

# Together, AI and GIS Strengthen Land Administration in Oman

Linda Foster (USA) and Mazin Al-Shahwarzi (Oman)

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## SUMMARY

With many countries being challenged by discrepancies between rights-restrictions-responsibilities, and cadastre and registry, there is an urgent need for alignment between these to enable governments to implement and meet sustainable development goals.

To address this in the Dhofar governorate of Oman, there was a need to consolidate land tenure for capturing and registering unlicensed acquisitions and (re)establish missing linkage between registry and cadastral plans. A task, which by traditional means of field surveying and manual data gathering, was seemingly insurmountable.

However, by leveraging GIS with embedded technologies such as AI, imagery analysis, and Lidar classification, a successful pilot project was completed. Covering five wilayats, the project accomplished its objectives by establishing an accurate land tenure system, including provisions for urban planning rules, and automating the issuance of legal documents such as deeds and krookies as well as communication with citizens.

This paper will explore the technologies and approaches used, a summary of results, and a look at challenges and lessons learned. Future phases of work will also be discussed.

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