambique get here?

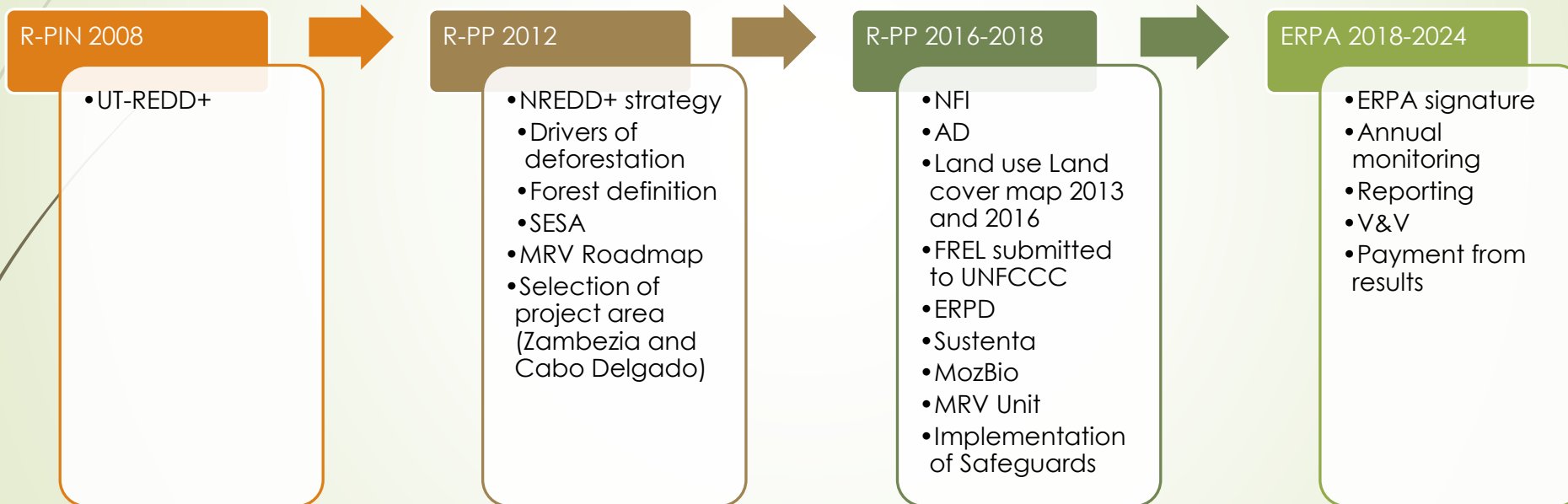


The trajectory



Supporting structure to produce annual report

The trajectory - Timeline





The trajectory - Process

➤ First contact

- Explanation of the process of audit
- The Timeline
- Definition of type of review (Partial and full)
- Definition of communications channels (General meetings, specialized meetings)

➤ Desk review

- Provide the report
- Provide the supporting data, methodologies and scripts and spreadsheets to reconstruct the data (REL and AD)

➤ Field visit

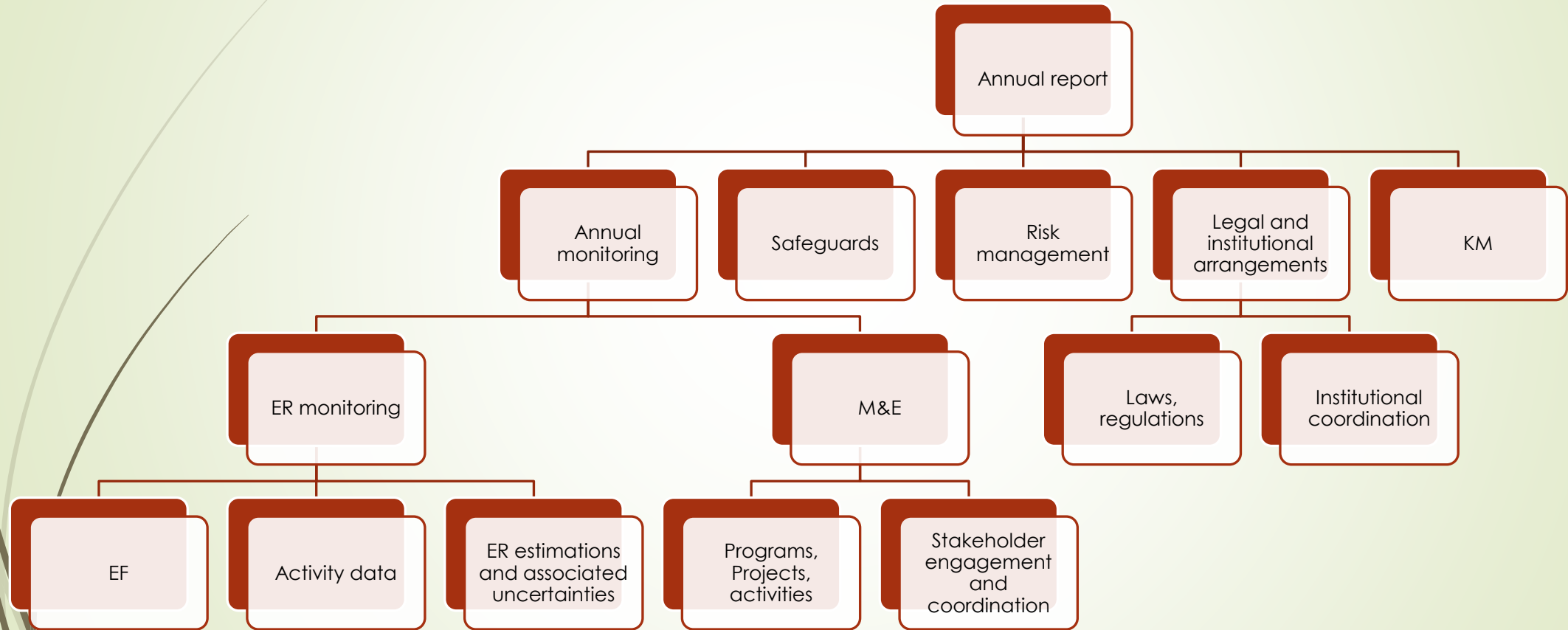
- Scheduled to happen (limited by the COVID19 pandemic)



The trajectory – Process (Cont.)

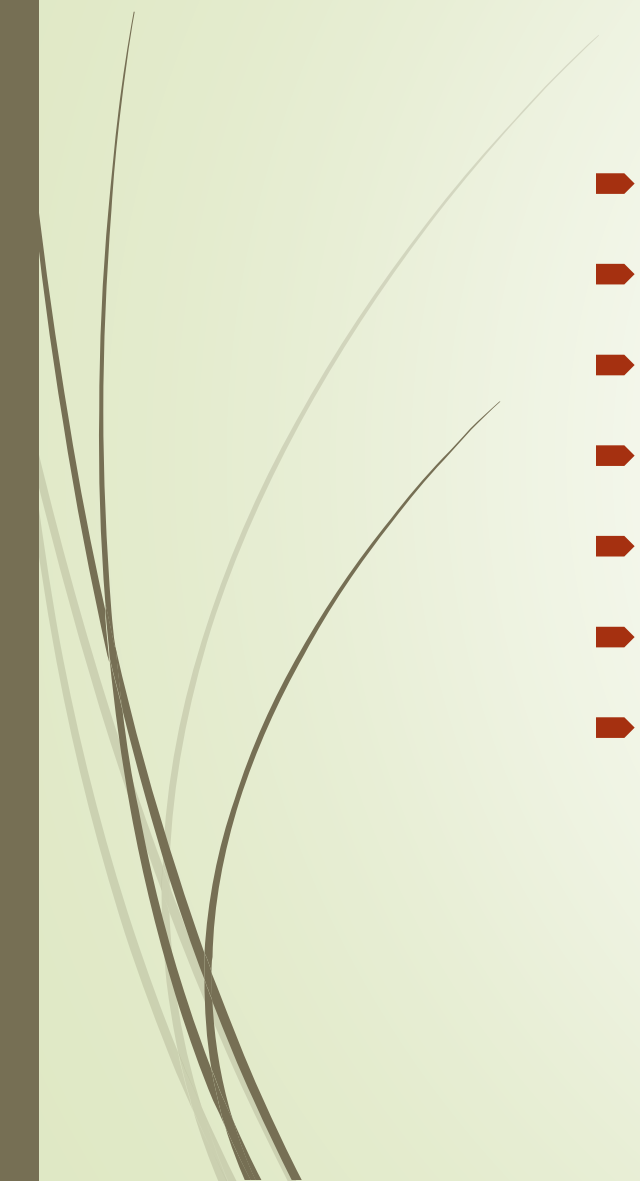
- **Rounds of findings- Sessions of clarification**
 - General meetings
 - Specialized meeting
- **Review by verification and validation team**
 - Minor CAR
 - Major CAR
- **CARs**
- **Final submission**
- **Feedback**
- **Submit to FCPF**
- **Communication to the Mozambican Government**

Supporting structure





Supporting structure

- Strategy
 - Political and organizational support
 - Team (communication, clear responsibility)
 - Infrastructure
 - Technical assistance
 - Communication
 - Quality management (QP, QC, QA & QI)
- 

Lessons learned (1)

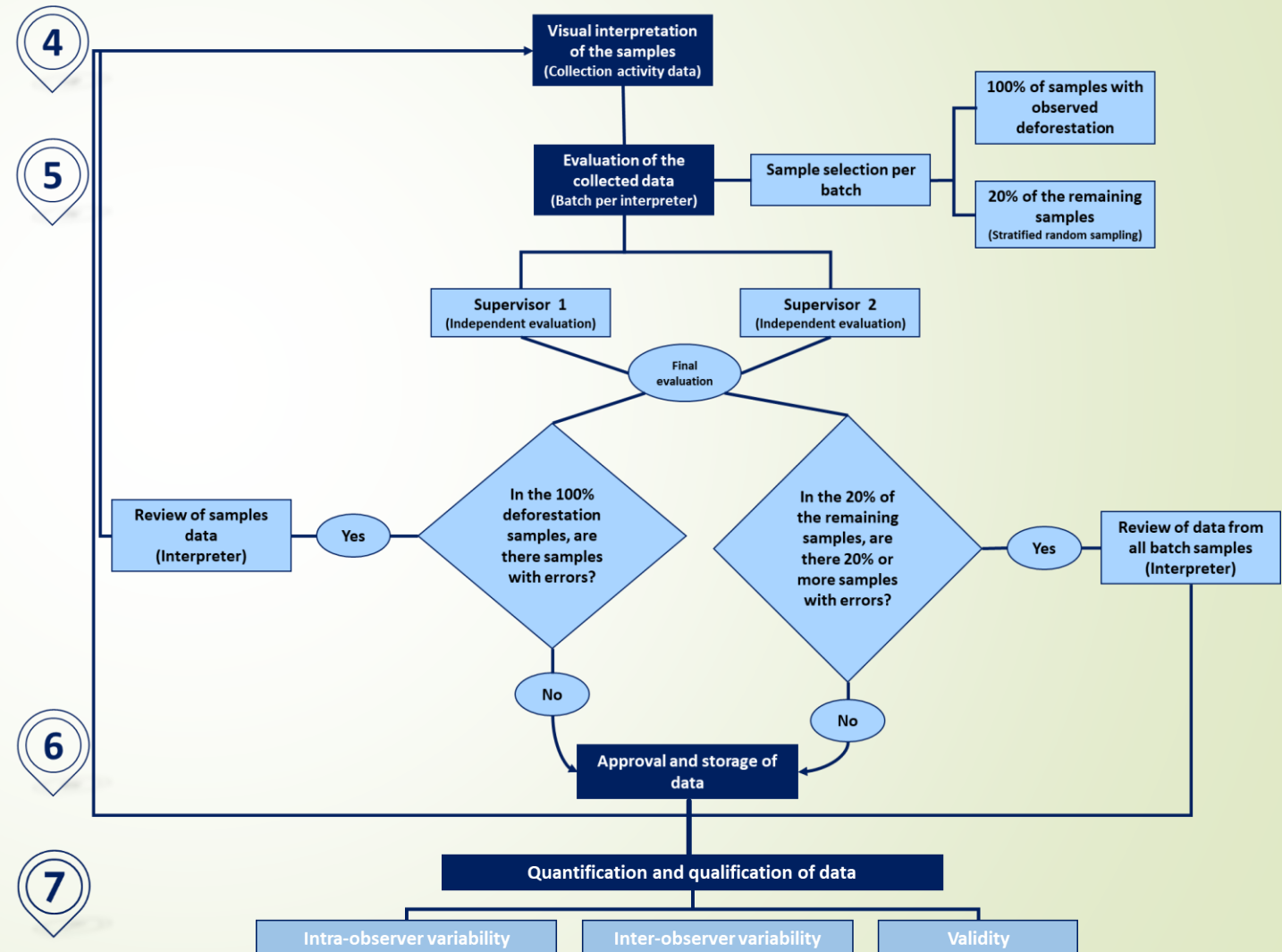
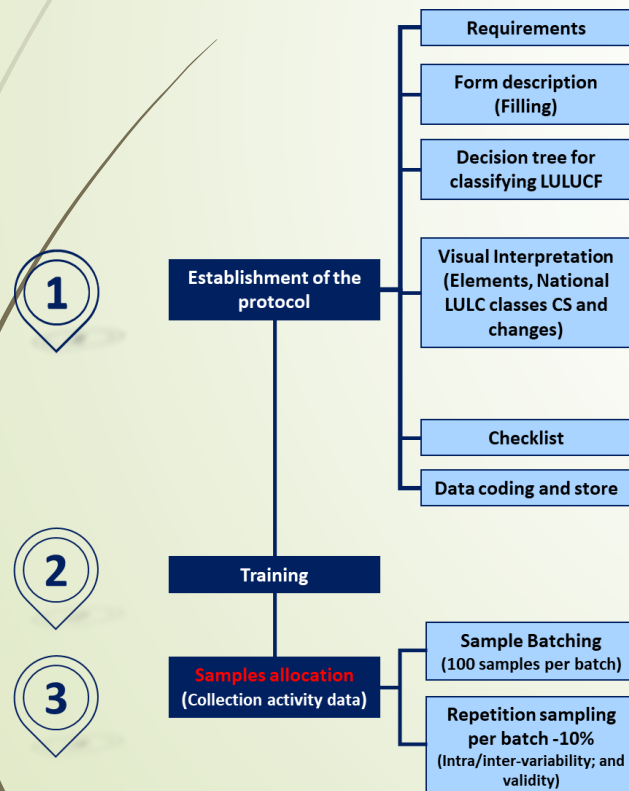
- **Completeness and accuracy of information** on Activity Data and Emission Factor (NFI) are important
 - Raw data available
 - Clear methodology
 - Complete report
 - Independent evaluation report
 - Embedded quality management process

Independent evaluation of Mozambique national activity data collection protocols, forest inventory design, and, data analysis

James Alegria
THE WORLD BANK – MOZAMBIQUE
June, 2020

Quality management system (1)

➤ Example of 7-step quality management process for **Activity Data estimation**



Quality management system (2)

- *Complete standard operating procedures and guidelines*
 - NFI guidelines
 - SOP 0-Map production
 - SOP 1- Spatial referenced Sample Designs For Area Estimation
 - SOP 2- Response design
 - SOP 3- Data collection
 - SOP 4-Sample-Based Area Estimation Analysis
- Step by Step approach for data collection and estimation of emission from AFOLU
- GHG emission estimation
- Protocol for estimation of emissions



The image shows the cover page and the first page of a document titled "Standard Operating Procedures for Area Estimation". The cover page is in Portuguese and includes the logos of the Forest Carbon Partnership, NICFI, FAO, and FND. The title is "Passo a Passo para o Levantamento e Estimativa de Emissões do Sector de Uso da Terra, Mudanças do Uso da Terra e Florestas". The first page is in English and contains a table with project information and a section for important notes.

Passo a Passo para o Levantamento e Estimativa de Emissões do Sector de Uso da Terra, Mudanças do Uso da Terra e Florestas

Unidade de Monitoramento, Medição, Reporte e Verificação para REDD+

FOREST CARBON PARTNERSHIP NICFI FAO Food and Agriculture Organization of the United Nations FND

STANDARD OPERATING PROCEDURES FOR AREA ESTIMATION

Purpose: These Standard Operating Procedures (SPO) Notes acts as a set of general Cheat-sheets, which in conjunction with a more general posterior white paper, aim to be the main support backbone documents for national staff working in area reporting for REDD+. The SPO will be modified to fit the particular protocols of each country and ensure that they are repeatable.

Important Note: Once project documentation has been handed over and signed off by both parties, any further revisions will be the responsibility of Operations and / or Application Services. These revisions will be included in Annex Documentation to ensure the original documentation remains unchanged and as delivered.

Application Name	
Application Portfolio number	
Project Name	Zambézia Integrated Landscapes Management Program – Emissions Reduction Program (ZILMP)/Mozambique
Project Number	<< DTC Number >>
Project Manager	(Print name) (signature) (date)
Project Description	Designed at jurisdictional scale, the ZILMP is located in Zambézia province, of which it covers 9 districts: Alto Molócue, Gile, Gúruit, Ile, Maganja da Costa, Mocuba, Mocubela, Mulevala and Pebane. Its ambition is to reduce emissions due to deforestation in the accounting area.

IMPORTANT NOTES FOR COMPLETING THIS DOCUMENT

Under most headings in this template are instructions for completing each section; they are marked in this way: << instructions for completing the section >>. Please read through the instructions for details on minimum requirements.

Important note: No sections are to be deleted from this document.

Text contained within << >> provides information on how to complete that section and can be deleted once the section has been completed.

Standard Operating Procedures (SOPs)
Template Version 0.1, 13-01-2020

Page 1 of 62

Lessons learned (2)

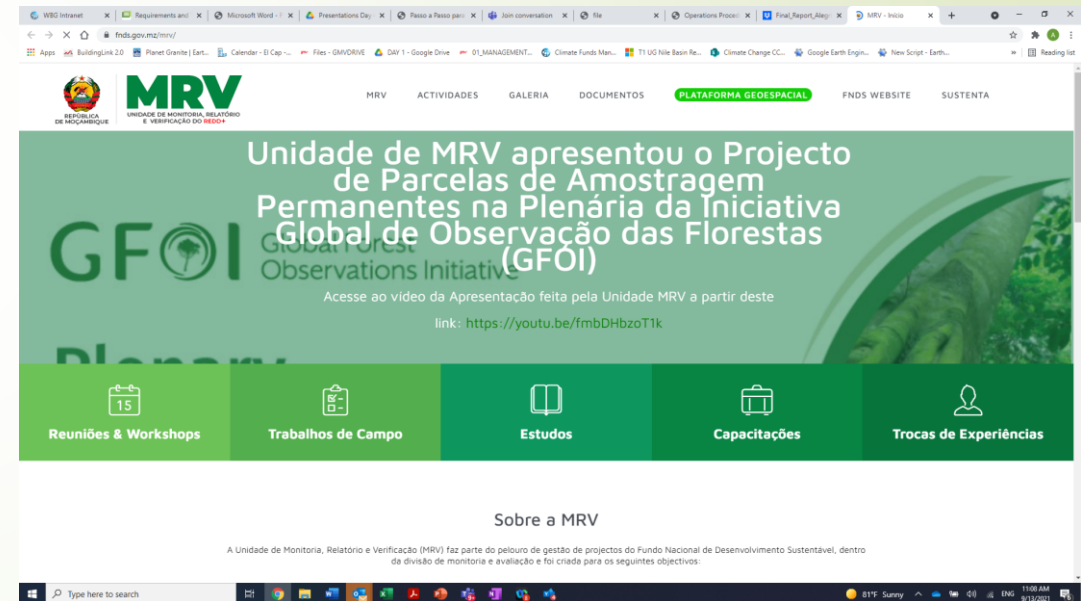
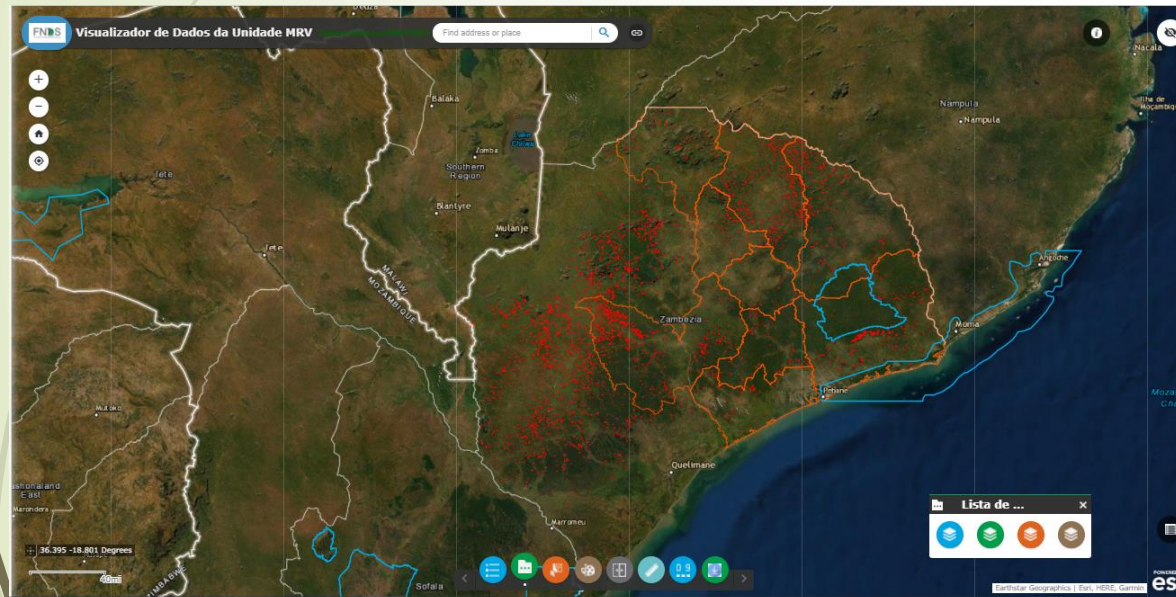
- Transparent and complete documentation
 - Technical documentation (NFI, Activity data, data quality)
 - Project document
 - Annual report
 - Meeting minutes
 - Receipts of project related expenses

Parameter:	AGB _{after}						
Description:	Aboveground-biomass-of-non-forest-type- <i>i</i> -after-conversion						
Data-unit:	tons-of-dry-matter-per-ha						
Source-of-data-or-description-of-the-method-for-developing-the-data-including-the-spatial-level-of-the-data-(local, regional, national, international):	For cropland: The values and assumptions of 2006 IPCC GL, Volume 4, Chapter 5 are used because, unfortunately, there aren't country-specific data. The agricultural land in Mozambique is mostly under the annual crop farming practices that drive conversion of forest land to agricultural lands. So, according to 2006 IPCC GL (Volume 4, Chapter 5, Section 5.28), for lands planted in annual crops, the default value of growth in crops planted after conversion is 5 tonnes of C per hectare, based on the original IPCC Guidelines recommendation of 10 tonnes of dry biomass per hectare (dry biomass has been converted to tonnes carbon in Table 5.9) (2006 IPCC, Volume 4, Chapter 5, Section 5.28). For grassland: The values and assumptions of 2006 IPCC GL, Volume 4, Chapter 6 are used because, unfortunately, there aren't country-specific data. As the climate in most of Mozambique is tropical dry to subtropical dry, the value of peak above ground biomass for tropical dry of TABLE 6.4 is assumed. For other lands: No default values exist for these conversions. Spatial level: International						
Value applied:	¶ <table border="1"> <tr> <td>Cropland (C)</td><td>10.00</td></tr> <tr> <td>Grassland (P)</td><td>2.30</td></tr> <tr> <td>Other lands (A O U)</td><td>0.00</td></tr> </table> ¶ The values above are recorded in the ranges "B5:B9", "B11:B15" and "B17:B21" of the "BIOMASS" worksheet tab in the "ZILMP Emissions Calculations MR (2019)" and "ZILMP Emissions Calculations MR (2020)" workbooks. These values are then applied in the range "D9:D20" of the "EMISSION MONITORING PERIOD (EMP)" worksheet tab in the "ZILMP Emissions Calculations MR (2019)" and "ZILMP Emissions Calculations MR (2020)" workbooks for estimating emissions.	Cropland (C)	10.00	Grassland (P)	2.30	Other lands (A O U)	0.00
Cropland (C)	10.00						
Grassland (P)	2.30						
Other lands (A O U)	0.00						
QA/QC procedures applied:	The adequacy in the use of these default values was confirmed with the experts in GHG Inventory in DINAB.						

Lessons learned (3)

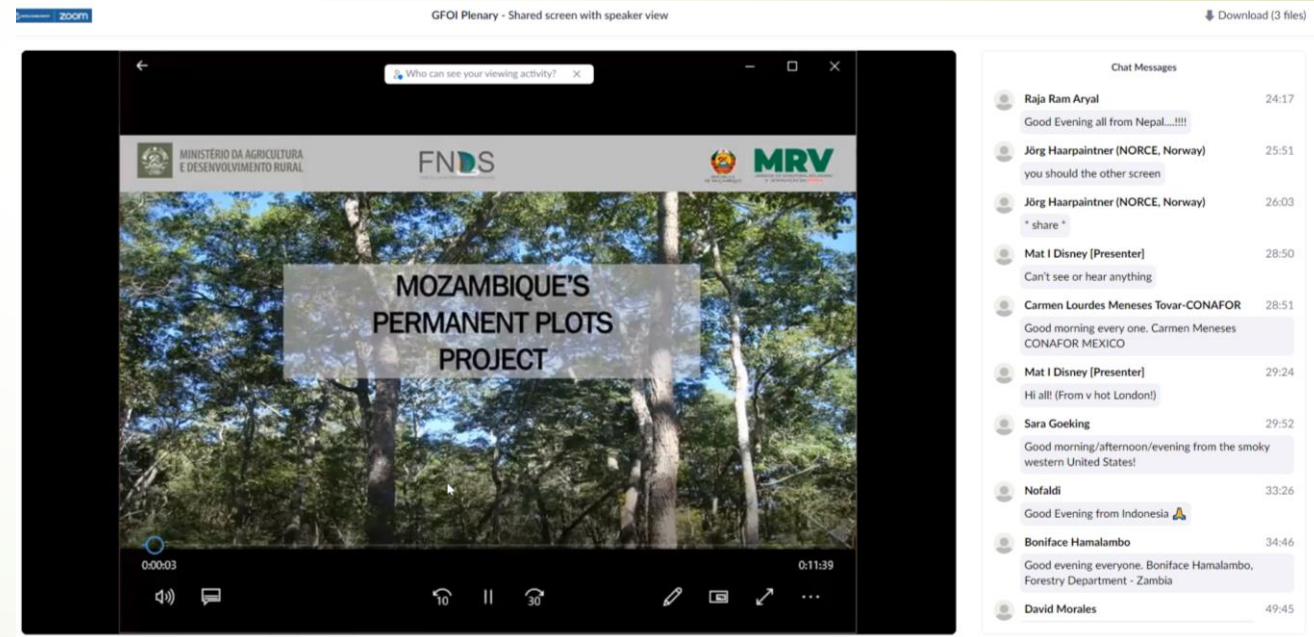
- Publicly available documentation and relevant data

<https://fnds.gov.mz/mrv/>



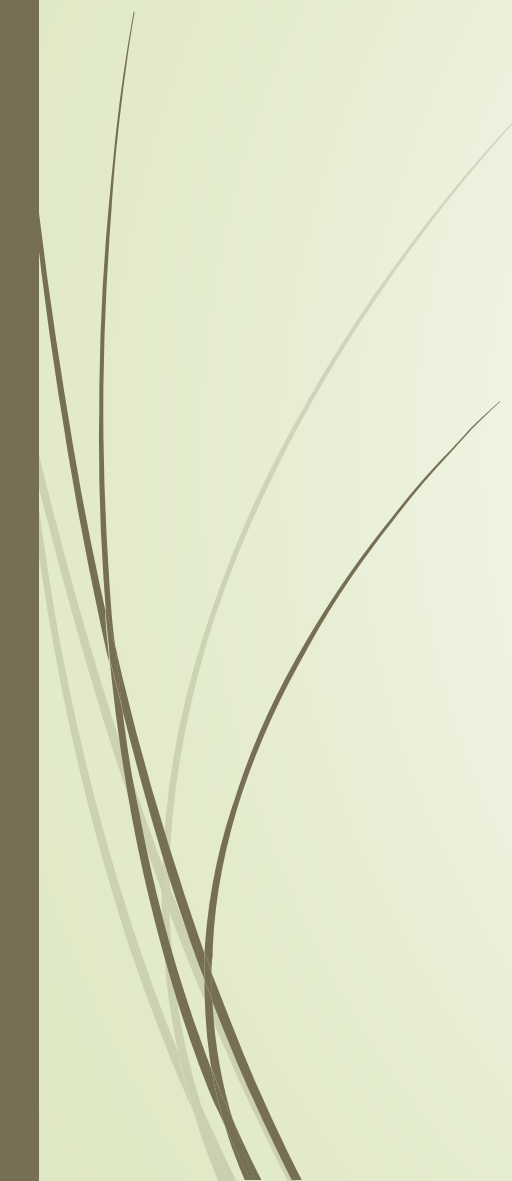
Lessons learned (4)

- *External technical support is required*
- *Exchange of experience*





Recommendations to countries

- Clear direction of where you want to go
 - Sell the idea - find good buyers
 - Identify weakness and get support
 - Communicate share your progress, achievements and results with stakeholders
 - Focus
 - Patience
- 



Sobre a MRV

Way foward!

<https://fnds.gov.mz/mrv/>

