

Local Construction Material Mapping Project

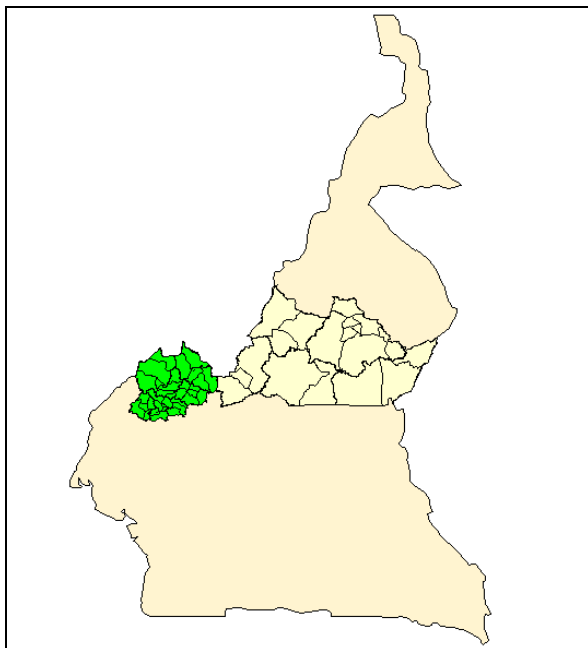


Figure1. Map showing the study area in Green and Yellow

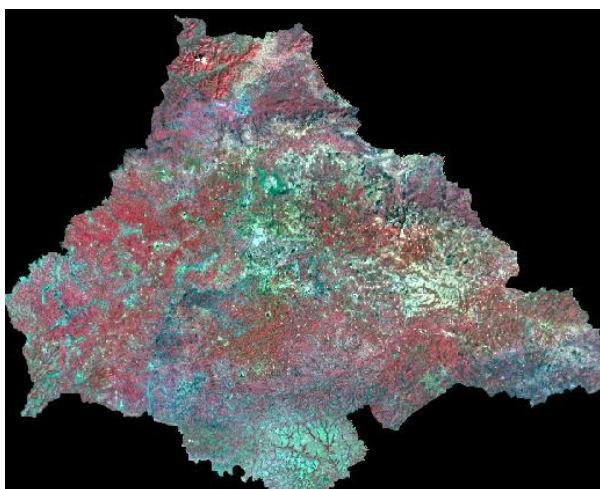


Figure2. Map showing Spot Image of one of the Councils

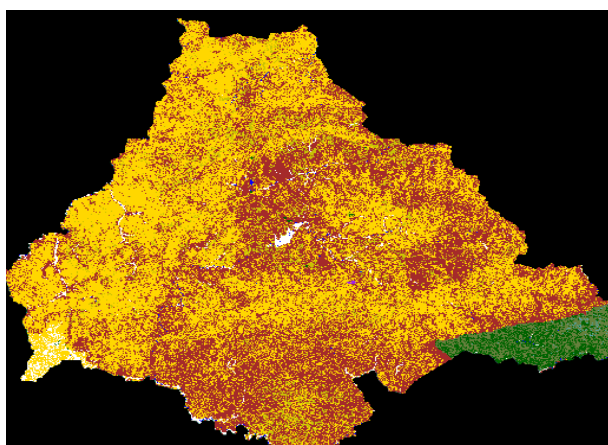


Figure3. Map Showing LCM of one of the Councils

Business Need:

In Cameroon, many infrastructure development projects are to be executed. All these infrastructure projects require construction material. The carrying cost of "Construction Material" could affect the cost of the project drastically. Prior knowledge of the availability of construction material locally could help in designing and budgeting developmental infrastructural project an area. The outline of the project requirement included-

- i) Creation of Local Construction Material Map of North West Region
- ii) Creation of Local Construction Material Map of Adamawa Region
- iii) Preparation of corresponding Reports

Area Covered:

Study area comprised of North West Region and Adamawa Regions of Cameroon, Africa

Inputs Used:

Image type	SPOT 5	SRTM	Geological Map
No. of Images	1 Set	1 Set	1 Set
Resolution/Scale	2.5 m	90m	1:100,000

GPS aided field data on local construction material

Business Solution:

Elements of image interpretation, along with the existing geological map and topographical data were used to create Local construction material map. To aid this classification, reference of more than 1000 points showing the spatial distribution of local construction material was taken to create signature set for different major material types.

Supervised classification and extensive manual editing method were adopted to classify the SPOT 5 satellite image. Further reference of terrain elevation data and slope map was taken to delineate few of the classes.

GPS aided field survey was carried out to validate the map

Necessary modification in the map was done based on field inputs.

S. No.	Local Construction Material	S. No.	Local Construction Material
1	Granite	8	Hydrological Features
2	Volcanic Soil	9	Metamorphic Rocks
3	Granitic/Acidic Clayey Soil	10	Sedimentary Rocks
4	Lateritic Clayey Soil	11	Volcanic Rocks
5	Sandy Soil	12	Tectonic Rocks
6	Lateritic Soil	13	Alluvium
7	Gravel/Granitic Soil	14	Bauxite

Project Shipment:

The following shipments were made-

1. Council-wise LCM map in raster and vector format
2. Map Layouts for NWR and Adamawa Region
3. Report

