National Geoportal Nepal: One step towards the establishment of Nepal's Spatial Data Infrastructure

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SUMMARY

The National Geoportal - Nepal is a groundbreaking initiative by the Survey Department (DS) within the Ministry of Land Management, Cooperatives, and Poverty Alleviation (MoLMCPA), Nepal. Its primary aim is to establish a comprehensive spatial data clearinghouse where all national-level spatial datasets and their associated metadata can be efficiently managed and shared through a single platform. This eliminates the need for users to navigate multiple websites for diverse data types originating from various departmental divisions. Traditionally, obtaining geospatial data in Nepal necessitated physical visits to the SD for individuals and organizations. The National Geoportal, now the exclusive national repository for geospatial data within the department, offers a user-friendly alternative. It boasts a range of functionalities and software modules, including user management, data upload, metadata management, data visualization, data purchase, and data export features.

The development of this geoportal was highly participatory. The technical team, led by NAXA, employed a participatory approach by extensively engaging with departmental staff from various divisions. They conducted user need assessments to identify system requirements, held consultations with officials, and designed the platform accordingly. Since its inception in 2019, the platform underwent significant updates in 2022, including the integration of a data purchase module through the online Connect IPS system so that users could purchase the data entirely online. This addition streamlines the data procurement process and makes it more convenient for users compared to physical visits to the department. This digital integrated geoportal serves as both a data and metadata repository and a catalyst for enhanced decision-making among government entities and stakeholders. The updated version ensures data accuracy and opens doors for collaboration with other ministries on a shared platform.

In Nepal's transition to a federal state, it is essential to consider decentralizing the national geoportal, allowing all three tiers local, provincial, and national local governments to have their version of geoportal. This step would align with the evolving governance structure in the country and would also help to reduce duplication of efforts when it comes to data collection and management at local level. Furthermore, another major challenge lies in the data sharing among the government organizations. Different other government organizations have their own data portals. Hence, the SD in the coming days needs to focus on interoperability, developing of APIs so that data sharing becomes easier among the government agencies as well thus making the national geoportal as the single data repository serving all needs related to baseline databases.

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