# Minutes for FIS 3<sup>rd</sup> meeting 09/10/2018-11/10/2018

Selection of Chairperson: Nason Hara (from Zambia) elected

**Secretary**: Shani Kiluvia (from Tanzania)

## 1. Review of 4th JCC on FIS

The meeting started with the review of 4<sup>th</sup> JCC on FIS which was presented by Mr. Nanaumi on behalf of the former chairperson of FIS. The presentation covered what the 2<sup>nd</sup> EWG meeting agreed and the conclusion made by the JCC with regard to FIS. EWG-FIS were told that the decisions were:

- The approval of the proposal to relocate some of project activities planned for FY 2018/19 to FY 2019/2020 to accommodate budgetary constraints at JICA
- JCC requested JICA to consider the extension of the project in order to allow implementation of project activities as per initial agreement and achieve desired results
- Approval of Advanced training to be held twice covering 5 modules for a period of two weeks. Each training will be attended by 15 participants
- JCC directed the EWG-FIS to finalize the Regional guideline on FIS by June 2019
- Approval of the Annual work plan for FIS for April 2018-March 2019

There were concern from South Africa that when planning for the advanced training, the dates for the training should be sent before June as some of MSs need to be consolidated the plan of their activities in June.

# 2. Objective of the 3rd EWG-FIS

Mr. Mi shared the objectives and the expected output of the meeting to the participants. The objectives are:

- To share the ideas on sustainable common platform for three components
- Share lesson learn from the an advanced FIS of the host country
- Develop RFIS system design
- Develop Regional FDM 2015 (Classification map)
- Develop Annual Work plan for 2019/2020

The expected output of the meeting are:

- Comments on sustainable common platform for three components
- Lesson learn from the an advanced FIS
- Comments on RFIS system design
- Comments on how to raise the accuracy of the Regional FDM 2015
- Annual Work plan for 2019/2020

## 3. Project Portal site image

The EWG-FIS participants were introduced on how the portal will work and were told that other components of the project i e FMM and PFM will depend much on FIS.

# 4. PFM database proposal

There were two proposals for PFM database presented by Mr Mi. In every proposal there is data uploading and data sharing. The participants commented that, in order to avoid problems or double standards; the information to be entered in the database has to be sanctioned by the authorised person and the processed data should be free for everyone.

The conclusion was everyone can upload the data to the database and everyone can access the processed data.

# 5. RFIS system Design

The RFIS design was presented to the participants. It was stated that the design is intended to just show the forest and non forest cover of the country and not the forest types in details. Therefore, Experts from the Member states will be required to confirm if the classified areas as Forest and non forest is correct. The participants were also told that the RFIS statistics is not actual but it just give the rough figures on the forest area, volume and forest change.

The following methods will be used for calculation of Forest area, Forest volume and Forest change:

**Forest area**: It is proposed to use the Eco-region as a summary unit for calculating area information that means while reporting the forest area; all forest types that will follow in the same Eco-region will be grouped to give the forest area. Likewise the country name will not appear in the report and the entire SADC area will be reported in Eco-region units.

The participants commented that before reporting the forest area in the eco-region, SADC should have the definition of forest first.

**Forest Change:** The forest change is going to be done by using Google Earth Engine. The demo SADC/JICA customised GEE works was shown to the participants.

**Forest volume:** Member states should provide the data they have for the calculation of volume of relevant species through integration of different kind of data into one format.

Alternatively, It was suggested that for those countries with the volume data should use/report their data and for those with no data to use the default one which are published by IPCC.

## 6. National Forest system in Zambia

Mr. Brian Mutasha gave presentation on how the country is conducting resource assessment whereby biophysical field inventory and remote sensing methods are both applied. The results from resource assessment provides information for NFIS.

NFIS in Zambia is based on Open source tools (Joomla Content managemnt System) and other web based solutions namely Intranet, Open Foris Collect, Open Foris Calc, Saiku and the NFMS portal. Participants were able to see the demo on how these web based systems works.

#### 7. Site visit

## Trip to Lusaka National Park.

Participants were able to visit the Lusaka National Park which is located in Lusaka Province. It was stated that formally the park was the forest reserve but due to its degradation it was decided to be gazetted as the National Park in 2011. The vegetation of the area is dominated by the regeneration of Miombo woodland. The National park is for educational purposes as well as a recreational area. There is nice view point and some species of animals. The participants were happy to see the Rhino (Thabo) and impala during the visit.

# Trip to Lusaka East 27 Forest reserve

Participants visited the forest reserve where they mate their host Mr. Nyerenda who is the Senior Forest Technician. Mr. Nyerenda said the reserve is the only Forest reserve in Lusaka Province and it is 1699 Ha large. The reserve is dominated by the Miombo Woodland and the dominating species is *Brachystegia spp* and *Jurbenadia spp*. The reserve is intact as they don't allow any harvesting from. With permission, surrounding communities are allowed to enter in to the reserve to collect dead wood for firewood, mushrooms and other non timber products. Also they collaborate with the communities to conduct forest patrols whereby they confiscate the tools of those people who are found in the reserve illegally.

## Review of the site visit

The participants were able to see the difference between the well managed and protected miombo woodland and the degraded Miombo woodland.

Discussion based on how fire is important in forest management especially in Miombo woodland.

Participants were interested on the use of fire (forest fire) as a tool in forest management, we learned on how fire can be used to enhance regeneration of some species as well as can be used to remove the invasive species.

We also learnt that It is very important to burn at a certain time when the grass is not very dry so to avoid the destruction of the trees in the reserve this means prescribed burning should be done early in the year when the season is not too dry.

Due to the nature of the forest types they have Mauritius is more tropical therefore they don't use fire as tool for forest management rather than removing/uprooting the exotic and allow the regeneration of native species. They very little prescribed burning.

Madagascar, the forests are managed by NGO in collaboration with Government and the communities and they don't do prescribed burning as the tool for forest management.

## **Best practise observed:**

The involvement of communities in forest management while allowing them to benefit from the forest.

Transformation of degraded forest to the National Park has proved to be successful for restoration purpose.

#### 8. Classification

Through presentation from the Consultant Haltfield, Ms were exposed on how the classification was done. The following are the procedure.

- Image acquisition
- Visual interpretation
- Semi automated algorithms
- Decision tree approach
- Classification done per scene
- 517 landsat scenes
- 3 Sentinel- 2 scenes
- Reference data used to guide classification; Google Earth, Global land cover

## Discussion based on classification

Madagascar and Mauritius has evergreen forest class which is not included in the legend. In order to include the class they should send the sample data to the consultant so that can work on that.

Seychelles: Based on the definition of Montane forest applied it excludes the class istead it was classified as Deciduous forest which they don't have. Data from the country will be provide to rectify that.

South Africa: Grassland should be included in the legend.

NB: Accuracy raising is through one to one conversation, it's when the map will be adjusted to something better than the first draft.

For those countries which have forest plantations were requested to share the shapefiles by next week.

The legend provided is fixed, the only addition will be on the plantation.

# **Advanced Training**

The advanced training will cover the following topics

#### **QGIS**

- Image/Rasta classification
- Accuracy assessment
- Statistics
- Other plugins essential for forest assessment

## Python (QGIS plugins)

- Introduction of plugin
- simple practice to create our own plugin and deploy it in QGIS
- Basic knowledge on programming in python
- Learn skills and raise developing level through analysis and/ or change available source code

## MySQL (Database)

- Introduction
- Simple practice
- Basic knowledge on database operation (table, field, query)
- Create and design a relational database

## GEE (Google Earth Engine)

- Introduction fore GEE
- Simpe practice
- Basic knowledge on programming in Javascript
- Create our own code

FIS advanced training will be conducted around June 2019.

Advanced training will be held twice covering for a period of two weeks. Each training will be attended by 15 participants.

### **CONCLUSION OF THE 3RD EWG**

We support the PFM data base system. Concerning data entry and access, the conclusion is everyone can upload the data to the database and everyone can access the processed data.

PFM will not feed information to the system, the one to be responsible for the system management is FIS.

The information to be entered in the database has to be sanctioned by the authorised person and the processed data should be free for everyone.

Participants appreciated the lessons learnt from the NFIS in Zambia which is based on Open source tools (Joomla Content managemnt System) and other web based solutions namely Intranet, Open Foris Collect, Open Foris Calc, Saiku and the NFMS portal. Participants were able to see the demo on how these web based systems works.

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- ➤ The participants commented that before reporting the forest area in the ecoregion, SADC should have the definition of forest first.

- ➤ Forest Change: The forest change is going to be done by using Google Earth Engine. The demo on how SADC/JICA customised GEE works was shown to the participants.
- ➤ Forest volume: Member states should provide the data they have for the calculation of volume of relevant species through integration of different kind of data into one format.
- ➤ Alternatively, It was suggested that for those countries with the volume data should use/report their data and for those with no data to use the default one which are published by IPCC.

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The legend provided is fixed, the only addition will be on the plantation and mangrove classes.

## **CONFIRMATION OF 2019/2020 ANNUAL WORK PLAN**

The 2019/2020 Annual Work Plan was presented indicting FIS advanced training to be conducted around June 2019.

Advanced training will be held twice covering for a period of two weeks. Each training will be attended by 15 participants.

All trainings is going to be conducted in Gaborone Botswana,

Participants proposed the venue for the trainings should possess fast internet facilities.

Member states confirmed the work plan and the contents of the training.

#### **AOB**

The way flight tickets are booked has to be reviewed. It is suggested that JICA office should communicate with the participant to attend the meeting/ training before flight booking.

# Compiled by Shani Khalid 11/10/2018