Establishing Sustainable NSDI: Combined Technical and Institutional Approach in Lao PDR

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**SUMMARY**

Lao PDR is a landlocked country in South-East Asia. The challenges in the country are related to the unplanned use of natural resources and related environmental degradation. Most of the ministries have already laid a good legislation to improve the situation, but actual implementation is delayed because of two reasons related to geospatial data. The first one is the lack of accurate and up-to-date data. The second is non-existing co-operation between different organizations. The objective of this paper is to review the main challenges in Lao PDR and how the approach implemented by National Geographic Department (NGD) and supported by Finnish funded Strengthening National Geographic Services (SNGS) has improved the situation. National Spatial Data Infrastructure (NSDI) is defined as a combination of technologies, policies and institutional arrangements that facilitate access to geospatial data. SNGS targeted to establish a sustainable NSDI in Lao PDR. The establishment is based on two approach method. The first is building up the technical capacity of NGD to create and maintain accurate and up-to-date data. This has included aerial photography of two thirds of the country (the remaining part will be photographed during dry season 2014-15), establishment of seamless GIS database and building up of a test Geoportal for data distribution. The second, institutional approach, targets to improve the co-operation between NGD and different organizations enabling data and information sharing. This has included the establishment of GIS committee and related technical working groups. Marketing workshops and seminars in Vientiane and in the provinces have been arranged. The first approach has increased NGDs technical capacity to produce accurate and up-to-date data and made it more known among other geospatial users. GIS-committee and related technical working groups have increased co-operation between NGD and different other organizations. October 2014 SNGS continued with an extension (SNGS-EP). The extension targets to further develop NGD as an institution. The newly approved (September, 2014) Decree on Surveying, Aerial Photography and Mapping has further improved NGDs position among other organizations. As a result of various meetings, marketing and contacts, which all have been supported by the technical assistance from Finland, NGD is now co-operating various other projects. Data distribution has been taken to a new level as well. In October, 2014, NGD decided to start the distribution of the orthophotographs free-of-charge to all government organizations. In coming future we will see the implications of this action.