## Land Governance Lost in Translation - Exploring Semantic Technologies to Increase Discoverability of New Technologies & Data

Lisette Mey (Netherlands), Stacey Zammit (Canada) and Laura Meggiolaro (Italy)

**Key words:** Capacity building; Standards; open data, big data, semantic technology, language, thesaurus, data discoverability

## SUMMARY

Land is a topic that is debated in many languages, across different (academic) disciplines and in all parts of the world. Furthering our collective agenda, sharing and learning from knowledge and perspectives from other contexts, or transitioning technological innovations from one country to the other is complicated by - among many other aspects - language and terminology barriers. Many attempts have been made in the past to find common definitions and terminologies for issues related to land, but a wide consensus or adoption has never been reached. Understandably so: one can only imagine the heated and controversial discussion to reach agreement on what we mean exactly when we use the word 'property'. It simply does not have the same meaning in each country or context. It is a daunting and arguably impossible task to reach this global consensus.

In this paper, we would like to explore whether we can gain inspiration from how semantic web technologies have overcome knowledge-sharing challenges in other sectors, such as the agriculture sector. We have seen how a controlled vocabulary such as AGROVOC, has helped no less than 10 million users a year in overcoming the language barriers we just described. Through AGROVOC's technical infrastructure, computers can read concepts beyond 0s and 1s and understand how 'maize' as a concept is the same as 'Maïs' in French or 'العارية' in Arabic. Translations, synonyms and relationships of this one concept are captured in one unique code, a 'Uniform Resource Identifier' (URI), that computers, including search engines, can read and understand. AGROVOC is used by 1.8 million users per month to classify agriculture data and bibliographic resources, increasing visibility and discoverability of agriculture data and information to an immeasurable scale.

With emerging technologies, new tools and ever-growing amounts of land data, we face a very real risk of losing the overview. Without this overview, data is much less likely to be used and thus be useful. In this paper, we will present our research on building on and enriching the AGROVOC

Land Governance Lost in Translation - Exploring Semantic Technologies to Increase Discoverability of New Technologies & Data (10648) Lisette Mey (Netherlands), Stacey Zammit (Canada) and Laura Meggiolaro (Italy)

FIG Working Week 2020 Smart surveyors for land and water management Amsterdam, the Netherlands, 10–14 May 2020 thesaurus to include more land governance terms and whether and how this will lead to increased visibility and use of land data. We would like to share our experiences and challenges in expert consultations to reach consensus on land terminologies and what the possibilities are for the land sector to be part of a widely used tool like AGROVOC.

Land Governance Lost in Translation - Exploring Semantic Technologies to Increase Discoverability of New Technologies & Data (10648) Lisette Mey (Netherlands), Stacey Zammit (Canada) and Laura Meggiolaro (Italy)

FIG Working Week 2020 Smart surveyors for land and water management Amsterdam, the Netherlands, 10–14 May 2020