

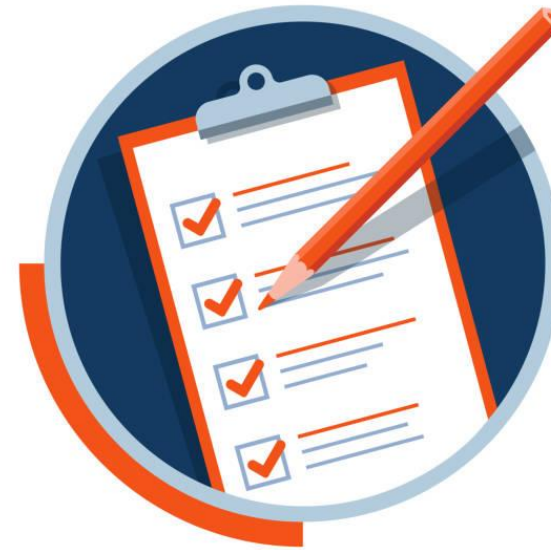
An aerial photograph of a lush green landscape. A wide river flows through the center, reflecting the sky. The surrounding area is filled with rolling green hills, dense forests, and some small buildings. In the far distance, blue mountains are visible under a partly cloudy sky. The text 'ADEQUECY OF FOREST PLANS' is overlaid in large, bold, black capital letters across the upper half of the image.

# ADEQUECY OF FOREST PLANS

**GROUP 4**

# Agenda

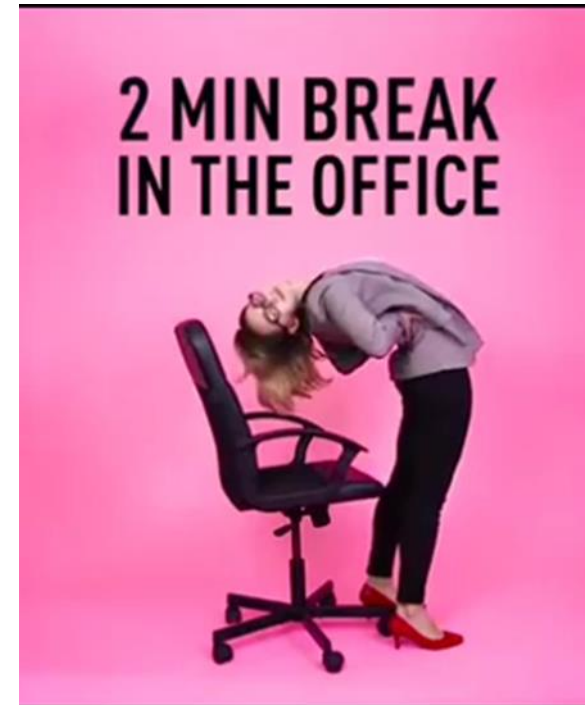
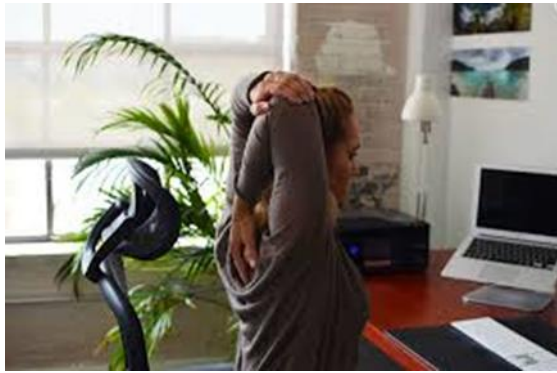
- ▶ Safety moment
- ▶ Team composition
- ▶ Sources of information used during forest planning
- ▶ Methodology in Data collection and Analysis
- ▶ Remote sensing and remote sensing
- ▶ Tools and techniques
- ▶ Level and type of training for stakeholders
- ▶ Strategies for implementation of the forest plan
- ▶ Constraints to the implementation of the plans
- ▶ Remedies to the challenges



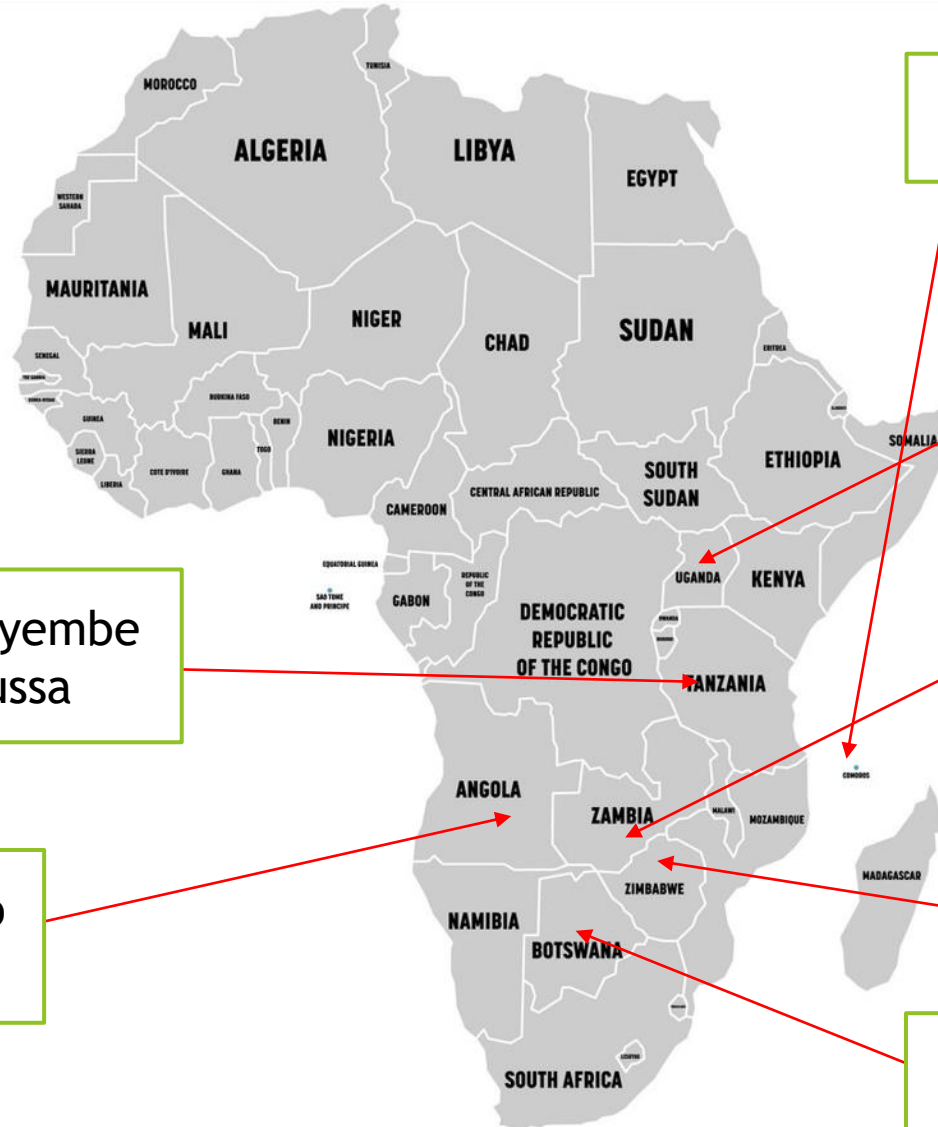


# Safety Moment

These are simple exercises that everyone can do to relax the body while at work or at this forum.



# TEAM COMPOSITION



Mark Jean Baptiste

Diana Ahebwe

Felix Mwakyembe  
Musa Mussa

Noah Brown Zimba  
Keddy Mbindo

Avelino Harculano  
Martins

Audry Catherene  
Manduna

Namasiku  
Mufwanzala

# Source of the information used in planning

- ▶ **Forest inventory:** Forest inventory is a critical part of forest planning
- ▶ **Remote sensing:** Used to collect information about forests over large areas.
- ▶ **Forest Modelling:** Models can be used to simulate the behaviour of forests under different management scenarios.
- ▶ **Expert opinion:** Valuable source of information for forest planners.
- ▶ **Stakeholder input:** Essential for forest planning as integrates people who are affected by forest management.

# Methodology in data collection and analysis

- ▶ **Field measurements:** It is the most accurate method for collecting data, but it is also the most time-consuming and expensive.
- ▶ **Transect sampling:** Involves walking along a transect line and recording the presence or absence of trees, as well as their species, diameter, and height.
- ▶ **Permanent sample plots:** Used to monitor changes in the forest over time.
- ▶ **Destructive sampling:** Rarely used but it is the most accurate method for estimating forest biomass, but it is also the most destructive.
- ▶ **Biomass and Growth models:** Traditional methods that are widely used for biomass assessments and tree growth
- ▶ **Remote sensing-based forest inventory:** Satellite linked assessments
- ▶ **Open source software** for collections, data storage, processing, analysis, visualization e.g. Statistical software, Open foris tools (FAO), Forest Vegetation Simulator (FVS) and SORTIE, Google Earth Engine (GEE)

# Remote sensing-based forest inventory

Remote sensing-based forest inventory is a method of collecting data about forests using remote sensing technologies, such as satellite images or aerial photographs.

- ▶ **Data acquisition:** Can be obtained from a variety of sources, such as satellite images, aerial photographs, LiDAR data.
- ▶ **Data preprocessing:** Involves correcting of atmospheric distortion, geometric distortion, and radiometric calibration.
- ▶ **Feature extraction:** Involves identifying objects of interest, such as individual trees or forest patches.
- ▶ **Classification:** Involves assigning each feature to a specific category, such as forest, non-forest, or different types of forest.
- ▶ **Data analysis:** Involves estimating the area of forest cover, the distribution of different forest types, or the biomass of forests.

# Tools and Techniques used in forest planning

- ▶ **Land-use planning:** Ensures that forests are used in a sustainable way and that the needs of different stakeholders are met.
- ▶ **Forest inventory:** Process of collecting data about forests, such as the types of trees present, the amount of timber, and the condition of the forest.
- ▶ **Modelling:** Use of mathematical models to simulate the behaviour of forests, effects of different management practices on forests.
- ▶ **Decision analysis:** Can be used to help forest managers make decisions about how to manage forests in a sustainable way.
- ▶ **Participation:** Ensure that the needs of different stakeholders are met and that the forest planning process is transparent and accountable.



# Type of training of the stakeholders involved planning

- ▶ **Level of training depends on the role of the stakeholder in planning**
- ▶ **Forest ecology:** Support forest planners understand the factors that affect forest growth and productivity.
- ▶ **Forest management:** This ensures that forest planners develop and implement management plans that meet the needs of different stakeholders.
- ▶ **Forest planning:** Enables forest planners to understand different steps involved in the forest planning process and decision making.
- ▶ **Communication:** Build relationships with stakeholders and to ensure that the forest planning process is transparent and accountable.
- ▶ **Conflict resolution:** Helps forest stakeholders manage conflicts that arise during the forest planning process.

# Strategies for implementation of the forest plan

- ▶ **Establish clear goals and objectives:** Ensure that the plan is implemented effectively and that the needs of all stakeholders are met.
- ▶ **Identify the key stakeholders:** Ensure that their needs are considered in the development of the plan and that they are involved in its implementation.
- ▶ **Develop a communication plan:** It should include a variety of methods, such as public meetings, online forums, and social media.
- ▶ **Build partnerships:** Partnerships with key stakeholders can help to ensure that the forest plan is implemented effectively e.g. local communities, businesses, environmental organizations, and government agencies.
- ▶ **Training and education:** Necessary for stakeholders to understand the forest plan and its implementation.
- ▶ **Monitor and evaluate:** Ensure that the plan is being implemented effectively and that it is meeting its goals.

# Resources for implementation of the forest plans

- ▶ Funding
- ▶ Technical expertise
- ▶ Training e.g Capacity building
- ▶ Data
- ▶ Communication
- ▶ Monitoring and evaluation



# Constraints to the implementation of the plans

## Constraints

- ▶ Inadequate funding
- ▶ Insufficient technical expertise
- ▶ Limited political support
- ▶ Natural disasters
- ▶ Economic instability



## Remedies

- ▶ Engaging stakeholders
- ▶ Building partnerships
- ▶ Using adaptive management
- ▶ Monitoring and evaluation





## CONCLUSION

The adequacy of forest plans can be evaluated based on the specific needs of the forest and the goals of the plan.

Ultimately, the adequacy of forest plans is a matter of judgment as long as the forest managers develop plans that are successful.

A photograph of a cream-colored rectangular note with the words "Thank You" printed in a large, bold, black serif font. The note is placed on a rustic wooden surface with vertical grain. A black fountain pen with gold-colored accents is positioned diagonally to the right of the note. The entire image is set against a background of overlapping green geometric shapes on the right side.

**Thank  
You**