Web GIS Based Data Collection System for Environmental Managers

D.M.S.L.B. Dissanayake¹

Web Geographical Information System (GIS) is a new pattern for delivering GIS capabilities into the hands of the people excepting geographical boundary and one pathway to access the Global village which is new paradigm in the cyber space application. GIS related spatial field data collection is required for many reasons, such as Ground Control Points (GCPs), Sampling, applications, current database updating, data aviation...etc. Traditional field data collection methods are time and capital consuming heave task which is not suitable for addressing in emergency case. In addition to that, traditional data collection method deal with paperwork and point to point data collection practices which is burning many human hours.

The created system will be facilitated to collect point data with other attribute that are define by the programmer and Google API system. Web system was created using HTML 5 and PHP language. Google map class library and java script library were used to render the Google map to the web GIS system and My SQL database is used to store the data. In addition to that, Several software packages have been used such as adobe dreamweaver, adobe photoshop, PHP editor,Java,Ajax,ArcGIS,Arcserver.....etc.

Web administrator will be able to change whole content or part of the content of the system and define user privileges to access the system. Any user will be able to enter the data to the system under the privileges of the administrator. In same platform user will be able to edit, delete and update data that area entered by himself. The system will facilitate to download collected data as a Ms Excel data sheet and KML file which are supported to Arc GIS and other GISsoftware.

Key words: - Web GIS, Cloud GIS, GIS modelling, KML, Database system, GIS program.

_

¹ Department of Environmental Management, Rajarata University of Sri Lanka, <u>dissanayakedmslb@gmail.com</u>