

Concept of “Digital Sri Lanka”; development of spatial data base and sharing network

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Abstract

NARA is celebrating its silver Jubilee in February 2007, means that vast amount of data and information would have been gathered during its age of 25 years of Research and Development work. Unfortunately at early stage of its establishment, digital technology was not popular since the technology was not developed as today. However, the advanced digital technology, allow us generate data in digital formats, which are straightforward for archival, protection, distribution and sharing among scientists, environmentalists etc. This is a gateway to ocean and coastal data/information, ready to use effectively and efficiently.

Digital Sri Lanka (DSL) is a concept of spatial data/information generation, archival, and data distribution/sharing through internet for the country's development. In concurrence with the 25th anniversary of NARA R & D activities, the concept of DSL brought in to accomplish its wider objectives to find the way to future endeavors. Basically DSL has two components whose Land and the Ocean whereas the Coastal Zone is in between. Mostly the Survey department of Sri Lanka holds the leadership of land data management while NARA is responsible for ocean data management in the country.

DSL mainly focused on spatial data from Earth observing satellites, geographical data and related attributes data generated using RS, GIS and GPS technologies. It is expected that DSL to implement a web based data distribution service in Sri Lanka providing easy and effective access for data among scientist, researchers, and stakeholders for R & D. This is an attempt to prevent reproduction or repetition of data collection, instead to use available data efficiently and effectively. For instance, the DSL serves for Resources mapping, Resources management, Vulnerability mapping, Modeling and model validation, Environmental monitoring, Fisheries investigation, Multi hazard risk assessments, Disaster management, Coastal zone management etc.

Data in digital formats provides easy to use, updates and access from anywhere in the world through web and this will avoid time consumes for data creation and repetition of data creation or collection. Wider range of spatial data such as bathymetry, coastline, fisheries, water quality parameters, aquaculture, coastal land use, resource maps are needed for research and other applications. That data/information creation involves different techniques and thus needed to be available and ready to use by the other scientist. Need of a spatial data is indeed with the development of digital technology. The human life has become more and more sticking with the digital technology today hoping that no one can avoid it using in the competitive environment because its wider range of applications.

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