Field Trip Report: Survey of Bangladesh, Digital Mapping Unit

Date of Visit: 05/03/2024

Location: Survey of Bangladesh, Digital Mapping Unit, Dhaka

Participants: Students of CE, and EWCE departments of MIST along with respected faculties

Objective of Visit:

The objective of our field trip to the Survey of Bangladesh's Digital Mapping Unit was to have an eye-opening insight into the processes involved in digital mapping, geospatial data collection, and the utilization of such data for various applications.

Activities and Observations:

Introduction and Group Division:

Upon arrival, we were greeted by the staff of the Digital Mapping Unit who provided an overview of the day's activities. We were divided into eight groups, each with a designated sequence of visits to different units within the facility.

Unit Visits:

1. Geoportal Unit: My group, Group 8, began our visit with the Geoportal Unit. Here, we learned about the compilation and dissemination of geospatial data through the Geoportal website (https://geoportal.nsdi.gov.bd). The staff demonstrated various mapping resources available, including topographic maps, water line maps, and navigation services.

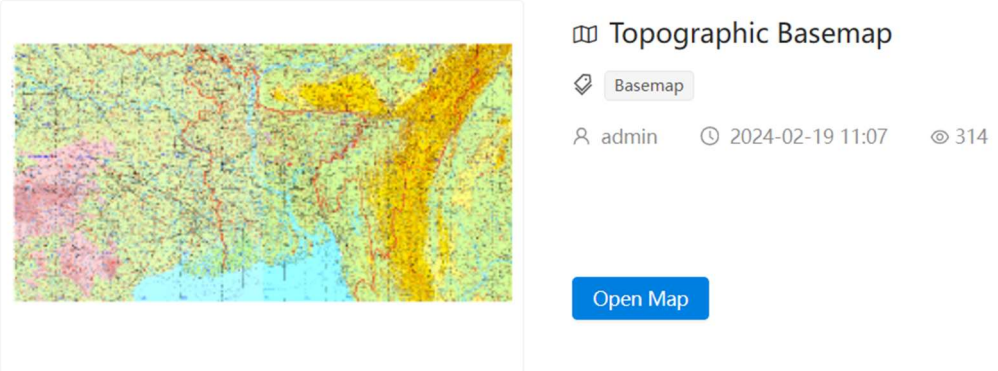


Figure 1: Topographic map from Geoportal website.

2. Cartography Unit: Following our visit to the Geoportal Unit, we proceeded to the Cartography Unit. Here, we witnessed the compilation of data into maps of different

scales. The staff explained the process of map production and the importance of accuracy and precision in cartographic representation.

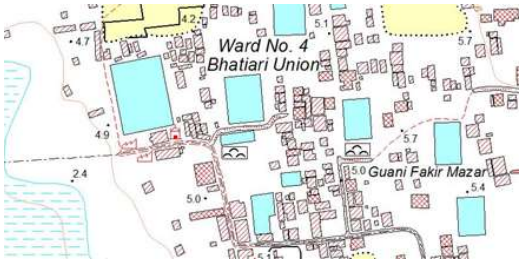


Figure 2: Scale 1:5000



Figure 3: Scale 1:25000

3. Briefing Session: After visiting the Geoportal and Cartography Units, we attended a briefing session where we learned about the history and operational procedures of the Survey of Bangladesh. The session provided valuable insights into the organization's role in geodesy and digital mapping.
4. GIS Unit: Following the briefing session, we visited the GIS Unit, where we gained an understanding of data verification and refinement processes. We learned how GIS technology is utilized to analyze and manipulate spatial data for various purposes.
5. Photogrammetric Unit: Our final stop was the Photogrammetric Unit, where we learned about the process of combining aerial and drone photography to create detailed maps. The staff demonstrated how points, lines, and polygons are drawn over photos, and structures are identified and mapped.



Figure 4: Source http://sob.gov.bd

Insights and Learnings:

We gained an appreciation for the meticulous processes involved in digital mapping and geospatial data management.

Understanding the workflow from data collection to map production provided valuable insights into the importance of accuracy and quality control in digital mapping operations.

Learning about the diverse applications of geospatial data, including urban planning, disaster management, and navigation, broadened our understanding of its significance in various sectors.

Conclusion:

Our visit to the Survey of Bangladesh's Digital Mapping Unit was highly informative and enriching. We extend our gratitude to the staff for their hospitality and for sharing their expertise with us. The experience deepened our understanding of digital mapping technologies and their applications, and we look forward to applying this knowledge in our academic and professional pursuits.

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