

STEPPING INTO THE WORLD OF CADASTRE

HABTEMICHAEL WELDEGEORGIS REVEALS HOW CONTACTS AND PERSISTENT LEARNING HAVE HELPED HIM IN HIS WORK AS DIRECTOR GENERAL OF ERITREA'S CADASTRAL OFFICE, INCLUDING BUILDING UP A CADASTRAL SYSTEM FOR THE COUNTRY

I was a second-year law school student at Haile Selassie University, Addis Ababa, Ethiopia, when I discontinued my study to join the Eritrean People's Liberation Front in February 1972. After 19 years of participation in the Eritrean armed struggle for liberation and detachment from academia for 25 years, I pursued higher learning and earned an MSc in development management through distance education from the UK's Open University.

In 1998, I was assigned as director and, in 2003, director general of the Eritrean Cadastral Office. At that time, I had no notion or prior exposure to the concept of cadastre. The cadastral system in Eritrea has existed since it was introduced during the Italian colonial administration at the end of the 19th century. For more than a century, it functioned as a simple manual register of buildings, mainly in urban areas. The transaction of immovable property registration was based on providing repetitive property reference numbers, which exaggerated the amount of immovable properties registered. To manage and develop such a traditional cadastre into modern one without any knowledge of the field was a formidable task to undertake.

To upgrade my knowledge, I applied to participate at the FIG Working Week 2009 in Eilat, Israel. I prepared a peer-reviewed paper entitled, The Cadastral System in Eritrea: Practice, Constraints and Prospects. This opportunity was an eye-opener and changed

my world. The contacts made at the working week opened new doors for me. I was now not only equipped with valuable contacts but also with a range of information, learnings and knowledge.

And then what?

I have been so lucky to be able to participate in several FIG Working Weeks and they have been my learning grounds, which have enabled me to make significant advancements in the building of a cadastral institution in Eritrea. I brought home information from senior heads of mapping and cadastral organisations worldwide on important concepts and techniques that were discussed and shared. I benefited from these relevant global cadastral and mapping communities and became acquainted, broadened and deepened my

knowledge with new cadastral approaches and concepts. I was really exposed to a world class of experts, learned first-hand insights from these seasoned professionals, learnt from other countries' experiences and best practices on cadastral systems, and developed personal networks and friendships on the field.

I realised the importance of a land information system that has nationwide coverage for proper management of land and its resources. Accurate and comprehensive data enables management at various levels to undertake well-informed decisions. Taking the lessons, we are trying our best to register all land and other immovable properties by implementing mandatory registration and digitising available cadastral data. We had a cadastral system that worked manually, but now we have developed a computerised database, although the spatial data is yet to be integrated with the textual data. The cadastral system shall, in the meantime, gradually develop into a full digital cadastre. We are developing our cadastral system without negating the old works, learning from others' best practice, referred as 'progressive cadastre'. Through a fair registration fee and a relatively fast and transparent registration process, we are endeavouring to ensure customer satisfaction. The necessity of integrating cadastre and land administration systems is also well-realised; however, its implementation to a great extent depends on time, policy and capacity development of related government institutions.

Asmara's Fiat Tagliero was constructed in 1936



In addition, the importance of geospatial data and geospatial planning for management at various levels is well-conceptualised from my learnings through FIG and through the possibility of communicating directly with the best experts in the world. But, its implementation depends on the availability of geospatial data, which so far is a gap that requires the development of capacities of related institutions in terms of personnel and equipment. The concepts of Cadastre 2014 and 2034 are fine on conceptual levels, but are not our current priorities. Cadastre 2014, for example, advocates survey accuracy and thus is modelled for the developed world, ignoring the needs of the developing world where cadastral coverage is only about 30%. In such circumstances, where conventional cadastres become obsolete, the 'fit-for-purpose cadastre' where general boundaries are used become appropriate.

A flexible approach

This approach to land administration, which uses the social tenure domain model (STDM), is flexible, inclusive, affordable and upgradeable whenever conditions are ripe. Through this approach, unplanned houses, for example, registration of land purchased from right holders (land sale is illegal in Eritrea) where dwelling houses are built without proper plan and permit, was introduced at the beginning of 2016. We are providing certificates of 'temporary registration' with the intention of providing permanent certificates when they are upgraded and given building licence at later stages.

Moreover, addressing the issue of sustainable cadastre is of paramount importance. The Eritrean service charge fee was arbitrary. It continued until 2000 and later beyond when attempts were made to improve the fee, but were still arbitrarily. This year, for the first time, we have introduced a service charge regime based on the value system that could contribute towards institutional sustainability. The traditional record-keeping system that



Asmara's Testing Center was constructed in 1915

existed for more than a century has also been transformed into modern record-keeping system based on the country's ZIP codes. A study, for example, shows a house transferred 13 times having different reference numbers. This repetitive process, which exaggerated the amount of immovable property registered, was transformed; a permanent reference number for any immovable property was provided.

The old manual cadastral records have to be digitised to be integrated with the database. For this purpose, a study is being undertaken to identify these records and how to scan and digitise them. The study is expected to be finalised by the end of the year.

Cascading model

Furthermore, it has been understood that capacity development of the staff is of high priority and at the core of a cadastral system. For this purpose, printed cadastral materials from various authors and my peer-reviewed papers were translated into Tigrigna, one of Eritrea's national languages, to serve as a manual. This includes: cadastre and



The author in his office

its importance, development of cadastral systems, various global cadastres at work, Cadastre, a Land Information System, records management, and notary public and its importance. Cadastral Template 2.0 for Eritrea was prepared and is currently being revised.

In short, we have developed a clear vision of where we are, what gaps we have, and where and how to go forward, irrespective of the challenges.

Finally, the peer-review papers I prepared for FIG Conferences were learning processes that broadened my knowledge and research skills on the field. This experience has enabled me to orient and lead a cadastral system that has shown modest progress. Although we have a long way to go to develop a modern cadastre, which is a basis for sustainable development, I believe that we are on the right track. This professional and personal journey has been beneficial for my institution's development and inspiring for me personally. I have been thrilled to stay on course with FIG and its efforts.

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The author at FIG Working Week 2017 talking with Punta Prasat Pli from Nepal before the plenary presentation.