2020

Standard Operating Procedure for Shape Files/KML data from the States

Ministry of Environment, Forest and Climate Change
Government of India

Institution:	Version: *1.0*	Date:	Number of pages: 4	Name of procedure: Document Control Procedure	ID Code: *GIM/Moef/GIS/22072020*
					QMS

Topic & Purpose: Standard Format For Shape files/KML data Intervention Area of the States	Review Period: 1 year
Location: Green India Mission, MOEF & CC Delhi	**Distribution: Afforestation Dashboard & Management Information System**
Version number: *V 1.0*	**Control No: GIM Monitoring & Evaluation Activities**

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Shape files/KML Data Control Procedure

Application

This procedure to ensures Quality Control of Shape files/KML Data given by states to Green India Mission Directorate.

Objective

This procedure explains how to establish a Spatial Data control process of shape files /KML data for the centralization of all states Shape files/KML data.

Definitions

Information and its supporting medium; Shape files/ KML data along with relevant attribute MIS data helps GIM Directorate for the Quality Control (QC) of Spatial data/Shape files/KML data

Quality management system (QMS) helps in Quality Control (QC) of Spatial data for the centralization of the all states GIS database &finally helps in GIM Monitoring & Evaluation activities.

Responsibilities

The Quality Manager will be responsible for the control of Data spatial data/shape files/KML data along with relevant attribute data (detail given in fig.1.1)

Operating mode

The goal of the Spatial database control process is to ensure that all shape files/KML data are valid, falling on respective landscape location, current, approved, and according to desired Format.

The Quality Manager will annually ensure data should have following essential Information in shapefiles/KML data: (more detail see figure 1.1)

- State Name
- Division Name
- Range
- Name of JFMC
- Year
- Mod_ANR_AR
- Open_AR
- Open_ANR
- Plantation
- Fodder_Tree

- Avenue Plantation
- Location
- L2_Name
- Type
- Area hectare
- Projection System

Type of Spatial Data Format:

1. **Shape Files (.shp)**: As per standardised format it is mandatory to provide GIS data in shape files format only with Geographical Coordinate System WGS 84 as Shape files hold more attribute table & data integrity maintained. Secondly shape files linked with Web GIS.
2. **KML Data File**: If states does not have Geographical Information System (GIS) software/shape files available then only they can provide data in KML files along with attribute data mention in figure 1.1.

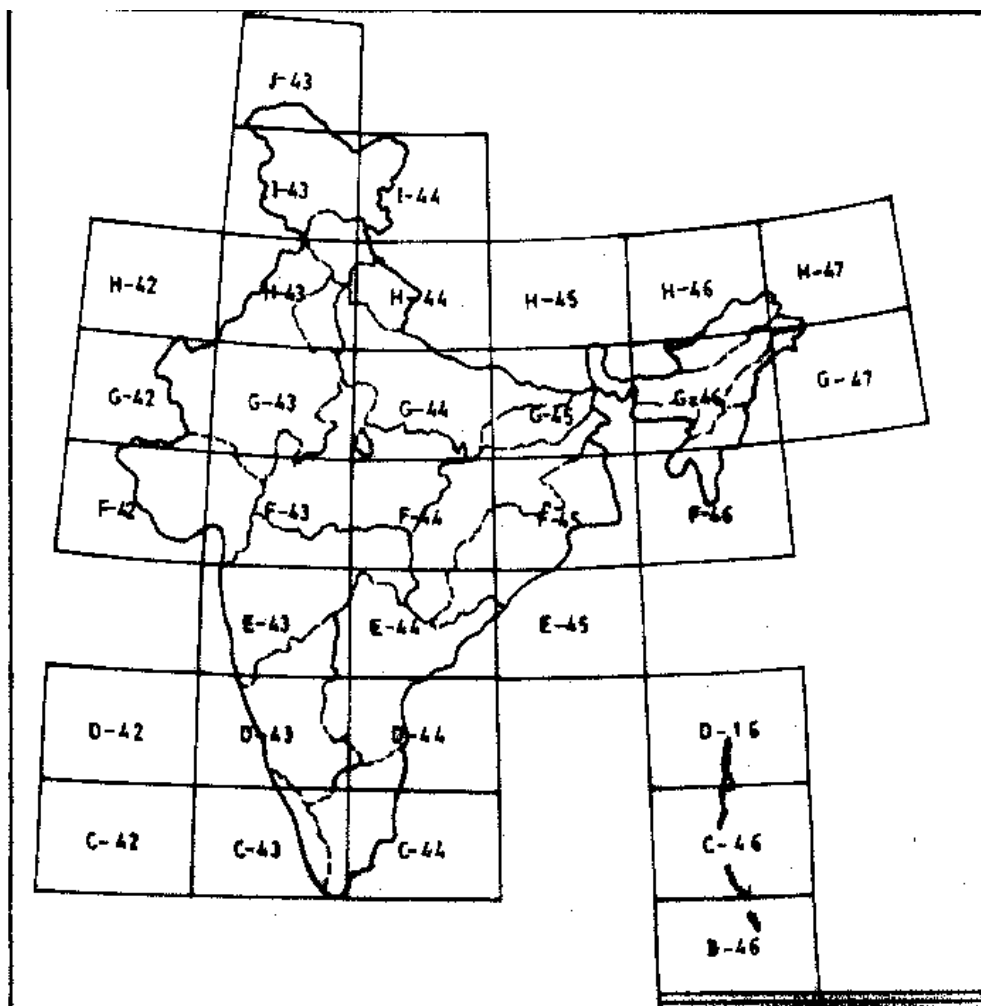| State_Name*	Division_Name*	Range*	Name of JFMC*	Year*	Mod_ANR_AR*	Open_AR*	Open_ANR*	Plantation*	Fodder_Tree	Avenue_Plantation	Species*	Location*	L2_Name*	Type*	Area_ha*
		Lingmoo Territorial	Payong JFMC		10		0					Payong RF	3A1C1f	Mod. Dense Forest (ANR)	10 ha.
		Lingmoo Territorial	Lingee JFMC		5		0					Pengring Khasmal	3A1C1f	Mod. Dense Forest (ANR)	5 ha.
		Lingmoo Territorial	Niya Brum JFMC		0		5					Mangzing RF	3A1C1f	Open Forest (ANR)	5 ha.
		Lingmoo Territorial	Lingmoo JFMC		0		5					Tokdang RF	3A1C1f	Open Forest (ANR)	5 ha.
		Lingmoo Territorial	Sripatam-Gagyong JFMC		0		5					Gagyong	3A1C1c	Open Forest (ANR)	5 ha.
		Lingmoo Territorial	Satam Samruk JFMC		0		10					Pathing RF	3A1C1c	Open Forest (ANR)	10 ha.
*	Mendatory Fields														

Showing in Fig1.1

Calculation of Area:

As per the standard process all the polygon boundary area have to be provided for the calculation of the area along with projection system used in the calculation of area.

Parameter used in the Calculation of the Area:

As per the standard process calculation of area based on Projected Coordinate System with UTM Zone. India is falling on 42N to 46N coordinate system. Showing in Fig1.2

Showing in Fig1.2

Result & Outcome:

Centralization of Shape files/KML data

- Shape Files/KML data intervention area reviewed yearly, and approved for the use by authorized personnel.
- All states should provide essential Information on Shape Files/ KML data for the centralization of data of all states as per the mandatory format
- Standard Shape files/KML data finally help in the incorporation of maps into central Spatial database.
- Maps & all attribute data (given in figure 1.1) approved & verified by state agency then the same shape files/KML data finally incorporated into Web GIS/Bhuwan maps of National Informatics Centre (NIC).