



Ministry of Land, Environment and Rural Development
National Directorate of Forestry



Forest resource management challenges and technical solutions in Mozambique

Joaquim A. Macuácuá

Head of Mapping and Data Management Division

COP25, Madrid, 11th December, 2019

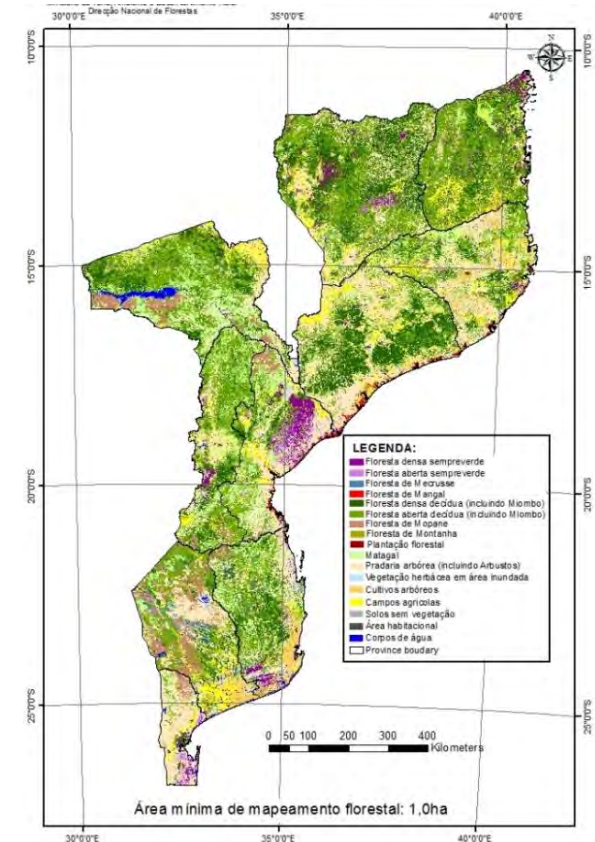
ITTO/FFPRI Side Event

Outlines

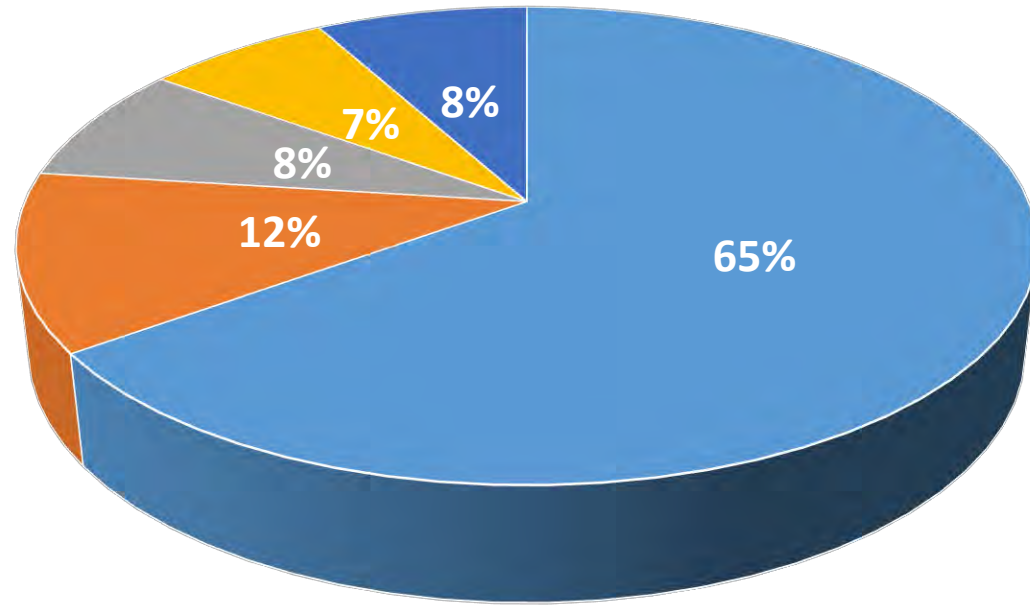
- Contextualization;
- Drivers of deforestation and forest degradation;
- Solutions under implementation;
- Concept of establishment of Forest resource Platform;
- Current model of FMP;
- New Approach in pipeline;
- Techniques of forest monitoring
- Challenges;
- Conclusion.

Contextualization

- Mozambique is East country of Africa **covered by dry tropical forest**, which is highly vulnerable to the risks of climate variability, such as **temperature rises, heavy rainfall and drought**;
- Population is about **28 Million**, about **82% of the population live** and still depend on forest;
- Over the last few decades, the vulnerability has affected especially the **pastoral, agro-pastoral communities, urban areas**, with **millions of people suffering from famine** caused by drought which has worsened since 2015 due to **El Nino** and **cyclic cyclones in 2019** such as (**Idea a Kenneth**) causing **death, homeless** from floods and strong winds, starvation from crops washout and others;
- The forest **cover 52%** of the country with deforest rate **0.58% (219 000ha/year)**
- Forests are an **essential factor for rural development** through the **provision of goods and services to the local and national economy**, through informal employment, income generation, non timber products, food security, housing and others. Similarly forests **contribute to the economy of the urban population** mainly through the provision of biomass energy,



Drivers of deforestation and forest degradation



- Expansion of agriculture- shifting cultivation
- Expansion of residential areas and infrastructure development
- Unssustainable timber explotation
- Firewood and charcoal production
- Others

All of the those activity actions have to be **oriented** for its realization with **minimum impact of deforestation and forest degradation**;



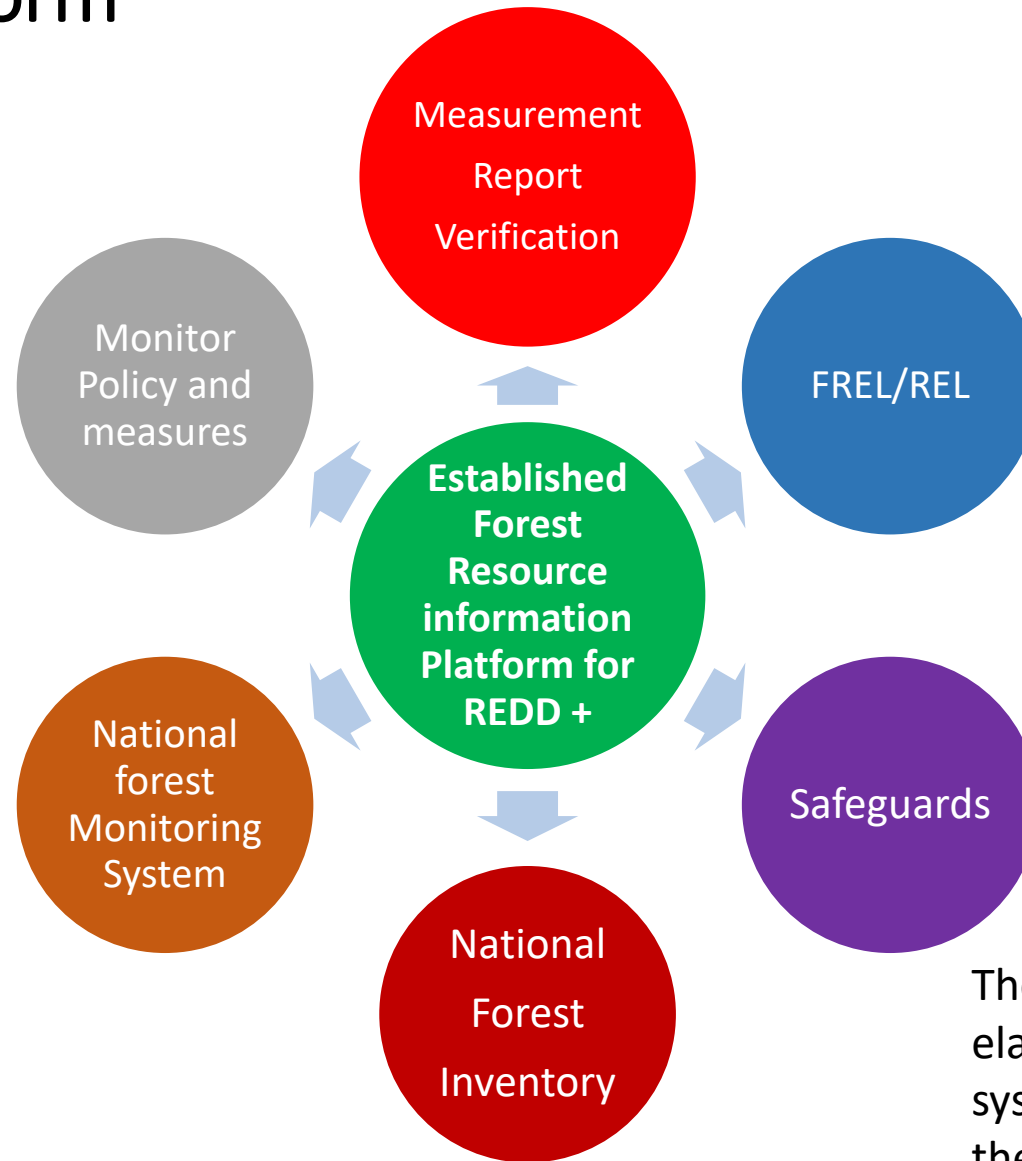
Example of expansion of Agriculture due to shifting cultivation, residential and infrastructure development

Solutions under implementation

- Temporally in hold of acceptance of new forest concessions and suspension of logging of over exploited species those being pressurized by the demand of market such as (Pau ferro and others);
- Elaboration of forest Policy and revision of forest law and its rule of implementation;
- Both concession and conservation industries have promoted concessions management as a solution to chaotic land tenure and widespread of illegal logging of minimum acceptable diameters;
- Maximum per area unit harvested intensity and minimum diameter felling limit, seeds tree retention rate, and 40 years rotation cut cycle.
- **Reduce illegal logging by setting up a timber tracking system** using bar codes a project initiated in Beira corridor **funded by ITTO** in Sofala province;
- Introduction of cashew nuts production project to generate different source of income to the charcoal producers;
- **Implementation of REDD+;**
- Commitment of NDC.

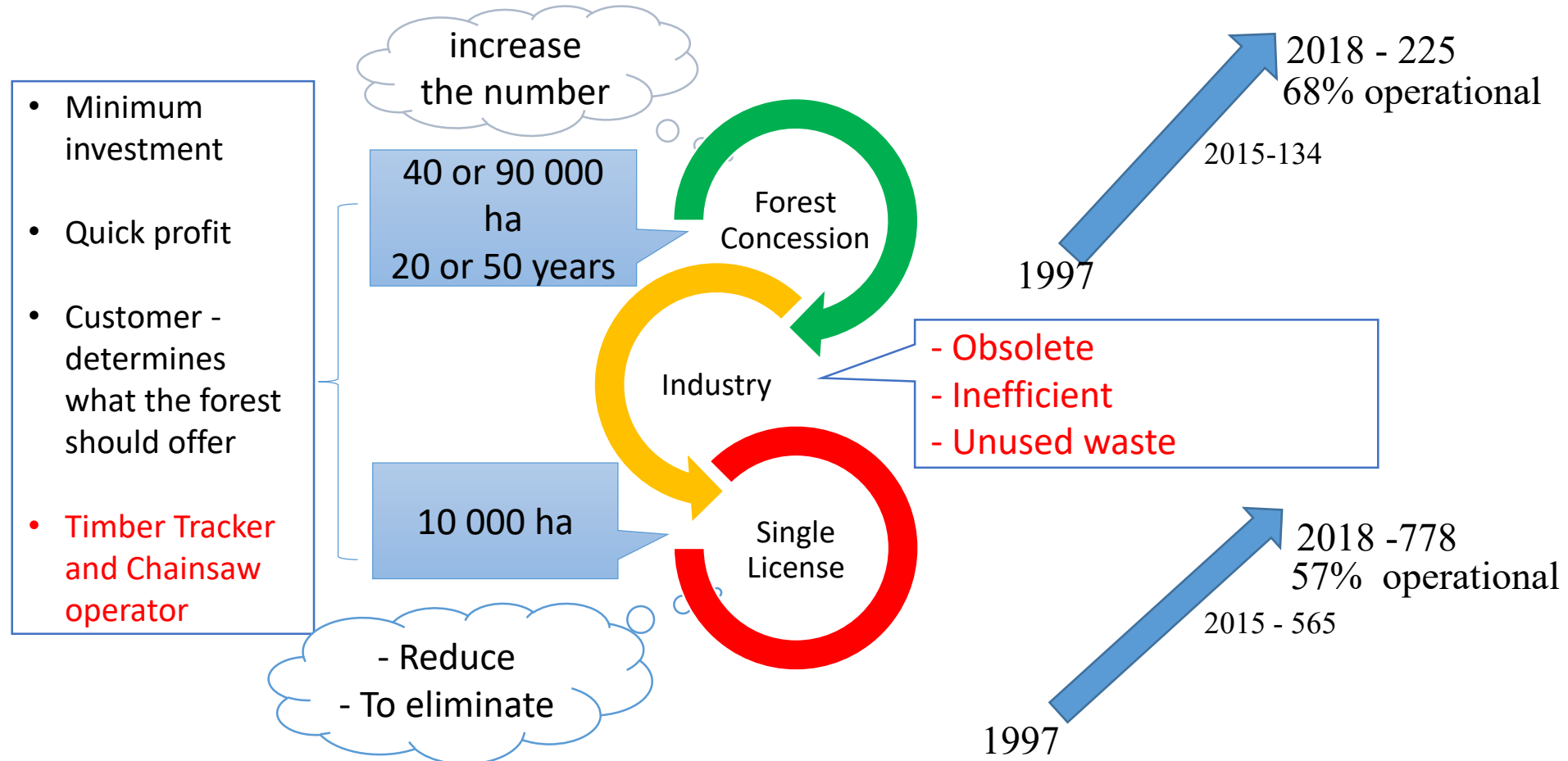
Concept of establishment of Sustainable Forest Resource information Platform

Forest management is a system of actions for supplying different products and services for society, associated to the preservation of additional forest resources, including wildlife, soil and water conservation, recreation etc. Forests are the repositories of aesthetic, ethical cultural and religious values.



The country have developed, established elaborated the relevant information system to monitor forest accordingly to the UNFCCC requirements

Current model of Forest Management plans and Forestry industry – from questionnaire 99% of operators are just requirements



New Approaches in pipeline....

Bidding- of what?
Cancel all current
contracts to implement
this new approach (?)

**Termination of
repopulated contracts**
and creating incentives
for improvements

Awareness and Negotiation
- inclusion, participation,
formal involvement of the
parties, clarity of rights,
obligations and responsibilities

Forest Policy Mission

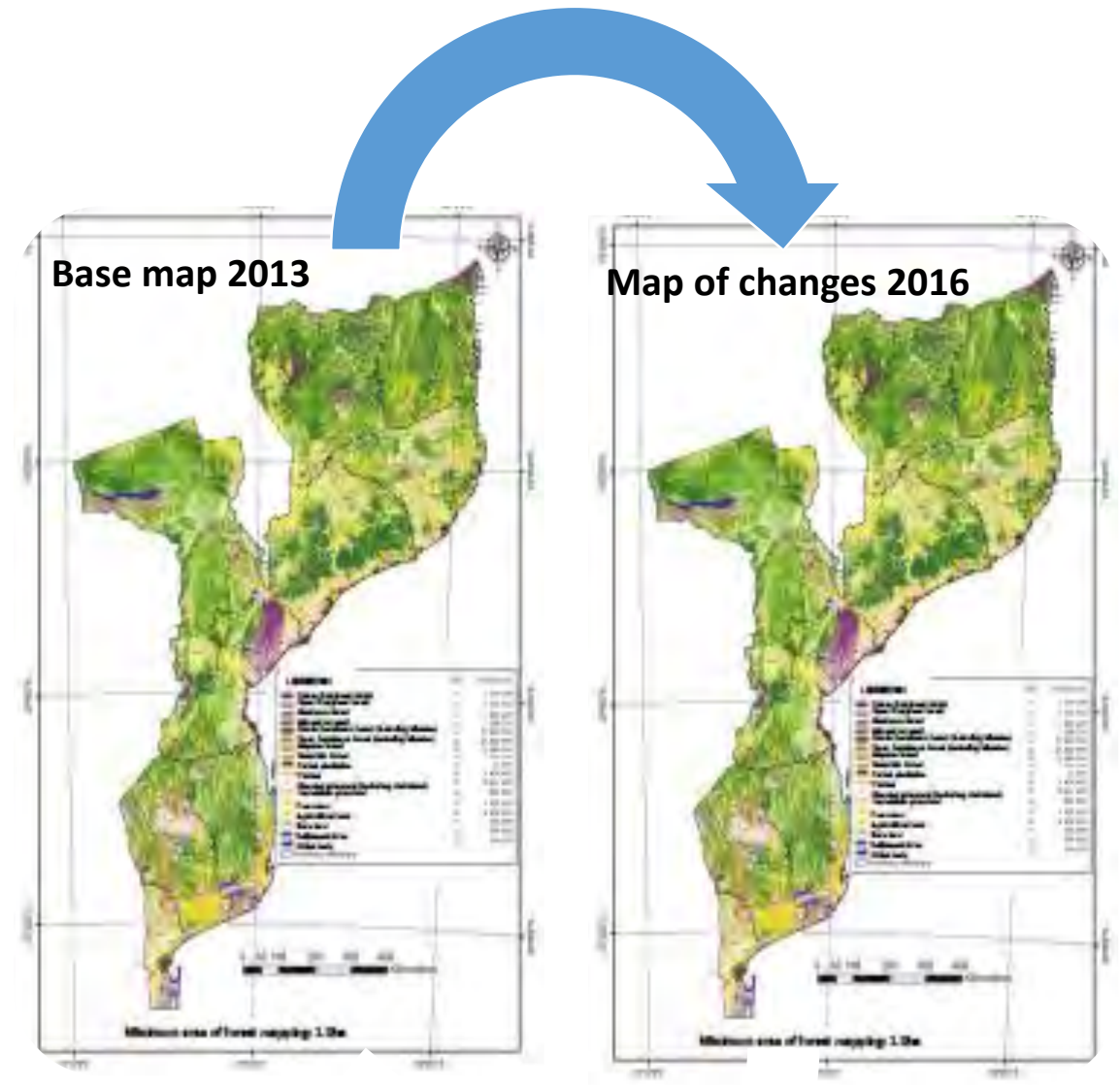
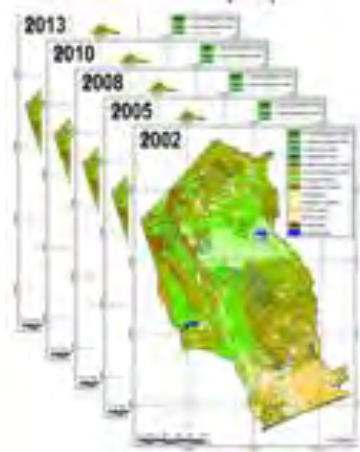
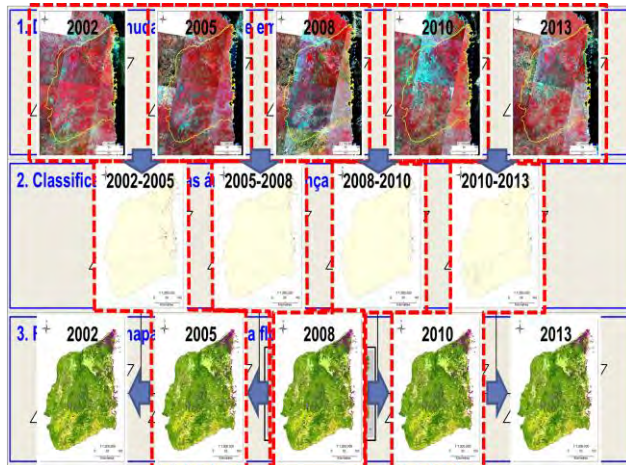
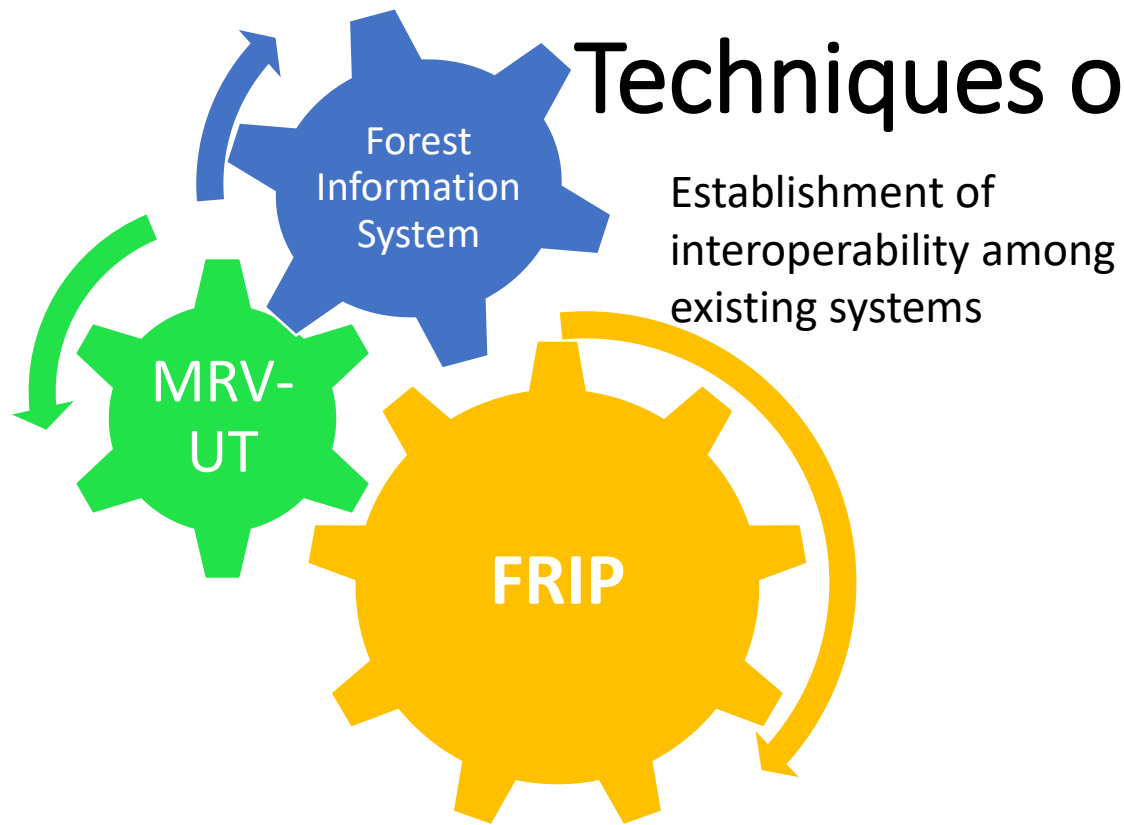
- promote the production, management and sustainable use of **forest heritage (?)**
- adding value
- well-being and meeting the needs of present and future generations, based on land zoning

Vision: Forests contribute to the sustainable socioeconomic development of the country.

Sustainable
Forest
Management

- ODS - universality
- Green Growth economic
 - Decent job
 - Gender equity
 - Climate change mitigation and adaptation
 - Restoration of degraded areas

Techniques of forest monitoring



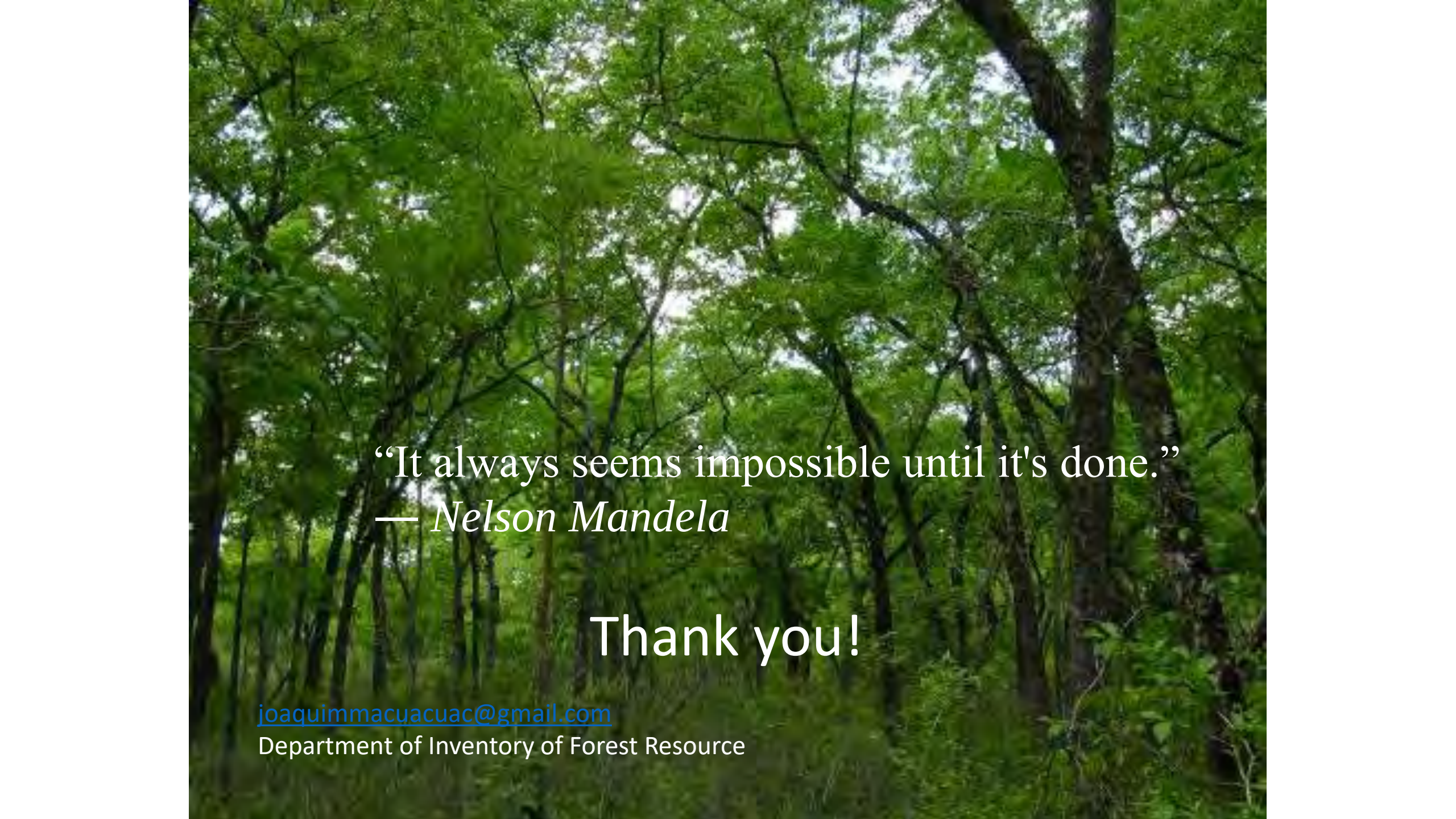
Use of temporal satellite images (before and after as well as semi-real time information provided by JJ-Fast

Challenges

- Fulfil at initial stage the principles for robust with transparency, accuracy, consistency comparability completeness for forest monitoring system (**technical** and **political perspective**);
- **Reduction of high demand of fuel wood and charcoal production as well as shifting cultivation** require political and financial support to secure livelihood of the community.
- Looking to the forest as business as usual **widely employed in the country by the logging industry and does not ensure sustainable-yield timber production notably the absence of wide natural forest plantation practice, forest restoration** promoting growth and regeneration in logged stands;
- Implement forest management plan of the **new designed model** under pipeline according to the **land zoning**;

Conclusion

The boundaries of the causes of **deforestation and forest degradation at landscape level and resource users** are blurred requiring an **integrated** approach to the implementation of **viable, inclusive, efficient and sustainable actions** and **models for forest monitoring** .



“It always seems impossible until it's done.”
— *Nelson Mandela*

Thank you!

joaquimmacuacuac@gmail.com

Department of Inventory of Forest Resource