

UNSUPERVISED CLASSIFICATION

#AIM: Perform an Unsupervised Classification for any study area of our

locality(phalodi,jodhpur). It include the following classes:

- 1)Forest
- 2)Agriculture
- 3)Water
- 4)Built Up Area
- 5)Open Area

#COLOURS USED FOR DIFFERENT CLASSES:

- 1)Water-Skyblue
- 2)forest-Red
- 3)Agriculture-Light green
- 4)Building Area-mustard
- 5)Open area-Navy Blue
- 6)Other stuff-Yellow

PROCEDURE:

#DATA DOWNLOAD:

- 1)Select the address in the earth explorer.
- 2)Select the range of area over which we want to perform survey and then select cloud cover upto 10% and date range.

3)select the landsat 8 in the Data set

4)click on results and download the suitable data set.

#WORK IN QGIS:

1)Install SCP plugin which we will use for

a)Bandset selection

b)Band processing and clustering

c)postprocessing-this includes reclassification of data.

2)put corresponding values of different classes in above screenshot and then click on run.

3)Select corresponding colours for different classes and then apply and click ok.

3)Then go to project and select new print layout.

4)Now add grid,frame style(zebra),north symbol, legend ,scale and title of map and then export as image.

#CONCLUSION: We drew an unsupervised classification of area of our locality(phalodi) using QGIS Software.Our map displays area covered by water, vegetation, agriculture,building area,open area and some other stuffs which can be used for surveying. The map is hereby attached: