



TECHNOPOLICY AFRICA

The official newsletter of the African Technology Policy Studies Network ISBN 978-9966-124-91-3



Highlights

ATPS Ranked as the 1st Top Science and Technology Policy Think Tank in Africa and 10th Globally

The World and COVID-19: The Good, The Bad and The Ugly

University Students Assemble Kenya's First Locally-Made Ventilator

EDITORIAL TEAM

Editor in Chief:

Dr. Nicholas Ozor

Editor:

Felix Musila

Contributors:

- Dr. Akanimo Odon
- Uzochukwu G.O. Okafor
- Tebogo L. Mogaleemang
- Moses Odhiambo
- Felix Musila
- ATPS Team

Design and Layout:

Felix Musila

ATPS Vision:

To use science, technology and innovation (STI) as a means for achieving sustainable development in Africa.

ATPS Mission:

To improve the quality of science, technology and innovation (STI) systems research, policy and practice by strengthening capacity for STI knowledge generation, dissemination, and use for sustainable development in Africa.

Overall Objective:

To build Africa's capabilities in science, technology and innovation for sustainable development.

ATPS Motto:

Building Africa's capabilities in science, technology and innovation policy research, policymaking and policy implementation for sustainable development.

Inside...

- ATPS Vision & Mission
- Board Chairman's Message
- Executive Director's Message
- ATPS Retains the 1st Position as the Top Science & Technology Policy Think Tank in Africa and 10th Globally
- Empowering Africa's STI- Organisations Through Eco-Innovation and Resource Mobilisation Strategies for Impact
- The World and COVID-19: The Good, The Bad and The Ugly
- Climate and Environment Commitment-The African Conundrum
- Health Innovation: Kenyan University Students Innovate to Fill COVID-19 Ventilator Shortage
- Scholarships/Opportunities
- Picture Gallery

Chairman's message

It gives me great pleasure to welcome you to this edition of the *TechnoPolicy Africa* Newsletter. During these trying times we face due to the novel COVID-19 pandemic, our determination, resilience and hope is put to the test. Just to borrow from the great words of Thich Nhat Hanh who said and I quote **“Hope is important because it can make the present moment less difficult to bear. If we believe that tomorrow will be better, we can bear a hardship today”**. It may be difficult to remain hopeful when faced with loss and uncertainty, but we have plenty of reasons to be optimistic.

ATPS continues to record remarkable progress in its endeavors to build Africa's capabilities in science, technology and innovation policy research, policymaking and policy implementation for sustainable development. Among the most recent major success stories is that the ATPS emerged as the 1st Top Science and Technology Policy Think Tank in Africa and 10th globally according to the 2019 Global Go To Think Tank Index Report released by the University of Pennsylvania under the Think Tank and Civil Societies Program.

ATPS also came tops in Africa in the categories of the Best Use of Internet, Best Institutional



Prof. Crispus Kiamba,
Chair, ATPS Board of Directors

Collaboration Involving Two or More Think Tanks, Think Tank with the Most Innovative Policy Ideas/Proposals, Think Tank with the Most Significant Policy Impact and the Best Advocacy Think Tank among other categories. With these tremendous successes, the ATPS Board extends its gratitude to the entire 5000 network members and stakeholders spread across 51 countries in 5 continents for their great support and strategic guidance.

As we progressively continue to implement our Phase VIII Strategic Plan (2017-2022), we strive to ensure that our strategic activities are successfully heeded to and fulfilled. The ATPS Phase VIII Strategic Plan will continue to build upon the numerous gains and achievements recorded during the previous years. We will continue to sustain our integrity and expertise in Science, Technology and Innovation (STI) policy research, policymaking

and implementation for Africa's development. These roles have earned us our position as the premier STI policy research organization in Africa.

The ATPS remains committed to serve its wide range of stakeholders even better. This is despite the ugly glare of the global COVID-19 pandemic. We therefore continue to solicit for financial support from our consortium of donors and partners and remain open to collaborations and partnerships with like-minded organizations and institutions around the world.

I take this opportunity to thank all those who have supported us during this period through development grants, linkages, partnerships and other collaborative activities. I also wish to thank all those who have greatly contributed to this edition of the *TechnoPolicy Africa* Newsletter for their very spirited and resourceful inputs.

Executive Director's message



Dr. Nicholas Ozor, ATPS Executive Director

Welcome to the seventeenth edition of the *TechnoPolicy Africa* Newsletter 2020. This edition highlights significant events, achievements and challenges of the ATPS during the period. In general, we continue to push on with our core mandate of promoting the generation, dissemination, use and mastery of science, technology and innovation for Africa's development, environmental sustainability and global inclusion.

The ATPS continues to stand in solidarity with all our partners, grantors, collaborators and the entire Science and Technology fraternity during this COVID-19 pandemic period. At the ATPS, we have remodeled some of our project activities to suit safety measures that different countries have adopted within their jurisdictions whilst ensuring that we cause minimal disruptions to our projects, programmes and activities. Most importantly, we have fully activated our National Chapters in 30 countries to enable us implement our activities within these countries under the COVID-19 lockdown. In the last five months, we have been able to implement our project activities in nearly 22 African countries without making a single trip,

thanks to our National Chapters who have lived up to our expectations by delivering in-country roles with the Secretariat providing oversight functions. This mode of work has also enabled us to achieve outputs and outcomes at the least transaction costs.

Besides, we have prepared two important publications on Nationally Determined Contributions for Africa under our 'Climate change thematic priority'. The first publication is on "Nationally Determined Contributions Implementation Index and Tracking Tools for Africa" available at: <https://atpsnet.org/wp-content/uploads/2020/08/NDC-Implementation-Report-final.pdf>; while the second is on "Political Economy of Climate Change Governance in Africa" available at: <https://atpsnet.org/wp-content/uploads/2020/08/Report-on-Political-Economy-of-Climate-Change-Governance-final.pdf>.

We wish to thank all our partners, grantors and donors for their relentless support even as we continue to solicit for more support to enable us achieve our objective of strengthening Africa's capability in science, technology and innovation for sustainable development. We pledge to continue to remain astute in the delivery of our mandate with the highest value for money.

ATPS Retains the 1st Position as the Top Science and Technology Policy Think Tank in Africa and (10th globally) According to a Global Report

By ATPS Team,

The ATPS once again secured its top spot as Africa's Top Science and Technology Policy Think Tank and 10th globally according to the 2019 Global Go To Think Tank Index Report that was officially released on 28 January 2020.

This marked 14 years of the Think Tanks and Civil Societies Program (TTCSP) that aims to acknowledge important contributions as well as emerging trends in think tanks worldwide. The report sought to showcase the role played by think tanks in governments and civil societies with the sole aim of improving their capacity as well as performance. A panel of experts drawn from diverse disciplines ranked over 8,000 think tanks from across the globe.

The (ATPS) managed to retain its top position as the 1st Top Science and Technology Policy Think Tank in Africa and 10th globally. This is a no mean achievement. Think tanks under this category provide top-notch quality research solutions in a number of genres ranging from energy, climate to life sciences. These think tanks excel in different spheres of research, analysis and public engagement on a wide range of policy issues with the aim of advancing debate, facilitating cooperation between relevant actors, maintaining public support and funding, and improving the overall quality of life in the relevant countries that they cover.



Think Tanks and Civil Societies
Program logo

The ATPS also ranked tops in many other categories that were used to assess Think Tanks across the world. Notable among these categories are: **Best Managed Think Tank; Think Tank with the Most Innovative Policy Ideas/Proposals; Best Independent Think Tank; Best Trans Disciplinary Research Think Tank; Best Advocacy Campaign Think Tank; Think Tank with the Best Use of the Internet; and Think Tank with the Best Institutional Collaboration Involving**

Two or More Think Tanks; Best Think Tank in Domestic Health Affairs among others.

More details of the ranking can be found in the report at:

https://repository.upenn.edu/think_tanks/17?utm_source=repository.upenn.edu%2Fthink_tanks%2F17&utm_medium=PDF&utm_campaign=PDFCoverPages

Empowering Africa's STI-Organizations Through Eco-Innovation and Resource-Mobilization Strategies for Impact

By Dr. Akanimo Odon- Africa Strategy Advisor, Lancaster University & CEO, Envirofly Consulting UK Limited

A thorough assessment and review of several reports and documentation which show the developmental and current state of STI in different African countries, provides a justification for this article which considers a two-pronged approach to the effectiveness and sustainability of STI-organizations in Africa. Within the STI pillars of knowledge acquisition, knowledge creation, knowledge transfer and developing an innovation culture, pushing for an eco-innovation agenda with capacity building at its core and supporting a strategic resource mobilization drive with internationalization at its core, are two clear ways of increasing the relevance of STI-organizations especially in a post-COVID era.

In an era where the identification of long term 'solutions' to sustainable development and climate change challenges across the world is crucial, there is a strategic lead that STI-focused organizations (including government, universities and research and development departments of industries) in Africa can take to develop home-grown policies and initiatives to allow Africans themselves provide solutions to their own particular needs and challenges. The twin pillars of increasing human capital and building Africa's green and sustainable economy, comes together in eco-innovation. Eco-innovation has the capacity to deliver the mechanisms needed for green growth and sustainable development. These mechanisms will be essential to producing commercially successful products, services and technologies that would reduce the impacts of human activities on the environment, achieve more efficient/responsible uses of natural resources and enhance societal, economic, and technological resilience to environmental pressures.

There is no doubt that there exists huge gaps between academic research and industry in many African countries. This provides for an urgent need to design policy tools, knowledge transfer programmes and pathways to impact models to ensure a new era of impact-oriented research in African countries, driven by providing STI-backed solutions to actual problems. This is a strategic push that is needed to support the process of change from a 'publish or perish' agenda to a 'publish and impact' agenda in African research.

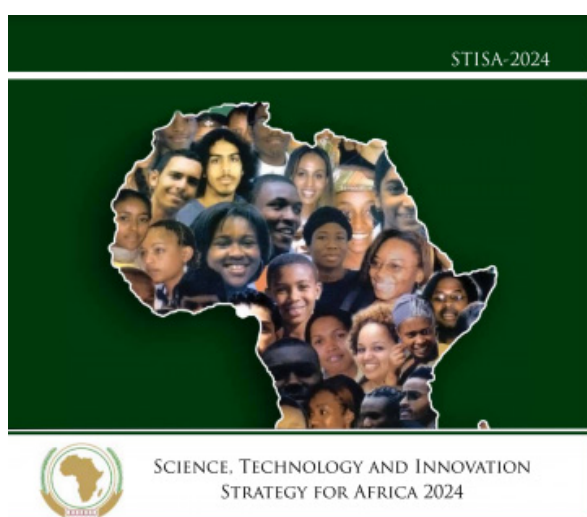
Most African researchers know of the term 'Publish or Perish' which is used to describe the fact that research in Africa is being driven fundamentally from a 'publish to be promoted' basis as against a 'publish for impact' basis. While both bases can function together, the trouble is that most African STI-researchers are not driven by research for impact because they do not seem to have a compulsion to. In an environment where there are so many challenges, in which research can be designed to provide solutions to these challenges, most African researchers publish without a clear impetus to make real change. There are pressing issues that makes researching to answer real practical questions in African institutions difficult and in most cases untenable.

Academia says 'we have knowledge'; Industry says 'we have Money'; and Government says 'we have Power'. One of the challenges that stifles implementation of STI policies and programmes is the 'working in a bubble' situation faced by most agencies emphasized

by the silos-working mentality of the tripartite segments of society as shown above.

These can be addressed under an eco-innovation framework with knowledge transfer and capacity building at its core. Established strategies like co-location of academia and industry; co-development and co-delivery of research programmes between research and industry; practical SME-solutions through student research projects; consultancy relationships with practical mutual benefits, to mention but a few.

However, it must be clear that eco-innovation cannot be achieved without qualitative science and technology-focused research and resource mobilization which must be driven by government policies to bridge the gaps between research and industry. This provides a good platform for increasing STI-employment and employability of Africans with special reference to women and young people. With all the policies and strategies in place, implementation would still struggle in the absence of funding. A good start would be, to however replace 'funding' with 'resources' as this makes the engagement required a lot more robust and sourcing for what is needed to make research work goes beyond physical cash to appreciating strategic research partnerships for impact.



Science, Technology and Innovation Strategy for Africa 2024

Africa was home to just 2.4% of the world's researchers (1.1% for Sub-Saharan Africa and 1.4% in North Africa), compared with 42.8% in Asia, 31% in Europe, 18.5% for North America, and 3.6% for Latin America and the Caribbean. In most African countries, STI-inclined research institutions depend wholly on their federal governments who now struggle to fund them; they don't engage strategically well with private sector organizations or industry who can potentially fund them; Memorandum of Understandings (MoUs), when they exist, that can attract funding are not well operationalized and often gather dusts on shelves; solution-driven research, even when problems abound, is an afterthought; access to increasing international funding is a struggle; and when they apply for funding, proposals are poor and not commercially viable because grantsmanship is deficient. So, the need for a comprehensive resource mobilization and appropriation implementation plan that carefully addresses all the listed issues above is crucial.

The African Union Science, Technology and Innovation Strategy for Africa 2024, emphasizes that African states have the potential for a 1% contribution of their GDP towards financing STI programmes that are led by STI-focused organisations. African leaders have always committed to increasing funding for national, regional and continental programmes for science and technology but so far only a handful of the countries have implemented that. In 2013, Africa's gross expenditure on research and development was about 0.45% of GDP, compared with 2.71% in North America, 2.11% in Southeast Asia, 1.75 % in Europe, 1.62% in Asia, and 1.03% in Latin America and the Caribbean. The African figures have not changed much since then.

The World and COVID-19: The Good, The Bad and The Ugly

By Tebogo L. Mogaleemang- Founder/CEO, Spectrum Analytics-Botswana

The year 2020 promises to mark a turning point in the annals of human history. The human and economic toll of COVID-19 is going to be immense, and experts claim the global economic impact will dwarf what we experienced with the 2007/2008 financial crisis. For good or bad, COVID-19 may be a needed catalyst for us to change how we live and work.

The global pandemic has exposed structural defects in health care systems around the world. The loss of lives and livelihoods we are witnessing from the pandemic are tragic, however, the disease has also revealed a lot of things I do not want to go back to. Hindsight is a great teacher, and certainly our global leaders' wavering and ambiguous communication allowed this to escalate into a costly crisis – unintended or not. It has been frustrating watching leaders of the 'free world' choosing to play politics while the disease is spreading and claiming lives. Bizarrely, the World Health Organisation also took its sweet time to declare COVID-19 a pandemic – delaying the implementation of appropriate responses and interventions by governments all over the world. To this day, I am still not sure whether, I should wear a facial mask in public or not, official recommendations have hopped on both sides.

We live in a world where finding the truth online is increasingly becoming a search for a needle in a haystack. It may sound counterintuitive to many of us, but it takes information to inform, misinform and disinform. The absence of decisive and assertive global leadership from December 2019 to March 2020 created a conducive climate for the spread of false information that placed many human lives at a risk. COVID-19 has also exposed the dangers of information overload as well. To quote Herbert Simon, "What information consumes is rather obvious: it consumes the attention of its recipients. Hence a wealth of information creates a poverty of attention." Having 'multiple versions of truth' distracted all of us from demanding accountability and adequate COVID-19 responses from our governments. The internet, our information highway, is breeding human distraction (and breeding fear) on an epic scale, and that poses extreme risks during times like these. I have caught myself emotionally conflicted from content I have seen online, and as an African I do not know how to feel about videos of Africans being subjected to clear and targeted racial discrimination in China. Harsh as it may sound, these Africans would not be subjected to such treatment if African governments could create the same opportunities for their people - right here in Africa. The deafening silence of a super power like China on the matter left me uncomfortably numb.

It has not all been gloomy though, I have seen nature bounce back to life as well, birds and squirrels have come out to play in numbers in my neighbourhood. Despite our chest thumping as a species, it is sobering to admit that we pose the gravest danger to the existence of other life forms and our shared biosphere. The disruption of daily human activities has resulted in global drops in pollution. If we are sincere about conserving the environment, the message is loud and clear, we need to change our way of life. It is bizarre that currently there are some who are more concerned with the health of economies than human lives. This is not to trivialise the need to reboot economies, and while the loss of livelihoods is real, at what point did the economy become a sacrificial altar for human lives?



A pictorial of people wearing masks in public to avoid contracting the Coronavirus

“We know what to do to bring back our economy back to life. What we do not know is how to bring people back to life.” as the Ghanaian President Nana Akufo-Addo succinctly shared in one interview. Strangely, we have forgotten that our economies only exist in our imagination in a way, heretical as that may sound, that is a fact (Yuval Noah Harari’s insights can help if in doubt).

I have a confession to make though; I am a hopeless optimist. So, despite all the negatives and bizarre moments I have observed and read about, COVID-19 has also sparked enthusiasm and new hope in me. I have been inspired by how the shortage of medical supplies and restricted movement of people and goods ended up triggering innovation across Africa. African states are increasingly consuming their local solutions and innovations to address their own challenges; this momentum needs to be consciously sustained beyond COVID-19. We have seen glimpses of what is possible when governments become agile and people-centric. In my beloved Botswana, we have created more digital solutions since the lockdown than in the last 10 years. With political will, this can mark a new dawn for Africa, setting the continent towards sustainable and inclusive development. It does not make sense that the richest continent in the world in terms of mineral resources can have most of its inhabitants living on foreign and government handouts. Many young people in the continent have stood up and proposed brilliant solutions to the global challenges we are facing. Clearly, Africa has talented and skilled problem solvers who can be its most valuable resource if offered a creative outlet.

COVID-19 appears to have made a stronger case for digital transformation for businesses and governments than endless conferences and workshops on the Fourth Industrial Revolution over the last 3 years. The need for increased investments in Research, Science and Technology and Innovation (RSTI) in Africa cannot be emphasised enough if Africa is to prosper in the Digital Economy. In my beloved Botswana, different administrations over the last 20 years have waxed poetic about creating a knowledge-diversified economy, yet we still invest less than 1% of our GDP (Gross Domestic Product) on R&D. It is an open secret that countries shaping the global economy invest heavily in STEM (Science Technology Engineering and Mathematics) Education and Research.

If African leaders allow the gap to widen, then Africa will forever be a consumers' continent. Everyone focuses on their own in times of crises, so we need to build 21st century skills to allow us to tackle our own problems. COVID-19 has revealed a lot of abnormalities in our old normal. If we do not change, I will play the video of the Ghanaian dancing pallbearers for humanity. I do not know about you, but I would rather risk shaping the future than go back to how things were.

It would be remiss of me if I did not commend health care workers around the world, you may not carry weapons, but you are our frontline soldiers on the global war against COVID-19. I salute you all!



South Sudanese refugees practice social distancing as they await to access food rations at a distribution centre in Kakuma camp in Kenya

Climate and Environment Commitment-The African Conundrum

By Uzochukwu G. O. Okafor- Coordinator-African Technology Policy Studies Network - Namibia Chapter

Climate change encompasses different terminologies, global warming, climate crisis, climate emergency, all these to draw attention to its urgency. The world has accordingly taken notice with the UN environment conference, in Stockholm in 1972 culminating with the adoption in 2015, by the UN General Assembly, of the Agenda 2030 for Sustainable Development. Sustainability has three pillars: Environmental, Social and Economic (Figure 1).

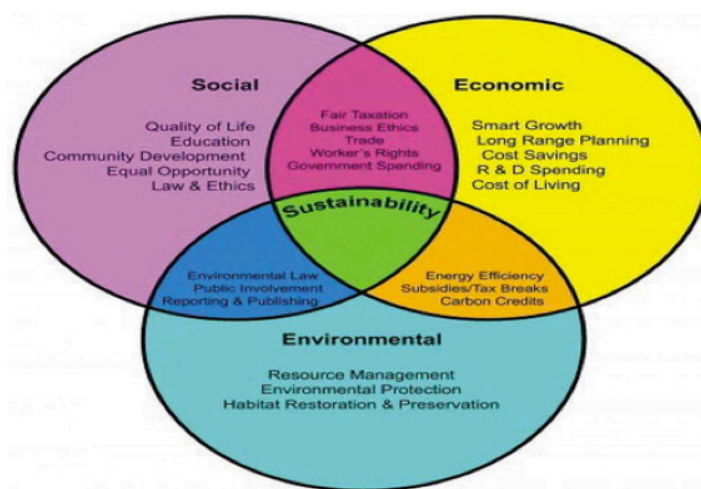


Figure 1: Relationships between social, environmental and economic sustainability, (Justice Mensah & Sandra Ricart Casadevall (2019)

Climate change affects Africa the most under all scenarios above 1.5°C. (Edem E. Selormey and Carolyn Logan, 2019). Okonjo-Iwuala, 2020 states that “devastating cyclones affected 3 million people in Mozambique, Malawi, and Zimbabwe in the spring of 2018. GDP exposure in African nations vulnerable to extreme climate patterns is projected to grow from \$895 billion in 2018 to about \$1.4 trillion in 2023—nearly half of the continent’s GDP.”

The cruel irony facing Africa is illustrated in figure 2 below, showing Carbon Emission by income group and by region. The possible trend on impact of climate change on sub-Saharan Africa’s GDP by 2100 over a range of global warming between 0°C to 3°C is shown in figure 3 below. All these illustrate the conundrum Africa faces with respect to SDG’s and climate change agreements. These notwithstanding, Africa must be committed to transitioning to a green economy.

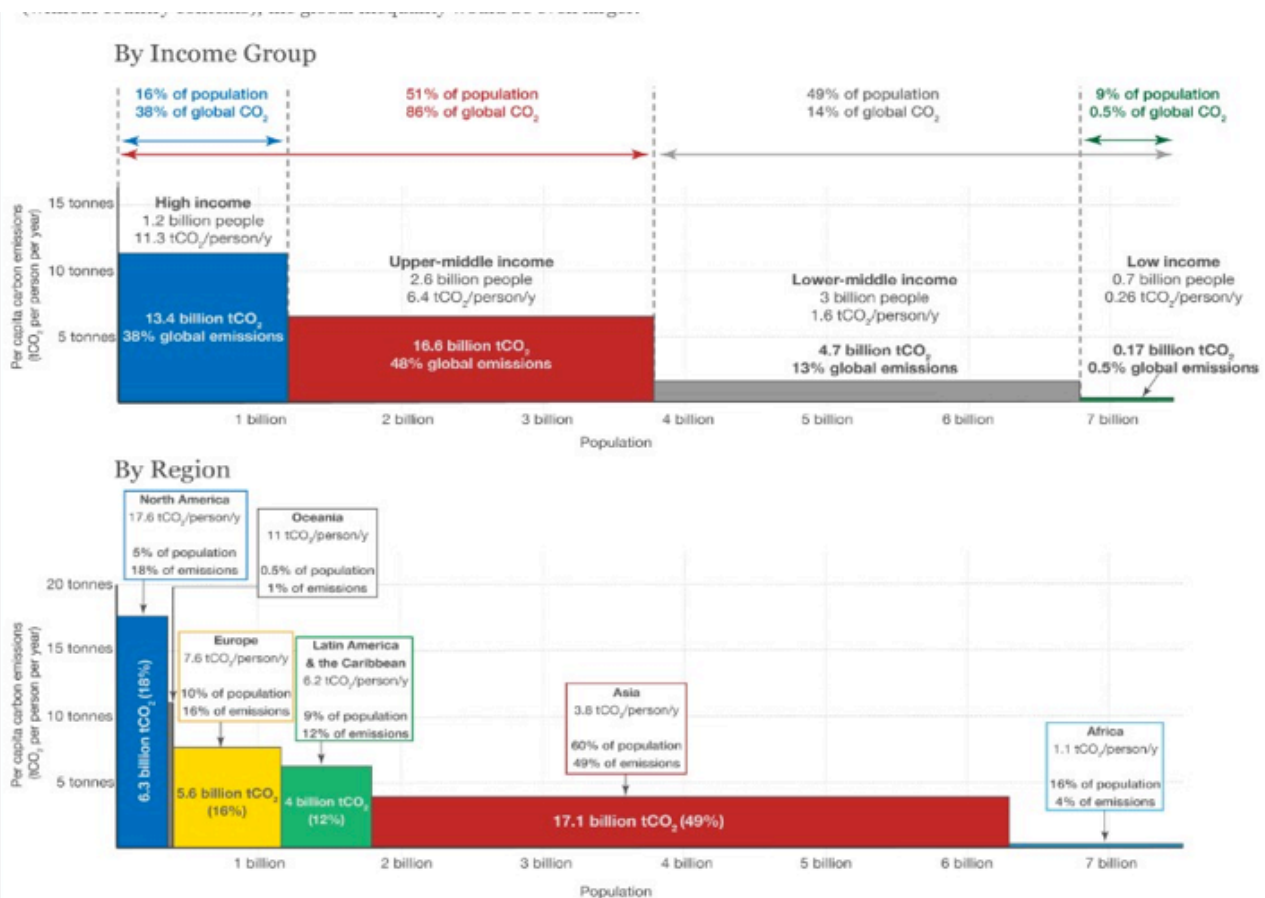


Figure 2: Global CO₂ emission by income and region (Hannah Ritchie and Max Roser (2020))

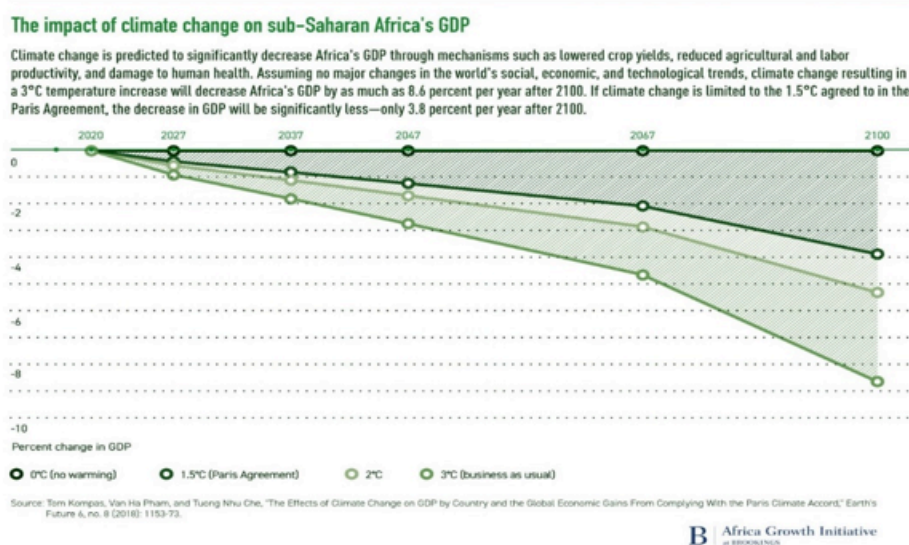


Figure 3: Impact of climate change on Sub-Saharan Africa's GDP

Challenges of Climate Change in Africa

Africa suffers significant infrastructure deficit in the areas of roads, energy, clean water, health, education and agriculture. Bridging this infrastructure deficit, while limiting CO₂ emission is a major challenge. The development of infrastructure will require a lot of construction, involving extraction of construction materials, mining of ores and minerals, increased use of fossil fuel and biomass. Construction works worldwide, use 50% of all resources, 45% of global energy, 40% of global water, and 70% of all timber. The shares of global resource extraction have shifted considerably in the last 30 years. Asia's share increased from 40% in 1980 to 60% in 2011, (Larsgöran Strandberg and Sara Trulsson, 2020). Africa is likely to experience the same scenario. Africa has weak institutions and governance, coupled with weak legal and regulatory frameworks (AMCEN, 2011). Strong institutions and strong environmental legislation create the capacity to secure the environment from industrial harm. Weak governance is compounded by ignorance and lack of awareness about individual contribution to CO₂ emission. According to Washington Post study, 2019, only about 28% of Africans were "climate change literate." An example is this author. Before writing this article, the author was oblivious of his significant share of contribution to global warming. With ecological footprint of 5.9, CO₂ emission of 9.7 tons per year, 57% of total ecological footprint, 34 earths will be needed if the rest of the people live like the author. (figure 3). To adapt and mitigate the impact of climate change, it will require a huge financial outlay and adequate technical capacity.

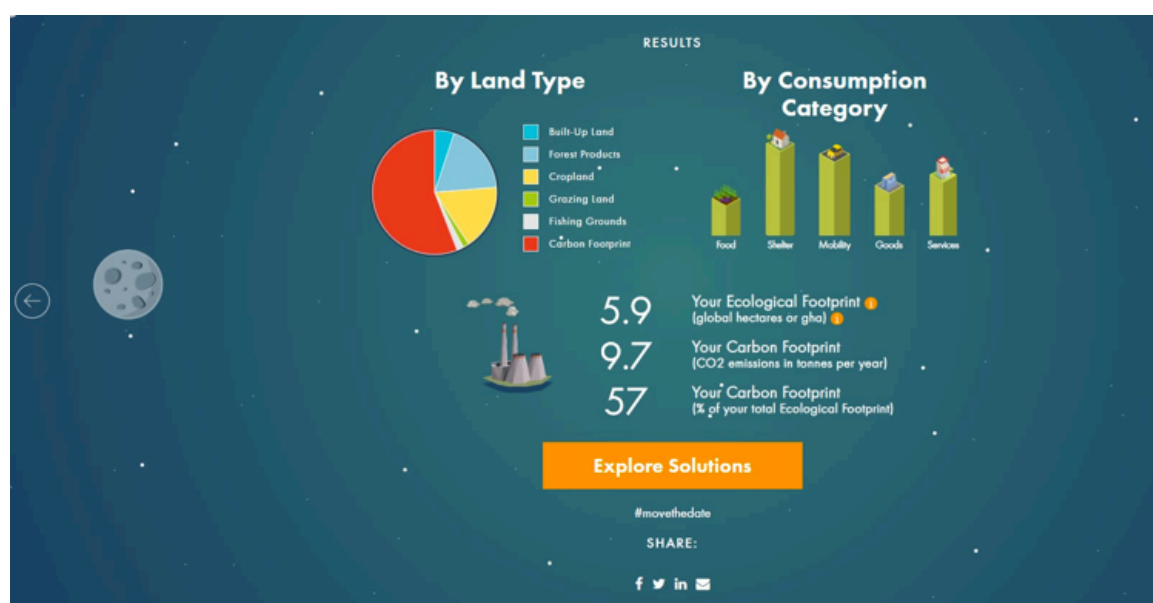


Figure 4: The carbon dioxide foot print of the author

Africa, unfortunately, lacks the financial resources and technical capacity to face the climate change challenges. A World Bank study (UNEP, 2019), stated that Africa is already committed to adaptation costs in the range of USD 7-15bn per year by 2020, with an annual increase of 7% each year after. By 2050, adaptation costs could hover around USD 35 billion per year. One possible solution to funding would be to access funds from international organizations. Unfortunately, most African countries lack the technical capacity to develop fundable projects.

Youth Vital in Fight Against COVID-19 Scourge in Africa

By ATPS Team,

By now, the Coronavirus scourge (COVID-19) has affected nearly every continent, forced countries into states of emergency, sent individuals into varying levels of quarantine and isolation, and shuttered businesses and schools. But wait, there's a lesser-known story that also deserves attention: of youth rising up to meet the challenges of this pandemic. They are not just sitting idly by waiting for the worst to come; throughout the continent, they are hard at work providing solutions to help reduce the spread of the virus, and address the socioeconomic impact of the pandemic. It is encouraging to see young people across Africa leading the way in the fight against coronavirus, and stepping up to help their communities. They know the future depends on their actions. The youth represent energy, creativity and innovation and should be beacons of hope that can support the community at all times especially in times of such crisis. Through individual acts and collective action, young people are reclaiming power in the face of this pandemic and the powerlessness it makes us all feel. Youth-led civil society and movements are acting on an unprecedented scale. Youth are mobilizing communities to protect themselves, and supporting governments safety and health regulations across Africa.

#211CHECK Collective Initiative By Nelson Kwaje (South Sudan)

During this dangerous time of uncertainty, misinformation about the Coronavirus can cost lives. That is why youth organizations and young people are turning to online platforms and digital media to share correct information and recommendations to dispel common myths. Nelson Kwaje, a 28-year old young man from South Sudan, with a background in technology and peace building, has made this one of his missions.

Nelson is a Program Director for DefyHateNow, a community organization based in South Sudan, with branches in Cameroon, Kenya, Sudan and Ethiopia. Nelson helped to initiate the #211CHECK collective, which is a digital community of youth working in various fields who collaborate to fight misinformation and raise awareness on coronavirus prevention and protection, using the #COVID19SS hashtag. Their work exposes false facts, disputed and unfounded remedies or cures, doctored images and any and all pieces of information that could confuse and mislead the public. Thanks to them, truth is replacing lies so that people can act in their own best interests, and society's as a whole.

Ndlovu Youth Choir (South Africa)

The arts may seem like a luxury at a time of crisis when, in fact, performances can be part of the solution. Some young people have used their creative talents to support the COVID-19 response. The novel nature of the virus has caused a spread of speculation and unverified information regarding the virus' spread, symptoms and potential treatments. The Ndlovu Youth Choir, a South African youth choir known for reaching the finale of America's Got Talent last year, composed, performed and filmed a musical rendition of the World Health Organization's (WHO) Coronavirus safety advice. Featuring translations of certain key points in various South African languages, the choir composed this song to ensure that the various communities in their country were well informed and safe during the spread of this pandemic. The video, posted on Twitter, was even shared by Dr. Tedros Adhanom Ghebreyesus, WHO's Secretary-General!



Ndlovu Youth Choir (South Africa) in a performance

Harnessing The Power Of Communications

Jama Jack is the Head of Communications of the Medical Research Council Unit for the only COVID-19 testing center in Gambia. For her, one of the biggest local challenges is the information gap, so she created posters and videos busting myths about Coronavirus and published the materials in various Gambian languages. Similarly, editor, producer, and presenter Robert Mukondiwa provides daily updates to Zimbabweans (and the rest of the world) about his country's efforts to tackle COVID-19. Through informative programming at Zimpapers TV Network, Robert is influencing others to engage in helpful behavior changes such as social distancing and self-isolation.

Then there is James Smart and Kizito Gamba in Nairobi, who are leading a team of young journalists under Tazama World Media. They are putting their lives on the line to bring out compelling stories on the effect of coronavirus among the extreme poor in South Africa, and detailing why quick, robust and well-thought responses are required.

Mathare Environmental One-Stop in Kenya

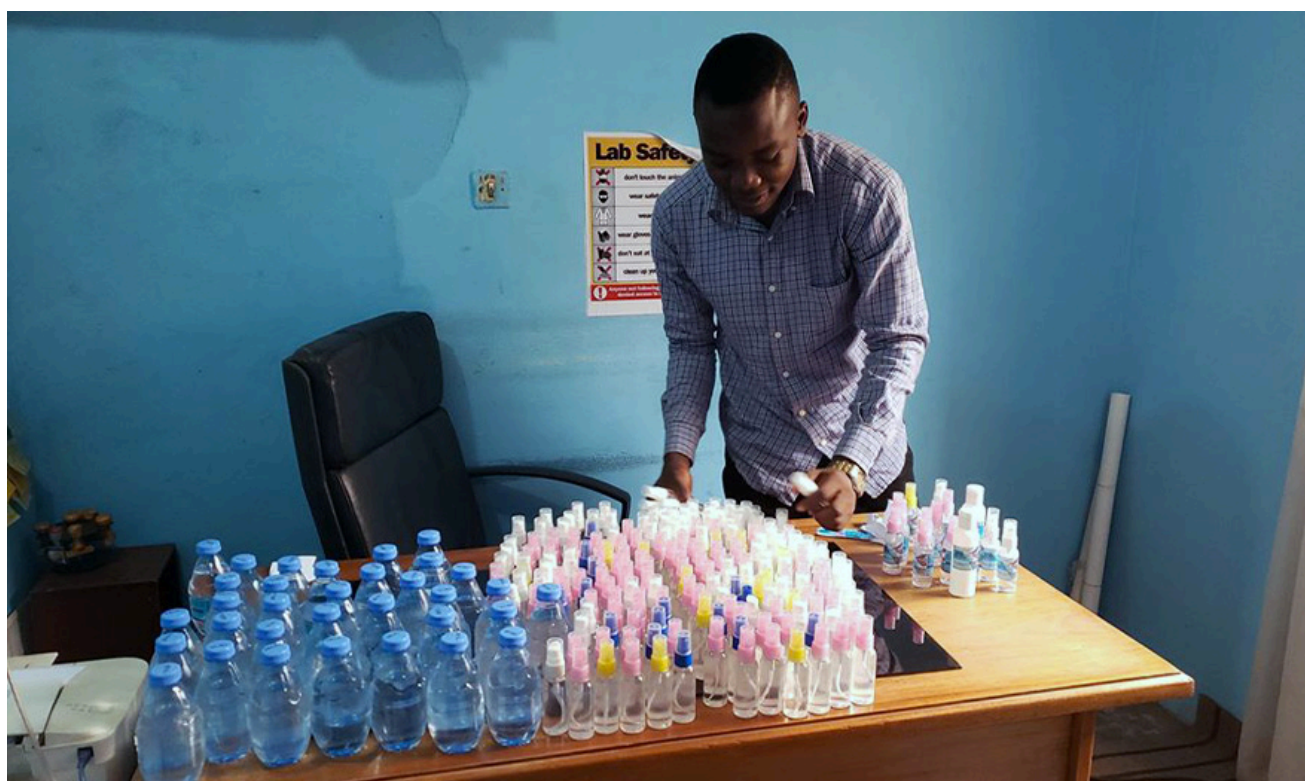
Isaac Muasa of Mathare Environmental One Stop in Kenya has teamed up with the UN-Habitat, the Norwegian Embassy and the Canadian High Commission to support residents of Mathare slums to stop spread of Coronavirus in the neighborhood. The group has begun a hand-washing program meant to protect Mathare residents from COVID-19. As a result of the initiative, children and young people make up the majority of the people who are washing their hands more frequently now.

Cameroon's "One Person, One Sanitizer" Initiative

In Cameroon, Achalake Christian, the coordinator of Local Youth Corner, has launched the "One Person, One Sanitizer" operation to prevent the spread of the Coronavirus, especially amongst the poor. He's working with young people to produce and distribute free, homemade hand sanitizers using World Health Organization standards. He has teamed up with people of goodwill, a coalition of youth civil society organizations, medical doctors, pharmacists and a laboratory scientist.

Saving Local Food Vendors in South Africa

Sibongumusa Zuma is causing waves with his humanitarian action in South Africa. Across the country, street hawkers have been prohibited from trading during the national lockdown. It is hard for everyone but for the street vendors it's harder. To help ease the impact, he has organized young people to donate groceries to street hawkers. Zuma says that as young people, they cannot sit down and fold their arms knowing very well that there are people who used to make a living by selling food on the streets, whose businesses are closing due to the lockdown.



A youth-led initiative of assembling alcohol-based hand sanitisers

Africa Youth Transforming Africa Initiative

In Botswana, Pretty Thogo is coordinating a platform that brings together the World Bank's Africa Youth Transforming Africa Initiative and the Youth Alliance for Leadership and Development in Africa. They are organizing regular roundtables for youth to discuss development issues, and spark some youth-grown solutions to influence policymaking in Africa.

During its first online roundtable in April, the initiative featured medical and communications experts, who helped young Africans to learn more about COVID-19 and how to identify trusted sources of information.

Similarly, with the leadership of Immy Mulekatete and Dr. Joseph Ryarasa Nkurunziza, Youth Voices Rwanda is hosting Twitter and Facebook live discussions on the impact that COVID-19 has had in their communities and the role that they can play in containing its spread. Governments should put in place measures and mechanisms to facilitate coordinated, organized and impactful youth engagement in the fight against Coronavirus. Most importantly, young people must realize that they have a critical part in fighting the COVID-19 pandemic - knowing that the spread of the virus is a threat to people, livelihoods, development and stability.

Youth should work with governments and diverse partners to stop transmission of the virus and to keep everyone safe and take measures that will bolster the fight against the pandemic. As Doug Ragan, a UN-Habitat's Child and Youth specialist has said and it is true, "youth are Africa's greatest asset and the future of the continent depends on them."



A pictorial on how to avoid contracting the Coronavirus

Kenyan University Students Innovate to Fill Covid-19 Ventilator Shortage

Interview with Mr. Moses Odhiambo-Lead Innovator

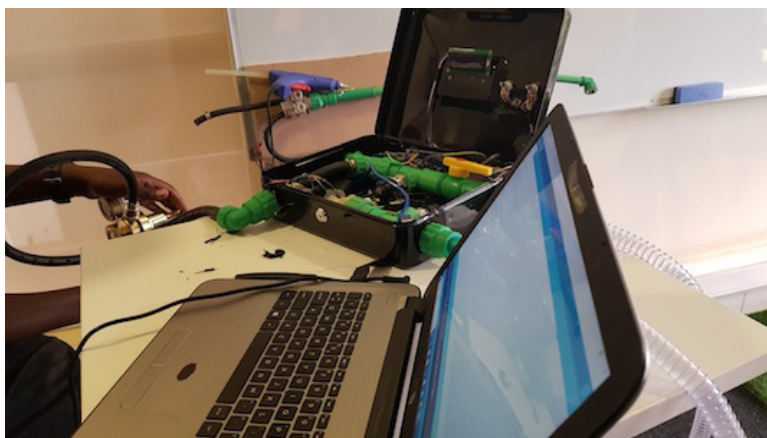


A demonstration of how the ventilator works

1. What was the motivation behind this innovation?

This started off as a discussion with Mr. Avin Galot who is the founder of Wazi Group, an Innovative incubator that deals with custom need based solutions. Avin asked me a simple question when the numbers in China started rising; his worry was what would happen if such a scenario would hit Kenya. Thus the idea to work on a low cost ventilator was mooted.

2. Could you kindly explain how this ventilator works?



The Ventilator is currently in its second prototype. The feature it has currently, is the ability to regulate the intake of oxygen and the exhalation. So far it has managed to sustain this process in an initial 48 hour test run and did so perfectly. The next iterations have to deal with the monitoring aspect and will include screens to track all pressure sensors and valves.

The ventilator prototype during its assembly process

3. How has the process been...coming up with this innovation, right from the conceptualization to prototype to the final product?

Like any other innovation we think up at Wazi Group, the process has been eye opening especially since this is such a critical equipment. A big percentage of the development constituted working closely with medical doctors who use this equipment on a daily basis. This has helped shape our development process positively.

4. Who is best suited to use this innovation?

From the beginning, this was built for the doctor in the ICU to use and yet portable enough for a patient to carry home.

5. What challenges have you encountered so far in the course of coming up with this innovation?

Most of the challenges come from funding the project yourself and ensuring that we get most of the materials locally to be able to justify mass production and ease of maintenance.

6. How has the reception been? (From the general public, government, and stakeholders? Has your innovation won any awards either locally/internationally?)

The response has been really encouraging with calls for collaboration from major universities and coverage in both local and international media.

7. What significant impact has your innovation had on its users?

We are a couple of weeks away from presenting it to KEBS and our hope that this will be a starting point to encourage other innovators to come up with our own solutions.

8. Is your innovation affordable to its users?

Yes this was the core principle of this project. Our main aim is to keep this under KES 50,000.

9. What are your future plans in regards to your innovation?

To get this to as many health facilities as possible within the country and also the region.



The ventilator connected to a dummy patient for demonstration purposes

University of Toronto (Canada) Art and Science Postdoctoral Fellowship Programme 2021

The Arts & Science Postdoctoral Fellowships are designed to provide outstanding recent doctoral students advanced training in their field of study. These fellowships are not discipline specific, but rather can be held in any department or research unit across the Faculty of Arts & Science at the University of Toronto. Applicants must secure sponsorship of a supervisor, or supervisors, from the professoriate within the Faculty of Arts & Science.

Application Deadline: 1st December 2020 at 11:59pm EST

For more information please visit:

<https://www.artsci.utoronto.ca/faculty-staff/research-supports-services/find-funding#as-postdoctoral-fellowship-program>

The Africa Prize for Engineering Innovation 2021

The Africa Prize for Engineering Innovation, founded by the Royal Academy of Engineering, is Africa's biggest prize dedicated to engineering innovation. It awards crucial commercialisation support to ambitious African innovators developing scalable engineering solutions to local challenges, demonstrating the importance of engineering as an enabler of improved quality of life and economic development.

The aim of the Africa Prize for Engineering Innovation is to stimulate, celebrate and reward innovation and entrepreneurship in Sub-Saharan Africa.

Application Deadline: 14 September 2020 at 4pm GMT+1 (London)

How to apply:

All applications must be submitted via the online grant system, available here: **<https://grants.raeng.org.uk>**. You must register through the system before you can apply. The application form has six sections and will take approximately one and a half to two hours to complete.

TWAS Fellowships for Research and Advanced Training

TWAS offers fellowships to young scientists in developing countries to enable them to spend three to 12 months at a research institution in a developing country other than their own. The purpose of these fellowships is to enhance the research capacity of promising scientists, especially those at the beginning of their research career, helping them to foster links for further collaboration.

Application Deadline: 1st October 2020

For more information please visit:

<https://onlineforms.twas.org/apply/139>

WAAW Foundation Scholarships

WAAW Foundation awards annual scholarships to students who demonstrate need and prove their status as full-time students in a STEM-related course in an African University. Recipients will be required to start a STEM Outreach Chapter at their university.

WAAW Foundation is pleased to announce its 2020/2021 scholarships, offering \$500 for need-based undergraduate female African students admitted to a University, College or institute of higher learning in Africa.

Application Deadline: November 2nd 2020

How to Apply: Applications must be submitted to **scholarship@waawfoundation.org** or **lucy@waawfoundation.org**

Science Granting Councils Initiative (SGCI) Phase 1 Final Close-out Workshop in Dakar, Senegal-11th to 13th February 2020



Dr. Nicholas Ozor (centre holding microphone) addressing the forum during one of the sessions



**Felix Musila, ATPS
Communications Officer
attending the workshop**



ATPS Executive Director, Dr. Nicholas Ozor (Left) and the African Union's Commissioner for Human Resources, Science and Technology, Prof. Sarah Anyang Agbor (Right) when he paid her a courtesy call at her offices at the AU Headquarters, in Addis Ababa, Ethiopia

ATPS NATIONAL CHAPTER COORDINATORS

Australia

Mr. David Doepel
Chair, Africa Research Group, Murdoch
University
90 South Street
Murdoch
Western Australia 6150
Tel: +61418912287
Email: d.doepel@murdoch.edu.au

Benin

Dr. Roch L. Mongbo
Senior Lecturer & Researcher
FIDESPRA/Univ. of Abomey Calava and
CEBEDES – XU dodo
02 BP 778
Cotonou, Benin
Tel: +229-21304139
Cell : +229 95 96 64 46
Email: rochl_mongbo@yahoo.fr

Botswana

Mpho Thabang Rapoo
Botswana University of Agriculture and
Technology,
Plot 10071 Boseja, Palapye, Botswana
Postal address: Private Bag 0016,
Palapye, Botswana
Email: mtrapoo@gmail.com; rapoom@
biust.ac.bw
Tel: (+267) 72 865 060; (+267) 493
1826

Burkina Faso

Dr. Benoit Kabore
Université de Ouagadougou
01 BP 4487
Ouagadougou 01
Burkina Faso
Tel: 226 812008/380715
Email: benkabor2003@yahoo.fr

Cameroon

Prof. Sylvester Ndeso Atanga
Lecturer, Epidemiology & Public Health
Faculty of Health Sciences
University of Buea
P.O. Box 63
South West Province
Republic of Cameroon
Tel: + 237-75816047

Cote d'Ivoire

Prof. Arsène Kouadio,
Associate Professor, University of
Abidjan-Cocody ; Researcher, CIRES
Director, Laboratoire de croissance
Economique
Executive Director, Institut pour le
Développement (IPD),
Coordinator, ATPS Côte d'Ivoire,
Coordinator, RIA Côte d'Ivoire,
Fellow Researcher, AERC, Poverty
Economic Policy (PEP),
Cocody, Boulevard Latrille
08 B.P. 1295 Abidjan 08, Côte d'Ivoire
Tel : +225 22 44 60 99
Fax: +225 22 48 82 84
Mobile : +225 07 98 46 80 / 05 95 97 91
E-mail: arsenekk@yahoo.fr
arsenekouadio@hotmail.com

Egypt

Ms. Manal Moustafa Samra
Focal Point Coordinator
45 Noubar Street, Bab El-Louk
8th Floor, Apt 29, Cairo
Egypt
Tel: +20105005284
Email: mmsamra@gmail.com

Ethiopia

Mr. Wondwossen Belete,
National Coordinator
Director of Intellectual Property Protection
and Technology Transfer,
Ethiopian Industrial Property Organization
(EIPO)
Email: wondwossenbel@yahoo.com

Gambia

Vacant

Ghana

Dr. Fred Amu-Mensah
Senior Research Scientist
CSIR Water Research Institute
P.O. Box M.32
Accra, Ghana
Tel: +233-24-4748197
Fax: +233 21 77 7170
Email: assabil@aim.com;

Kenya

Dr. Stephen Karimi
Director of Quality Assurance , National
Commission for Science, Technology
and Innovation (NACOSTI)
P.O. Box 30623, 00100 Nairobi-Kenya
Tel: +254727923357
Email: karimisteve@gmail.com

Lesotho

Mr. Denis Sekoja Phakisi
Acting National Coordinator
Manufacturing Manager
Loti Brick
P.O. Box 8008, Maseru 100, Lesotho
Tel: +266 5885 3389
Fax: +266 22310071
Email: ds.phakisi@lycos.com

Liberia

Dr. Wollor Emmanuel Topor
National Coordinator
Acting Dean
College of Science and Technology
University of Liberia
Tel: + 231-6875802
Email: wollortopor@yahoo.com

Malawi

Dr Kingdom M. Kwapata
Bunda College, P.O. Box 219,
Lilongwe, Malawi
Tel: +265 999195477
E-mail: kwapata@yahoo.com

Mali

Dr. Sidiki Gabriel Dembele
Agrochimie/Agroforesterie et Fertilité
des sols
Bureau Ouest-Africain d'Appui
Organisation et de Technologies
Appropriées
B.P. E 3730, Bamako, Mali
Tél. : (223) 226 2012
Fax : (223) 226 2504
Cell : (223) 71 3806
Email: sidikigabriel@hotmail.com or
ousmanenia2000@yahoo.fr;
filifindem@yahoo.fr;

African Technology Policy Studies Network (ATPS)

ATPS NATIONAL CHAPTER COORDINATORS

Morocco

Prof. Dr. Saïd Boujraf
National Coordinator
Director of the Clinical Neuroscience
Laboratory
Department of Biophysics and Clinical
MRI Methods
Faculty of Medicine and Pharmacy, Uni-
versity of Fez
BP. 1893; Km 2.200, Sidi Hrazem Road,
Fez 30000, Morocco
Tel: +212 667 780 442
Fax: +212 535 619 321
E-mail: sboujraf@gmail.com

Mozambique

Eng. Lourino Alberto Chemane
ICT and Planning Advisor
Executive Secretariat, ICT Policy
Commission
Bairro da Coop
Rua Particular Dr. Antonio de Almeida
61 R/C Direito, Maputo
Moçambique
Tel: +258 21 309398
Fax: +258 21 302289
Cell : +258 82 3110700
Email: chemane@infopol.gov.mz;
lourino.chemane@mctestp.gov.mz;

Nigeria

Prof. Michael C. Madukwe
Professor, Department of Agricultural
Extension
University of Nigeria
Nsukka, Enugu State
Nigeria
Tel: +234 42 771019
Fax: +234 42 771500
Cell: +234 803 700 6968
Email: michael.madukwe@unn.edu.ng,
madukwemichael@yahoo.com

Prof. Femi Olokesusi

Nigerian Institute for Social and
Economic Research (NISER)
P.M.B 5 UI Post Office
Oyo Road, Ojoo, Ibadan, Nigeria
Tel: +234 2 8103345/8102904
Fax: +234 2 2413121
Email: femioloke@yahoo.com

Rwanda

Dr. Marie-Christine Gasingirwa,
Director General, Science, Technology
and Research,
Ministry of Education, Rwanda.
Email: cgasingirwa@mineduc.gov.rw

Namibia

Surveyor Uzochukwu Okafor
Surveyor- General
Directorate of Survey and Mapping
Ministry of Land Reform
Tel: +264(0)2965036
Mobile: +264811223311
Email: uzo.okafor@mlr.gov.na

Sierra Leone

Dr. Kelleh Gbawuru Mansaray
Dean of Faculty, Faculty of Engineering
at Fourah Bay College, University of
Sierra Leone.
Mount Auroel
PMB Freetown Sierra Leone
Mobile: +23278476527
Email: mansaraykg@gmail.com

Senegal

Dr. Papa Alioune Sarr Ndiaye
ESP BP 15475 DAKAR Fann
Sénégal
Tél : Bureau (221) 864 54 18
Fax : (221) 864 21 43
Domicile (221) 820 23 88
Cellulaire (221) 634 58 88
Email : papaas.ndiaye@ucad.edu.sn
papaas.ndiaye@gmail.com

South Africa

Professor Mark Swilling
Stellenbosch University, Private Bag X1,
Matieland, 7602, South Africa
Cell: +27(0)83-459 7417
Tel: +27(0)21-881 3196
Fax: +27(0)21 - 881 3294
Email: swilling@sun.ac.za
mark.Swilling@sopmp.sun.ac.za

Sudan

Mrs. Nadia Hassan Sidahmed
Economic Studies Department

Industrial Research & Consultancy
Centre (IRCC) Sudan
Tel: +249 911449106
Email: nadiyahsh@yahoo.co.uk

Swaziland

Dr. Musa Dube
Senior Lecturer
Faculty of Agriculture
University of Swaziland
Luyengo Campus
P. O. Luyengo, Swaziland
Email: madube@uniswa.sz

Tanzania

Dr. Amos Nungu
Director General
Tanzania Commission for Science and
Technology
P.O. Box 4302,
Dar-es-Salaam Tanzania.
Tel: +255222774023
Email: amos.nungu@costech.or.tz;
amos.nungu@gmail.com

United Kingdom

Mrs. Martha Ada Ugwu
National Coordinator
59 Highgrove Road
Walderslade, Chatham
Kent, ME5 7SF, UK
Tel: +4401634310389/07985476289
Email: Martha.ugwu@yahoo.co.uk

Uganda

Dr. John Okuonzi
National Coordinator
Kyambogo University
Faculty of Engineering, Department of
Electrical and Electronic Engineering,
P.O. Box 1, Kyambogo, Kampala,
Uganda
Tel: +256 782 353034
jokuonzi@kyu.ac.ug or
okuonzijohnie@yahoo.com

United states of America.

Dr. Anthony C. Ikeme
National Coordinator
President & CEO
Clintrid Pharma Services

ATPS NATIONAL CHAPTER COORDINATORS

102 Pickering Way, Suite 200
 Exton, PA 19341
 Tel: 484.753.3405
 Cell: 215.380.9920
 Fax: 610.384.5455
 Email: aikeme@clintriad.com

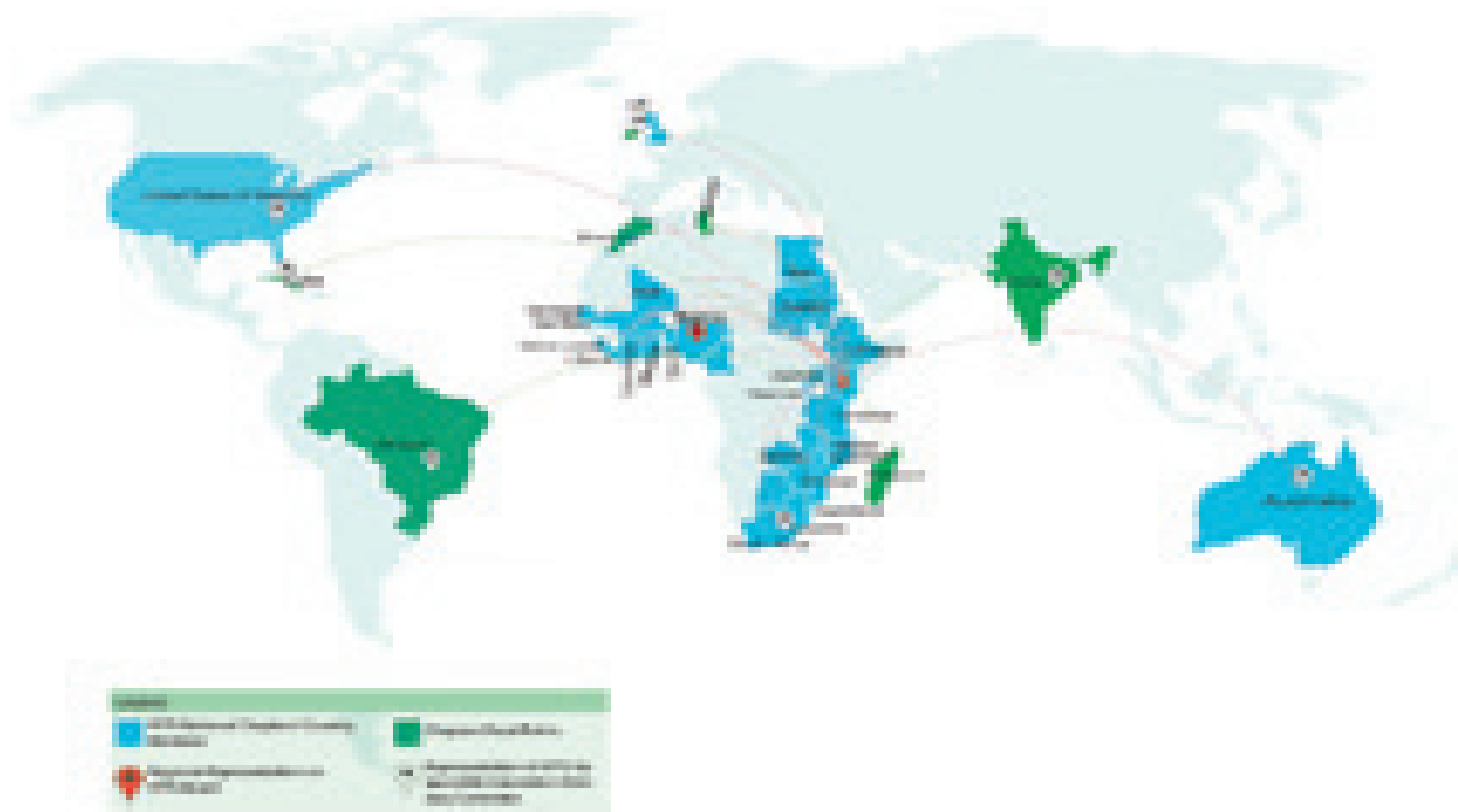
Zambia

Prof. Francis Yamba
 Director, Centre for Energy
 Environment and Engineering Zambia
 (CEEZ) Ltd, 176 Parirenyatwa Road
 Suite B. Fairview, P/B E721
 Lusaka, Zambia
 Tel/Fax: +260 211 223118

Email: ceeez2015@gmail.com;
 ceeez@zamnet.zm

Zimbabwe

Mr. Benson Zwizwai
 Deputy Director
 Institute of Development Studies
 P. O. Box 880
 Harare, Zimbabwe
 Tel: +263 4 333341/3
 Fax: +263 4 333345
 Cell: +263 912245614
 Email: bmutzwizwai@yahoo.com





African Technology Policy Studies Network (ATPS)

8th Floor, Chancery Building, Valley Road

P.O. Box 10081-00100, Nairobi, Kenya

Tel: +254 20271 4092; Fax: +254 20 2714028

Email: info@atpsnet.org

Url: <http://www.atpsnet.org>

Skype: ATPS Network

Follow us on



ATPS NETWORK



ATPS NETWORK



ATPS NETWORK



@atpsnetwork



**African Technology
Policy Studies Network**



atpsnetwork's channel