Empowering Communities in the Global South with Geospatial Technology for Sustainable Development

Wambayi Wabwire (Kenya), Coughenour Amy and Kemper Rudo (USA)

Key words:Access to land; Capacity building; Geoinformation/GI; Security of tenure; Young
surveyor; Community Led; Geospatial technology

SUMMARY

The past decades have seen significant improvements in geospatial technologies. For example, the advent of phone GPS has considerably improved geospatial data capture and, in a way, democratized surveying. At the backdrop of this geospatial revolution is the need to innovate land administration practices in line with the joint FIG and World Bank Publication "Fit-for-purpose Land Administration" and the FAO Voluntary Guidelines on the Responsible Land Governance, which have called for the use of viable, practical solutions that are quick and affordable in securing tenure rights, while involving, and recognizing communities as an equal co-producer of knowledge in the land administration processes. At the same time, the government is the custodian of land records.

Employing new geospatial technologies in land administration processes, such as using smartphones for demarcation, offers opportunities for community members to be involved in the demarcation process, not as observers but as experts -they are in their matters, further strengthening their land rights. Moreover, these technologies are simple and do not need highly specialized knowledge; hence they can easily be deployed and transferred. In addition, geospatial technologies can considerably reduce the cost and time of conducting surveys and other related land administration exercises.

Technology and society are mutually constitutive for successfully implementing participatory community mapping using geospatial technologies. Special attention need to be paid to the intersection of technology and society. The implementation and use of geospatial technology in land administration as an end without recognizing and appreciating the social aspects exacerbate inequalities in the community or a region. And lock out communities or limit the much-desired and vital community participation in land administration processes.

Empowering Communities in the Global South with Geospatial Technology for Sustainable Development (12173) Wambayi Wabwire (Kenya), Coughenour Amy and Kemper Rudo (USA)

FIG Working Week 2023 Protecting Our World, Conquering New Frontiers Orlando, Florida, USA, 28 May–1 June 2023 This paper contributes to the body knowledge of how geospatial technologies, such as mobile devices, can be effectively employed to catalyze communities' actions to secure their land rights, environmental ecosystems, and biodiversity through sharing Cadasta Foundation's experience in using simple-to-use geospatial technology-enabled communities to map, legitimize, and defend their land rights in the global south.

Empowering Communities in the Global South with Geospatial Technology for Sustainable Development (12173) Wambayi Wabwire (Kenya), Coughenour Amy and Kemper Rudo (USA)

FIG Working Week 2023 Protecting Our World, Conquering New Frontiers Orlando, Florida, USA, 28 May–1 June 2023