Our Forest Our Future

Welcome to the Solomon Islands Forestry Information GeoPortal: Solomon Islands Ministry of Forest... for creating, sharing and accessing geospatial data and maps with information on Forestry for decision making and... Provision policy makers and technical leaders in F...

Factsheet: Vol. 3
MOFR SolGeo-FIMS
(Forest Information Management System)

Find Our Forest Data.

Q Search

176 Layers
Click to search for geospa...
public sources. Download data in standard formats.

14 Maps
... can be saved, downloaded, shared publicly or restricted to specify users only.

The Project on Capacity Development for Sustainable Forest Resource Management in Solomon Islands

Privacy & Cookies Policy

〔Background〕

SolGeo-FIMS is spatial Data Infrastructure-SDI

It is an open spatial data geoportal built for the Ministry of Forestry and Research to create, retrieve, update and store information on forest in the Solomon Islands. The system is focused on geospatial data, both raster and vector, as well as documents related to the forest assessments. End users will be able to browse through national forest maps including Forest Management Units (FMU), Forest Type Maps (FTM), High Conservation Value (HCV) Maps, Land Cover Maps, and the carbon stock estimated using GEDI2019 global forest canopy data for Solomon Islands.

〔 End Users Browse 〕

Land Cover

Forest Management Unit

Montane forest Degraded
Mangrove
Swamp riverine forest
Forest plantation
Water
Settlement
Otherland
Grassland
Crop_subsistence
Crop_Palm
Crop_Coconut

Carbon Stock Estimate

- The Frontend can be access via any standard modern web Browser Application.

〖 Managed Data 〗

SolGeo-FIMS Managed Data consist: {Recent Updated}

- **Time Series Dataset** -{Forest Land Cover, Carbon Stock Estimate & Forest Loss and Gain-Solomon Islands}
- **Auxiliary Data** -{Documents,spredsheet & Feature Info}
- **Static Dataset** -{Admin Boundary,Infrastructure,Biophysical & Protected Area}
- **Raster Dataset** -{Satellite Image & Scan Topography Map}

➢ Continue update of these dataset is vital to keep the atomicity of data with the respective data sources
➢ The SolGeo-FIMS are not yet configured with User defined statistic to have a better understanding of the dataset
  --> currently working on
➢ **Forest Land cover, Carbon Stock Estimate and update Roads** are most recent data updated in System.

| Forest Land Cover | Carbon Stock Estimate | Road | FMU | Watershed 5h-100h | FTM | HCV |

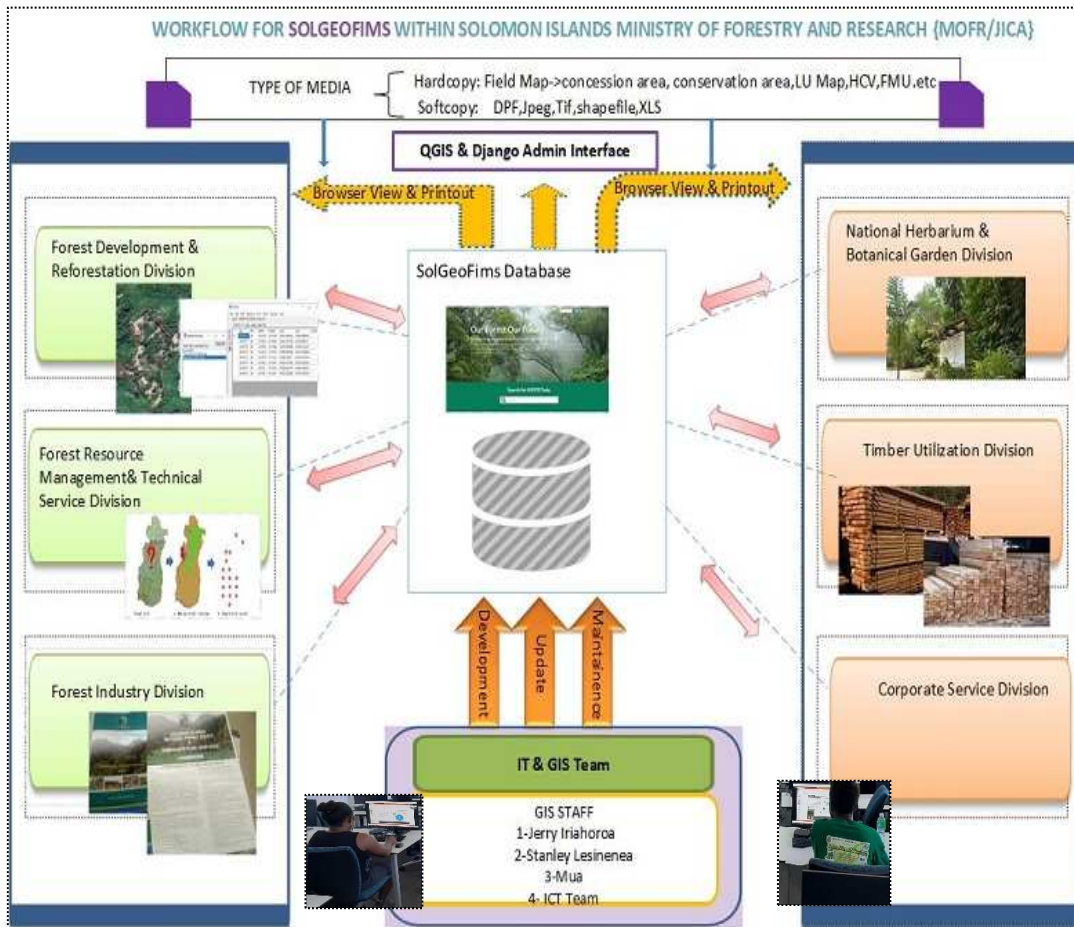## 〖 MOFR Workflow for SolGeo-FIMS System 〗

Fig-1 Shows the workflow for the SolGeo-FIMS system within MOFR

❑ SolGeo-FIMS has a wider audience throughout the Solomon Islands accessing the portal through SIG-ICT Network Infrastructure.

❑ An effort by all the six divisions within MOFR to feed the system with recent and historical forest information will benefit the Country citizen to get acquainted about forest status without relying on hardcopy technical documents.

❑ Utilizing the system for spatial data storage enables future reference when need be.

❑ The Government Policy makers also can use this Platform to support their legislative initiatives
❑ International **GIS-RS experts** who want to assist MOFR can use the platform to have a glance at the overall forest dataset available for the Solomon Islands.

〔SolGeo-FIMS System- {System Upgrade-Core Technologies Stack}〕

❑ Technologies and Programming Languages
- o **Linux** (Ubuntu Server LTS v20.04. Kernel version 5.11)
- o **Java**-8-openjdk
- o **Tomacat9** {Web Container}
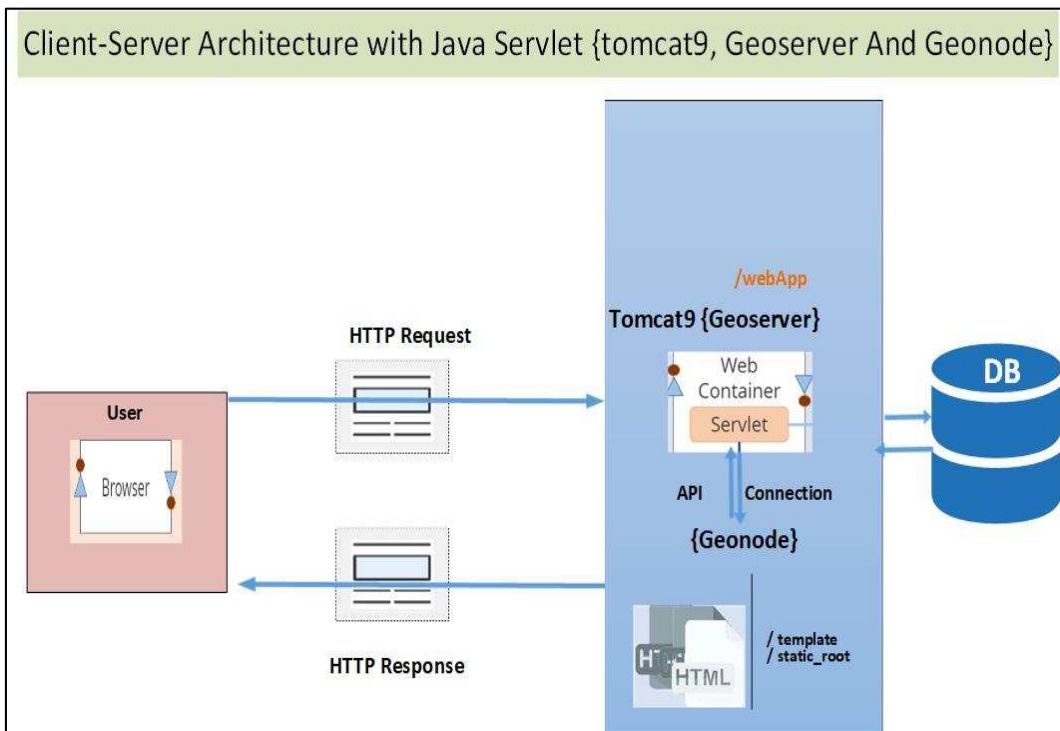- o **Nginx** {Web server + Reverse-Proxy}
- o **Python** 3.8+

〔SolGeo-FIMS System- {Application Upgrade Core-component Stack}〕

❑ All Geospatial processing and Management is performed with following Upgrade version **Open Source Software:**
- o **Geonode (2.10 →version 3.2.2)**
  - Web based application for deploying Spatial Data infrastructure
- o **Geoserver ->Middleware(Previous version→2.18.3)**
  - Open Source Server for sharing geospatial data
- o **Django==2.2.20**
  -Python Framework embedded in to Geonode for the admin purpose
- o **Mapstore 2** { Geonode-map store-client==3.2.1}
- o **PostgSQL & PostGIS** {Backend database Management System}
  -Highly scalable data management used to store all spatial data
- o **Requirement.txt** file has all the dependency version required for successful deployment

〔Below is an Abstracted Diagram for SolGeo-FIMS Change in Configuration〕

Client-Server Architecture with Java Servlet {tomcat9, Geoserver And Geonode}

❑ Recently, the system undergo change in configuration due to a previous Geoserver failed to initialized a Geoserver instance.

❑ Hence, {Geoserver} is deployed outside Geonode container and linked to Geonode via **API connection**.

MOFR Website (including JMOFR-ICA project info): www.mofr.gov.sb
YouTube: www.youtube.com/channel/UC3_oJjc14Z6E0w0rcqtWRxw

Facebook: www.facebook.com/groups/mofrjica
Twitter: https://twitter.com/mofrjica

Update Data Classification in SolGeo-FIMS

Classification	File Name	Description	Feature Type	From Where Information Source	Images e.g
Forest Land Cover {NEW}	Land Cover	Forest Land Cover for all nine provinces in SI	Raster	Hansel Treecover Hansel LossYear	
Carbon Stock Estimate {NEW}	Estimate Carbon Stock	Carbon Stock Estimate for Guadualcanal Province	Raster	GEDI global dataset	
Roads {NEW}	Road_Polyline	Roads for all Nine {9} provinces in Solomon Islands	Vector		
High Conservation Value Map {updated}	HCV	HCV-1,2,3 Map for all Provinces in Solomon Islands	Polygon	Hansel Treecover Hansel LossYear	
Forest Type Map {updated}	FTM	Forest Type Map for all provinces in Solomon Islands	Polygon	Ministry of Forestry & Environment	
Forest Management Unit {updated}	FMU	Forest Management Unit for all province in solomon Islands	Polygon	Original or Based Map	
Logging Concession	Logging Concession	Logging Concession for all provinces in Solomon Islands	Polygon	Survey data	
Provincial Boundry	Provincial Boundry	Boundry for all provinces in Solomon Islands	Polygon	Survey data	
Watershed	Watershed	Watershed for all Provinces in Solomon Islands	Polygon	USGS Remote Sensing Data	
Watercourse	Watercourse	Watercourse for major River in Solomon Islands	Polygon	Original	
Reef Region	Reef Region	Reef Region for Major Reef in Solomon Islands	Polygon	Original	
Roads	Roads	Roads for all provinces in Solomon Islands	Line	Original	
Contour	Contour	Contour for all provinces in Solomon Islands	Line	Original	
Bridges	Bridges	Major Bridge in Solomon Islands	Line,Point	Original	
Komniboli Boundry	Komniboli Boundry		Polygon	Survey data & Drone	
Falake Boundry	Falake Boundry	Komniboli Boundry Falake Boundry Komniboli LandUse	Polygon	Survey data & Drone	
Komniboli LandUse	Komniboli LandUse		Polygon	Survey data	
Falake LandUse	Falake LandUse	Falake LandUse	Polygon	Survey data	