# **Economic Cooperation Organization Capacity Building and Training Programmes**











# Virtual Capacity Building Workshop on

Regional Spatial Data Infrastructure (SDI) for Sustainable Development in ECO Countries

13 Sep -15 Sep 2021

#### I. Background

Spatial data is used for decision and policy making throughout the world. It is indispensable element of activities such as planning, implementation, monitoring and evaluation of socioeconomic development projects. The development of Geographic Information Systems (GIS) and related technologies over the last two decades has changed the way in which spatial information is handled by a wide range of public and private sector bodies throughout the world. However, the full potential of these technologies is unlikely to be realized until governments take necessary steps to create Spatial Data Infrastructures (SDIs) to facilitate access to spatial information assets that are held by various organizations to maximize their usage. As a result, governments all over the world are developing SDIs. The term Spatial Data Infrastructure (SDI) was coined in 1993 by the U.S. National Research Council to denote a framework of technologies, policies, and institutional arrangements that together facilitate the creation, exchange, and use of spatial data and related information resources across an information-sharing community. Spatial Data Infrastructure (SDI) is fundamentally a concept about facilitation and coordination of the exchange and sharing of spatial data between stakeholders from different jurisdictional levels in the spatial data community. Such a framework can be implemented to enable the sharing of spatial information at a national, regional, or global level. SDI that is implemented at regional level is called regional SDI.

The concept of regional SDI is not new. For example, member states of European Union (EU) started implementing regional SDI i.e. Infrastructure for Spatial Information in the European Community (INSPIRE) directive in 2007. In the Directive: "infrastructure for spatial information' means metadata, spatial data sets and spatial data services; network services and technologies; agreements on sharing, access and use; and coordination and monitoring mechanisms, processes and procedures...". Another example of regional SDI is, Asia-Pacific Spatial Data Infrastructure (APSDI). The APSDI is a network of databases, located throughout the region that provides insight to the fundamental data needed to achieve the region's economic, social, human resources development and environmental objectives. With this background, the question arises, why not to develop SDI for ECO member states. The establishment of regional SDI for ECO region, will act as a catalyst in regional efforts for promotion of scientific data & knowledge sharing, research and training in various fields of

geomatics, such as geodesy, cartography, photogrammetry, Geographic Information Systems (GIS), and Remote Sensing (RS).

#### II. About the Virtual Capacity Building Workshop

This Virtual Capacity Building Workshop will be jointly organized by Survey of Pakistan and Geological Survey of Pakistan with the support of Economic Cooperation Organization (ECO), is a six-session workshop held over three days. The programme is designed to raise and improve awareness, knowledge and understanding of the regional SDI, to introduce and inform participants from ECO region the overarching strategic framework, the implementation guidance, approach and available resource materials to operationalize the SDI according to their national as well as regional circumstances. It aims at sharing knowledge and experiences among ECO member countries engaged and interested in operationalizing country level SDIs, too.

The virtual capacity building workshop seeks to contribute to the strengthening of nationally as well as regionally integrated geospatial information management towards the production, dissemination and application of geospatial information for the implementation of national as well as regional development priorities. The workshop will provide networking opportunity to geospatial professionals of ECO countries for sharing knowledge and experiences.

#### III. Relevance of this workshop to the ECO Region

The Economic Cooperation Organization (ECO) region is facing multiple challenges such as COVID-19 pandemic, climate change, food security, quickly decreasing natural resources and energy crises. To address these challenges, collaborative efforts by the ECO member states are required. This includes sharing geospatial information. Regional SDIs are being implemented to enable sharing of geospatial information resources held by member states.

The establishment of Regional Spatial Data Infrastructure (RSDI) for ECO Region, will act as a catalyst in regional efforts for combating the challenges faced by the region as well as promotion of scientific data & knowledge sharing, research and training in various fields of

geomatics, including geodesy, cartography, photogrammetry, Geographic Information Systems (GIS), and Remote Sensing (RS).

### IV. Objectives

The objectives of the workshop are to:

- a) Raise awareness of, and improve knowledge and understanding on the use of spatial information for sustainable socio-economic development
- b) Introduce an approach to understand and prioritize challenges to implement regional
   SDI in ECO region
- c) Share ongoing national experiences in designing and developing country-level Action Plans towards SDIs.

#### V. Participants

The Virtual Capacity Building Workshop is open to interested participants from governments, but prior registration is required for all interested participants (<a href="https://forms.gle/Bpt6aurcsd6ex5BHA">https://forms.gle/Bpt6aurcsd6ex5BHA</a>). Participants are expected to be geospatial professionals of ECO Member States. They should have a desire to address and improve the availability, accessibility and application of geospatial information nationally and regionally, and to realize vital and integrative role of geospatial information.

#### VI. Provisional Annotated Agenda

The provisional annotated agenda for the Virtual Capacity Building Workshop is as follows:

| Inauguration of Workshop   |  |  |
|--|--|--|
| <b>Day 1: 13 Sep 2021</b> 12:00 pm – 14:00 pm (UTC+5, Pakistan time) | <ul> <li>Welcome address by Honorable Surveyor General of Pakistan</li> </ul>  |  |
|  | <ul><li>Group. Photo</li><li>Address by Deputy Secretary General ECO</li></ul> |  |
|  | <ul> <li>Spatial Data Infrastructure and INSPIRE</li> </ul>                    |  |
|  | By Dr. Jill Saligoe-Simmel , USA   |  |
|  |  |  |
|  |  |  |

| Status of SDI in ECO member countries  |  |  |
|--|--|--|
| Day 1: 13 Sep 2021 14:30 pm – 16:30 pm (UTC+5, Pakistan time) 17:00 pm – 18:00 pm (UTC+5, Pakistan time)   | <ul> <li>State of NSDI in Pakistan</li> <li>By Mr. Asmat Ali, Survey of Pakistan</li> <li>State of NSDI in Iran</li> <li>By Dr. Mohammad Ali Nezammahalleh, UT, Iran</li> <li>State of NSDI in Kyrgyzstan</li> <li>By. Dr. Zheenbek Kulenbekov, AUCA, Kyrgyzstan</li> </ul>  |  |
| Day 2: 14 Sep 2021 12:00 pm – 14:00 pm (UTC+5, Pakistan time)  | State of NSDI in Turkey By Mr. Abdulvahit Torun, MET University, Turkey      Detail ACDA   |  |
| Regional SDIs  |  |  |
| Day 2: 14 Sep 2021  14:30 pm – 16:30 pm (UTC+5, Pakistan time)  17:00 pm – 18:00 pm (UTC+5, Pakistan time)   | <ul> <li>Importance of Regional SDIs         By Mr. M. Khubaib Abuzar, Survey of Pakistan     </li> <li>Regional SDIs around the world         By Mr. Munir Ahmad, Survey of Pakistan     </li> <li>Regional SDI in Africa         By. Mr. Zerihun Amdemariam Berisso, DG LRIA Ethiopia     </li> <li>Need of Regional SDI for ECO countries         By Mr. Nayyar Saleem, Survey of Pakistan     </li> </ul>  |  |
| ECO-SDI  |  |  |
| Day 3: 15 Sep 2021 12:00 pm – 14:00 pm (UTC+5, Pakistan time)  Day 3: 15 Sep 2021  14:30 pm – 16:30 pm (UTC+5, Pakistan time)  17:00 pm – 18:00 pm | <ul> <li>Value of Regional SDI         By Mr. Ganesh Prasad Bhatta, Ministry of Land, Nepal</li> <li>Significance of SDI for socio-economic development         By Dr. Muhammad Ali Tahir, NUST, Pakistan</li> <li>Challenges for ECO-SDI         By Prof. Dr. Abbas Rajabifard (Tentative)</li> <li>Regional SDI in brief         By Dr. Arbind M. Tuladhar, Netherlands</li> <li>The Way forward         By Mr. Asmat Ali, Survey of Pakistan</li> </ul> |  |

#### VII. Organizers

Survey of Pakistan (<a href="http://surveyofpakistan.gov.pk/">http://surveyofpakistan.gov.pk/</a>) and Geological Survey of Pakistan (<a href="https://gsp.gov.pk/">https://gsp.gov.pk/</a>) will jointly organize the workshop with the collaboration of Secretariat of ECO (<a href="http://eco.int/">http://eco.int/</a>). The venue is <a href="mailto:Geoscience Advance Research Labs">Geoscience Advance Research Labs</a> Geological Survey of Pakistan, Park Rd, Chatta Bakhtawar, Islamabad, Pakistan.

Online link to the workshop: <a href="https://teams.live.com/meet/95840341072067">https://teams.live.com/meet/95840341072067</a>

#### VIII. Point of Contact

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