## **Developing Web-GIS for the Provincial Spatial Planning Database**

Samsu Arif, Ilham Alimuddin, Nurjannah and Sumbangan Baja

Pusat Penelitian Dan Pengembangan Wilayah, Tata Ruang, Dan Informasi Spasial (WITARIS) Universitas Hasanuddin, Kampus UNHAS Tamalanrea, Makassar, 90245 Center for Research and Development of Spatial and Regional Planning and Spatial Information Hasanuddin University, Kampus UNHAS Tamalanrea, Makassar, 90245

Samsu Arif: samsu\_arif@yahoo.co.id, Ilham Alimuddin: ialimuddin@hotmail.com Dr. Nurjannah: <a href="mailto:nurj\_din@yahoo.com">nurj\_din@yahoo.com</a>; Prof. Dr. Sumbangan Baja: baja\_s@yahoo.com

Abstract: It is an undeniable fact that the advancement of information technology has provided an excellent problem solving related to managing spatial information nowadays. Unfortunately the advancement of this technology has not been used to the outmost due to the lack of implementation in the area of Spatial and Regional Planning in Indonesia. Indonesian government has approved the Act No. 26 of 2007 which has mandated all the provinces, districts, and the city should have the Spatial Plan and Detailed Spatial Plan for development in the area can be properly implemented. To realize the implementation of appropriate spatial planning law, local governments still have to face issues that are considerably basic, this is the lack of human resources in the understanding and implementation of spatial planning. On the other hand demands that society is based on the awareness of the function and role of good spatial planning has also increased. Based on these facts an application where the spatial arrangement can be acceptable to all parties needed to be supported by regular, consistent, and sustainable efforts. One of the efforts is developed by this study, namely developing the Provincial Spatial Planning Database System (Sistem Informasi Tata Ruang, SIMTARU) through Regional Spatial Development Implementation in South Sulawesi Province which is activity-based WEB GIS database preparation. This activity is closely associated with aspects of land use district / city in the province of South Sulawesi. The application system is developed to focus on the data collectivity and the enhancement of the system capability. Data collectivity includes entry and data integration compiled by the operators to the users. The main emphasis of this database development study is more on data base management systems and WEB GIS application program. Data were collected and integrated into a system of basic data of a general nature, such as base maps, satellite image data, map forest areas and public infrastructure data and its attributes. The challenge of this study is to publish the database to the web using programming language of PHP-Mapserver and continuously updating the database. Coordination among the sub provincial level (kabupaten) is highly concerned in the data collectivity. In conclusion, some functions of spatial analysis in the system have not been developed to the fullest which is therefore there are a lot of spares for further development.

Keywords: Spatial and Regional Planning, Web-GIS, PHP-Mapserver, SIMTARU.