Expert Consultation and Meeting on Enhancing Geospatial Information
Management Arrangements and Accelerating Implementation of the Sustainable
Development Goals, and the Sub-regional Workshop on the United Nations
Integrated Geospatial Information Framework (UN-IGIF) for Central Asia, South
Asia, and neighboring countries

Implementing geospatial strategies: challenges and opportunities

Astana, Kazakhstan 15-19 September 2025









ISLAMIC REPUBLIC OF PAKISTAN SURVEY OF PAKISTAN











Pakistan's Status in Enhancing the Management and Use of Geospatial Information

- Survey of Pakistan leading to strengthen GIM & promote use of GI
- NSDI Feasibility Study completed in 2024
- Limited financing to initiate establishment
- Fragmented data across 34 federal & 74 provincial ministries
- Lack of common standards, legal framework & data-sharing policies
- Out of 1229, only 84 (7%) are geospatial data on open data portal with missing SRS
- Absence of skilled HR, modern technologies & Cyber Security protocols









Pakistan's Aim for Next Five Years

Strategic Pillars for Pakistan's NSDI

Governance and Institutions

Policy and Legal

Infrastructure and ICT Deployment

4
Data & Standards
(all stakeholders)

5
Capacity &
Education

6 Innovation, R&D

7
Outreach and
Engagement

8 Financial International/ Local
Partnerships









Enhancing Geospatial Information Management arrangements Accelerating the Implementation of the SDGs

Sub-regional Workshop on UN-IGIF for the Central Asia, South Asia and Neighboring Countries

Pakistan's Aim for Next Five Years

Proposed Roadmap

Phase	Start Date	End Date	Duration
1. Strategic Planning & Vision Alignment	Oct 2025	Mar 2026	6 months
2. Institutional Framework & Governance	Oct 2025	Sep 2026	12 months
3. Standards, Policies & Interoperability	Oct 2025	Sep 2026	12 months
4. Physical/ Data Infrastructure Development	Jul 2026	Dec 2027	18 months
5. Tech Infrastructure & Geoportal	Sep 2026	Aug 2027	12 months
6. Capacity Building	Jan 2026	Jun 2029	42 months
7. Pilot Project	Jan 2026	Jun 2027	18 months
8. Full-Scale Rollout & Improvement	Jan 2028	Jun 2030	30 months
9. Legislative & Policy Embedding	Jan 2026	Dec 2027	24 months
10. Outreach & International Collaboration	Oct 2025	Jun 2030	Continuous









Anticipated Main Challenges in Next Five Years

- Continued government priority and political support
- Non-allocation/ reduction in annual Government Budget (climate change effects)
- Securing alternate source(s) of funding and technical/ advisory support
- Timely roll out of NSDI at Federal and Provincial levels
- Capability of SoP to establish/ operationalize NSDI as per Government expectations
- Authenticity and Standardization of existing data
- Sharing of data by all stakeholders/ de-conflicting their interests









Potential Opportunities to Address the Challenges

- Growing realization in the Government about NSDI benefits
- Evidence-based policy making & reporting outcomes including SDGs
- Effective planning to obviate potential natural disasters in sync with Ministry of Climate Change and NDMA
- Better planning and execution of development projects
- Effective State Land Management
- Increase in agricultural productivity
- Efficient management of mines & minerals









Familiarity with UN-GGIM, UN-GGKIC, IGIF and CAP

- SoP participated in UN-GGIM session in 2020
- Aware of UN-GGKIC's role in strengthening capacity development
- SoP contributed to UN-IGIF Survey 2023
- Familiar with CAP but not yet prepared
- NSDI Implementation Roadmap (addressing all nine strategic pathways) has been proposed to the Government
- CAP will be made after formal Government approval for operationalizing the UN-IGIF aligned with Pakistan's priorities and circumstances









Support from UN-GGIM/ UN-GGKIC/ Other Partners

- Assistance by UN-GGIM
 - Obtaining funding & consultancy from international donor (World Bank, ADB, AIIB, UN agencies etc)
 - HRD through trainings/ courses
 - Implementing IGIF & Pak-NSDI
- Assistance by Member States
 - Collaboration for preparing tech framework
 - Technology and Software/Tools
 - HRD through trainings/ courses









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