

Digital Soil Library

This is specifically designed for maintaining and displaying the database of Sujala project – a World Bank funded Integrated Watershed Development programme. In the library the spatial data is created in ArcGIS environment and the Digital Library (DL) software is developed using Visual Studio.NET. **Fig. 1** shows the opening screen of the DL software, where the user has to select the micro watershed and **Fig. 2** shows the soil map of selected watershed. The software displays all the information of the selected land parcel *i.e.* soils, current land use, existing hydrological structures, proposed conservation measures, fertility status and suitability for different crops. Software module is developed to display the village wise land parcels with selected soil or fertility status. Using the software, one can also generate village or micro-shed reports and Excel file with properties of all the land parcels for the selected village (**Fig. 3**). The software also includes the facility to view the photos and pedon description forms of the selected soil series (**Fig. 4**). The thematic maps for depth, LCC, slope, texture, erosion, gravelliness and suitability maps for 11 horticultural crops *i.e.* Amla, Cashew, Custard Apple, Guava, Jackfruit, Black berry (Jamun), Lime, Mango, Orange (moosambi), Sapota (Chikoo), and Tamarind have been deployed. Soil fertility maps have also been added.



Fig. 1. Opening screen of the Digital Library software

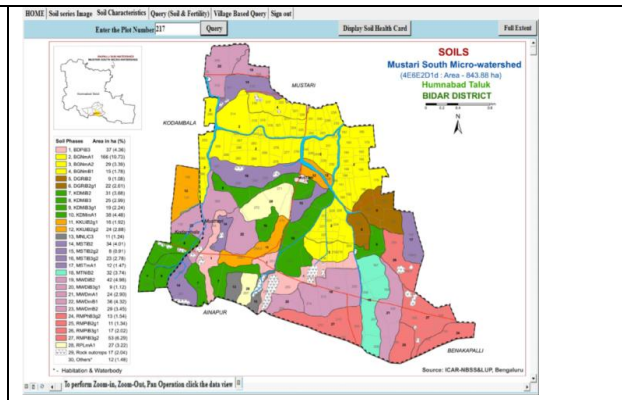


Fig. 2. Computer screen showing the soil map of selected watershed

OC_DXF TEXT OC Leg	OC_Area	P_DXF TEXT	P Leg	P_Area	K_DXF TEXT	K Leg
130 High (>0.75 %)	7.58	130 Low (<23 kg/ha)	7.58	130 Medium (140-330 k)		
131 High (>0.75 %)	8.78	131 Low (<23 kg/ha)	8.78	131 Medium (140-330 k)		
132 High (>0.75 %)	13.05	132 Low (<23 kg/ha)	13.05	132 Medium (140-330 k)		
133 High (>0.75 %)	10.17	133 Low (<23 kg/ha)	10.17	133 Medium (140-330 k)		
168 High (>0.75 %)	7.94	168 Low (<23 kg/ha)	7.94	168 Medium (140-330 k)		
169 High (>0.75 %)	6.8	169 Low (<23 kg/ha)	6.8	169 Medium (140-330 k)		
170 High (>0.75 %)	3.26	170 Low (<23 kg/ha)	3.26	170 Medium (140-330 k)		
STREAM Others	7.82	STREAM Others	7.82	STREAM Others		

Fig. 3. Computer screen with the results of the selected village

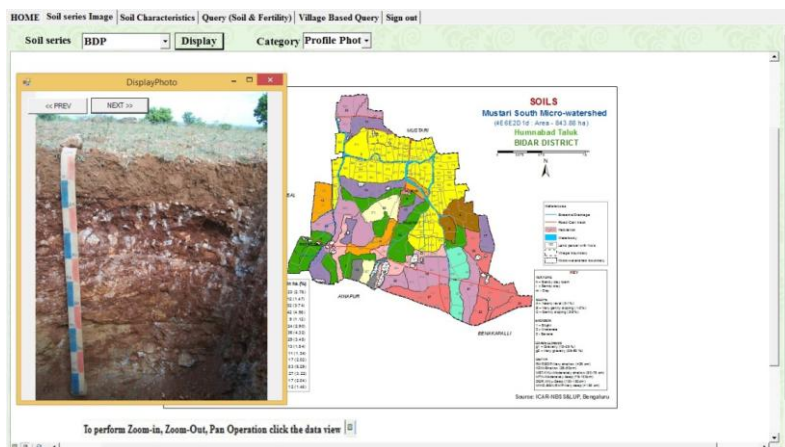


Fig. 4 Computer screen showing the soil profile photo of the selected soil series

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