

## **NEXT EINSTEIN FORUM**

An AIMS initiative in partnership with the



## NEXT EINSTEIN FORUM GLOBAL GATHERING 2018 KIGALI DECLARATION

### DRAFT

#### 1. PREAMBLE

- 1.1.1.We, delegates of the NEF Global Gathering 2018, representing over 91 countries from over 760 organisations from Africa and all the continents of the world. We represent the scientific community, industry, civil society, media, and decision-makers from across the world, especially from Africa. We met in Kigali, Rwanda for the NEF Global Gathering 2018, co-organised by the Government of Rwanda.
- 1.1.2.We recognise the inroads the Next Einstein Forum has made so far, and we call on the Next Einstein Forum to continue to extend its activities and impact.
- 1.1.3. We are brought together by our shared belief in the essential role of science in promoting Africa's transformation and sustainable human development, and for science in Africa to drive the continent forward into becoming a leading member of the global scientific community.
- 1.1.4.We are convinced that young people, armed with Science Technology, Engineering and Mathematics (STEM) training, will be capable of meeting tomorrow's greatest challenges, we resolve to orient our educational systems towards STEM and advocate for building scientific culture early on.
- 1.1.5.We recognise the challenges brought about by gender-based discrimination in STEM education, research and development and we agree to be deliberate in our actions and programs to promote the enrolment and retention of women to STEM education and research.
- 1.1.6. We recognise the utmost importance of designing home grown solutions and policies specifically adapted to African challenges and opportunities.
- 1.1.7.In the pursuit of increasing the visibility and output of excellent research from Africa, we witness the launch of *Scientific African* which will be an open-access journal owned by the Next Einstein Forum with a first issue coming out in September 2018.

## 2. COMMITMENTS AND CONCRETE ACTIONS

WE, AFRICAN GOVERNMENTS, EXPLICITLY COMMIT TO IMPLEMENTING THE FOLLOWING ACTIONS BY THE AGREED UPON DEADLINES:

### 2.1. National Budgets

2.1.1.We commit to increasing national Research and Development (R&D) national budgets by 1% by 2020 and 3% by 2025, based on current respective national levels.

#### 2.2. Regulatory Frameworks

Improving National Regulatory Frameworks on the continent to facilitate knowledge creation, valorisation and protection on the continent

- 2.2.1.We commit to adopt a Pan-African wide framework for an innovation-led economy
- 2.2.2. We commit to each set up a national independent entity for technology benchmarking by 2021.



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2.2.3.We commit to each promoting the creation of Pan-African market segments specifically for innovation (for example, synthetic fuels or construction materials).

## 2.3. Skills & Capacity building

## Improving the Quality of Education on the continent

- 2.3.1.We commit to integrate local culture and stakeholders including art and faith-based to stakeholders to build and retain children's scientific curiosity.
- 2.3.2.We commit to valuing the teaching profession, including building incentives to get the brightest into the teaching profession.
- 2.3.3.We commit to each integrating digital technologies into education and skills development so as to accelerate uptake of digital technology on the continent.

## Bridging the Gender Gap in Education, Science, Technology and Employment

- 2.3.4.We commit to implementing gender-responsive policies which grant equal opportunities for girls and boys in 1) Accessing education at primary and secondary levels, 2) Transitioning to tertiary institutions, 3) Benefiting from employment opportunities and 4) Enjoying equal pay and career advancement.
- 2.3.5. We commit to doubling enrolment in STEM courses for girls at secondary level, in urban and rural areas alike, by 2020.
- 2.3.6.We commit to achieving a 35% rate of women enrolled in tertiary-level STEM education by 2020 and a 45% rate by 2025.
- 2.3.7.We commit to granting incentives to public, private and non-governmental organisations who create and implement a gender equity roadmap particularly as it relates to recruitment, retention, pay and advancement by 2022.

#### 2.4. Finance & Partnerships

# Improving Financing, Partnerships, Platforms and Pipelines to facilitate knowledge creation, valorisation and protection on the continent

- 2.4.1.We commit to establishing 1) A central Pan-African body that coordinates fundamental research funding and 2) Applied research funding across the continent by 2023.
- 2.4.2.We commit to setting up 1) A Pan-African fundamental research grant scheme and 2) a Pan-African applied research grant scheme by 2023.
- 2.4.3.We commit to accelerating lab to market processes by fostering smart partnerships articulated around innovation value chains.
- 2.4.4.We commit to each building a national research pipeline within universities in collaboration with industries by co-financing, financing or recruiting financing innovation hubs attached to universities or research institutes.

### 2.5. Thematic-specific commitments

#### **Climate Change, Energy and Food Security**

2.5.1.We commit to incentivizing all our industries to adopt low carbon circular economy tenets.



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- 2.5.2.We commit to moving towards fully green national energy systems, namely by adopting solar and efficient biomass energies, the two most promising green energies on the continent, as efficiently as possible so as to reach fully clean energy systems across the African continent by 2028.
- 2.5.3.We commit to fostering optimal strategies for Smart Cities that give an equal weight to ICT, sustainability, health and wellbeing, and gender considerations, amongst others.

# Towards a Predictive, Preventive and Personalised Medical (PPPM) System across the African continent

- 2.5.4.We commit to implementing national Predictive, Preventive and Personalised Medical (PPPM) health systems which follow current best international practices by 2030 so to keep our national populations the healthiest possible, increasing their physical and emotional health and well-being and simultaneously reducing the large financial burden an unhealthy population puts on national budgets.
- 2.5.5.So as to achieve the above commitment, we commit to training all our national medical students and current medical practitioners in Preventive, Predictive and Personalised Medicine (PPPM) practices by 2022.

#### 3. CLOSING REMARKS

- 3.1.1.We acknowledge and appreciate the role of all of the organisers, hosts and supporters of the Next Einstein Forum Global Gathering 2018 including the African Institute for Mathematical Sciences (AIMS), the Government of Rwanda, Robert Bosch Stiftung, Johnson & Johnson, MasterCard Foundation, the Canadian Government through the International Development Research Centre, Carnegie Corporation of New York, German Research Foundation (DFG), and Elsevier.
- 3.1.2. We recognise the success of the NEF Global Gathering 2018 and encourage AIMS and the NEF to redouble their efforts in the promotion of science and technology globally with a focus on Africa.
- 3.1.3. We extend our appreciation and gratitude to H.E. President Paul Kagame as the host of the event for the hospitality and support, and that of the Government of Rwanda.
- 3.1.4. We extend our appreciation and gratitude to H.E. President Macky Sall of Senegal for the honour of his presence and continued engagement.
- 3.1.5. We agree to meet in 2020 for the next edition of the Next Einstein Forum Global Gathering in Nairobi, Kenya, and take the opportunity to extend our appreciation and gratitude to Kenyan H.E. President Uhuru Kenyatta and his Government for the warm welcome.

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