



THE AFRICAN CENTER FOR SUSTAINABLE CITIES STUDIES (ACS)

Call for applications for PhD positions

The African Center for Sustainable Cities Studies (ACS) is a research and training center established at Ardhi University (ARU) under the VLIR-UOS Institutional University Cooperation (IUC) programme in collaboration with Hasselt University (UHasselt) as a lead partner in Belgium and other Flemish Universities, including Ghent University, Antwerp University, Free University of Brussels, Busworld Academy and University of Applied Sciences and Arts, and other Tanzanian Institutions including Mzumbe University, University of Dar es Salaam, the National Institute of Transport and Nelson Mandela African Institution of Science and Technology (NM-AIST). The vision of the ACS is to contribute towards attaining a world with inclusive, safe, resilient and sustainable cities and communities in accordance with SDG 11 and its mission is to advance research and education for sustainable cities development and to contribute in generating solutions to societal and environmental problems related to urban development. The ACS in collaboration with partner universities in Belgium announces several PhD positions that will be run under sandwich mode where students will spend three to six months in Belgium and six to nine months in Tanzania (Ardhi University) depending on the programme. The duration of PhD studies is 4 years. Research sites will be based in Tanzania. Tanzanians with requisite qualifications are invited to apply for the positions. ACS operates under principles of the Agenda 2030 (Leaving No One Behind). Therefore, candidates from disadvantaged groups are encouraged to apply.

The General eligibility criteria are;

- i. ARU employees or those with a potential of been employed by Ardhi University. Therefore, the applicants shall have a GPA of at least 3.8 in undergraduate and a GPA of 4.0 or B+ in master's degrees.
- ii. A Master's degree in relevant discipline from a recognized institution of higher learning and a demonstrated knowledge and experience in conducting research and communicating research outputs



- iii. Strong written and oral communication skills in both English and Kiswahili languages

In addition:

- i. Applicants who are not ARU employees must be ready to be employed by ARU after completion of their studies should employment positions be available
- ii. All applicants should be ready to sign an agreement with ARU before commencement of scholarship
- iii. Age limit: Not older than 45 years

The center invites applications to fill PhD positions as detailed below:

Thematic Area 1: Land Use Planning

Number of PhD positions: 2

PhD position 1 - Participatory planning and land use conflict management in the rural settlements around Dar Es Salaam

Brief description of the PhD position:

The rapid urbanisation of Dar Es Salaam is triggering an urbanisation process in the bordering rural districts. As a consequence, rural settlements are increasingly witnessing ‘urban’ phenomena such as land speculation, (tourism) gentrification, spatial segregation, etc. These phenomena in turn generate land use conflicts: e.g., among citizens caused by the double allocation of (public) land, among neighbours over boundary disputes, between investors and authorities over development projects, between pastoralists and farmers over land resources. To mediate these conflicts, authorities are drawing up comprehensive land-use plans and detailed community and redevelopment plans. The problem is that all these conflict mediation instruments remain expert based and as such exclude a large part of the population from the planning process. Further, land use conflicts persist despite the mediation efforts, which calls for a need to strengthen the existing mediation instruments. The aim of the overall research project is to explore how we can use (digital) technologies to



increase the involvement of a diversity of actors in planning processes and increase the chances to mitigate land use conflicts.

The rural areas around Dar Es Salaam have a limited capacity to work with digital technology. For this reason, the PhD candidate will experiment with low-tech participatory artefacts such as maps, scale models or physical measuring devices. The PhD candidate will work in the district of Bagamoyo.

ARU promotor: dr. Fredrick Magina, School of Spatial Planning and Social Sciences.

Flemish promotor: prof. dr. Oswald Devisch, Hasselt University, Faculty of Architecture and Arts.

Eligibility:

- a master degree in spatial planning
- knowledgeable with GIS (or prepared to learn to work with GIS)
- interest in low-tech participatory artefacts
- interest in participatory conflict mediation

PhD position 2 - Participatory planning and land use conflict management in demarcated conflict areas in Dar Es Salaam

Brief description of the PhD position:

The Ministry of Lands, Housing and Human Settlements Development has demarcated a number of municipalities in Dar Es Salaam that suffer from a high number of longlasting land use conflicts. These conflicts are triggered by processes such as land speculation (by foreign investors) and the privatisation of public land. To mediate these conflicts, the Ministry has introduced a conflict mediation unit. The problem is that this unit, and the mediation instruments that this unit uses, remain expert based and as such exclude a large part of the population from the planning process. Further, land use conflicts persist despite the mediation efforts, which calls for a need to strengthen the existing mediation instruments. The aim of the overall research project is to explore how we can use (digital) technologies to increase the involvement of a diversity of actors in planning processes and increase the chances to mitigate land use conflicts.



The actors living and working in these demarcated conflict areas are very diverse, involving both highly literate and networked experts and professionals (e.g. developers, investors, lawyers, brokers) and marginalised and illiterate communities. For this reason, the PhD candidate will experiment with participatory planning processes that blend GIS and social media in order to trace the radical interdependency of these actors. The ministry demarcated three conflict areas in Dar Es Salaam: Boko, Tegeta and Mbezi Beach. The PhD candidate will work on one of these three.

ARU promotor: dr. Fredrick Magina, School of Spatial Planning and Social Sciences.

Flemish promotor: prof. dr. Oswald Devisch, Hasselt University, Faculty of Architecture and Arts.

Eligibility:

- knowledgeable in property law
- knowledgeable with GIS (or prepared to learn to work with GIS)
- interest in the politics of planning
- interest in participatory digital technology
- interest in participatory conflict mediation

Thematic Area 2: Socio-economic development

Number of PhD positions: 1

PhD position 1: Assessing ‘food democracy’ in African metropolises: the case of Dar Es Salam



Brief description of the PhD position:

This PhD research aims at contributing to an enabling governance environment, that can enhance the level of food democracy in (selected areas in) Dar Es Salaam. Food democracy refers to the equal and effective participation of all members of an agro-food system in shaping that system, as well as to knowledge about the relevant alternative ways of designing and operating the system.

The proposed research shall be anchored on a system thinking, and consideration of critical aspects such as stakeholder involvement, equity and inclusiveness. A first task will map and describe the different food policy mechanisms in Dar Es Salaam and connect these with the existing literature on urban food policies in rapidly urbanizing cities in developing countries' contexts. In a next step, the researcher will focus on two or three selected areas, and explore in depth the existing food governance, with particular attention for networks, decision making and power relations. A third part will explore future policy scenarios and their impact on food democracy in the selected areas.

ARU promotor: Dr. Luitfred Kissoly, Department of Economics and Social Studies

Flemish promotor: Prof. Joost Dessen, Ghent University, Department of Agricultural Economics

Eligibility:

The PhD candidate should have a master in sociology, political sciences, governance, development studies, economics, public administration (or equivalent) with a strong interest in food and policy making. She/he should have expertise in qualitative research methods. Expertise in quantitative methods is an asset. One of the following criteria should be met: **(i) master degree abroad (e.g. Europe)**; and/or (ii) publication in Web of Science journal and/or (iii) a good English language test (e.g. IELTS score of 6.5 or higher)



Thematic Area 3: Urban Transport

Number of PhD positions: 1

PhD position 1

Brief description of the PhD position:

The PhD-research will focus on transport impact analysis of large scale projects, and on the interaction between transport and land use planning. The PhD student will make use of (activity-based) transport modelling to analyse how changes in land use development affect the transport demand. Possible research tasks include analysing the impacts of spatial developments along the transportation corridors (for instance the BRT corridors, SGR corridors etc.), assessing the mitigation of impacts, the policy measures, etc.

ARU promotor: Dr. Wilfred G Kazaura, School of Spatial Planning and Social Sciences.

Flemish promotor: Prof. Dr. Muhammad Adnan, Hasselt University, Transportation Research Institute.

Eligibility:

We are looking for a PhD-candidate with a background in geo-sciences, spatial planning, infrastructure planning, transportation engineering, civil engineering, or any other related background. The student should have a strong interest in (or experience with) statistical analysis, transport modelling, GIS and spatial analysis. The student should be fluent in spoken and written English.



Thematic Area 4: Cultural Heritage

Number of PhD positions: 3

Important notes:

- i. Applicants who have already applied in the previous calls do not have to apply again in this call.*
- ii. Selected candidates for 2 positions will start immediately and one will start in September 2023*
- iii. **Application Deadline: 15th January 2023***

Brief description of the All PhD positions:

The Project is aiming at developing new knowledge and approaches in cultural heritage practices and management towards sustainable cities. It will develop strategies for sustainable design and construction, and methods for conservation and adaptation of architectural heritage and its embedded knowledge, focusing on safeguarding the cultural, environmental, material and immaterial heritage and identity.

The candidates for these positions will be admitted at Hasselt University in Belgium and will work under the project to accomplish the stipulated outputs. The data collection study area of the project is expected to be in Tanzania. The candidate will be supervised by both Hasselt University and Ardhi University Academic Staff (In the research group under Prof. Koenraad VAN CLEEMPOEL at Hasselt University).

PhD position 1: Establishing instruments for safeguarding the built heritage in Dar Es Salaam

Major research question: How to create an inclusive inventory system for heritage sites in Dar Es Salaam

The project aims to start from a critical analysis of existing 'heritage inventories', to then move on to providing a new, inclusive inventory based on international



scholarship and taking into account the historical tissue of Dar with its various layers.

ARU promotor: Dr. Simon Mpyanga & Dr. Ombeni Swai

Flemish promotor: Prof. Dr. Koenraad Van Cleempoel, Faculty of Architecture and Arts, Hasselt University

Eligibility:

We are looking for candidates who have a background in Architecture, Construction Management, Urban Design, or any related discipline.

PhD position 2: Safeguarding Cultural Heritage Through Memory and Craftsmanship

Major research question: How to sustain conduits of liquid heritage for inclusive economic emancipation on vulnerable heritage fabric.

Narratives surrounding weaving using traditional materials among women in Bagamoyo.

Skills and practices in the production of traditional artifacts.

ARU promotor: Dr. Godfrey Ayub, Dr. Simon Mpyanga & Dr. Shubira Kalugila

Flemish promotor: Prof. Dr. Koenraad Van Cleempoel, Faculty of Architecture and Arts, Hasselt University

Eligibility:

We are looking for candidates who have a background in Architecture, Construction Management, Urban Design, or any related discipline.

PhD 3: Exploring potentialities of heritage in Dar via research by design.

Major research question: How can adaptive reuse contribute to providing a new future to heritage sites, taking into account social, architectural, economical and legal values?



Based on the inventory system of PhD 1, this project explores new programs for historical sites

ARU promotor: Dr. Daniel Mbisso & Dr. Rehema Monko & Dr. Sara Phoya

Flemish promotor: Prof. Dr. Koenraad Van Cleempoel, Faculty of Architecture and Arts, Hasselt University

Eligibility:

We are looking for candidates who have a background in Architecture, Construction Management, Urban Design, or any related discipline.

Thematic Area 5: Gender and Community Participation

Number of Ph.D. positions: 2

PhD position 1: Gender Issues at the University

Brief description of the PhD position

Gender equality and inclusiveness in education at all levels is of importance. In particular, higher learning institution has a role to play in promoting gender equality as stipulated in various international, regional and national conventions, programmes and policies. There is a need to interrogate new and old forms of gender inequalities, reflecting on challenges, approaches and interventions for gender equality as stipulated in the Sustainable Development Goals (SGDs) No.5. Although there is improvement in gender equity in different aspects of development, gender gap is still apparent in higher education. This PhD position is intended to contribute to knowledge, approaches, practices and/or interventions in combating gender inequalities. The PhD-research will focus on gender and intersectionality issues at the level of the university to come up with research based outputs to inform policy and decision makers appropriate course of action to be taken to tackle gender inequalities. It will investigate issues related to inequality alongside lines of gender, disability, marital status, amongst university students and staff. Possible topics include the study of: inequalities in student enrolment, attainment, subject choice;



inequalities in academic careers, academic seniority, access to research funding; gender pay gap; gendered networks; sexual harassment; work/life balance; role models; mapping and assessment of effect of gender/intersectionality policies, etc.

For this research the PhD-researchers would collect original data through targeted field-campaigns in contrasting different universities in Tanzania (and possibly Flanders).

ARU promotor: Dr Nelly John Babere, School of Spatial Planning and Social Sciences.

Flemish promotor: Prof. Prof Nathalie Holvoet, IOB, University of Antwerp, Belgium.

Eligibility:

We are looking for a PhD-candidate with Masters degree in social sciences, gender studies, community development, development studies, sociology, and public administration with a strong interest in gender equality, community participation and sustainable development. The candidate should:

- (1) have obtained excellent study results (GPA of minimum 4.0)
- (2) demonstrate knowledge of and experience with quantitative and/or qualitative research methods
- (3) be fluent in spoken and written English
- (4) be willing to follow courses and spend time at the University of Antwerp (approximately 15 months over a period of 4 years)

Please submit the following documents:

- (1) Motivation letter
- (2) CV
- (3) PhD research proposal (approximately 3000 words), including rationale/background, research questions and research methodology.

PhD position 2: Community Based Monitoring/Citizen Science

Brief description of the PhD position:



In today's world, Community Based Monitoring (CBM)/citizen science activities are increasing and promise to transform quality of life. Improving governance of CBM requires multiple actors to enlist the eyes and ears of citizens to better spot public problems and bring those problems to the attention of the government and the broader public. Recently, information and communication technologies have enabled local communities to be active participants in monitoring in order to promote accountability, transparency and participatory approaches in governance process. In order to support inclusiveness in monitoring, citizen science/ mobile CBM appears to require an approach that is context-specific and adaptive using community-based participatory research methods. How this is to be achieved, however, remain open question. Tanzania is slowly deploying mobile CBM/citizen science, but the understanding of its approaches is not so clear and some instances actors, potential drivers and enablers are unknown. The PhD research will focus on community based monitoring/citizen science with possible topics could include: community mapping, (action) research on citizen science /CBM as a way to address diversity and gendered exclusionary tendencies in community based monitoring/citizen science; impact of community based monitoring/citizen science initiatives on, among others, empowerment, networking, sustainability, and responsiveness.

For this research, the candidate will collect primary data in selected areas of Dar es Salaam and/or Bagamoyo; action research might also be envisaged.

ARU promotor: Dr. Deodatus Patrick Shayo, School of Spatial Planning and Social Sciences.

Flemish promotor: Prof. Nathalie Holvoet, IOB, University of Antwerp, Belgium

Eligibility:

We are looking for a PhD-candidate with master's degree in social sciences, community development, development studies, political science and public administration and sociology with a strong interest in community participation, citizen, social accountability, social monitoring, sustainable development, inclusive communities, digital communities and participation, and community-based participatory research methods. The candidate should:

- (1) have obtained excellent study results (GPA of minimum 4.0)
- (2) demonstrate knowledge of and experience with quantitative and/or qualitative research methods
- (3) be fluent in spoken and written English



(4) be willing to follow courses and spend time at the University of Antwerp (approximately 15 months over a period of 4 years.)

Please submit the following documents:

- (1) Motivation letter
- (2) CV
- (3) PhD research proposal (approximately 3000 words), including rationale/background, research questions and research methodology.

Thematic Area 6: ICT and Smart Cities

Number of Ph.D. positions: 2

Brief description of the PhD positions:

This research refers to applied research related to Smart, Sustainable and Inclusive Cities (SSIC) based on emerging technologies such as big data, AI, and the Internet of Things (IoT). Essential building blocks for SSICs are data infrastructures that facilitate the transfer, sharing, and use of relevant data including algorithms and IoT Sensor data as well as data analytics. In order to fully implement these data infrastructures in a smart and sustainable way, strong data governance strategies based on (market) regulations, collaboration, and human capacity are indispensable. One Ph.D. focuses more on the technological aspects of data infrastructures (see e.g. platforms/dashboard, databases, standards, metadata, prototypes), meanwhile the other Ph.D. on the non-technological/governance aspects of SSIC data infrastructures (open data, co-creation, e-inclusion policies, governance modeling). Research needs to be achieved in strong collaboration with key stakeholders of SSICs.

ARU promotor: Prof. dr. Rigobert Buberwa, School of Earth Sciences, Real Estates, Business and Informatics.

Flemish promotor: Prof. dr. ir. Joep Cromptvoets, KU Leuven, Faculty Social Sciences, Public Governance Institute (with support of colleagues from University Ghent, University Hasselt, and University Antwerp)



Eligibility:

Specific qualifications: Masters in the fields of Engineering, Data Science, Information systems, Computer science, Informatics, Business, Law, Public Administration, and Political Sciences. Applicants are required to demonstrate proficiency in the English language and must submit an English proficiency test.

Desired qualifications: Strong expertise in smart cities, data infrastructure/governance, e-participation/co-creation, emerging technologies, and stakeholder needs studies is an asset

Application Procedures and Deadline:

Copies of application documents including i.) Postgraduate application forms, ii.) a two-page concept note; and iii.) all relevant supporting documents (e.g. copies of certificates, CV, etc.), both hard and soft copies, should be submitted to Ardhi University using the following address:

Director, Postgraduate Studies Research and Publication,
Ardhi University,
P.O Box 35176,
Dar es Salaam.
Email: dprp@aru.ac.tz

All applications should be submitted not later than **31st January, 2023** unless otherwise specified in the respective thematic areas.

Applicants who meet the eligibility criteria will have to appear for a physical interview at Ardhi University during the last week of February 2023. Successful applicants are expected to begin their studies in September 2023 unless otherwise specified in the respective thematic areas.



If needed, more clarification can be sought from the center through directoracs@aru.ac.tz.