



LAND USE OF SWABI

Name	Shah Fahad
ID no	7682
Section	A
Department	BE-Civil
Semester	8 th
Instructor	Engr. Hamza Mustafa

1) Abstract :

Due to increase in population in district Swabi . The land which is used for agriculture become less day by day which come one of the most great issue .Here we study about the whole district and mentioned the urban area, agricultural area and water area .We collected some Geographically data about district Swabi which show the area for agricultural and other areas.

2) Introduction :

Land use planning is a process of making informed decisions about the future use of lands , water and other resources. Land use plans use to best available information in transparent and accountable manner to achieve a defined vision and goals for the planning area.

3) Study Area :

Study area was the whole district Swabi .In Swabi there are more than 80 villages . We studied the whole district area.

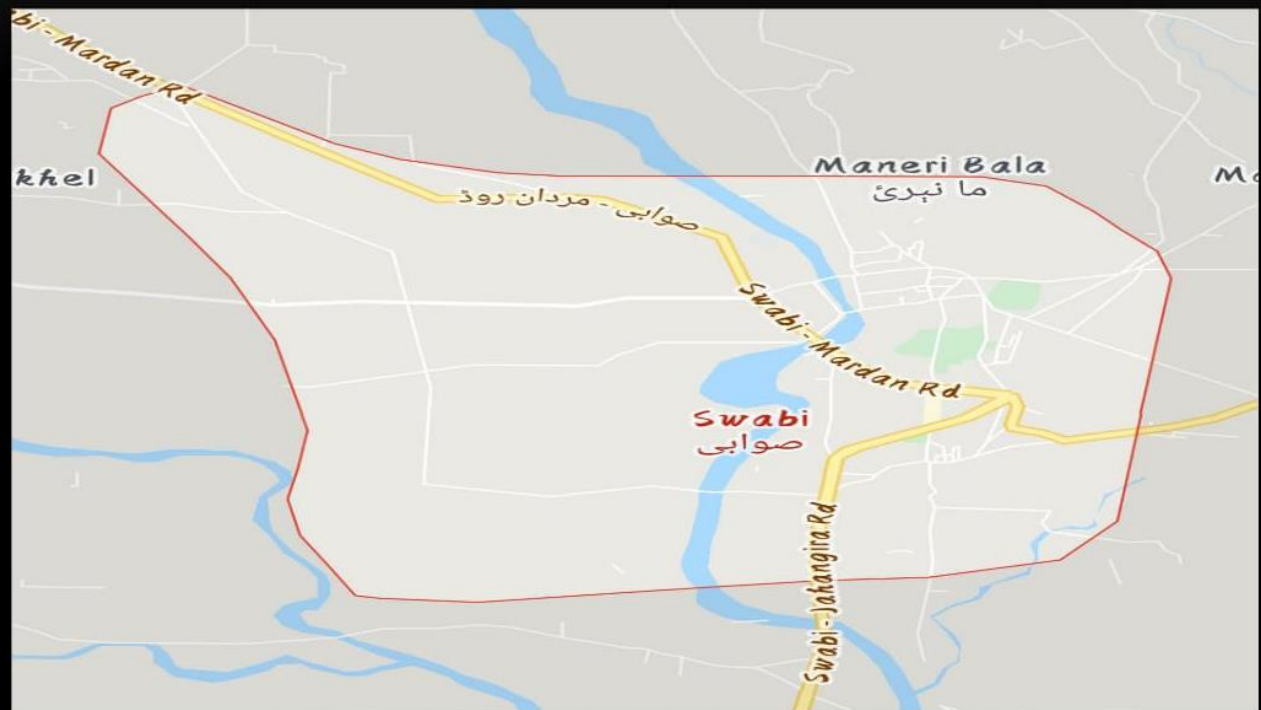
Area :

Area of Swabi is 1,481 Km².

Density :

Density of Swabi is 1,097 / Km².

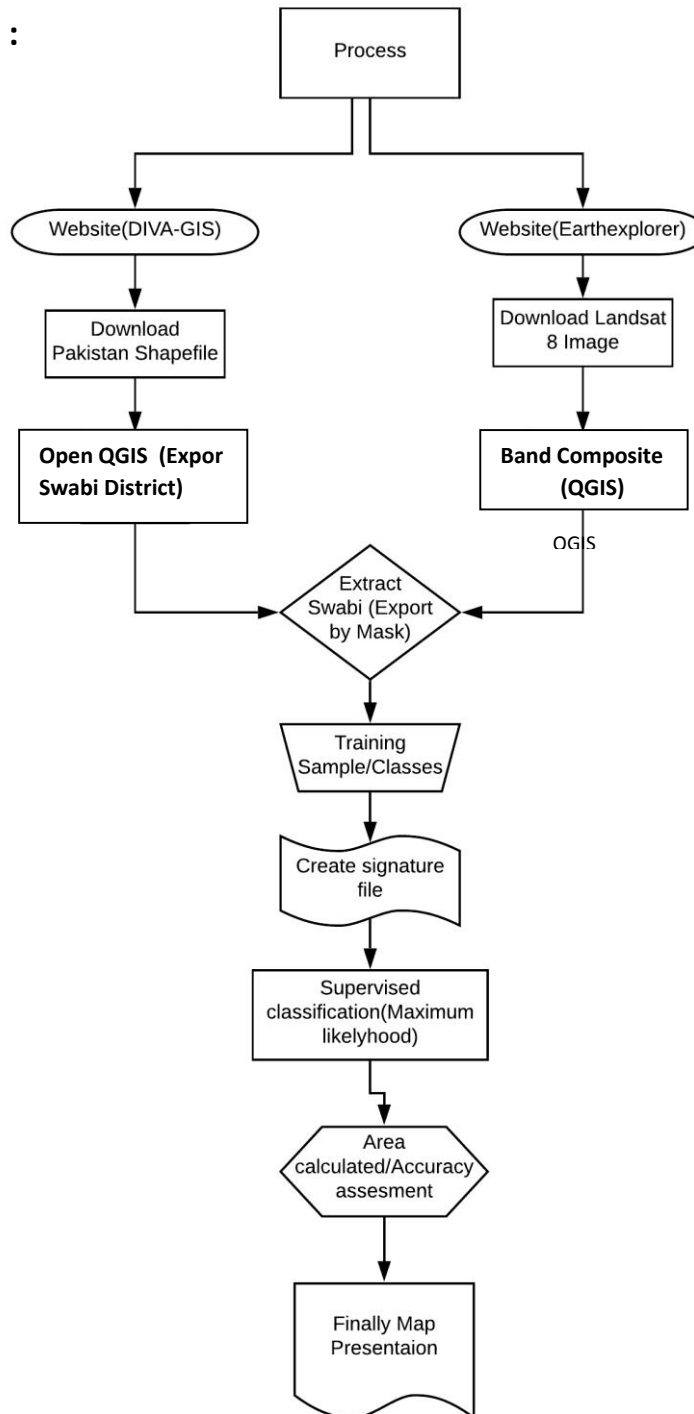
GOOGLE MAP OF SWABI



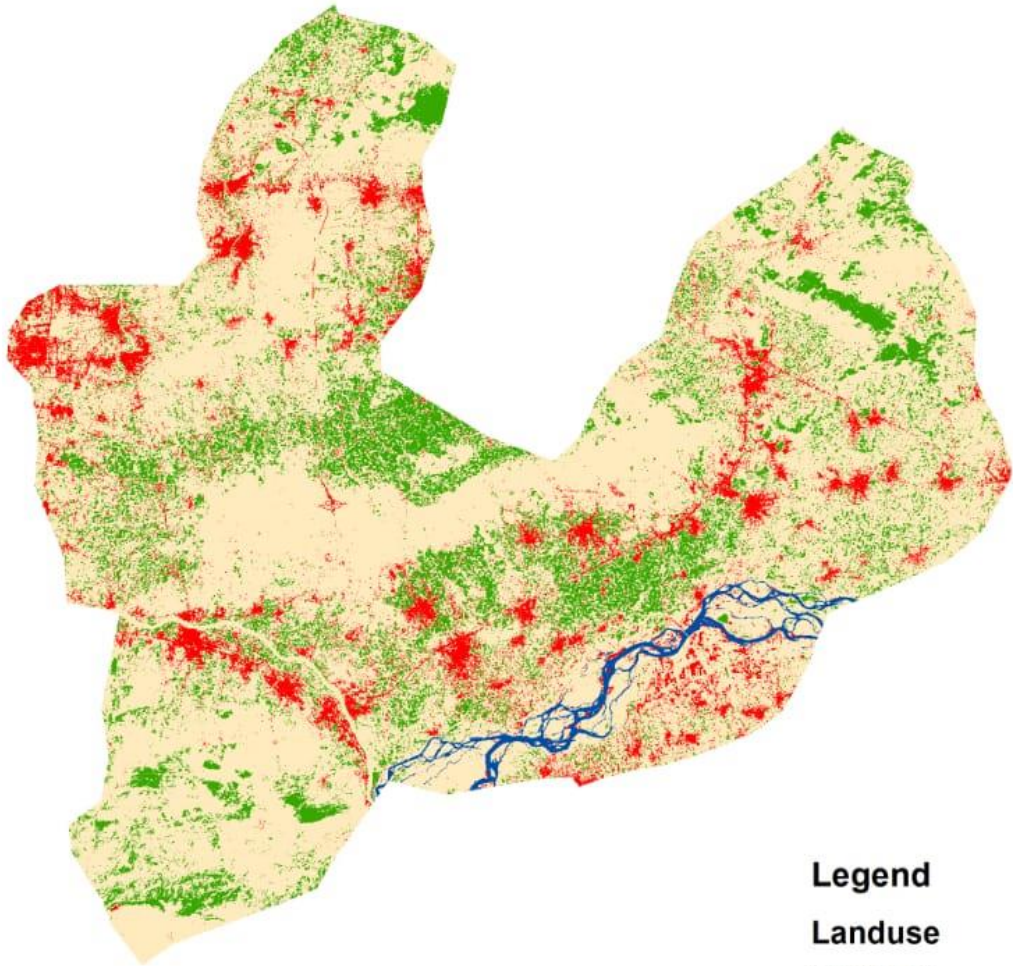
4) Data :

- DATA_TYPE = "L1TP"
- COLLECTION_CATEGORY = "T1"
- LANDSAT_8
- SENSOR_ID = "OLI_TIRS"
- PATH = 151 ROW = 36
- DATE_ACQUIRED = 2020-06-04
- CLOUD_COVER = 7.25

5) Methodology :



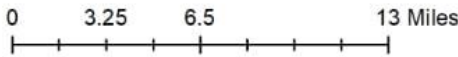
Landuse Swabi 2020



Legend

Landuse Features

-  Water
-  Builtup
-  Vegetation
-  Barrenland



6) Result :

Finally we collected the data of the whole district Swabi and categories them in to the different areas which are water area, Builtup area , Vegetation , Barrenland and also show their percentages .

At the end we do the assessment of the whole area and gives some accuracy.

Features	Area(KM²)	Percent
Water	18.20	1.17
Builtup	132.69	8.53
Vegetation	250.77	16.13
Barrenland	1153.11	74.17
Total	1554.8	100

Overall Accuracy	0.966666667				
Kappa Coefficient	0.95546759				
Supervised	Reference_1	Reference_19	Reference_41	Reference_65	Ground Truth
Water	25	0	0	0	25
Builtuparea	0	21	0	0	21
Vegetation	0	0	20	0	20
Barrenland	1	2	0	21	24
Total	26	23	20	21	90
Ground Truth					
Supervised	Reference_1	Reference_19	Reference_41	Reference_65	
Water	96.15384615	0	0	0	
Builtuparea	0	91.30434783	0	0	
Vegetation	0	0	100	0	
Barrenland	3.846153846	8.695652174	0	100	
Total					
Comision					
Water	0	25	0		
Builtuparea	0	21	0		
Vegetation	0	20	0		
Barrenland	3	24	12.5		
Omision					
Water	1	26	3.846153846		
Builtuparea	2	23	8.695652174		
Vegetation	0	20	0		
Barrenland	0	21	0		
Producers					
Water	25	26	96.15384615		
Builtuparea	21	23	91.30434783		
Vegetation	20	20	100		
Barrenland	21	21	100		
User Accuracy					
Water	25	25	100		
Builtuparea	21	21	100		
Vegetation	20	20	100		
Barrenland	21	24	87.5		