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# FOREWORDS



Survey Department Nepal, besides regular responsibilities, has been contributing in knowledge and information sharing in the field of surveying and mapping through its annual publication and has come up with the 22nd issue of “Journal on Geoinformatics, Nepal”. I would like to congratulate Editorial Board and express my gratitude to all the contributor for giving this journal to its shape.

Survey Department's contribution to national development is significant. Through accurate surveying, mapping, and geospatial information services, it supports land administration, infrastructure development, urban planning, natural resource management, disaster management, and various sectors of the economy. The department's work is instrumental in fostering economic growth, ensuring sustainable development, and improving the overall well-being of citizens.

In recent time, Survey Department has initiated adopting modern technology in surveying and mapping sector to make its services effective, efficient, transparent and reliable. Modern technology has revolutionized the way we understand and interact with our physical environment. With the introduction of high-precision instruments such as GPS (Global Positioning System), LiDAR (Light Detection and Ranging), and remote sensing, surveyors can capture highly detailed and precise data about the Earth's surface. These advancements in technology have not only enhanced the accuracy and efficiency of surveying and mapping processes but also opened up new possibilities and improved decision-making, and minimizes the cost of project.

One among the many remarkable initiatives, that the Survey Department has started, is online based Cadastral service system termed as Nepal Land Information System (NeLIS) and “MeroKitta”. Citizens can receive the basic cadastral service such as map print, field book print and plot register print without visiting the office. Parcel subdivision and map updating can be carried out online. Currently this service is available in 53 offices but the Department is planning to rollout the system in all district level offices in near future. Similarly, the Department has envisioned to establish a network of Continuously Operating Reference Station

(CORS) throughout the country and strengthen the Geodetic control Network. It is expected to improve the quality of surveying and mapping services through operationalizing CORS in the days to come.

I would like to express my sincere appreciation to the fellow colleagues, the members of Advisory Council and the Editorial Board for their invaluable contribution in this issue. The team deserves special thanks for their tireless efforts in bringing this issue in the stipulated time. More importantly, I extend sincere gratitude to all the authors for their resourceful professional contribution. I further request all concerned professionals for their kind support and professional contribution in the upcoming issues too.

Thank you, and enjoy Reading !!!

Janak Raj Joshi, Director General

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# EDITORIAL

Survey Department, the national mapping agency of Government of Nepal is conducting many different activities in the field of Surveying and Mapping. Besides the technical activities in this field, department is also contributing in academic sector of this field by publishing journal on different research and findings about geoinformatics through “Journal of Geoinformatics, Nepal”, the annual publication of the department. Editorial board is happy to share the 22<sup>nd</sup> issues of this journal. The journal has been a platform for sharing information on geoinformation and its wide range of application for the researchers and professionals working in this field from wide range of community including government, non-government, international organization as well as universities. Editorial board believes that this has also supported in professional development through knowledge sharing in the field of surveying, mapping and geospatial technologies.

Driving from the first issue since 2002 till this 22<sup>nd</sup> issues, the journal has covered from the history of the surveying and mapping to the latest technologies in this field. The editorial board like to thank sincerely to all those authors who contributed in making the successful publication of the issues and also to the Advisory Council and the editorial for making this happen. This issue is also the continuous product of the previous efforts. This issue also as in previous one, includes interesting and worth reading papers related to geospatial technologies and its applications and findings.

I am also thankful to Survey Department for providing me the responsibility of the Editor-in-Chief for this 22<sup>nd</sup> issue of the journal. With the continuous guidance and critical comments from the advisory board have been able to bring this issue of the journal for readers. On behalf of all the members of the Editorial Board, I would like to express sincere thanks to all contributing authors, paper reviewers, members of Advisory Council and all other persons who have contributed for the publication of 22<sup>nd</sup> issue of the journal.

At last, on the behalf of Editorial Board, let me humbly request all of you to contribute your valuable articles, research papers, review papers for the upcoming issue of this journal.

**Karuna K. C.,**  
Editor-in Chief,  
Jestha, 2080 (May 2023)

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