

GRAND CHALLENGES AFRICA CONVENING MEETING OUTCOMES REPORT

INTERCONTINENTAL HOTEL, NAIROBI - KENYA

24-26 FEBRUARY 2016



Grand Challenges Africa is a program aimed at inspiring innovation to address and significantly impact major development challenges preventing African countries from reaching the Sustainable Development Goals (SDGs).

GC Africa's vision is to achieve extraordinary innovations that transform health and address other developmental challenges in Africa.

The program's mission is to foster African-led scientific innovations that could help African countries achieve targets for the Sustainable Development Goals (SDGs)

The focus areas for GC Africa are to: -

- 1 Consolidate and improve on the gains made through Grand Challenges support to African scientists over the last decade;
- 2 Undertake outreach and awareness campaigns to extend the reach of the Grand Challenges funding model in Africa;
- 3 Define and set the agenda and priorities for future Grand Challenges in health and other development programs in Africa and
- 4 Jointly with other partners and/or independently craft, run and manage future African-centric Grand Challenges calls.



Participants follow proceedings during the Grand Challenges Africa Community Meeting.

The GC Africa conference brought together grantees across Africa previously funded by the Bill & Melinda Gates Foundation (BMGF), Grand Challenges Canada (GCC) and the US Agency for International Development (USAID).

The objective of the conference was to strengthen the African Grand Challenges community and provide a platform for grantees, funders and partners to

connect, share ideas and build from each other's work.

The conference theme centred around,

Celebrations of the leadership provided by African Academy of Sciences (AAS), Alliance for Accelerating Excellence in Science in Africa (AESA), the New Partnership for Africa's Development Agency (NEPAD), GC Africa and Grand Challenges partners (BMGF, GCC and USAID) who have since 2010 to date, invested \$120 million in 380 projects in 29 countries across Central, East, Southern, North and West Africa;

Conversations on how to align and focus GC Africa on the SDGs and build capacity to discover, develop and deliver innovations and

Challenges on:

How to generate calls, activities and policies that foster innovation;

How to break down the barriers to innovation in Africa;

How to achieve the SDGs without leaving anyone behind.

CONFERENCE PROCEEDINGS

DAY 1

OPENING PLENARY: OVERVIEW OF GRAND CHALLENGES AND THE POST-2015 INNOVATION LANDSCAPE

This panel focused on experiences from the speakers' organizations, and their work in science and innovations particularly for Africa and in Africa. The organizations represented (BMGF, GCC and USAID) have collectively funded over 380 innovative projects in Africa. Their presentations provided insight into the opportunities and challenges that exist when funding innovation in Africa. Major recommendations from this session included:-

- Every project is a learning experience and contributes towards improving conditions in society regardless of its objectives being achieved or not.
- Early stage funding is critical in science. Funders are slow in evaluating proposals which creates a bottleneck.
- Build on existing projects for sustainability.
- Funders should work with young Africans when identifying problems in their societies and solving them.

- The next step in innovation is to move the focus of funding to Africa to avoid overreliance on the western countries and ensure sustainability. This can be achieved through increased commitment from African governments.
- Scientists need to engage the governments at all stages.
- Beyond conferences, there needs to be a platform for continuous interaction among scientists and partners.



African Academy of Sciences Executive Director Prof Berhanu Abegaz delivers his opening speech

PLENARY SESSION 2: Mobilizing African Resources to Generate and Scale Innovation to achieve SDG Targets

While Africa accounts for 15% of the global population, and 25% of the global disease burden, it currently only produces about 2% of the world's research output.

25%

AFRICA'S GLOBAL DISEASE BURDEN

As such, an African-led and Africa-focused R&D agenda will require a scale-up of domestic resources from multiple sources and partners.

It will require investments in bringing promising innovations to scale, and ultimately to impact. To that end, the panel explored strategies to mobilize resources across Africa for R&D and to effectively scale innovations.

Role of the Kenyan Government in Research and Development (R&D)

The Kenyan government has made strides towards creating an enabling environment for innovation. Some of the efforts of the government include:

- Enactment of the Science and Technology Act that provides rules and regulations of research in the country.
- Creation of the National Convention for Science and Technology.
- Setting up of an Advisory Committee to support Science and Technology.
- Creation of Enterprise Kenya which was launched to support local ICT innovations to become big global entities.
- Government has committed funds to provide seed money for R&D.

Lessons learned from India's work to mobilize resources for investment in Research and Development

- Acknowledging that innovation is created by experience and not schools. Training institutions trigger the critical mind but the potential is realized through practical engagement in R&D.
- Political goodwill has been key in India's R&D and innovation. The government is at the center of R&D and has provided an enabling environment including financial support that has led to the sustainability of innovations in India.
- Innovators do not work in isolation, ideas and findings are shared with relevant stakeholders

from within and outside (e.g. funders, academic institutions, the government corporates etc.). This has facilitated the flow of funding.

- To make funding seamless, R&D and innovations need to attract institutions, partnerships and funding.

How to design cross-sector partnerships between government and other institutions that drive investments in R&D and innovation, particularly in the women and reproductive health space.

The power of collaboration is key in solving African problems. Research in the continent has failed to attract government and private partnerships because of the way the findings are communicated.

How scientists communicate matters, importantly, scientists have to learn to communicate with Ministers of Finance using a language that promotes action.

The role of the private sector as a complement to philanthropic and governmental resources, and how the sector strikes a balance between its immediate bottom line and its support for less resource-rich innovators

To help unlock budgets of the private sector, African governments need to increase investments in the training of scientists and work with institutions of higher learning to develop curricula that create critical minds.

A platform that provides for a place where innovators can interact amongst themselves, with funders, governments, private sector and the consumers is key to unlocking innovation on the continent.

NEPAD/AESA's leadership on the development of a Pan-African Health Research and Innovation Strategy, and how it fits into the African Union's strategy

NEPAD has been key in pushing the R&D agenda amongst African states. As a result, Science Technology and Innovations (ST&I) is now part of the African Union (AU) agenda, having adopted the Science, Technology, and Innovation Strategy for Africa (STISA-2024) in 2014.

By adopting the strategy, countries have committed towards supporting ST&I in their countries and allocating a part of their GDP to this end.

Countries have started putting science in their development agenda and many have now established governance structures and programs in R&D.

The perspective of the Africa Development Bank (AfDB)

Research needs to be linked to resource markets. Innovators have to think of how they can engage these markets in order to create a sustainable pool of funding resources for innovation.

It is therefore key that innovators engage with governments and funders at an early stage, to provide support to develop products which are relevant and that the public and private sector will be willing to invest money in.



Young Women's Christian Association General Secretary Nyaradzayi Gumbonzvanda gives a speech during the start of Plenary Session 3

PLENARY SESSION 3: Mobilizing African Resources to Generate and Scale Innovation to achieve SDG Targets

The ratio of women to men in Africa is almost equal, yet women have less access to opportunities compared to men. They face challenges such as gender based violence (GBV), poor sexual and reproductive health (SRH), illiteracy, lack of power to make decisions etc. which prevent them from fully participating in economic development.

They are the ones that carry a pregnancy, deliver and take care of a child yet majority of them lack the power to decide on Antenatal Care (ANC), hospital delivery, and immunization. The cost of this inequality is borne not just by women, but the entire society.

Discrimination against women can undermine economic development by limiting food security for families as women provide almost 43 percent of the world's agricultural labor force.

Recommendations on innovating for women and girls

- Have clarity of intention- what is it we want to achieve, who is it we want to change etc.
- Engage government from the onset of the innovation project.
- Sustainability- think through how the initiatives will be sustained over time.



Patricia Amira a Kenyan TV personality moderates a panel discussion

- Be clear on the problem we want to address and the effect of the intervention on the problem
- Identify the challenges and the right partners to bring on board.

PLENARY SESSION 4: All Children Thriving

This session focused on developing new tools and holistic approaches to help mothers and children thrive in the developing world by ensuring a healthy birth for both mother and child and setting children on a path to healthy physical growth and cognitive development.

Panelists examined the Grand Challenges All Children Thriving platform as a potential model for how Grand Challenges Africa can identify priority goals, define specific challenges, and achieve impact, including progress towards the SDGs.

Key recommendations from the session were;

- To tap into young innovators' potential, higher education institutions have a role to play. Funders should consider new/young researchers instead of always funding seasoned researchers.
- Mentorship is key to building human resource in research. Capacity building of senior mentors to scout for talent at an early stage and mentor that talent to maturity is key in creating a pool of good mentors.
- Innovation in the continent needs to identify gaps/problems in health that need research.
- Maximum use of technology is important if the goal is to improve the lives of Africans.

PLENARY SESSION 4: Global Health in Numbers

Data generation is not an end in itself. Data needs to be shared for use by others including policy makers

and planners. Awareness on the existence of the data is critical in creating demand for it.

The session looked at the evolution of data in Africa and the challenges in terms of data collection, sharing and use.

Data Sharing and Use

Researchers have personalized data with the majority prioritizing the use of data to publish in peer reviewed journals for professional growth.

However, journals are biased towards positive results. Both negative and positive results should be shared for use by others including decision makers.

Capacity Development

For a long time, data was collected in Africa and analyzed in the western world, a situation which is slowly changing. Developing capacity for data analysis locally is inevitable. The continent needs to have a critical mass of people who collect the data as well as analyze it.



AAS Senior Advisor, Kevin Marsh follows a panel discussion

Speech presented by NACOSTI Director General, Moses Rugut on behalf of Cabinet Secretary, Ministry of Education Hon.Fred Matiangi.



In his speech, the Cabinet Secretary recognised the role played by innovation in Africa's economic growth and assured participants of the Kenyan government's commitment to supporting innovation.

He also noted that public and private sector partnerships are essential for innovation because of its risky nature. He added that Africa needs to reduce the disconnect between industry and research so more R&D outputs can be commercialized and the number of patent applications can increase.

DAY 2

PLENARY SESSION 1: Innovation as a Tool to Achieve SDG targets in Africa

While the global community is committed to achieve the SDGs by 2030, the current tools available are insufficient. Achieving the SDGs will require a deep and universal commitment to innovation, from early-stage R&D, to scaling promising innovations, to the widespread adoption of innovative and even disruptive technologies.

How to scale up innovations

- A framework of good governance - transparency and accountability will provide an enabling environment for innovation.
- Proper understanding of the innovations value chain is key towards the continent's achievement of the SDGs.
- A pipeline linking innovation to investors will accelerate development on the continent.
- Governments are best placed to push demand by being the first customer.
- Demand creation will lead to job creation. Government/policy makers should take up the role of creating awareness among community members.
- Funders need to realize that in research it's not a "one-size fit all" - every proposal needs to be considered based on its setting/context needs.
- Celebrate failure. Learning from failed projects is critical.



AESA Director Tom Kariuki opens a plenary session on defining Grand Challenges Africa

PLENARY SESSION 2: Grand Challenges in Global Health (GCGH) Programs: Celebrating African Leaders, Building Excellence in Capacity

Global health challenges are intertwined with inequity, poverty and resource constraints which hinder access to prevention and quality care.

To address this global issues GCGH grantees have embarked on various projects which have exposed them and developed their leadership skills. They have also experienced challenges along the way.

Benefits gained as a result of innovation

- They have been empowered in research,
- They are able to develop a proposal, implement the project and analyze data and disseminate findings.
- The mentorship program has developed their leadership, networking, critical thinking and management skills.
- They are also able to leverage on partnerships built to move their innovations to the next level.

Challenges faced

Bringing innovations to the consumers, has been a challenge as gaps in the value chain have prevented innovations from moving to the next scale. To scale up innovation to products, scientists and the stakeholders need to;

- Develop platforms for sharing and networking;
- Appreciate contributions of local communities and governments;
- Change the mindset of local markets e.g. need for regulations and policies for Genetically Modified Organisms (GMOs).

BREAKOUT SESSION 1: Academic mentorship that Drives Innovation-How to Develop Critical/Analytical Thinking Amongst Students

Discussion Highlights

- Majority of academic and research institutions in Africa lack a comprehensive mentorship program.

- To build capacity for R&D in the continent, student mentorship is important.
- Student internships are necessary to mentor students in research. They should provide a capacity building opportunity that allow students to build skills in proposal writing, the theoretical work of the research, writing papers for publications etc.
- Academic institutions need to develop partnerships with public and private sector to provide student placement.
- Understanding the cultural background of mentees is important in a mentorship program. There is no "cut and paste" in mentoring, thus mentors have the responsibility of understanding their mentees and creating a mentorship relationship based on the mentees cultural background or context.
- A structured mentorship program is key both in our academic and research institutions. This structure should call for accountability on the part of the mentor, strive for gender balance, Adopt a multidisciplinary approach in mentorship is necessary and have mentor support/resource groups that are critical in mentorship programs for exchange and learning.
- Support to mentors can include non-monetary incentives and they should never be paid for mentoring.

BREAKOUT SESSION 2: Pitching for Innovation

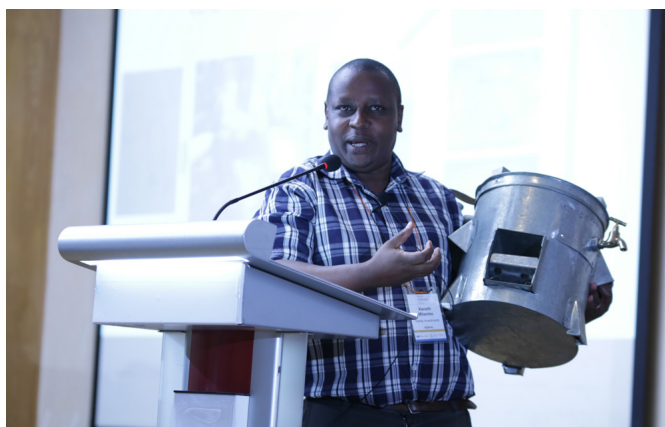
The *Pitching Your Innovation* session sought to provide a platform for scientists to build partnerships with journalists and to train scientists to deal with and pitch their stories to the media.

Kenneth Ndua, Social Entrepreneur, Jiko Kenya and Jiko Africa, Kenya

A social entrepreneur who has been implementing projects in sustainable livelihoods development, social innovation, environmental care, HIV and AIDS for the past 16 years.

Product – Water Purifying Stove

Ndua has added an extra component to the Jiko Kenya (firewood stove) and Jiko Africa (charcoal and briquettes), fuel-efficient biomass stoves that can be filled with 3 liters of water, enabling the homes to simultaneously boil and sanitize water while cooking. This feature, which helps to insulate the stove, makes it more efficient, and also traps waste heat that is used to boil water thus ridding it of impurities and micro-organisms, leaving it clean and safe for drinking. Ndua was selected as the winner because he used simple language, demonstrated the impact of his innovation and brought the product for the judges to see.



Kenneth Ndua presents his winning pitch - a multi-purpose fuel-efficient stove.

J Coenie Louw, Medical Director for Gateway Health Institute, South Africa

JC Louw is the Medical Director for Gateway Health Institute in South Africa. He has more than 20 years' experience in the medical field and has been active in various sectors: as a lecturer at the Medical University of South Africa (2003 to 2010).

Product - An oil-based delivery method for Amoxicillin

This innovation suspends amoxicillin, the preferred treatment for childhood pneumonia, in oil allowing it to extend its shelf life and reduce the risk of contamination. Currently, amoxicillin needs to be reconstituted in water before being administered to a patient, which breaks down its chemicals rendering it ineffective in two weeks. Using water also increases the risk of contamination and of waterborne diseases.



JC Louw from Gateway Health Institute (South Africa) makes his pitch

Betty Walakira, Health Child, Uganda

Betty Walakira is the founder and a Board member of Health Child - a non-governmental organization based in Uganda. She has experience of over 11 years in implementing Maternal, New-born and Child Health projects mainly focusing on demand and supply of quality health care. Betty has a Masters in Science Population and Reproductive Health.

Product-Mama Kit

Walakira is working with communities to get them involved in interventions to decrease child mortality by mobilizing communities into saving groups to promote a culture of saving for health.



Betty Walakira from Health Child (Uganda) makes her pitch

Mothers saved for the mama kit, transport, warm clothing and a basin and this increased delivery in health facilities from 47% to 74%.

Peter Lubega Yiga, Innovator, Natural mosquito repellent, South Africa

Peter Lubega Yiga has been involved in the research and development of innovative mosquito and insect repellents for more than 10 years. Despite having studied finance at the University of the Witwatersrand, Peter was compelled to venture into the malaria field after suffering a severe bout of malaria.

He has collaborated with various institutions including the Council for Scientific & Industrial Research (CSIR), National Institute for Communicable Diseases (NICD) and the Malaria Institute in South Africa.

Product: Natural repellent for malaria

Yiga has developed a natural repellent that can be safely used on babies and provides protection for four hours longer and at a cheaper cost than the current repellents in the market.

The product provides at least six hours of protection and has been successfully tested by the South African Bureau of Standards.

The recent Zika outbreak points to the need for topical mosquito repellents that offer personal protection. DEET, an active ingredient in many repellents, is not recommended for use on babies.



Peter Lubega Yiga makes his pitch

BRAINSTORMING SESSION: Developing Challenges for Grand Challenges Africa

Participants were divided into six groups based on their earlier responses to some survey questions.

The three main themes of discussion were: prevention and treatment of diseases; mortality; and epidemics.

The results of these discussions are represented on Table 1 (page 10 and 11).



Participants take part in a brainstorming session

TABLE 1: DEVELOPING CHALLENGES FOR GRAND CHALLENGES AFRICA

Goal	What should be funded	What should not be funded
Support the research and development of vaccines and medicines for neglected, infectious and other tropical diseases	<ul style="list-style-type: none"> •Novel and effective models, assays and approaches. •New approaches for lowering cost, shortening time and limiting attrition. •Developing new drug/vaccine targets against infections. •Discovering broadly neutralizing antibodies against infectious diseases. •Development of multi-pathogen drugs/vaccines to address co-infections. •Discovering new drug/vaccine delivery platforms. •Discovering unconventional sources of new pharmacophores. •Discovery of new drug resistance breakers and anti-virulence agents. •Creating a regional technical platform for standardizing experimental design, assays and the use of animal models. 	<ul style="list-style-type: none"> •Repeat failures. •Projects that cannot be scaled up
Support the research and development of vaccines and medicines for NCD's and Mental Health	<ul style="list-style-type: none"> •Innovative community communication strategies to improve awareness, case finding and uptake of evidence based intervention. •Innovative community owned- generated data to be used for advocacy and influence policy. •Nutritional strategies that prevent mental disorders in children and adults and fetus. •Innovative ways to ensure mental health drugs availability at lower levels of care. •Innovative approaches to promoting and early recognition and management of mental health problems among children. •Integrated mental health care screening for depression in antenatal and postnatal care. •Investigating therapeutics of natural remedies •Innovative approaches for early diagnosis and intervention. 	<ul style="list-style-type: none"> •Randomized control trials •Any study without a clear intent for an intervention.

TABLE 1: DEVELOPING CHALLENGES FOR GRAND CHALLENGES AFRICA

Goal	What should be funded	What should not be funded
Reduce maternal mortality to less than 70 per 100,000 live births	<ul style="list-style-type: none"> •Family planning. •Innovative Advocacy •Innovation that is trans-disciplinary and multi-sectoral. •Projects that involve men as active agents of care. •Innovations that improve availability of simple life saving products at local level. •Innovations that leverage on existing systems. 	<ul style="list-style-type: none"> •Single disciplinary programmes. •Interventions that focus on the mother without the child. •Projects that lack of community engagement in program design and implementation.
End preventable deaths of new-borns and children under 5 years of age	<ul style="list-style-type: none"> •Education •Health Systems Strengthening •Nutrition •Cost of Health Care •Economic Empowerment of girls and young women 	<ul style="list-style-type: none"> •Interventions that are not; scalable, affordable and applicable to African settings
Substantially reduce the number of deaths and illnesses from trauma; hazardous chemicals; and air, water and soil pollution and contamination	<ul style="list-style-type: none"> •Innovations that drive use of green approaches (recycling, use locally available resources, re-supply) •Education for farmers, government, Public awareness •Point of use technologies (diagnosis, processing, treatment) 	<ul style="list-style-type: none"> •Interventions that: •Increase cost to the consumer; •Reduce food security
Strengthen the capacity of all countries for early warning, risk reduction and management of national and global health risks	<ul style="list-style-type: none"> •Ownership and active engagement to ensure more effective health systems. Capacity building – where are the gaps and how to •strengthen in sustainable way? •Access to and engagement with communities (understanding local context). •Strengthen regional and multi-country networks. •Exploit IT networks. 	<p>The status quo is unacceptable</p> <p>External control</p>

DAY 3

OPENING PLENARY: What is Needed for Grand Challenges Africa's Success?

Partnerships are inevitable for innovations to accelerate economic growth in Africa and change lives.

PLENARY SESSION 1: Building Partnerships for Sustainable Development

This panel explored the role of partnerships in catalyzing innovation to advance health and development priorities in Africa.

Panelists representing major research institutes, funders and government agencies reflected on their sector's unique contributions to strengthening R&D in Africa, while exploring opportunities for new and continued partnerships.

Panelists shared their vision for a collaborative African innovation ecosystem, and how regional and international players could work together to help Grand Challenges Africa create a pipeline of game-changing solutions that in turn can help African countries deliver on their SDG priorities.

Key Highlights

Role of partnerships

- Grants for research enable development of innovative products while partnerships are necessary for value addition and linking researchers/products and consumers.
- Researchers should endeavor to form partnerships with governments, markets and the private sector.
- Partnerships bring in multidisciplinary approaches that involve all stakeholders.
- The success of partnerships depends on good communication.

It is important to agree on a communication framework from the onset. Challenges in communication have made it difficult to focus problems and projects are viewed from a country perspective.

- Partnerships could also be used to lobby governments to commit to research and fund research projects.

Role of international governments in supporting innovation in Africa

Kenya is a large recipient for all DFID research funding and hub of East Africa research which was established in 2013 to see how to strengthen national research and to support the knowledge economy. Governments of East Africa have committed to support science and innovation.

South Africa national research has collaborations with IDRC. They work strong together from the point when the idea is conceived. They have deliberations to consider research priorities and what works in making good initiatives in science, technology and innovation.

Capacity Building

For innovations to work, investments should be made in education that develops critical thinkers who can conduct academic research and also innovate. Scouting and grooming such talent should start from training institutions where great ideas from students are supported to the next level.

African governments need to take leadership in directing research and innovation in the continent by providing laws that govern licensing and patenting to the benefit of researchers and innovators.

Agenda Support

Scout for and build partnerships that can fill in the gaps in the pipeline. Innovators need to involve partners from the start of the project in order to build their trust in the product and create a sense of ownership of the product by the partners.

Local governments need to provide advocacy and awareness on the research agenda and the end products in order for other stakeholders to buy in.

PLENARY SESSION 2: African Academic Leadership in Innovation

African academic institutions are a crucial center for innovation on the continent. They provide laboratory space and infrastructure for researchers, serve as liaisons to international institutions, play an invaluable convening role and act as a platform for engaging the next generation of scientists.

Today, far too much of the research conducted by African institutions remains unincorporated with the knowledge base of the global research community, and researchers themselves are often not appropriately integrated.

The reverse is also true, with international research not always shared with local innovators who would be best able to take research forward.

And while an increasing number of African academic institutions embed knowledge and innovation into their research, access to available support mechanisms and funds remain limited.

The panel explored the role of the academic sector within the overall innovation system.

Key Recommendations

- The institutions of higher learning need to come up with mechanisms to attract funding and formal fundraising structures for research. For this to be achieved they need to appreciate research and develop an innovative culture among the students.
- Institutions need to develop a marketing mind among Masters and PhD students and provide formal linkages for students with funders, private partners, government and the markets. Inculcate an innovative structure in the universities by creating an enabling environment that will identify talent, nurture and allow that talent to thrive.
- A good mentorship program, with clear goals and roles can achieve this.

CLOSING PLENARY

The session provided a brief of the discussions that had happened in the conference sessions.

Conclusions drawn from the interactive and panel discussions formed a part of the presentation. The following were drawn from the closing.

Challenges

- 1) Gender inequities which have affected access to education and health.
- 2) Food insecurity is a major concern.
- 3) There are limited funding resources for innovation especially for scaling it up to development.
- 4) There is lack of a clear mentorship structure in research and higher learning institutions
- 5) There is a disconnect between institutions of higher learning, research institutions and the government with each one working in silos.
- 6) There is inadequate funding for research and development by governments in Africa.

Opportunities

- 1) NEPAD's and the individual government's commitment (financial, legislative and policy) to research and development.
- 2) Poverty, disease, gender inequity, food insecurity and environmental challenges that provide a basis for innovative thinking.
- 3) Existence of seasoned and young researchers.
- 4) Existence of multinationals like pharmaceutical companies that have CSR funding that can be used to fund innovations.
- 5) Institutions of higher learning play a role in capacity building. They should emphasise on mentorship programs and creation of critical thinkers.
- 6) Identify the 'enemies' of innovation and how to have conversations with them to identify issues and how to work together to achieve our ultimate goal of saving lives.

Recommendations

- 1) Participation and involvement of African government is key in steering development in Africa. The governments need to provide political goodwill, funding and setting the research agenda among others for innovations to enable their scaling up.
- 2) Identification of young talent is important for sustainability. Capacity building is inevitable in proposal development, designing delivery measures, and scaling innovation to development.
- 3) Communicating research findings is important for attracting funding and political goodwill. Research findings should be packaged in an easy to understand language for non-researchers.
- 4) Partnerships with multinational companies such as pharmaceuticals is critical if innovation has to be scaled up. Build on existing partnerships and explore new partnerships both for GC Africa and grantees.

PICTORIAL



Peter Singer, Grand Challenges Canada CEO gives a speech during the conference



Kenya ICT Cabinet Secretary, Joseph Mucheru delivers his closing speech



Ifakara Health Institute's Dr Fredros Okumu explains how his innovation has contributed in combating malaria



Ayo Ajayi, Africa Team, Gates Foundation Director participates in a panel discussion



Evelyn Gitau (left) Programme Manager Grand Challenges Africa and Dr Tom Kariuki, Director AESA



Alphonsus Neba, DELTAS Africa Programme Manager follows proceedings during the conference



Eunice Kilonzo, a journalist from Nation Media Group (Kenya) participates in a panel discussion.

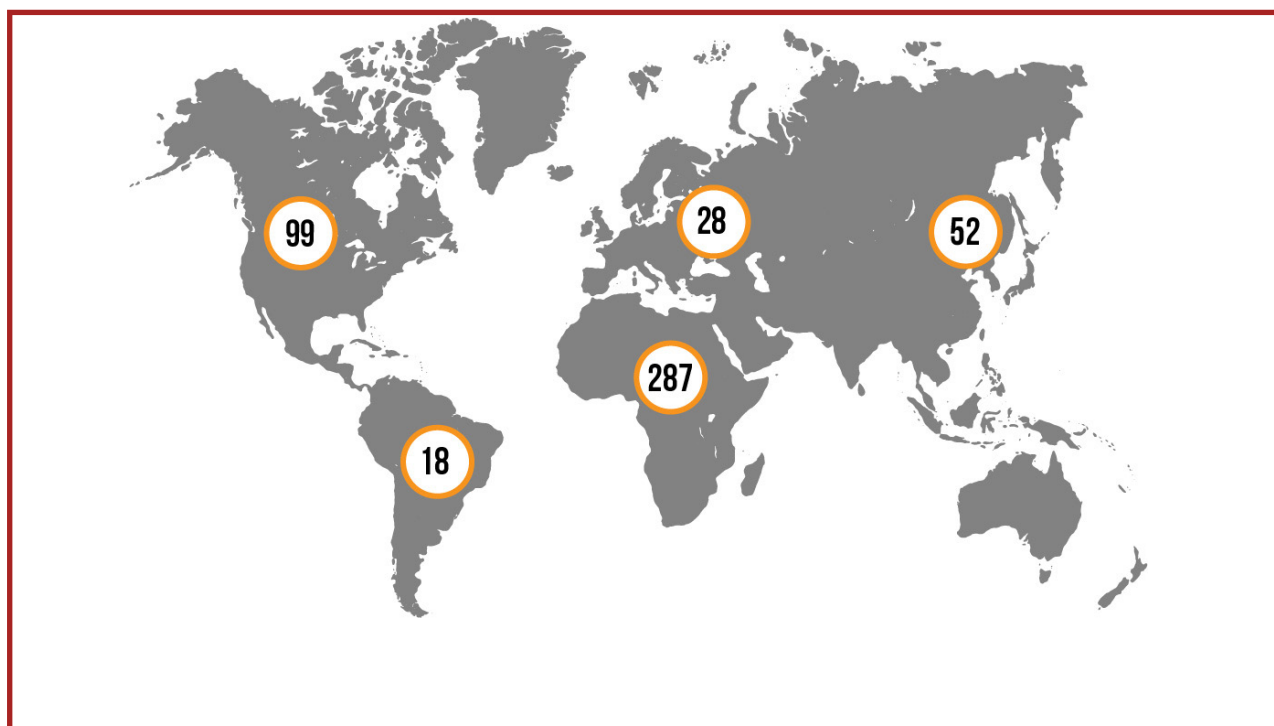


Kedest Tesfagiorgis from the Bill & Melinda Gates Foundation moderates a panel discussion during the conference

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Conference participants map



To view the meeting agenda visit the [Grand Challenges Africa page on www.aesa.ac.ke](http://www.aesa.ac.ke/GrandChallengesAfrica)

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