

# **News Bulletin**

Quarterly Newsletter on Science, Technology and Innovation

#### ACTS Newsletter

#### **About ACTS**

he African Centre for Technology Studies (ACTS) is a pioneering development research think-tank that was founded in 1988 as an intergovernmental organisation to harness Science Technology and Innovation (STI) for sustainable development.

#### **Our Focus**

Vision: Knowledge for better Livelihoods

Mission: To strengthen the capacity and policies of African countries and institutions to harness science, technology and innovation for sustainable development

Value Proposition

Facilitate and convene evidence based policy dialogue and debate

Inform development policy and practice

Put critical issues of science, technology innovation on the development agenda Conduct high quality research, policy analysis, capacity strengthening and outreach on applications of STI policies for sustainable development in Africa

Provide independent and objective policy advice to African governments and agencies, regional economic

communities and institutions, private sector, civil society and community actors and agencies

#### Inside this issue!

December 2021



## Seminar Series on Knowledge and Innovation in Honor of Prof. Calestous Juma Launched

A seminar series on knowledge and innovation for development in honor of Prof. Juma, the founder of ACTS, was successfully launched on 12<sup>th</sup> August 2021. The inaugural seminar series, jointly organized by ACTS and the Calestous Juma Legacy Foundation (CJLF) focused on *'Re-igniting Africa's Industrialization Through Innovation'*. It attracted more than 200 online participants.

The two-day event featured an insightful keynote address by Prof. Banji Oyelaran-Oyeyinka of the African Development Bank (AfDB) on the first day. The keynote focused on key themes relating to industrialization in Africa: the renewed debate on industrialization, the reason for the continent's poor industrialization record and consequences of relying on natural resources. From the keynote, key challenges facing Africa's industrialization were highlighted. These are: dependence on natural resources, limited local manufacturing, increased concentration of industrial activity specialized in high value added activities and serving international markets and high dependence on imports reflecting uneven manufacturing and innovation capabilities.

The second day focused on innovation and renewable electrification in developing countries with key insights on important opportunities for local economic development. The discussions were based on a study on the Innovation and Renewable Electrification in Kenya (IREK) project "Building Innovation Capabilities for Sustainable Industrialization: Renewable Electrification in Developing Economies".

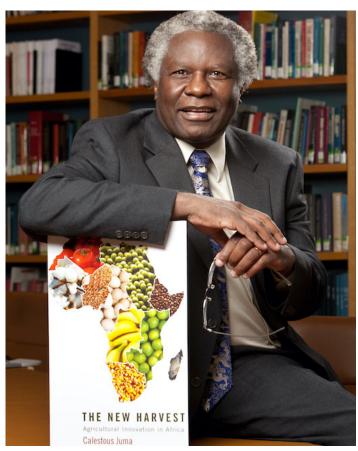
Speakers proposed a raft of key recommendations which exhorted African countries to pursue an active industrial strategy; build sectoral innovation and production systems for better health, enhance contributions of the informal economy to industrialization, enact policies that strengthen innovation and technological capabilities in informal enterprises and develop strategies to enhance local participation in global renewable value chains.



"This is the first collaborative event organized by ACTS and CJLF to keep CJs dream alive by creating a platform that will elicit discussions around knowledge and innovation for development"- Prof. Tom Ogada, Executive Director, ACTS

"Calestous has been many things to many people; but for us at ACTS, we saw him and continue to see him as an intellectual giant who made the youth of Africa proud in his accomplishments in the spheres of science, technology and innovation" - Prof. Alfred Oteng-Yeboah, Chair, ACTS Governing Council





The late Prof. Juma: a world renowned scientist who strongly believed in the power of leveraging STI to transform national economies and accelerate social progress.

"We plan to continue participating and hosting similar seminars to enhance expansion of technology and innovation knowledge and work together with ACTS in producing some outputs from these sorts of conversations" -Angela Christiana, Executive Director, CJLF.



#### **Participants' Reactions**

"Great series of presentations on the neglected issue of local capacity building in renewable development in the region" - Stephen Karekezi

"Thank you for organizing this meaningful lecture series" Yuna Choi, South Korea

"As a graduate student, Prof. Juma constantly encouraged me to reimagine the role of universities as engines of economic development and renewal with a focus on Africa Martin Mbaya, Kenya.

#### Use of Evidence in Policy and Decision Making (SGCI 2- Evi-Pol Project)

he Science Granting Council Initiative (SGCI) coordinated by ACTS started in 2015 and aims to strengthen the capacities of science granting councils (SGCs) in sub-Saharan Africa in order to support research and evidence-based policies that will contribute to the continent's economic and social development. It does this through programs focused on management of research grants; the use of evidence to inform STI policy; supporting knowledge exchange with the private sector; and establishing partnerships between Councils and other science system actors. It also focused on the cross-cutting issues of strategic communication, gender and inclusivity. The SGCI currently operates in 15 sub-Saharan African countries.

The SGCI-Phase 2 aims to strengthen the capacity of Africa's SGCs to design and monitor research programs, and to formulate and implement policies based on the use of robust STI indicators. The Evi-Pol project falls under SGCI-Phase 2 and has the objective to strengthen the capacity of SGCs to generate and use evidence in policy and decision-making, and to enhance their roles as policy champions. The project focuses more generally at deepening understanding and knowledge on policy processes among SGCs.

The specific objectives of the Evi-Pol project are: support SGCs to conduct reviews of national STI policies and deepen their knowledge and understanding of the policy processes; support the Councils to develop robust organizational-level monitoring, evaluation and learning (MEL) frameworks and plans; support the Councils to develop data management systems and frameworks and systematically collect, analyze and use relevant data/ evidence; Promote peer to peer learning and knowledge exchange between Councils and local STI experts. The SGCI-2 has a peer-to-peer learning component which strengthens the mutual learning and sharing of experiences in dealing with policy gaps of mutual interest. The knowledge platform or help desk, which is within this objective, has been designed under the Evi-Pol project to embed capacity building in the delivery of the services solicited by SGCs.

Evi-Pol supports the councils to develop data management systems (DMS) and frameworks; systematically collect, analyze and use relevant data/ evidence and promote peer to peer learning and knowledge exchange between councils and local STI experts. Among recent activities, the Evi-Pol team held a DMS masterclass on 26 October 2021 which aimed to explore current issues in data systems interoperability, integrating data sets and to relate these to current practices in different organizations. Another activity is the development of a help desk that is intended to be a one stop point for where the SGCs can request support for discrete small pieces of work and on demand large pieces of work relating to use of evidence in STI decision making and/or the STI policy process. To ensure this, STI policy consultants to provide discrete support in line with the Councils' needs will be considered from a pool of experts within AfricaLics community.

More information about the project can be accessed <u>here.</u>

#### **Project on Modern Energy Cooking Services in Kenya**

CTS, in collaboration with Loughborough University, has been implementing the Modern Energy Cooking Services (MECS) project over the last one and half years. The project aims how to rapidly accelerate a transition from biomass to genuinely clean cooking.

The MECS project is premised on the fact that existing strategies are struggling to solve the problem of unsustainable but enduring cooking which place a particular burden on women. After decades of investment of improving biomass cooking, focused largely on increasing the efficiency of biomass use in domestic stoves, the technologies developed have had limited impact on development outcomes. The MECS project aims to break out of this 'business as usual' cycle.

The project combines creating a stronger evidence base for transitions to modern energy cooking with sociotechnological innovations that will drive the transition forward.

The MECS Kenya component has built strong impact trajectory including engagement with policy makers, at subnational, national and international levels. This includes direct work and partnership with counties and specific energy centers within the counties. Several counties are now being engaged in e-cooking as part of supporting their energy planning and convening actions through county energy centers.

The ACTS team is currently involved in the national energy planning processes through the National Sustainable Energy Technical Assistance (SETA) initiative under the Ministry of Energy. The team has introduced e-cooking as a key option for energy efficiency and is working with the Directorate to align accordingly.

MECS has a huge opportunity to transform the clean cooking landscape in Kenya and create a model for Africa. However, this can be achieved through mutual support, trust and equitable partnerships that helps to unlock opportunities and incentivizes progress.

More information about the project can be accessed here.

## Community Cooling Hubs to Stem Post-harvest Losses

CTS in collaboration with Birmingham and London Southern Bank University is implementing a community based cooling project to stem post-harvest losses in Kenya. The hubs will also be used to store animal and human vaccines. The project covers dairy farming in Kiambu, horticulture in Kitui and fish farming in Homabay counties.

Under the banner of Community Cooling Hubs (CCH), the project aims to drastically reduce post-harvest losses at the community level by promoting and deploying easily accessible cooling technologies.

The project will deliver clean energy solutions to smallholder producer communities in Kenya in a bid to address food losses and waste while also adding value to various agrifood sectors in Kenya.

A needs assessment to understand community cooling needs and demands on specific value chains has already been conducted, providing valuable insights that would form the basis for implementing the project. The assessment revealed storage challenges facing specific value chains - lack of transport, market and storage facilities, exploitation by middlemen and inadequate capital to finance agronomic practices.

Other challenges mentioned are lack of veterinary services and knowledge on value addition and unpredictable weather patterns.



Milk coolers at Kiriita Cooperative Society premises in Kiambu.

#### Book on Renewable Electrification Published

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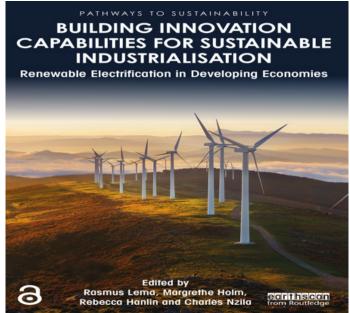
This book argues that renewable electrification in developing countries provides important opportunities for local economic development, but new pathways are required for turning these opportunities into successful reality.

The chapters in the book draw on a mix of project, sector and country level case studies to address questions such as: What capabilities are developed through on-going renewable electrification projects in developing economies? How can the expansion of renewable electrification be supported in a way that also encourages sustainable economic development? What role do international linkages (South-South and North-South) play and what role should they play in the greening of energy systems in developing economies?

The authors of the chapters provide a new understanding of how green transformation and sustainable industrialization can be combined, highlighting the opportunities and constraints for local capability building and the scope for local policy action.

The book will be of great interest to students and scholars of development studies, energy studies, sustainability and sustainable development, as well as practitioners and policy makers working in development organizations and national governments.

The Open Access version of this book, available at http:// www.taylorfrancis.com/books/e/9781003054665, has been made available under a Creative Commons Attribution-Non Commercial-No Derivatives 4.0 license.



#### AfricaLics Building the Innovation and Development Capacity in Africa

he African Network on Learning, Innovation and Competence Building Systems (AfricaLics) is a research and capacity building network with a Secretariat hosted by ACTS. The Network's vision is to support African countries towards developing and utilizing high quality research, conducted by African researchers, to enable more informed policy decisions to be made relating to the use of science, technology, and innovation (STI) for economic and social development as well as efficient governance.

ACTS hosts the AfricaLics Secretariat. With support from the Swedish International Development Cooperation Agency (SIDA), the Network has been implementing a research capacity building (RCB) program entitled "Enhancing research capacity on Innovation and Development (I&D) in Africa." Some of the activities under this RCB program include PhD academies; Research conferences; PhD visiting fellowships program (VFP); Policy engagements/ Outreach (webinar series) among others.

#### **PhD Academies**

The purpose of the PhD Academies held annually is to support the training of African Doctoral students engaged in research in the field of I&D; a multidisciplinary social science research area that includes elements of innovation studies and development studies.

This is an under-acknowledged field of study in much of Africa. The Academies provide a chance for PhD students to come together and support each other as well as receive training and stimulate their awareness of policy and management issues related to this field of research.

The major goal is to ensure that young scholars are equipped with the requisite research, theoretical and analytical capability to interrogate the African innovation landscape with the goal of being able to generate evidence-based insights for potential uptake by policymakers, private sector and civil society actors, international development agencies and other stakeholders.

In 2021 AfricaLics in collaboration with the university of Gondar hosted the 7th PhD academy which was two weeks of online training (Week 1: 26th - 30th July 2021 and Week 2: 20th - 24th September 2021). Due to the unprecedented COVID-19 pandemic, the Academy was held online through Zoom.

The Academy hosted students from Africa and a handful of students from the rest of the world. The Academy invited frontier researchers in the field of innovation and development from around the world to provide lectures and mentor students.

More information about AfricaLics PhD Academies can be accessed <u>here</u>.

#### PhD Visiting Fellowship Program (VFP) For African Countries

The VFP fellowships offer opportunities for PhD and postdoctoral students from low income and low-middle income African countries to receive additional training and capacity building support in innovation and development at Aalborg University (AAU), Denmark. Despite the COVID-19 global pandemic, five AfricaLics PhD visiting fellows from the 2020 - 2021 cohort had an opportunity to visit and stay in Denmark between August 2021 and end of October 2021.

The study visits to AAU provided the students with opportunities to present their work and interact with peers, mentors and other scholars working in the field of I&D. It provided them with time away from home to focus on writing and studying, attend a few events and selected PhD courses and make use of library facilities and other support services. The five PhD fellows were from Ghana, Ethiopia, Nigeria, Tanzania and Zambia.

#### **Research Conferences**

The overall purpose of the conferences is to present and discuss current state of the art research on Innovation and Development issues in Africa. Conferences target specifically the academic community, but also bring in policy makers, the business community and civil society.

Conferences aim to bring together leading scholars (between 150 - 200) working on I&D in Africa and other actors interested in the I&D field. To date AfricaLics has organized 4 research conferences, which are held after every 2 years.



Visiting PhD fellows with AAU mentors.

## **ACTS to Develop Climate Change Training Modules**

CTS has teamed up with training and research institutions to develop market-driven climate change training modules for different cadres and levels of education in the Common Market for Eastern and Southern Africa (COMESA) region.

The other consortium partners include the Institute of Climate Change and Adaptation (ICCA), University of Nairobi and Tetralink Taylor & Associates East Africa in collaboration with the Environment, Climate and Sustainable Development Institute (ECSDI), University of Zimbabwe. and Ethiopia's Environment and Forest Research Institute (EEFRI).

Under the umbrella of Capacity Building of Technical Institutions involved in Climate Change Education Training and Scientific Research (CapCET), the consortium will develop specific modules based on existing training demands on climate change.

According to Dr Joel Onyango, the project lead and a senior researcher at ACTS, the ultimate aim of CaPCET is to enhance the capacity of training institutions and professionals in climate change within the COMESA region. The project is based on the premise that Africa in general, and the COMESA region in particular, continue to experience unique climate change challenges that require a dynamic approach to capacity building.

A needs assessment on climate change training demands conducted in Ethiopia and Zimbabwe revealed an array of training gaps that needs to be addressed with a view to building the capacity of different actors in the climate change space; and stand the continent in good stead of reversing or slowing down the effects of climate change.

Specific topics requiring special attention for training in climate change include ecosystem based climate smart agriculture, climate transparency and reporting, calculation of greenhouse gases and climate modeling

The findings of the needs assessment presented during a webinar held on 27<sup>th</sup> October, 2021, identified climate change mitigation and adaptation, climate financing, disaster risk management and climate resilience building as the key training demands identified by stakeholders.

ACTS Executive Director, Prof. Tom Ogada, noted that there is lack of clear strategies to mobilize funds for climate actions, which is a key area of training.

"To enhance climate change financing, we should also separate adaptation and mitigation projects and proposals" - Prof. Tom Ogada, Executive Director, ACTS

On his part, Prof. Kefasi Nyikahadzoi, the Director of ECSDI at the University of Zimbabwe noted that knowledge on climate change has not permeated to the people who need it most - especially extension workers who work directly with farmers to improve their livelihoods.

He called for re-packaging of information from research on climate change to benefit those being affected by the effects of climate change especially vulnerable groups like small scale farmers.

"Existing curricula do not articulate issues of climate change, we need to package the curriculum to suit all levels and especially the vulnerable groups" - Prof. Kefasi Nyikahadzoi, the Director of ECSDI at the University of Zimbabwe

Prof Linda Mhlanga, the Deputy Director of ECSDI said the University of Zimbabwe does not have a stand-alone training programme on climate change.

"What exists are specific courses spread across different undergraduate and postgraduate programs. For this reason, he noted that the CaPCET project comes in handy as it will come up with an integrated and well-coordinated curriculum that will be offered at the university" - Prof Linda Mhlanga, the Deputy Director of ECSDI

Dr. Agena Anjulo, EEFRI Deputy Director General, Ethiopia said there is an urgent need to improve resource management to enhance climate change adaptation and mitigation actions at the community level. his 5 years Trilateral Chair program is being implemented by ACTS in partnership with the University of Johannesburg (South Africa) and the University of Sussex. The research program has the ambition to develop and test a new theoretical framework to understand transformation, in the context of 4IR and from an African perspective. The motivation is the need to unpack the social and technological relationships that explain the rate, direction and patterns of (radical) innovation adoption, diffusion and use.

This is a process involving not only technologies but also changes in consumer practices and needs, the skills and capabilities of all actors involved, infrastructures, governance, regulation, industry structure and cultural meaning of the socio-technical system involved. The main aim is to ensure that 4IR potential is harnessed for the specific conditions in Sub-Saharan Africa and in particular South Africa and Kenya, but with the African continent in mind.

The main research questions pursued are (a) how are changes in socio-technical systems influenced by the rapid technological developments under the 4IR? and (b) how can the transformative potential of these changes be exploited to encourage sustainable development?

Over the course of the program, a total of eight PhD projects will be supported with full scholarships, two of which are based at the Jaramogi Oginga Odinga University of Science and Technology (JOOUST) and hosted by ACTS. A sub-contract agreement was signed between ACTS and JOOUST in 2020. ACTS is responsible for funding the program's collaborative activities in Kenya. As the project facilitating organization, JOOUST provides training, mentoring, capacity building and administrative support to students.

Other activities implemented within the program include 1) conversation between the PhD students and authors. This platform was developed for students and emerging scholars within the Trilateral Chair to engage interactively with key readings written by leading scholars in the field, and to facilitate their incorporation into ongoing and planned research projects. 2) PhD Engagement Week designed to discuss the PhD cohort, provide a platform for students and senior researchers to meet each other, as well as sensitize the students under this program about the different theoretical frameworks and thematic areas relevant for their study. 3) Introduction to Systematic Literature Reviews (SLR) course.

#### December 2021

### Building Capacity for Computing Research In Kenya

reating a sustainable research culture in computer science targeting agriculture, health, finance and transport is a fundamental pillar towards making Kenya become a high middle income economy. For this reason, ACTS in collaboration with California Polytechnic State University, has been implementing a project on supporting STEM research cultures in Africa - Building institutional capacity for computing research in Kenya (CB4ICTD). The project is funded by the International Development Research Centre (IDRC).

The project specifically aims to co-create and evaluate initial programs that address institutional barriers to building research capacity and conduct further policy-relevant research to advance knowledge about institutional capacity building and better understand how the pilot strategy might be applied to other STEM fields and African countries.

The project is anchored on three pillars which include industrial fellowships where computing faculty members spend 3-6 months in a firm conducting a collaborative research project; industrial studentships which enables faculty to retain their best students to work on research projects; and Postdoctoral fellowships where recently graduated PhDs serve as postdoctoral fellows in departments to strengthen the research functions of a university.

The CB4ICTD project has demonstrated that institutional and structural factors such as university and departmental structures and strategies, and the relationship between a university and the private sector strongly influence researcher productivity and research impact.

The fellowship beneficiaries engaged industry on their research and used the academia industry linkages to develop grant proposals that provided pathways to scale their research to impact the society. So far, 6 policy briefs and 4 blogs have been developed in various STEM fields.

More information about the project can be accessed <u>here.</u>

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## **ACTS Launches College of Scholars Arm**

The College will work closely with other networks to identify and implement joint projects, deliberate on emerging technologies and how they can be deployed to enhance productive capacities in different areas

CTS established a College of Scholars on June 23, 2021 to develop and guide implementation of special projects related to its core mandate of harnessing applications of STI policies for sustainable development in Africa.

The college will work closely with other networks to identify and implement joint projects, deliberate on emerging technologies and how they can be deployed to enhance productive capacities of the youth by creating new markets.

During the launch, the new Dean of the College of Scholars, Prof. Shem Wandiga said it was an opportune time to have the college when Africa needs new ideas.

"The African continent is standing at crossroads of challenges and needs new ideas from its citizens not only for survival but also for its prosperity. These challenges call for building back a better Africa to be a priority of our foremost activities and will revolve around helping our fellowmen and women in getting over these challenges" he noted.

He urged members of the College of Scholars to chart out precisely how they shall change minds and chart new pathways for the future of Africa.

The college presents a great opportunity for experts in the region and globally to address the various challenges facing the African continent, which have been exacerbated by the effects of the Covid-19 pandemic.

The launch of the College was graced by ACTS Executive Director, Prof. Tom Ogada and the Governing Council Chair

#### Role of the College of Scholars

Specific role of the college will include but not limited to:

- Deliberate on the implementation of the program. It will act and prepare reports for consideration by the Executive Committee and the Governing Council.
- Undertake detailed evaluation and assessment of the program and activities at the center.
- Plan an annual policy research conference of the center in collaboration with the secretariat
- Provide general advice and guidance any other activities assigned to it by the Governing Council.
- Undertake specific activities assigned by the GC.

#### Members of ACTS College of Scholars



Prof. Shem Wandiga, Former Director, Institute of Climate Change and Adaptation (ICCA), University of Nairobi (Dean)



Dr. Veerle Vanderweed, Managing Partner, Platform for Transformative Technologies



Dr. Xiaolan Fu, Founding Director of the Technology and Management Centre for Development (TMCD)



Prof. Bitange Ndemo, Professor of entrepreneurship, University of Nairobi



Prof. Landry Signé, Senior Fellow, Brookings Institution



Prof. Mammo Muchie, Research Professor, Tshwane University of Technology, South Africa.



Prof. Paul Zeleza, Outgoing Vice Chancellor, United States International University, Kenya

## **ACTS to Spearhead the Digital Economy Program**

#### Why Digital Economy?

he world is on the edge of a technological revolution that will disrupt the way we live, work and socialize. A key aspect of this revolution is the digital economy, which covers all business, economic, social and cultural activities that are supported by the web and other digital communication technologies.

The digital economy is characterized by the blurring of boundaries between the physical, digital and biological worlds. It's mainly a product of advances in artificial intelligence (AI), Machine Leaning (ML), robotics, the Internet of Things (IoT), 3D printing, genetic engineering, quantum computing, and other technologies. These developments fall under what is popularly known as the Fourth Industrial Revolution (4IR).

#### **AI4D Africa Scholarship Project**

Under the digital economy program, ACTS has launched Artificial Intelligence for Development Africa (AI4D) scholarship program to foster and nurture talent in responsible Artificial Intelligence and Machine Learning in African public universities. The three 3-year scholarship program funded by the International Development Research Centre (IDRC) and the Swedish International Development Cooperation Agency (SIDA) aims to meet the growing demand for research and development in responsible Artificial Intelligence (AI) and Machine Learning (ML) in the continent.

The project is implemented by ACTS based in partnership with Kwame Nkrumah University of Science & Technology in Ghana; University of Linkoping, Sweden, University Cheikh Anta Diop de Dakar, Senegal. Other partners include University of California, United States; Human Sciences Research Council and Institute for Humanities in Africa based in South Africa; and the University of Eduardo Mondlane, Mozambique.

The scholarship program aims to create a critical mass of scholars to enhance research and development in AI and ML while public universities in sub-Saharan Africa will have developed their capacities to provide postgraduate training in the two fields A series of complementary activities have also been lined up to enhance research capacities of the scholars which include short-courses, PhD Academies quarterly seminars, annual workshops, mentorship, regional conferences and online training.

Following a rigorous selection and evaluation process, the 1<sup>st</sup> cohort of 22 scholars - 15 PhD students and 7 Early Career Academics (ECAs) - have been selected from Kenya, Tanzania, Ethiopia, Uganda, Botswana, Zambia, South Africa, Senegal, Benin and Rwanda. Selection of the second cohort is underway and is expected to add more fellows to the project.

During the official launch of the Al4D program on August 31, 2021, the Executive Director for the African Centre for Technology Studies (ACTS), Prof. Tom Ogada, said the program will help harness technologies in Al and ML.

"We are fully committed to ensure successful implementation of the program not only for the benefit of the scholars but also to help harness AI and ML technologies" he noted.

Katie Clancy of IDRC added that the program will spearhead research in AI and ML in the continent.

"We are excited to partner with SIDA and ACTS to strengthen artificial intelligence and machine learning ecosystems in Africa through high quality research, responsible innovation and nurturing of talent" she noted.

Apart from the scholarship, the program will create and support a network of scholars to catalyze uptake of AI and ML disciplines especially among women and the youth

Dr. Vilhelm Muller of SIDA lauded the formation of the AI4D Africa scholarship network that will create a forum for sharing ideas on AI and ML in the continent.

"Networks enhance the probability of the outcome of the AI4D Africa initiative and should be maintained even after the scholarship and interact with other networks within innovation" he noted.

More information about the project can be accessed <u>here</u>

AI4D Africa Scholar Profiles

## Nairobi Risk Hub Engage Stakeholders on Risks

CTS is implementing a project on Multihazard Urban Disaster Risk Transitions that focuses on disaster risk management interventions and capacity building in Nairobi. The project provides options for anchoring actions for climate change adaptation, while also contributing to mitigation against urban disasters associated with climate variability.

The Nairobi Risk Hub is part of the larger Urban Disaster Risk Hub (Tomorrow's Cities). It is a five-year global interdisciplinary research hub funded by UK Research and Innovation (UKRI) Global Challenges Research Fund (GCRF).

The aim of this project is to catalyze a transition from crisis management to multi-hazard risk-informed planning and decision-making, for cities in low-and-middle income. Specifically, the Nairobi Hub seeks to provide Nairobi with the capacity and policy framework that enables a shift from crisis response towards integrated development planning for enhanced disaster risk preparedness and management.

It utilizes interdisciplinary research as a tool to convene stakeholders from across sectors and local communities to facilitate collective action towards addressing the drivers and impacts of multiple hazards. Its programs of work seek to establish a new integrated evidence base on the city's most prominent hazards and risks, their drivers, uncertainties, root causes and potential solutions, as well as to build greater capacity for collecting and applying this evidence in disaster risk management.

Since it started, the project has covered significant ground in mapping out stakeholders and documenting their perceptions and understanding of risks among the urban poor. This has been achieved through structured dialogue with local community leaders, city policy makers, national policy makers, researchers, institutions of higher learning, opinion leaders, practitioners, civil society organizations and global partners

Community level engagements at community levels focused of poverty, high cost of living exacerbated by COVID-19, insecurity, land access and affordable housing. Local leaders attributed high poverty to perennial floods and fires which tend to occur concurrently due to high exposure (e.g. markets located near rivers) and dynamic vulnerabilities to environmental and physical factors like poor basic infrastructure.



One of the community engagement fora by the Nairobi Risk Hub to understand perceptions and of risks among stakeholders.

Discussions revealed that risk is hardly integrated into even the emergency response activities at the local and city levels. This is mainly due to limited knowledge and resource capacity.

The engagement also unpacked the limited interaction between the urban poor and different disciplines social and physical sciences) and expertise revealing the limited understanding about the context, root causes of the risk and potential remedies among the urban poor. There is also persistent gap among the various stakeholders engaging the local communities in risk reduction.

The process incorporated elements of co-production of knowledge and evidence, facilitating local community led discussion, listening to the local community and their leaders, creating space for dialogue with them and other stakeholders, to cross-fertilize ideas and knowledge, engaging all sectors at the city level and strengthening relations and incorporating them into research activities.

Following the engagements, there has been buy-in from the city policy makers, local communities and stakeholders, which is evident in the ongoing implementation of the impact case; and also enhanced an in-depth understanding of the interactions between the social drivers and multiple physical hazards and their impacts that could provide a good framing for DRR plans for the city and spur a framework for collective action through the evidence-based convening of DRR decisions and actions.

More information about the project can be accessed here.

## **Project to Deconstruct Research Methodologies**

team of research experts from ACTS are part of a project working towards exploring alternative methods of pursuing knowledge with a view to making them more suited to wider application without necessarily losing on scientific rigor. ACTS is implementing the project in partnership with the University of Innsbruck (UIBK) and University of Natural Resources and Life Sciences (BOKU).

Dubbed **Decoloniality Book Project**, the initiative aims to rid existing research methodologies of rigidities that hamper effective outcomes and utility. It is based on the premise that whereas existing methodologies help standardize research approaches, their adoption, application and utility of associated findings vary widely depending on the type of research, discipline, personal preferences, understanding of the methodology and even geographical location.

How do we 'decolonize methodologies' in research and policy appraisal and provide alternative opportunities for thinking, knowing thereby liberating the pursuit of knowledge from the stranglehold of globalizing structures and their conditioning effect?

#### **Decoloniality Book**

Opportunities arising from and challenges hindering the application and utility of findings deriving from established methods will be distilled in a book which sets out to explore how these methods can be modified in a way that ensures they effectively inform policy decisions and generate wider political debates intended to enrich knowledge, enhance practice and nurture better socio-economic outcomes.

More information about the project can be accessed here



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### ACTS DIARY

#### 2nd Calestous Juma Seminar Series

#### November 29th -30th 2021

The 2nd Calestous Juma seminar will focus on Steering Science, Technology and Innovation to achieve Sustainable Development Goals. Specifically, the seminar will showcase best practices in the transformation of agriculture and fisheries sectors through integration of STI; synthesize and reflect on the lessons learnt in the global pilot program of the STI for SDG roadmaps in Africa.

Registration: Day 1 and Day 2

## Workshop on Governance of Socio-technical Transformations (GoST) Workshop

#### November 29, 2021

ACTS in collaboration with the Science Policy Research Unit (SPRU) at the University of Sussex will hold a workshop on Governance of Socio-technical Transformations (GoST) focusing on pathways to policy in Kenya. The hybrid workshop will allow for simultaneous participation for both in person attendees in Kenya and online sessions for those outside the country.

#### Webinar series 09: Building innovation capabilities for sustainable industrialization in Africa: Status and prospects

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#### December 2, 2021 Time: 5:30PM - 7:00PM

The webinar will be based on work done by the three AfricaLics visiting fellows program (VFP) Post-docs in their capacity of guest-editors of a special issue of the journal 'Innovation and Development'. The special issue will be published in 2022 and presents a series of articles on building local technological capabilities and their implications for formulating and implementing policies in Africa's industrialization agenda.

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TIP Conference 2022: Building a Sustainable Knowledge Infrastructure on Transformative Innovation Policy

#### January 17th - 21, 2022

The Transformative Innovation Policy Consortium (TIPC) and the European Forum for Studies of Policies for Research and Innovation (Eu-SPRI) have co-organized the 2022 TIP Conference, that will be held digitally from 17th - 21st January 2022. The conference aims to bring together a diverse range of actors and stakeholders to mobilize people, ideas, and initiatives to produce an evolving action research agenda for Transformative Innovation Policy.