## **UN-GGIM** in Singapore

Between May 16-20, the UN-GGIM and the Singapore Land Authority (SLA) jointly organised an expert meeting and international seminar together with the United Nations Expert Group on Land Administration and Management (EG-LAM).



The expert meeting particularly focused on translating concepts into practice to implement the Framework for Effective Land Administrations (FELA) at regional and at the country level. It also discussed issues and opportunities for inclusive, integrated, and effective land administration. Alongside, the international seminar included sessions on the availability and accessibility of reliable, up-to-date, high-quality land information; restrictions and responsibilities for secure land and property rights; built environment and the cadastre; integrating the terrestrial, cadastral and maritime domain; effective land administration for the wellbeing of society, economy and environment.

| Eva-Maria Unger

### **SPATIAL II in Albania**

In late January, we visited our sister organisation the State Authority for Geospatial Information (ASIG) in Tirana, Albania, for the ongoing SPATIAL II project. Together with ASIG, we looked back on last year's activities, the online workshops and webinars and we discussed the regional workshop planned in Tirana in June 2022. While in Albania, we reviewed and gave advice on the IT-Infrastructure on ASIG-implementation. And also shared knowledge of the Kadaster IT-architecture; the current situation, software-stack, architecture, steps and lessons learned, data harmonisation and data quality control from a Dutch perspective. Specifically, we talked about the usage of the IT-tool 'Docker': how to start small/local pilots, gain experience and organise maintenance.



For the upcoming study visit to the Netherlands, ASIG is interested in getting to know more about monitoring, remote-sensing, data-use processes and the data workflow, IT-architecture and topographic maps.

| Vincent Verheij, Jeroen Hogeboom and Wouter Visscher

## Small Talk

### Making progress in Benin

The 4-year Beninese land administration modernisation project is now in its final year. About 50 field teams are currently collecting data in 10 municipalities. Meanwhile, the cadastral system is being developed in a Scrum/



Agile approach, with strong involvement of end users . A sustainable national cadastre needs a firm foundation. That is why the project supports the national cadastral agency in defining a strategic plan, a national data collection plan, a sustainable financial model and an IT master plan.

### LAND-at-scale in Rwanda

Meetings with stakeholders and the management of the National Land Authority provided useful input for the implementation phase, starting in August 2022. The Dutch embassy, RVO and National Land Authority as members of the project steering committee were actively involved in adjusting the inception programme for actuality and priorities. The inception report will be available by August 1st.

### Facts & figures for the Netherlands

The World Bank gathers land administration data from many countries to monitor the Sustainable Development Goals indicators. Kadaster recently reported on key 2021 land administration figures for the Netherlands and Amsterdam city. The aggregated data showed that 10,6 million properties are registered, 386.523 sales transactions were made, and 547.015 mortgages were registered. For Amsterdam city, 502.695 properties are registered, 16.701 sales were made and 24.629 mortgages were registered.

## O1 International Symposium 'Bringing networks and knowledge into practice'

Kadaster organises this symposium with the joint farewell of Chrit Lemmen and Kees de Zeeuw, leaving Kadaster International. Network, knowledge and practice: three elements to achieve effective land administration systems that provide humanity with security of land and property rights. Since the start of Kadaster International, these elements defined our approach and ensured that we could generate impact.

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# Fast-tracking digital transformation in Armenia

The Cadastre Committee of Armenia and Kadaster have been collaborating on the 'Digitalisation of Cadastral Data in Armenia' project since February 2020. The Committee administers and records land transactions, and maintains an archive of 2.4 million cadastral files consisting of 123 million individual sheets.

The starting point of the project coincided with the WHO declaration of the COVID-19 pandemic. This disruption speedily resulted in transferring activities online across 2020 and 2021. These included undertaking collaborative research sprints to assess Optical Character Recognition (OCR) and Intelligent Character Recognition (ICR) technologies; webinars on international standards for digital archive and paper archive management; and the development of a 2-staged digital transformation agenda, including the short-term move towards a hybrid paper-digital environment, and the subsequent fully digital environment. A special challenge for Armenia is that it has its own unique language and alphabet consisting of 38 letters – and many of the paper documents are handwritten.

### One-stop-shops with digital service booths

In 2022, face-to-face visits resumed. In April, a team from Kadaster could see, first-hand, the significant digitalisation progress by the Cadastre Committee. This included the establishment of brand new physical one-stop-shops, furnished with digital service booths and counters, a brand new easier to use public-access web portal, and automated workflows with the back office for validation and approval of submitted documents. The team conducted refresher workshops on both the hybrid and full digital transformation







strategies, and also showcased developments occurring at Kadaster. The visit also facilitated a new dialogue between the National Archives of Armenia and the Netherlands.

### Front-runner

The Cadastre Committee is now considered a front-runner in service digitalisation in Armenia, with an increasingly positive public profile. It is seeking to build partnerships to support and share data with other providers of essential data services. The next phase of the project will see leaders and experts from the Cadastre Committee visit Kadaster in the Netherlands.

| Rohan Bennett, Vincent Verheij and Eva-Maria Unger

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And there it was! The thrill of a live network. In the past months, it was finally possible for many of us to attend live meetings, conferences and workshops again. At first it was overwhelming - the dynamics, the abundant knowledge, and the many people to (re)connect with. But apprehension soon turned into inspiration and energy to push boundaries and jointly address the grand challenges to make our world a better place for all.

It is our responsibility to dedicate our knowledge, experience and capacity to create societal impact. We are the generation that can end extreme poverty, properly address climate change, social injustice and gender inequality. We all need to take action, speak up and share our stories.

Our global challenge in the domain of land administration is that a large proportion of humanity does not enjoy secure land and property rights. We need to speed-up our efforts to document, record and recognise people to land relationships in all their forms. We as decision makers, experts and beneficiaries, need to collaborate in achieving common goals. Together, we must make sure we understand the needs and requirements, involve our network, and enable the next generation to continue. By strengthening partnerships and bringing together different perspectives, we stimulate creativity and innovation.

Over many decades, Chrit Lemmen and Kees de Zeeuw have embodied this attitude. They actively advocated (and continue to advocate) for effective land administration in local, regional and global networks. Both invested in the development of approaches, models, frameworks, and people to achieve our common goal.

Both are now moving on—so, we want to give them the stage during a live symposium - to inspire and energise our community. We are inviting colleagues and friends from our network to share knowledge and practical experiences, as well as their vision on how we as a community can contribute to the challenges that lay ahead. Please join us, online or in Apeldoorn on September 1 2022, for this event.

Paula Diikstra

## Update on modernising land registration in Indonesia

After COVID-19 disrupted 2020-21, face-to-face missions will recommence between the Indonesian Ministry of Agrarian and Spatial Planning/National Land Agency (ATR/BPN) and Kadaster in June 2022. Online activities across 2020-21 included a high-level collaborative analysis and a report on the state-of-play of digital transformation in the land sector; multiple webinar series including the UNGGIM Integrated Geospatial Information Framework (IGIF), Land Administration Domain Model (LADM, ISO 1952) and other international standards, data quality issues, supportive legislative and policy frameworks, provision of e-services, and plans for 3D-cadastre implementation. Aggregated attendance from ATR/BPN staff totalled over 1.000 participants. The upcoming mission will focus efforts on areas of the project that were more difficult to complete online-including the next generation of participatory data collection techniques, field visits, and digital and paper cadastral archive management.

| Rohan Bennett, Eva-Maria Unger and Haico van der Vegt

## **Digital innovations for South Africa**

Between 4 to 8 April, Kadaster took part in an innovation work visit on digital transformation to South Africa. The main aim of was to assist in the activation of a new land administration stakeholder network in the country, and to gain more understanding of current land governance challenges. The visit helped us to further prepare for an upcoming project that aims to design a pilot project for a land administration prototype system. During the work visit, RVO, the Dutch Embassy, PSPS-Business Abroad and Zurcom International organised meetings with stakeholders from NGOs, knowledge institutes and private companies.

| Christelle van den Berg

## **Combating deforestation with land rights**



An outdated cadastre, corruption, and land insecurity. These are the major drivers of deforestation, invasion of cattle farming, illegal logging and mining in Amazonian Colombia. 3 million hectares of forest disappeared between 2000 and 2020. Pressure on national parks and the peasant reserve for further deforestation are high. Deforestation is low in ethnic territories, mainly because of remoteness and inaccessibility. It is sometimes perceived as necessary to prove or assure ownership. Therefore, good land administration is an important ingredient in helping maintain forests. Kadaster works on projects in Brazil, Colombia, and Indonesia to clarify land rights and so help to reduce deforestation, as it occurs mostly on undesignated land.

| Bastiaan Reydon and Stephan Honer

## Unlocking the wealth of spatial data in St. Lucia

After two years of pandemic restrictions, it was finally possible to start with the extension of the St Lucia NSDI project, originally kicking off in 2019. A team of Kadaster and KU Leuven (Belgium) visited St. Lucia to follow up on the further development of the spatial data infrastructure (SDI) of St. Lucia, part of the Disaster Vulnerability Reduction Project, funded by the World Bank.

With the focus this time on implementation, the SDI of St. Lucia is aiming at unlocking the wealth of spatial data that is already out there. By putting these data in the hands of decision makers, it will improve the quality of their decisions on physical and infrastructural planning, disaster response and resilience building. It also includes the provision of enhanced services to the citizens and other users. All going well, the consultancy is scheduled to conclude in April 2023.



Haico van der Vegt

## "Reliable geo-information is vital"

Nowadays, armed forces must be adaptable, with faster response times, in more diverse countries. Therefore, the Ministry of Defence and Kadaster recently signed a new agreement to allow for sharing and delivery of more adaptable geo-information products and services such as imagery, elevation data and topographic maps.

### Military maps

"Basically, we supply 24 products of the Netherlands at different scales, derived from the Key Register Topography," says Ronald Exoo, relations manager at Kadaster. "Internationally, we are mapping other countries within the Multinational Geospatial Co-production Programme." By adding specially collected data to civilian maps, they become military maps. "For example, in the Aeronautical Obstacle Map, we add obstacles in the terrain, so helicopters can fly and land safely."

### Geo-information you can rely on

Commander Marcel van Loon remembers the flight MH17 disaster in which a civilian airplane carrying many Dutch passengers was shot down during a flight above Ukraine in 2014: "Soldiers had to go to Ukraine quickly. In such situations, you need validated geoinformation you can rely on, not an outdated Google Maps photo."

"During all missions, you must be able to navigate on geo-data. Reliable geo-information is vital."



Marcel van Loon – Commander at Ministry of Defence

### **Adaptability**

The basis of the new agreement is adaptability and flexibility. That means less fixed products and an innovation budget to deploy knowledge ad hoc, as needed. The 10-year agreement ensures both parties retain knowledge and skills. Van Loon: "We are doing really different things than we did five years ago; we have become proper partners."

| Karl Adams

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