Collaboration Platform for Sustainable Development Based on Public Participation Geographic Information System

Chih-Hong Sun1, Chin-Te Jung2, Ming-Fan Lien3, Vladimir Tikunov4

¹ Professor, Department of Geography, National Taiwan University <u>chsun@ntu.edu.tw</u>
² Deputy Director, Technical Division, GIS Center <u>ctjung@tgic.org.tw</u>
³ Director, Technical Division, GIS Center <u>collmf@tgic.org.tw</u>
⁴ Professor, Department of Geography, Moscow State University vstikunov@yandex.ru

Abstract

Sustainable development is the common vision for modern society. However, how to achieve the sustainable development vision is still a major challenge for many government agencies. But one thing is clear that sustainable development cannot rely on government only, public participation and action is the key to reach the vision of sustainable development. Public participation and action relies on the information sharing for all levels of decision makers. Therefore, this project proposes a Collaboration Platform for Sustainable Development (COPSD) using public participation geographic information system methodology which is based on the sharing of government controlled geospatial information to create a spatially enabled society. COPSD provides an easy access to geospatial information for all level of decision makers to identify the problems and locations related to environmental, economic development, and social justice issues. The environmental, economic development, and social justice issues are classified into 25, 22, and 26 different tasks respectively. COPSD is based on a user friendly geospatial visualization system which use Google map to integrate and overlay all kind of geospatial information provided by government agencies using OGC international geospatial web service standards. All level of stakeholders can choose one of the 73 tasks and propose a particular action plan related to that chosen task on COPSD by identifying the location and put a marker on Google map on that location. A red color marker indicates this is a new proposed action plan. A yellow color marker represents the proposed action plan is under execution. While a green color marker indicates the proposed action plan has achieved its proposed goals. Volunteers are invited to join the new proposed action plan by registering on the COPSD. The achieved results of a particular action plan can be documented on the COPSD. It is hoped that COPSD will eventually become a knowledge and experience sharing platform for all the sustainable development action plans executed by local governments and local communities around the world.

Keywords: Sustainable Development, Collaboration, Public Participation Geographic Information System