Strengthening the Eastern Africa Land Administration Network (SEALAN) Project in Enhancing Inter-University Collaboration in Land Administration Eastern Africa

Monica LENGOIBONI, the Netherlands, Karume KATCHO, Democratic Republic of Congo, David SIRIBA, Kenya, Ronald SSENGENDO, Uganda, JOSSAM (Rwanda) Christiaan LEMMEN and Jaap ZEVENBERGEN, the Netherlands

Key words: University Network; inter-university collaboration; land administration education; Eastern Africa Land Administration Network (EALAN), land governance

ABSTRACT

The Eastern Africa Land Administration Network (EALAN) has since 2006 been collaborating with the view to support the development of education, short courses for land professionals and research. The network, currently constitutes 13 member institutions in the eastern Africa region. The purpose of this study is to present the establishment, activities and the results of the Consortium on Strengthening the Eastern Africa Land Administration Network (SEALAN), a project funded by the Netherlands Initiative for Capacity development in Higher Education. The four year project concluded in January 2020. This study draws on the results from the projects’ four work packages (WP) i.e. i) the Network and Secretariat WP ii) Short courses WP; iii) Education WP and iv) Research WP. The study reports on processes, achievements, innovations, challenges/limitations and opportunities or spin offs along each work package. This study suggests that such inter-university networks could play a major role in collaboratively developing, revising and updating curricula in Land Administration whilst promoting innovations in education, collaborative teaching and learning through staff and student exchange, and collaborative research writing and community outreach. The SEALAN project and Consortium is the first strategic network of its kind established by the EALAN network. The findings of this study are useful to the administrators of educational institutions and partners as they improve inter-university collaboration and scaling up of content in curricula and research. For example, EALAN Network’s success has caught the attention of international partners interested in mutual learning through collaboration in knowledge sharing, conducting research as well as in replicating similar networks across the African continent.
Strengthening the Eastern Africa Land Administration Network (SEALAN) Project in Enhancing Inter-University Collaboration in Land Administration Eastern Africa

Monica LENGOIBONI, the Netherlands, Karume KATCHO, Democratic Republic of Congo, David SIRIBA, Kenya, Ronald SSENGENDO, Uganda, JOSSAM (Rwanda) Christiaan LEMMEN and Jaap ZEVENBERGEN, the Netherlands

1. INTRODUCTION
Land reforms are taking place in many African countries in the past decade. A wave of land reforms being undertaken take the nature of policy developments reforms, land law reforms, tenure and registration reforms and so on. Actors participating in these reforms come from various stakeholders including government, industry, funding agencies, academia and local populations contributing through partnering in steering the land reforms process and through providing specific inputs.

1. Role of Universities
Expertise and experience brought by academic institutions is mainly in the area of professional development. As such academia plays the leading role in producing graduates that will in time contribute to the processes of land reform. Therefore academia have an important role in the process of providing support to land reforms by providing competent graduates to address the labor market demands. There can be gaps, however, especially when graduates possess knowledge that cannot completely and directly address the needs of the society. For example, in the field of land surveying and mapping of land tenure, many universities offering the training often teach/design curricula that are geared to teach students how to implement what is in the law. Thus, the conventional approaches in land administration where, for example, mapping and registration of land tenure need to reflect what is described in the law (in terms of procedures and tenure and rights to land for registration). Legal tenures may take the form of freeholds, leaseholds and others prescribed in the law. Such formal tenures often conflict with the legitimate tenures e.g. in the context of informal and customary tenures in some countries in the EALAN Region. As such, graduates of surveying courses tend to focus on implementing and maintaining the legal land rights to the detriment of those who obtain access to land based on social norms, or social tenures through customary practices. New holders of legal tenures have found themselves in conflicts with legitimate right holders of the same piece of land through customary tenure. Moreover, students are taught to map using standards that are very precise, using time consuming techniques and expensive methods, which in practice results to further exclusion of those who cannot afford to pay for mapping and registering their land tenures under the formal system.

In the wave of land reforms taking place in many African countries, there is a acknowledgement on the need to recognize legitimate rights to land. Land policies/laws are either being created or reformed to accommodate the legitimate tenures such as customary tenures (McAuslan, 2013). Mapping and capturing informal and customary tenures still need to be understood, this implies that role of academia in land reform is becoming more relevant.

The Contribution of the Consortium on Strengthening the Eastern Africa Land Administration Network (SEALAN) in Enhancing Inter-University Collaboration in Eastern Africa (10520)
Monica Lengoiboni, Ronald Ssengendo (Uganda), Karume Katcho (Democratic Republic of Congo), David Siriba (Kenya), Jossam Potel (Rwanda), Christiaan Lemmen and Jaap Zevenbergen (Netherlands)

FIG Working Week 2020
Smart surveyors for land and water management
Amsterdam, the Netherlands, 10–14 May 2020
1.2 Land administration studies at universities

With land reforms taking place in Eastern Africa countries, and almost concurrently, curricula under the name “Land Administration” (may vary e.g. Land Administration and Surveying, Land Administration and Management etc.) at Bachelor, Post Graduate, Master or PhD levels came into being since the year 2006 (ILA, 2014). But along the way the curricula are reformed following the discourses in policy reforms. For example, the term fit for purpose land administration (FFPLA) ideology (Enemark et al. 2014, 2015) is a new proliferation in the field of land administration. While conventional land administration is known to have served mainly the elites and those with economic power (Meinzen-Dick and Mwangi 2009), FFPLA emphasizes on inclusiveness through mapping and documenting land tenure and land rights for all (rich, poor, male and female, young, old – without excluding the elite or the poor). Methodologies of a FFPLA vary on the purpose and focus on principles attached to its three frameworks – spatial, legal and institutional frameworks (Enemark et al., 2014, 2015). The principles advocate for general boundary approaches in mapping and documenting land tenure. As such, affordable techniques like mobile phones, satellite images (Lengoiboni, Richter & Zevenbergen) are used to capture spatial information quickly and affordably. Beyond capturing tenure information in a FFPLA approach, there is the upgrading (relating to improving the accuracy for specific purposes or more generally in relation to meeting societal needs), and of course the maintenance of the data.

Whilst debates such as those in the FFPLA arena – often shaped by the international agenda on land – also end up shaping the nature of land reforms (as currently happening in the Eastern Africa countries), universities also follow the trend in adjusting the education curricula to match these discourses with the aim to continue playing the producing highly skilled manpower for both land governance and practice. Debates in land reforms therefore shape the content of the curricula.

1.3 Funders influencing land reforms through education and research

Universities partner – directly or indirectly – with government in implementing land reforms – and so do funders. Funding organizations are also in the scene directly sponsoring students through scholarships to follow (mainly) higher degrees i.e. Masters and PhD within the Eastern Africa region or overseas. Funders thus equally influence the production of highly skilled manpower in the land administration sector by making financial resources available through funding higher education. Besides this, funders also partner with individual universities or with networks of universities and provide funding resources, thereby enabling curricula and research to be shaped in line with land reform discourses. On university networks, a number of universities team up in interuniversity collaboration – in education and research – within and across country borders.

Interuniversity collaboration through networks may have many benefits. However, do benefits outweigh the challenges/drawbacks? This study draws on evidence gathered from the outcomes realized by the Eastern Africa Land Administration Network (EALAN) through the project “Strengthening the Eastern Africa Land Administration Network” (SEALAN). The SEALAN project was funded Nuffic (Dutch organization for internationalization in education). The project was implemented through four Work Packages:

The Contribution of the Consortium on Strengthening the Eastern Africa Land Administration Network (SEALAN) in Enhancing Inter-University Collaboration in Eastern Africa (10520)
Monica Lengoiboni, Ronald Ssengendo (Uganda), Karume Katcho (Democratic Republic of Congo), David Siriba (Kenya), Jossam Potel (Rwanda), Christiaan Lemmen and Jaap Zevenbergen (Netherlands)
i) Network and Secretariat WP;
ii) Short Courses WP;
iii) Education WP and
iv) Research WP.

The duration of the project was 48 months and the end date was January 14th 2020.

The rest of this paper is organized as follows: The study context and research methods are first presented. Thereafter outcomes of the four work packages are discussed along the lines of a) collaboration style between members b) achievements, c) innovations d) challenges/limitations and v) new opportunities; and lastly the conclusion section.

2. STUDY, CONTEXT AND METHODS.
The idea of land administration academic education in Eastern Africa was initiated by the Swedish Government through the Swedish International Development Agency (SIDA) capacity building program. Funded by SIDA, KTH supported the development of national Bachelor of Science Programmes in Land Administration at four universities in Eastern Africa: Bahir Dar University (Ethiopia), Kenya Polytechnic University College – now Kenya Technical University (Kenya), Ardhi University (Tanzania) and Makerere University (Uganda). When in 2010 the SIDA capacity building program ended, the four universities involved decided to continue to work together in order to harmonize their BSc programs in Land Administration, and this was the beginning of a regional network of universities in Eastern Africa offering academic education in Land Administration: the Eastern Africa Land Administration Network (EALAN). The graduates from the four universities were therefore responsible for the initiation of the network, out of need to support each other mainly due to the reason that the land administration education was new in the region, and that there was a lack of qualified staff on the subject, and supporting each other seemed the way to go (Groenendijk et al, 2013). Since then, the membership of the network has grown to 13 member institutions (as at January 2020) across 8 countries (see Table 1). Member institutions in the EALAN network teach land administration or land related education programs, or are interested in introducing them in their curricula.

Table 1: Members of the EALAN Network

<table>
<thead>
<tr>
<th>Institution</th>
<th>Country</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. University of Burundi</td>
<td>Burundi</td>
</tr>
<tr>
<td>2. Université Évangélique de Afrique</td>
<td>Democratic Republic of Congo</td>
</tr>
<tr>
<td>3. Bahir Dar University</td>
<td>Ethiopia</td>
</tr>
<tr>
<td>4. University of Woldia</td>
<td>Ethiopia</td>
</tr>
<tr>
<td>5. Oda Butum University*</td>
<td>Ethiopia</td>
</tr>
<tr>
<td>6. Regional Centre for Mapping of Resources for Development</td>
<td>Kenya</td>
</tr>
<tr>
<td>7. Technical University of Kenya (TUK)</td>
<td>Kenya</td>
</tr>
<tr>
<td>8. University of Nairobi (UoN)</td>
<td>Kenya</td>
</tr>
</tbody>
</table>

The Contribution of the Consortium on Strengthening the Eastern Africa Land Administration Network (SEALAN) in Enhancing Inter-University Collaboration in Eastern Africa (10520)
Monica Lengoiboni, Ronald Ssengendo (Uganda), Karume Katcho (Democratic Republic of Congo), David Siriba (Kenya), Jossam Potel (Rwanda), Christiaan Lemmen and Jaap Zevenbergen (Netherlands)

FIG Working Week 2020
Smart surveyors for land and water management
Amsterdam, the Netherlands, 10–14 May 2020
9. INES-Ruhengeri (INES) Rwanda
10. University of Rwanda Rwanda
11. University of Juba South Sudan
12. Makerere University Uganda
13. Ardhi University United Republic of Tanzania

*Joined the network in July 2018 and did not participate in the SEALAN Project

Each of the twelve member institutions has its own age, experiences, strengths, weaknesses, type of services offered, its own context and external factors which influence performance with respect to the three focus themes of the SEALAN project i.e. Land Administration, Land Governance and Access to land for women and other vulnerable groups. Twelve member institutions participated in the SEALAN project from its inception in January 2016.

Methods
This is an exploratory study which aims to report on the experience of The EALAN network on the SEALAN project. The SEALAN project is composed of a consortium of 16 partners. Partner A is the EALAN Network, where 12 of the 13 member institutions participated in the SEALAN project. Partner B has four Consortium members which are ITC/University of Twente, The Netherlands’ Cadastre, Land Registry and Mapping Agency – in short Kadaster and MDF and the Land Development and Governance Institute, (LDGI) based in Kenya. The Project reports from 2016 to 2020 are data sources for this study, they are used to derive insights into the i) Collaboration style between members; ii) achievements; iii) innovations; iv) challenges/limitations; and v) new opportunities that came up as a result, along the four work packages of the project.

3. NETWORK WORK PACKAGE
The Secretariat and Network work package concerns the management, coordination and assessment of the network activities during the network and of the SEALAN project. The overall, the aim of this WP was to strengthen the institutional structure of EALAN by establishing shared values and principles, collaboration and ensure cohesion of the network and improved performance of the network in general.

3.1 Collaboration style between members
The network has different organs which are Annual General Meeting (AGM), Chairmanship, Secretariat and Commissions. In addition, the network has guiding constitution (EALAN 2013) that provides means and style of collaboration between member institutions.

AGM as the supreme organ is attended by all full members. However, other members (affiliate & honorary) may attend the AGM by invitation. The AGM is responsible for approving programs and strategic plans of the network, approving new membership applications and partnerships, approving cessation of membership and budget, elect network leaders, approve dissolution of the network, receive, discuss, and approve annual reports by the secretariat, and approve and amend constitution and bylaws.

The Contribution of the Consortium on Strengthening the Eastern Africa Land Administration Network (SEALAN) in Enhancing Inter-University Collaboration in Eastern Africa (10520)
Monica Lengoiboni, Ronald Ssengendo (Uganda), Karume Katcho (Democratic Republic of Congo), David Siriba (Kenya), Jossam Potel (Rwanda), Christiaan Lemmen and Jaap Zevenbergen (Netherlands)

FIG Working Week 2020
Smart surveyors for land and water management
Amsterdam, the Netherlands, 10–14 May 2020
The Network Chairman is elected on an annual rotational basis at the AGM. The network has adopted a practice that the AGM host institution takes the chairmanship, while the host of AGM of the following year is chosen at the AGM. The network chairman is responsible for chairing the AGM meetings, liaising with the secretariat on planning and scheduling of the AGM, represent EALAN at policy level meetings or delegate and liaise with the executive secretary on the management of the Secretariat.

The secretariat is the executive organ of the network and is coordinated by an executive secretary elected from among the full members during the AGM and holds office for a period of three (3) years. The executive secretary is responsible for preparing the daily agenda of EALAN activities. The network approved to have one permanent secretariat office at one member institution, INES Ruhengeri in Rwanda.

3.2 Achievements through the SEALAN project
The SEALAN funded meetings enabling the representatives each EALAN member institutes to meet and deliberate on project matters. The following were attained under such meetings:

Network’s Strategic plan
The Strategic Plan (2016 a) was meant to ensure a common understanding of the network objectives and the products and services the EALAN member institutes were expected to deliver. The strategic plan, adopted by the network, is a rolling five-years plan (2016-2021), reviewed and updated annually encompassing the following year’s plan. The network steering committee annually monitors the implementation of the strategic plan for the realization of the Networks objectives. The strategic plan is linked to both the business and research plan.

Network’s Business Plan
The Network’s Business Plan (2016 b) Describes the vision and long term strategic objectives of the network.

Research Plan Network’s
A research plan dubbed Researching Eastern African Land Administration (REALise) (EALAN, 2016 c) was drafted and adopted in response to the network objective on research. It provides a research strategy and work plan for the EALAN and it focuses on developing and enabling implementation of comparative research. The focus areas, otherwise interest groups, (IGs) for comparative research are: 1) land administration, 2) land governance, and 3) land access for women and vulnerable groups.

Website
A website was also developed (EALAN, 2018). It includes an online library with the open access database on land administration and a knowledge management platform for a capacity building for education and research. The platform facilitates sharing of knowledge between the active participating EALAN members in the key thematic areas of Land administration, Land governance and conflict resolution, and Access to land for women and vulnerable groups.

The Contribution of the Consortium on Strengthening the Eastern Africa Land Administration Network (SEALAN) in Enhancing Inter-University Collaboration in Eastern Africa (10520)
Monica Lengoiboni, Ronald Ssengendo (Uganda), Karume Katcho (Democratic Republic of Congo), David Siriba (Kenya), Jossam Potel (Rwanda), Christiaan Lemmen and Jaap Zevenbergen (Netherlands)

FIG Working Week 2020
Smart surveyors for land and water management
Amsterdam, the Netherlands, 10–14 May 2020
**Collaborative proposal writing/development**

Developing project proposals is yet another achievement the network has made. During the SEALAN project and through the coordination of the secretariat, EALAN members conducted collaborative proposal writing for projects in research, short term courses, and trainings and implemented them.
Equipment
The SEALAN project also facilitated equipment purchase and distribution among all EALAN member institutions. The equipment included GPS/Mobile Mappers, Tablets and Laptops and beamers. In addition, trainings on the functioning of these equipment were conducted to train EALAN member staffs.

Cohesion of the network
Frequent evaluations show that through the project, trust and motivation among network members is high, and that members feel accountable to each other, which has enhanced productivity along the other work packages – short courses for land professionals, education and research.

3.3 Innovations and challenges/limitations
Considering the existence of the network since 2009, the SEALAN project saw the adoption of a unique means of measuring network cohesion i.e. the “Network Thermometer for monitoring and evaluation of the functioning of the network and its members. The Network Thermometer is a monitoring and evaluation tool designed by EALAN – in support of a Dutch Training & Consultancy firm MDF. It is a questionnaire administered annually and inquires about Capability to act and commit, Capability to deliver, Capability to adapt and self-renew, Capability to relate to external stakeholders and Capability to achieve coherence, otherwise the 5Cs, as well as the cohesion of members within the network itself. Results have been used to evaluate the achievements and design new strategies as well as improve cohesion within the network.

3.4 Challenges
Notwithstanding the comprehensive strategic plan and committed staffs, a few challenges were experienced that reduces the impact of the coordination and networking. The challenges are related to staff turn-over in different member institutions and mismatches between the project’s deadlines and universities year calendars. Meeting deadlines was also a challenge because of other assignments the EALAN member staffs are engaged in at their home institutions – besides the SEALAN project. Further, slow email responses by some members played a role in the delays. All these often affected the co-ordination and delayed the implementation of SEALAN’s planned activities.

3.5 New opportunities
New partnerships
In the course coordination, networking and Secretariat, a number of new partnerships were established, for example, the ADLAND Consortium (composed of Technical University of Munich (TUM, Germany as consortium leader) Universität der Bundeswehr München (UBM, Germany), Leibniz Universität Hannover (LUH, Germany), University of Twente (UT, the Netherlands), Royal Institute of Technology (KTH, Sweden) and Swinburne University of Technology (SUT, Australia) sponsored by the German Development Agency (GIZ) organized two workshops with EALAN member institutions; over 30 EALAN Staff were trained on Online Teaching Course organized by the ADLAND consortium; through Network of Excellence on Land Governance in Africa (NELGA) on Strengthening Advisory Capacities

The Contribution of the Consortium on Strengthening the Eastern Africa Land Administration Network (SEALAN) in Enhancing Inter-University Collaboration in Eastern Africa (10520)
Monica Lengoiboni, Ronald Ssengendo (Uganda), Karume Katcho (Democratic Republic of Congo), David Siriba (Kenya), Jossam Potel (Rwanda), Christiaan Lemmen and Jaap Zevenbergen (Netherlands)

FIG Working Week 2020
Smart surveyors for land and water management
Amsterdam, the Netherlands, 10–14 May 2020
for Land Governance in Africa (SLGA -DAAD), the program offered 32 scholarships in Land Governance tenable at Ardhi University in Tanzania and Bahir Dar University in Ethiopia.

**Inspiring similar networks**
- GIZ has used the model of the EALAN network to create other networks similar to EALAN across the African continent (https://nelga.org/).
- ITC, Faculty of the University of Twente has supported the establishment of Latin America Land Administration Network (LALAN), a similar network to EALAN (Todorovski, Salazar, Jacome, & Lemmen 2019)

In addition, EALAN member staffs have been invited to different conferences to discuss the EALAN network thereby increasing its visibility. All these present new opportunities for partnerships with the EALAN network in matters related to varied manners of collaboration in academia and land administration.

4. SHORT COURSES FOR LAND PROFESSIONALS WORK PACKAGE
The goal of the short courses work package was to establish opportunities and enhance professionalism by offering innovative short-term and tailor made trainings on the three focus themes (Land administration, land governance and conflict resolution and access to land for women and vulnerable groups) in the region (EALAN Project Proposal, 2015). Trainings were designed to meet the demands of the land administration and land governance professionals in public and private sector, NGOs, policy makers, university academic staff, community (various groups) and vulnerable groups by by encompassing best practices across member countries. The processes involved analysis of content needs of land administration and governance; designing of short term curricula; developing toolkits; implementing the trainings and evaluating the courses.

The Short Courses Work Package had six aims: i) increase the capacity of EALAN staff to conduct a labor market needs assessment, ii) develop or adapt the trainer toolkit for each focus theme, iii) increase the capacity of EALAN staff to execute the trainings, iv) execute tailor-made specialized trainings, v) implement trainings through joint collaboration between EALAN staff, and vi) develop clear short and long-term outlook for offering services in the form of innovative short-term and tailor made trainings (EALAN Project Proposal, 2015).

4.1 Collaboration style
The short course trainings were to be achieved through: i) EALAN staff receiving tailor made trainings on Training of Trainers (ToT) on the three project themes. Trained EALAN staff then drew personal Action Plans for replicating the trainings at home institutions in order to expand capacity (SEALAN Annual Report 2017, 2018, 2019). Four training tool kits – sourced by the trainers of the ToT – were used as training aid for EALAN staff i.e.: i) Training Package Toolkit: Tools to support Transparency in Land Administration by GLTN (2013); ii) Good Land Governance, and Alternative Dispute Resolution (Brown et al. 1996); and iii), Transparency in local governance, tools to support transparent land administration;
Further, the collaborations between member institutions aimed to share opportunities and experiences e.g. on community outreach projects such as the Land Clinic initiated by INES-Ruhengeri, PhD calls, grant proposal calls, external examiner exchanges, curriculum development assistance among others. The collaborations were both formal and informal between all member institutions and between Interest Group (IG) or subgroups members. Communications in the collaboration process were carried out through WhatsApp groups, emails, Skype and telephone.

4.2 Achievements,
Almost all EALAN member institutions replicated the trainings in their home institutions. During the first and second year of the SEALAN project, EALAN member institutions had difficulty replicating the training due to lack of funds from their institutions. In the third year, the Network of Excellence on Land Governance in Africa (NELGA), sponsored by the German development agency (GIZ) supported each university to host a workshop in their organisation by making funds available. The activities for the training replication also counted for the short courses for land professionals on land administration, land governance and conflict resolution and access to land for women and other vulnerable groups. With the resources EALAN institutions received from NELGA, joint workshops were organised for university staff and land professionals in their countries.

At country level, other partners are working with EALAN institutions. Most visible are FAO, USAID and GLTN, but there are many other organizations partnering with individual EALAN institutions that are not listed here. With these listed here, there is potential to extend to work with EALAN at the network & regional level. The EALAN secretariat is mandated by the EALAN member institutions to take the lead in networking in search of partnership with these funding bodies (EALAN Constitution 2013).

4.3 Innovations
GIZ, through NELGA, has strengthened its partnership with EALAN because the three intervention strategies (Short Courses for land professionals; Education and Research) align one on one with NELGA’s interests. In fact, GIZ was involved in i) funding EALAN institutions to undertake policy dialogues where policy makers, practitioners, scientists and citizens can meet and discuss policy issues of relevance and relating to land, ii) Funding short course for land professionals that took place at INES in May 2018, iii) financial support for short course replications.

Interest Groups: Subgroups were created within the network with the purpose to group together member institutions that had similar interests mainly in the curricula and research. Four subgroups were created under the SEALAN project i.e. i) Network IG (composed of the secretariat and others focusing on daily and strategic running of the network); ii) Land Administration; iii) Land Governance and iv) Access to land for women and other vulnerable
groups. Partners within the IGs had the freedom to coordinate, share, and collaboratively progress ideas of interest to their subgroup.

4.4 Challenges/limitations
Although EALAN staff expressed relevance and enthusiasm about their willingness to replicate SEALAN trainings at home institutions, the following factors posed some challenges:

i) the universities did not offer much support in organizing and providing teaching materials needed for the training, leaving it up to the trained EALAN staff to volunteer to organize the training

ii) local staff/lecturers unwillingness to attend training if not facilitated to participate e.g. with incentives such as daily allowances.

iii) lecturers’ and students strikes in a number of countries – Kenya, Uganda, South Sudan, and Ethiopia resulted in absenteeism, which interfered with activities by EALAN staff in replicating the trainings

iv) SEALAN project activities (dates/deadlines) conflicted with University calendars. Delays were experienced especially when the dates/deadlines coincided with universities holidays.

v) SEALAN advocated for gender balance in all of the activities. However, despite the efforts to reach the goal of 50% female representation at EALAN events, attaining this target remained a challenge.

4.5 New opportunities
Despite the comprehensive plan, a few challenges were experienced that reduced the impact of the short courses. The challenges were largely that the short courses were mainly replicated at the respective academic institutions and few to the other land professional outside of the academic circles. This was largely because by their mandate, universities offer academic degree programmes. To ensure effectiveness of the course replication outside of the academy, the EALAN academic members need to collaborate and jointly offer short-courses, for example, the Regional Centre for Mapping of Resources for Development (RCMRD) jointly with the Institution of Surveyors of Kenya (ISK) conducted a two-week on fit-for-purpose land administration (ISK-RCMRD, 2019).

5. EDUCATION WORK PACKAGE
The aim of the Education work package was to link curricula to the focus themes of the project and the labor market needs, as well as to strengthen collaboration and partnership between EALAN members. Three major activities were carried out under this work package i.e. i) labor market needs assessment for land administration curricula, ii) participatory peer review of the existing and new undergraduate and postgraduate curricula and iii) development of a collaboration plan for inter-university cooperation through staff and student exchange.

5.1 Collaboration style
Staffs from the member institutions were trained on how to conduct a labor market assessment when developing/reviewing education curricula and on peer reviewing of

The Contribution of the Consortium on Strengthening the Eastern Africa Land Administration Network (SEALAN) in Enhancing Inter-University Collaboration in Eastern Africa (10520)
Monica Lengoiboni, Ronald Ssengendo (Uganda), Karume Katcho (Democratic Republic of Congo), David Siriba (Kenya), Jossam Potel (Rwanda), Christiaan Lemmen and Jaap Zevenbergen (Netherlands)

FIG Working Week 2020
Smart surveyors for land and water management
Amsterdam, the Netherlands, 10–14 May 2020
curricula. At least one staff was trained from each member institution, who then replicated the training at his/her home institution to expand capacity. Thereafter the staff embarked on the development/revision of curricula. The revised/new curricula were then shared with all the member institutions, after which a five days’ workshop was organized where the participatory peer review was carried out. Comments and suggestions from the peer review process were implemented by concerned institutions.

On the staff and student exchange, a core team first developed a model which was then discussed at the AGM, after which it was refined and finalized.

5.2 Achievements

Increased capacity: There is capacity in conducting and incorporating the needs of the labor market in land administration in the curricula.

Participatory review of curricula: The goal of the participatory approach was to enhance quality by bringing creative and innovative perspectives regarding the content of education and to accommodate vertical and cross disciplinary connections within curricula by including professionals from the various disciplines in the land administration sector review process.

Updated curricula in Land Administration across the region: All member institutions conducted both the labor and curriculum needs assessments; out of which the undergraduate curricula for eight member institutions in five countries i.e. Ethiopia, Kenya, Rwanda, Tanzania and Uganda were revised to address three key areas i.e. Responsible land governance, access of land to women and other vulnerable groups and pro-poor land documentation.

Additionally, new undergraduate curricula on land administration were developed in three countries i.e. by the University of Burundi (BSc in Land Administration and Surveying), University of Juba (BSc in Land Administration and Surveying) and Université Évangélique de Afrique, DRC (BSc in Land Administration and Surveying). In fact, DRC and South Sudan have submitted their curricula to the university councils and the ministry of higher education councils for approval. University of Burundi is already implementing its curriculum, with the first batch of students accepted in January 2020.

Staff and student exchange guidelines, implementation: To facilitate inter-university collaboration, Staff and Student Exchange Guidelines (EALAN, 2019) were developed. The objectives of the program were to enhance cooperation between EALAN member institutions, share knowledge, experience and resources among EALAN institutions and enhance the quality of education in EALAN member institutions.

Staff exchange implementation: Through the facilitation of SEALAN, staff exchange was successfully carried out among EALAN members. Staff and students from Technical University of Kenya, University of Nairobi and Makerere University (Uganda) were hosted at RCMRD in Kenya, while staff and students from DRC, South Sudan, Burundi and Ethiopia were hosted at INES-Ruhengeri in Rwanda. Participants learnt about topics ranging from

The Contribution of the Consortium on Strengthening the Eastern Africa Land Administration Network (SEALAN) in Enhancing Inter-University Collaboration in Eastern Africa (10520)

Monica Lengoiboni, Ronald Ssengendo (Uganda), Karume Katcho (Democratic Republic of Congo), David Siriba (Kenya), Jossam Potel (Rwanda), Christiaan Lemmen and Jaap Zevenbergen (Netherlands)

FIG Working Week 2020
Smart surveyors for land and water management
Amsterdam, the Netherlands, 10–14 May 2020
acquisition of cadastral data from satellite images, Fit for purpose land administration with demonstration of land of the innovative tools for tenure recordation (STDM by GLTN); and Mobile Mapping tools and their developments. Visits to local organizations such as registration offices or mapping agencies were also carried out.

Appreciation by the students confirmed the success of the program. For example students elucidated the most important lessons learnt from the exchange as “how other countries manage their land”; “interaction with people from other countries”, “sharing experiences with other students from other countries, networking and [being] impressed by the Land Administration Information System in Rwanda”, “the history of EALAN” as well as “gaining friends from different countries”. As suggestions for improvement, one week was perceived to be too short for student exchange experience and most evaluation forms suggested increasing the time as well as the number of students participating in the activity, as well as have an exchange program as a recurrent activity in the network.

5.3 Challenges
The major challenge to the implementation of the education work package through interuniversity collaboration was the language problems i.e. French which is predominantly used in Rwanda, Burundi and DRC versus English which is predominantly used in most of the EALAN member countries. This was also experienced during the student exchange program as well. Additionally, the shortage of staff with expertise in land administration in some of the institutions coupled with staff retention challenges, increased workload, while university strikes interfered with implementation plans of the work package. Civil wars and unrest in some countries like Burundi, South Sudan, DRC and Ethiopia also interfered the level of collaboration and interaction between the member institutions.

5.4 New opportunities
As a result of the achievements of the education work package the network has identified a number of new opportunities including
   i) a number of staff from member institutions that lacked expertise in land administration have been trained up to masters and PhD level through DAAD and NELGA funding and most of these staff are undertaking the training at member institutions
   ii) the collaboration has created a pool of competent persons who can act as peer reviewers of articles/journals /proposals within the region
   iii) additional to the staff exchange, the network has now developed a pool of competent supervisors and external examiners for the land administration programs of the member institutions.

5.5 Innovations
The success of the education work package owed much to a number of innovations that were implemented including the setting up of WhatsApp groups where some of the discussions took place and the use of skype to conduct some of the meetings. For example through these media it was possible to continue the discussions after the workshops hence enriching the final outputs of the package.

The Contribution of the Consortium on Strengthening the Eastern Africa Land Administration Network (SEALAN) in Enhancing Inter-University Collaboration in Eastern Africa (10520)
Monica Lengoiboni, Ronald Ssengendo (Uganda), Karume Katcho (Democratic Republic of Congo), David Siriba (Kenya), Jossam Potel (Rwanda), Christiaan Lemmen and Jaap Zevenbergen (Netherlands)

FIG Working Week 2020
Smart surveyors for land and water management
Amsterdam, the Netherlands, 10–14 May 2020
6. RESEARCH WORK PACKAGE
This work package aimed to develop and apply skills in undertaking collaborative research and its dissemination and to establish a sustainable research program amongst the EALAN member institutions.

6.1 Collaboration Style
A workshop was organized where representatives of EALAN institutions developed the research designs. Data collection was carried in respective countries. Individuals wrote a country paper and thereafter convened at a writeshop, where a collaborative and comparative research was done. Each country paper was peer reviewed by EALAN research staff, while the comparative research chapters were peer reviewed by others outside the EALAN network. This collaboration style was applied for two researches, they are:

A. Research on land governance arrangements in Eastern Africa:
Thus, the research aims to create an understanding on the nature of land governance system in Eastern Africa countries and its role in minimizing conflict between land governance actors and processes. The research was intended to answer the following key questions.

i. What are the existing land governance arrangements in Eastern Africa countries?
   a. Who are the actors involved in land governance?
   b. What are the roles of land governance actors?
   c. What are the main land governance processes?

ii. What are the conflicts that emanate from existing land governance arrangements?
   a. What types of land conflicts exist in the region?
   b. What are the roots causes of land conflicts in the region?

iii. How can conflicts in land governance be addressed?
   a. How have actors addressed land conflicts in the past?
   b. What are the other approaches to resolve land conflicts?

B. Research on access to land by women in Eastern Africa.
The context of this study was guided by the gender and rights based approach (Quintero, 2012). This approach acknowledges that, “Many of the obstacles poor and marginalized people – and women in particular – meet are beyond institutions and the law. They relate to the social position and role of the people involved, and social relations between the different systems, the beneficiaries and the institutions themselves. This affects people’s ability to access justice before, during and after an injustice (dispute, conflict) occurs. This is what is called the ‘chain of justice’” (Quintero, Lodenstein, Apotheker, & Ahikire., 2014). The chain of justice framework is an analytical framework that uses a gender and rights based approach to understand injustices by exploring the different failures of recognition and redistribution of women’s land rights, and their root causes (Fraser & Honneth, 2003), in the process of claiming and realizing their rights in the justice system.

This study responded to following sub-questions in the framework of (Quintero et al, 2014):

1. What are the problems commonly reported to your organization?
2. What are the root-causes of those problems?
3. What interventions are you providing?
4. How does the intervention address the root cause of the problems
5. What are the key outcomes of your interventions
6. What are the key challenges you are facing during the implementation processes

6.2 Achievements
The above articles show that the countries represented in the EALAN network manifests diverse background of land governance arrangements accommodating various conflicting land governance actors and processes, due to varied historical backgrounds. Overall the formal systems in most of the countries are not reaching large parts of the society yet, progress is ongoing but many are still unreach. Due to the limitations of the formal systems, aspects of custom and informal authority structures exist and seem to be used by most people for conflict resolution and other transactions related to land.

Findings of the research study on Land Governance arrangements in Eastern Africa in Eastern Africa resulted in:
- Eight (8) Country papers
- Eight policy briefs
- Presentation of paper at EALAN AGM 2019 in Zanzibar
- Presentation of paper at the 2019 Conference on Land Policy in Africa, Abidjan, organized by the Centre for Land Policy in Africa
- A book (in preparation) on the land governance arrangements in Africa – including the 8 country papers and an additional chapter with a collaborative comparative chapter (Achamyeleh et al., 2019) on the land governance arrangements in the EALAN countries.

Results of the study on Access to land for women show that across the Eastern Africa region, social and economic problems such as men being the de-facto family heads places women at a disadvantage in the decision making processes. Legal and land administration problems such as the conflict between statutory law and customary practices also affect the rights to land for women. Non Governmental organizations and community based organizations bring interventions to help alleviate women’s problems in relation to access to land. Examples of interventions include awareness raising and women empowerment; use of alternative dispute mediation, arbitration and negotiation in support of women; providing free legal aid as well as projects that are specific in addressing women’s access to land. Key outcomes of the interventions include Increased awareness of women about their rights as well as resolution of disputes on land.

Findings of the research study on Access to land for women in Eastern Africa resulted in:
- Eight (8) Country papers
- Eight policy briefs
- Presentation of paper at EALAN AGM 2019 in Zanzibar
- Presentation of paper at the 2019 Conference on Land Policy in Africa, Abidjan, organized by the Centre for Land Policy in Africa
- A book (in preparation) on the Access to land for women in Eastern Africa – which includes the 8 country papers and an additional chapter with a collaborative comparative chapter (Achamyeleh et al., 2019) on the land governance arrangements in the EALAN countries.

The Contribution of the Consortium on Strengthening the Eastern Africa Land Administration Network (SEALAN) in Enhancing Inter-University Collaboration in Eastern Africa (10520)
Monica Lengoiboni, Ronald Ssengendo (Uganda), Karume Katcho (Democratic Republic of Congo), David Siriba (Kenya), Jossam Potel (Rwanda), Christiaan Lemmen and Jaap Zevenbergen (Netherlands)

FIG Working Week 2020
Smart surveyors for land and water management
Amsterdam, the Netherlands, 10–14 May 2020
comparative chapter (Mwasumbi et al., 2019) on access to land for women in the EALAN countries.

6.3 Innovations
Coordinating the same study across eight countries is not easy due to differences in cultural contexts, political challenges, socio-cultural problems and more. Innovations included partnering with Masters and PhD students within the region in undertaking these studies, thereby easing the work for the lead researchers. Of course, a high degree of commitment by EALAN staff and accountability to one another kept the pace of the research in line with the project timeline.

6.4 Challenges/limitations
Financial constraints to support data collection was the main challenge for this work package. The budget dictated the amount of data that could be collected for both studies.

6.5 New opportunities
ADLAND, adopted a similar strategy by organizing two writeshops for young academics with the EALAN network. A book with the research outcomes is currently in the process of review and publication.

Further, EALAN staff are already using the results of the EALAN collaborative and comparative researches as class materials as well as teaching aid for short courses for land professionals and in community outreach programs.

7. CONCLUSION
The purpose of the study is to present the experiences and outcomes of the EALAN network through the project “Strengthening the Eastern Africa Land Administration Network” (SEALAN) which was carried out in 2016-2020. Through the SEALAN project, all the 12 participating institutions collectively expressed the capability of the Network’s aims i.e. “to become a platform for sharing and exchanging ideas, skills, experiences, knowledge, plans and programmes in land administration and management through training, education, research, practice and dissemination in East Africa”. Their collective effort, in support of non-EALAN network members of the consortium led to the following realizations in the project life, which are expressed through their collaboration style in the various work packages, their achievements, innovations that took place, challenges as well as new opportunities for the EALAN Network. The following were achieved through the four work packages of the project:

On the outcomes of the project, the Secretariat and Network work package realized increased collaboration and efficiency within the EALAN Network. In particular, synergy and network cohesion has been built and coordination of day to day operations of the network improved. Moreover, staff and student exchange exposed the network to the students within the EALAN community, there website has become a reference point for the Network, and the Annual General Meetings and conferences has consistently attracted a wide range of actors ranging...
from academia, funders, government and industry. The Network “Thermometer” has become a useful tool to monitor network functioning and dynamics as to increase synergy, capacity to innovate and self-renew. With the Network work package in place, facilitation of the other work packages was eased. While the project’s outcomes on the Education and research work packages were largely achieved, the outcomes of the short courses for land professionals work package received the most challenge. This was largely because by their mandate, universities offer academic degree programmes.

In sum, it can be said that through the SEALAN project, inter-university collaborations has enhanced cooperative links within the EALAN Network member institutions Eastern Africa region. New opportunities for collaborations also emerged from partners form outside the project, e.g. by the ADLAND consortium led by the Technical University of Munich’s engagement in the EALAN Network activities. Cross-national diffusion of ideas e.g. through staff and student exchanges, collaborative researches/projects in the collaboration process etc. enabled innovation and growth in knowledge creation and dissemination of all partners involved. With EALAN staff are also being approached to participate in policy reform activities in their respective countries, all these show the linkages between funders, government, and others partner working with academia in eventually influencing policy through education and research as well as in preparing students as agents of change in the land sector.

The Contribution of the Consortium on Strengthening the Eastern Africa Land Administration Network (SEALAN) in Enhancing Inter-University Collaboration in Eastern Africa (10520)
Monica Lengoiboni, Ronald Ssengendo (Uganda), Karume Katcho (Democratic Republic of Congo), David Siriba (Kenya), Jossam Potel (Rwanda), Christiaan Lemmen and Jaap Zevenbergen (Netherlands)

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


The Contribution of the Consortium on Strengthening the Eastern Africa Land Administration Network (SEALAN) in Enhancing Inter-University Collaboration in Eastern Africa (10520)

Monica Lengoiboni, Ronald Ssengendo (Uganda), Karume Katcho (Democratic Republic of Congo), David Siriba (Kenya), Jossam Potel (Rwanda), Christiaan Lemmen and Jaap Zevenbergen (Netherlands)

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


NELGA Network of Excellence on Land Governance in Africa (NELGA) https://nelga.org/ accessed January 2020


ISK-RCMRD, 2019. Training on Fit for Purpose Land Administration https://www.flickr.com/photos/128418604@N04/albums/721577107649777643
BIOGRAPHICAL NOTES

Monica Lengoiboni holds a PhD in Land Administration – focusing on the seasonal land rights of nomadic pastoralists in the context of formal land administration system and cadastres – from Wageningen University, the Netherlands. She is assistant professor of Land Management at ITC (Faculty of Geoinformation Science and Earth Observation), University of Twente in the Netherlands. Her research and teaching actively engages the field of fit for purpose land administration. She is working with the Eastern Africa Land Administration Network (EALAN), where she has also been secretary in the period 2012-2014.

Katcho Karume
Ph.D holder in Environmental Physics, Prof. Katcho KARUME is currently the Dean of the faculty of agricultural and environmental sciences and Post graduate Coordinator in Environmental Sciences at Université Evangélique en Afrique (UEA). Former EALAN Chairman (2018-2019), He intensively uses Remote Sensing and Geographical Information Systems (RS-GIS) in his research. He also have an interest in Natural Resource Management in the conflict and post conflict context. Finally, He lectures some courses (RS and GIS, Electromagnetism, Electricity, Special functions and Applied Mathematics) in local Universities and supervise students for their research and dissertation.

Ssengendo Ronald is a lecturer at the Department of Geomatics & Land Management, Makerere University Uganda. He holds a Master’s degree in Engineering Surveying and Geodesy from the University of Nottingham, UK and a PhD in Geodesy & Geoinformatics from the Royal Institute of Technology, Sweden. His research interests include land administration systems, implementation of Fit-For-Purpose systems in Uganda, geoid modelling and height systems. He is also the current President of the Institution of Surveyors of Uganda and a member of the FIG Taskforce on Sustainable Development Goals.

Siriba David is a Senior Lecturer at the University of Nairobi in the Department of Geospatial and Space Technology. He has over 10 years of teaching experience at undergraduate and postgraduate levels. He is currently the co-coordinator of the MSc in GIS degree programme at the Department. He teaches Geographic/Land Information systems, Cartography, Cadastres among other courses. Professionally, David is a very active full member of the Institution of Surveyors of Kenya and is a Licensed Surveyor. David has participated in land acquisition and resettlement projects and has published in the wider area of land administration and an active member of FIG Commission 3.

Potel Josam is a Lecturer and Head of Department of Land Administration and Management at Ines-Ruhengeri in Rwanda and Executive Secretary of EALAN. He holds a Master of Science in Geo-Information and Earth Observation with Specialization in Land Administration, from the University of Twente, The Netherlands, and Bachelor’s Degree in Law from the University of Rwanda. Jossam teaches modules related to Land law and tenure systems, Land Administration and governance, Negotiation and land dispute resolutions and evaluating LAS. He has an experience of over 10 years in land sector, having participated in different land reform programs of Rwanda like National land policy formulation, Systematic

The Contribution of the Consortium on Strengthening the Eastern Africa Land Administration Network (SEALAN) in Enhancing Inter-University Collaboration in Eastern Africa (10520)

Monica Lengoiboni, Ronald Ssengendo (Uganda), Karume Katcho (Democratic Republic of Congo), David Siriba (Kenya), Jossam Potel (Rwanda), Christiaan Lemmen and Jaap Zevenbergen (Netherlands)

FIG Working Week 2020
Smart surveyors for land and water management
Amsterdam, the Netherlands, 10–14 May 2020
land registration, land sharing and redistribution several to mention. His research interests vary in wide areas of land administration and Governance.

**Jaap Zevenbergen** is professor of Land Administration at ITC (Faculty of Geoinformation Science and Earth Observation), University of Twente in the Netherlands. He is professor in land administration systems at the University of Twente, Faculty. He holds Master degrees in geodetic engineering and law and defended his PhD on systems of land registration in 2002. He has published extensively on land administration and land registration. He is a board member of the Cadasta Foundation, an advisory board member of GLTN, and has been a cochair of Commission 7 Working Group 2 for the period 2011-2014.

**Christiaan Lemmen** is Professor Land Information Modelling at the Faculty of GeoInformation Science and Earth Observation of the University of Twente in the Netherlands. His other main job is as Senior Geodetic Advisor at Kadaster International, the international branch of the Netherlands Cadastre, Land Registry and Mapping Agency. He is director of the OICRF, the International Office of Cadastre and Land Records, one of the permanent institutions of the International Federation of Surveyors (FIG). He is co-editor of ISO 19152, the ISO standard for land administration.

**CONTACTS**

**Dr Monica Lengoiboni**
ITC – Faculty of Geoinformation Science and Earth Observation | University of Twente
PGM Department, School of Land Administration Studies
PO Box 217
7500 AE Enschede
The Netherlands

**Prof. Katcho Karume**
Université Evangélique en Afrique
Faculty of Agricultural an Environment studies
P.O Box 3323
Bukavu
DR. Congo

**Dr. Ronald Ssengendo**
Department of Geomatics & Land Management
College of Engineering, Art, Design and Technology
Makerere University
P.O Box 7062 Kampala
Uganda
Email: rssengendo@cedat.mak.ac.ug
https://cedat.mak.ac.ug/geomatics/

The Contribution of the Consortium on Strengthening the Eastern Africa Land Administration Network (SEALAN) in Enhancing Inter-University Collaboration in Eastern Africa (10520)
Monica Lengoiboni, Ronald Ssengendo (Uganda), Karume Katcho (Democratic Republic of Congo), David Siriba (Kenya), Jossam Potel (Rwanda), Christiaan Lemmen and Jaap Zevenbergen (Netherlands)

FIG Working Week 2020
Smart surveyors for land and water management
Amsterdam, the Netherlands, 10-14 May 2020
The Contribution of the Consortium on Strengthening the Eastern Africa Land Administration Network (SEALAN) in Enhancing Inter-University Collaboration in Eastern Africa (10520)
Monica Lengoiboni, Ronald Ssengendo (Uganda), Karume Katcho (Democratic Republic of Congo), David Siriba (Kenya), Jossam Potel (Rwanda), Christiaan Lemmen and Jaap Zevenbergen (Netherlands)

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