A comprehensive set of databases and maps for Mekong Delta provinces in Vietnam to protecting forest cover and climate change adaptation

Bui Quang Binh

Institute of Human Geography 1 Lieu Giai st, Ba Dinh, Hanoi, Vietnam, <u>binhbq@hotmail.com</u>

The changing population, landuse status, and especially climatic conditions lead to severe changes in the forest cover and landuse of coastal provinces in Vietnam. To maintain the area of protection forests, including mangroves forests in the Mekong Delta provinces, a new comprehensive set of maps and databases, for the first time, should be constructed for decision makers, planners, local people and authorities to use for their management activities as well as for climate change adaptation.

To construct the relational databases and maps, the data input was prepared. Data was provided by authorities (paper maps), remote sensing, and came from measuring directly in the field. Raw data was processed and converted to be used for database construction for each targeted province. The databases and maps were built based on the regulations of national for accuracy and information layers and international standards for database structure. The maps contain several layers corresponding to several attribute tables with detailed information in the databases. Metadata are integrated in to databases, which is very useful for users to query information.

The accuracy of the new maps and databases were also verified by 2 ways. One is calculation and analysis in software and the other was to use empirical data in the field. The result of verification was acceptable according to the regulations

The new databases and maps will be a valuable tool for landuse planning and may reduce the decrease of protection forests in the targeted provinces.

Key words: Mangrove, GIS, remote sensing, geodatabase.