A Blended Learning for Realizing a Mixed Reality in Cadastral Survey Projects

Trias Aditya (Indonesia)

Key words: Cadastre; Capacity building; Digital cadastre; Education; AR/VR, mixed reality, FFP, Blended Learning, Cadastral Survey

SUMMARY

Under the current legal and institutional framework, systematic land titling activities from village to village are impossible without a complete cadastral map and active participation from communities and government officers. Combining modern survey techniques and community participation applying Fit for Purposes Land Administration (FFP-LA) principles is sought to accelerate and assure the quality of the systematic land titling. The standard data collection approach often requires the same-time same-place type of interactions. Unfortunately, ownership disputes remain high, and landowner participation is not optimal. This work sees that major cadastral survey activities have been applying the same time-same place interaction only. In contrast, other types of interactions, e.g., same-time different-place interactions utilizing Augmented Reality/Virtual Reality (AR/VR) technology for the cadastral survey, have not been considered and tested. This work tests the potential use of AR/VR for cadastral survey activities. The method is proposed as an option to accelerate completeness and landowner participation for supporting FFP-LA implementation. Unfortunately, a capacity building to shift the paradigm from a top-down traditional cadastral survey into a bottom-up modern cadastral survey for accelerated land registration is lacking. The work develops a learning platform applying blended learning practices in FFP Cadastral Survey (FFP-CS), including AR/VR technology for both in-house students and para surveyors (i.e. local representatives in the community) across the country. This blended learning program of mixed reality for cadastral survey projects is expected to speed up the surveyor and community readiness to ease landowner participation and to accelerate completeness in physical and legal data validation.

A Blended Learning for Realizing a Mixed Reality in Cadastral Survey Projects (11242)
Trias Aditya (Indonesia)

FIG e-Working Week 2021
Smart Surveyors for Land and Water Management - Challenges in a New Reality
Virtually in the Netherlands, 21–25 June 2021