HIGH LEVEL FORUM ON GLOBAL GEOSPATIAL MANAGEMENT INFORMATION

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Global Challenges And Indian Initiatives *

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GLOBAL CHALLENGES AND INDIAN INITIATIVES

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GLOBAL CHALLENGES

Most of National Governments are now facing the challenge of:-

- How to clean up legacy problems, restore natural resources and achieve human health protection.
- How to design strategies to allow for future growth while protecting the environment, maintaining bio diversity, safeguarding and preserving cultural and social values.

TECHNOLOGY

- Powerful new technologies have emerged in recent years that greatly improves our ability to collect, store, manage analyze and utilize geo-information and to combine with these other type of social, economical and environmental information.
- Geo-spatial information has become an important tool which can help in addressing the today's emerging global challenges.

PROBLEMS

- Nation states are rich repository of spatial data sets pertaining to specific use.
- These data sets are not integrated.
- Standards and practices adopted vary from time to time.
- There are not common standards and interoperability.
- There is lack of International and Regional planning for Geo-Spatial Information.
- No global mechanism that can play the important leadership role of setting the agenda for the development of global geospatial information and promote its use to address key global challenges.

WAYS TO PROGRESS

- Nations and International organizations in the field of Geo-spatial technology needs to cooperate with each other.
- Common themes of data and standards for them are required to be developed and following of mutually accepted standards by all Nation members.
- Establishing policies and plan that ensure flow of data between different Nations.

<u>GLOBAL GEO-INFORMATION</u> <u>MANAGEMENT</u>

- GGIM will greatly help in management and analyses of large volume of data, allowing for better understanding of terrestrial processes and better management of human activities to maintain the world socio- economic and environmental quality.
- GGIM will certainly help in better coordinating the activities of Nations and other International organizations in this field by exchange of ideas and experiences.

INDIAN INITIATIVE

- India has established National Spatial Data Infrastructure for acquiring, processing, distributing and improving utilization of spatial data and to serve as a gateway of spatial data being generated by other agencies.
- NSDI has successfully brought out metadata and data exchange standards in tune with International standards.

INDIAN INITIATIVE

- National Map Policy of 2005 has adopted WGS-84 as reference coordinate system along with International system of numbering for all open series map/data in India.
- Indian Govt. has also adopted the role of coordinating and managing Geo-Spatial data and facilitating partnerships among consumers and producers of Geo-spatial Information.

INDIAN INITIATIVE

- India has launched a national e-governance plan to lay the foundation and provide the impetus for long term growth.
- The plan seeks to create the right governance and institutional mechanism for citizen and business centric environment.
- Geo-Spatial Information system and Spatial data infrastructure are important components of the plan.

Innovation in the Management of Geospatial Information in India

Geo Portals and Web Services

• Applications

Research & Development

Indo-Canadian Cooperation in S&T/ Geomatics

India Geo Portal's initial prototype(Dec 2009)

•Workshop on 'Standards and Technologies for SDIs' (Feb 2010)

•Dialogue on Landslide Early Warning System for Munnar, Kerala (Jan 2011)

•National Data Sharing & Accessibility Policy (NDSAP) (May 2011) (India Geo Portal)(

(India Geo Portal



Geo Portals – key features

- •WMS, WFS/ GML, CSW
- ISO/ OGC specifications
- •Re-engineering of available data with Surveys and Line Departments
- Multi-source data Visualization
- Demonstration and training



National Spatial Data Infrastructure



State SDI Agencies

- DSSDI: Delhi State Spatial Data Infrastructure
- KSSDI: Karnataka State Spatial Data Infrastructure
- KSDI: Kerala State Spatial Data Infrastructure
- NESSDI: North Eastern State Spatial Data Infrastructure
- MPSSDI: Madhya Pradesh State Spatial Data Infrastructure
- WBSSDI: West Bengal State Spatial Data Infrastructure
- <u>Village Information System</u>



Multi-source data visualisation



