

Conference on Higher Education, Policy and Research

Conférence sur les politiques et la recherche dans l'enseignement supérieur

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Summary Report of the Djibouti
Conference on Higher Education, Policy
and Research: Quality and Future
Challenges for Eastern Africa

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Background and context: framing the overall concept and context of the Conference

Conference on **Higher Education, Policy and Research, Quality and Future Challenges for Eastern Africa that took place on May 2-4, 2017** in Djibouti brought together over 120 participants. Among them were ministers, university and tertiary education leaders, scholars from Africa and the diaspora, representatives from the African Union, United Nations entities, representatives from the National Commissions and youth representatives.

The conference was framed within the need for the revitalization of the higher education sub-sector in Africa. It was anchored within the context of the realization of the Sustainable Development Goals (SDGs), the African Union's Agenda 2063 and its education component, the Continental Education Strategy for Africa (CESA 2016-2025) at national, sub-regional and continental levels.

The conference originated from a consensus between the leadership of the Ministry of Higher Education of Djibouti and the UNESCO Regional Office for Eastern Africa based in Nairobi. The two parties agreed on the urgency to launch the Eastern Africa region on reform and integration paths of its higher education systems in order to better respond to the national and sub-regional sustainable development challenges and opportunities.

The theme and sub-themes assigned to the conference reflected the key priority areas for reforms identified by the conveners. The conference recognized the role of policy in providing the overall strategic framework for targeted action and support. The quality imperative brought the attention to the internal and external effectiveness of higher education systems in terms of relevance of the programs and orientation of research carried out in universities and other tertiary institutions.

With regard to the sub-themes, four major foci were selected: (i) Science and Climate Change, (ii) Peace and Human Security; (iii) ICT integration and (iv) sub-regional integration through the Addis Convention on *the Recognition of Studies, Certificates, Diplomas, Degrees and Other Academic Qualifications in Higher Education in African States*.

In addressing the theme and sub-themes, the conference set out to to achieve the following objectives:

- a. Strengthen existing reform agendas to promote science research at national and regional levels for socio-economic and environmental development.

- b. Promote resilience strategies vis-à-vis climate change by pooling intellectual and financial resources.
- c. Promote peace and security by enhancing research and programme development on conflict resolution in universities and other think-tanks.
- d. Accelerate ICT integration in higher education to enhance access, quality and relevance as well as innovation capacities.
- e. Promote Regional Integration through sub-regional and regional harmonization and Quality Assurance frameworks, such as the East African Qualifications Framework for Higher Education (EAQFHE) and the Addis Ababa Convention on the Recognition of Studies, Certificates, Diplomas, Degrees and Other Academic Qualifications in Higher Education in African States.

In terms of expectations, the conference was to adopt a Regional Statement (appended) that would encourage participating countries to carry out accelerated reforms in the following the areas:

- a. Higher education reforms at the regional level for the revitalization of science research in Eastern Africa and an agreement for the establishment of a UNITWIN Network of institutions on science research.
- b. A mechanism for joint collaboration led by universities to address emerging issues, including climate change, and peace and security in the region.
- c. A collaborative effort to mobilize universities, including UNESCO Chairs and Centers for empowerment of young people, to link learning with the job market through partnerships with the private sector, research and development, eco-tourism and creative industries for income generation.
- d. Higher education as a priority for ICT policies and masterplans.
- e. Collaborative strategy by all participating countries for ratification and implementation of the *Addis Convention*.

Opening of the Conference: Situating the Conference's objectives in the overall sustainable development agendas at national, sub-regional and continental levels

The Opening of the conference was marked by important speeches from top leadership at country and UNESCO levels that laid out the ground for issues to tackle and the expectations to meet during the conference and beyond.

Two Heads of State provided the participants with their visions and the solutions to the challenges faced by higher education in Africa and the Eastern African Region. His Excellency,

Mr. Ismaël Omar Guelleh, President of the Republic of Djibouti and Her Excellency, Prof. Ameenah-Gurib Fakim, President of the Republic of Mauritius.

In his speech, and from the outset, President Ismaël Omar Guelleh, indicated that, in spite of competing state affairs, he made it a duty to come and open the conference because higher education and research are of particular and growing interest to him. He said that, as a leader, one could not ignore the stakes in the impressive advances in science and technology that shape national development in a globalized world characterized by stiff competitions among nations. He underscored the fact that Africa is at a real turning point in its history, and particularly in its development. Several indicators such as the economic growth rate, regional social dynamism in terms of Africa's youth bulge and the number of young people graduating should lead to optimism about the future of the continent. He, however, cautioned against too much optimism by indicating that to achieve its goals, Africa has to work harder on the acquisition of more knowledge through the use of relevant research and quality teaching in line with the requirements of modernization of economies for more growth and concern for labor market and environmental challenges.

He reiterated his call for Africans not to miss this new revolution as doing so would further make Africans mere spectators and not actors in it. Investing in the development of science, technology, engineering and mathematics, therefore, becomes a matter of survival and a true indicator of a country's capacity to support its existence through sustainable development. He urged both universities and research centers to move towards a socio-economic rationalization of their role, with more openness to the outside world and in-depth reforms to meet the needs of populations and businesses while being innovative in order to compete at the global level.

He concluded by suggesting concrete solutions such as the need for universities and research centers to work on the basis of performance contracts, quality assurance, and promotion through evaluation of results. In essence, tertiary institutions must become the pillars of development in order for Africa to realize the vision of the African Union of making Africa a prosperous continent, a continent of hope, a continent that wins.

In her video address, President Ameenah Gurib-Fakim of Mauritius, concurred with President Guelleh of Djibouti in underscoring the importance of the chosen theme and sub-themes of the conference vis-à-vis Africa's sustainable development. She indicated that the revitalization of the African higher education systems to enhance STEM, research and innovation is key to Africa's present and future development. It is therefore important for Africa to mobilize its energy and resources around these key drivers of growth.

She went on to highlight important development and scientific trends in Africa that can be harnessed to propel economic growth and social development. She listed the current high

economic growth enjoyed by countries across the continent and the youthful population of Africa among the key trends that bring hopefulness for the future.

With regard to key areas to invest in, she mentioned the importance and urgent need to develop broadband internet that has the potential of enhancing the information and communication technology (ICT) to expand educational opportunities and improve quality of higher education.

She also urged African countries to reform their governance systems through transparency and sound management of the continent's immense mineral resources in order to use them for the efficient and qualitative development of education and training systems. Africa should invest in its people. Poverty reduction ought to be a cornerstone of these reforms in governance as well as in education and training systems. Institutions and society should make more room for female participation at all levels. For instance, female academics should be empowered to take their rightful place in the boardroom of academia. Africa cannot develop without addressing the current gender inequality that sidelines more than 50% of its workforce. President Gurib-Fakim said that addressing the gender gap is smart as increasing the current workforce by 1% can generate 0.5-point increase in Gross Domestic Product (GDP).

She concluded her address by stressing the need for increasing the role of the private sector in African economies through public-private partnerships to address the structural deficit of the economies whereby only 1 out of 5 people finds employment in the formal sector. To develop the private sector in Africa, policymakers ought to invest in research and development (R&D). Only through R&D can Africa create the expertise she needs to reap the benefits of mining and transforming its mineral wealth and agriculture outputs. Therefore, higher education has an important role in the development of industrialization in Africa by making countries producers of knowledge instead of consumers.

Prior to the two presidents, both the Minister of Higher Education of Senegal, Pr. Mary Teuw Niane, the invited guest from the West African Region, and his Djiboutian counterpart, Dr. Nabil Mohamed Ahmed, outlined the key challenges facing higher education and reforms to be undertaken.

Prof. Niane provided insights into ECOWAS' and Senegal's reform efforts. He underscored the fact that the current structure of the economy and the rapid technological innovations make higher education and research fundamental issues for contemporary society and an essential component of the competitiveness of nations.

He informed the participants that at the level of ECOWAS, regional policies are underway with the generalization of the LMD¹ reform system of diplomas in three cycles (bachelor's, master's, doctorate) modeled after the Bologna process blueprint in Europe, and a commitment to STEM. ECOWAS voted of a resolution in 2015 setting an objective of 60% in science and 40% in arts and humanities for the content of education delivery in its states.

In addition, the sub-region hosts centers of excellence funded by the World Bank or WAEMU to pool efforts to solve problems in sectors such as health, ICT, energy, environment, and agriculture and so on. Senegal is home to five (5) of WAEMU and 2 of the World Bank.

In Senegal, higher education and research reforms are ongoing. This reform agenda is the result of the political will at the highest echelon of leadership to build a national consensus around key national priorities. The current President of the Republic formulated a vision: "to make higher education and research a lever for the economic, social and cultural development of Senegal". It is the product of a participatory and inclusive process. The implementation of the reforms is far from being a quiet river; it rests on a permanent will to stay the course and a constant opening to dialogue with the actors as beneficiaries. The following areas are being reformed:

- reorientation of higher education towards STEM and the creation of a network of higher vocational institutes,
- Strengthening of the use of ICTs to increase access and internal efficiency,
- the reform of the governance of universities with boards of directors presided over by personalities from the socio-economic world, the generalization of performance contracts, the creation of a National Quality Assurance Authority, the creation of the Cité du Savoir (city of knowledge) and the reform of the policy on the recruitment and career of teachers researchers,
- the expansion of the university map through the construction of a higher education of proximity and quality in face-to-face and distance learning, by professionalizing the programs and capacitating and empowering graduates to build the new generation of entrepreneurs,
- the refocusing of the training around the student, the improvement of his/her academic, living conditions, citizenship education and emphasis on service to the community ,
- the creation of social dialogue committees to pacify university space,

¹ *Licence, Masters, Doctorat in French*

- the construction of a research and innovation system that gives the Emerging Senegal Plan (PSE) the skills, knowledge and know-how it needs for its successful implementation,
- the strengthening of the internationalization of higher education and research to enhance the "study in Senegal" label,
- and finally, the mobilization of the human and financial resources necessary for the operation and investments to carry out the reform.

Dr. Nabil Mohamed Ahmed, Minister of Higher education of Djibouti, began his speech by addressing the following question: What can universities and research centers do to meet the new challenges of a world full of uncertainties and in constant evolution?

He indicated that by 2020 alone, the global economy will have to fill a deficit of 85 million skilled jobs; and in 10 years 80% of all professions will use scientific and technological skills. Therefore, it is clear that higher education and research institutions have no choice but to simply innovate and transform. The key to success, he said, lies in the following three components of curriculum reform: focusing on learning by doing, technological innovation and ICT as a tool teaching and learning.

He however cautioned that for Africans to succeed the key challenge is not to copy and paste existing models in other parts of the world but to draw inspiration from them through reforms and actions tailored to their environments and by integrating higher education and research into the world of entrepreneurship and investing more in engineering and social values.

He indicated that in Djibouti, the reforms have been put in place since the inception of the university ten years ago. From a very early stage, Djibouti adopted the Bologna process by adopting the LMD system. In addition, the government has modernized the governance and management of the university, including the use of an e-campus platform. Inter-country and inter-regional cooperation schemes are also in place. Djibouti is sharing experiences with several countries in the region, and particularly with Francophone countries in West Africa.

As a result of the President's vision and political will, the country now invests in water, energy and mining exploration. The government now finances the procurement of equipment to better mine the country's natural resources and integrate them into a program of sustainable economic development. For instance, the institute of health sciences that trains para-medics has completely adopted the new learning techniques through new reforms calling for the use of new technologies (ICT) in partnership with the best centers of the Rhone-Alps region in France.

He concluded his speech by outlining the four main areas around which Djibouti will build its reform agenda: Current and future projects in the country; environmental issues; culture of peace and tolerance; and multilingualism. More specifically, the following activities are currently underway:

1. Building around new development projects that will require new skills in engineering, logistics and transportation, banking services and new knowledge, especially in the use of digital technology in the process. The government has agreed in principle on a financing plan with the World Bank for the establishment in Djibouti of an International Center of Excellence in the areas mentioned above.
2. Building around the opportunities offered by climate change and the idea of the East African Observatory for Climate Change is taking its course. The goal is to integrate laboratories for the development of new and renewable energies, laboratories for the recycling of waste and their use in other areas. The plan is for faculties of science and engineering to take part in the setting up and use of these laboratories.
3. Building around peace and the culture of tolerance. Without peace, there is no hope of development. Djibouti has benefitted from this image of a peaceful country and a land of welcome in a world where other countries are erecting walls.
4. Building around multilingualism. An important asset in a globalized world is the ability to speak many languages. Multilingualism should be valued and encouraged. A project to build a language center in Djibouti is underway.

As a co-convenor of the Conference and the party in charge of the substantive contents of the conference, UNESCO provided both its vision and commitment to the proceedings and ensuing follow-up activities.

In recorded video messages, the Assistant-Director General (ADG) for Education and that of the Africa Department, articulated UNESCO's support framework for the implementation of SDG 4 for which it has the global mandate and provided goodwill messages.

ADG Education, Dr. Mr. Qian Tang, made the case that ministers need to mobilize around SDGs and more particularly SDG4, as education is this time round addressed holistically; and higher education is part of a continuum. The conference, he indicated, was also an opportunity for implementing the recommendations of the World conference on higher education in creating a higher education space in Africa for modernization of higher education and increased focus on equal access and quality assurance.

UNESCO sees the theme and sub-themes of the Djibouti conference as a call for an increasing role of higher education in delivering SDGs. Africa needs higher education systems that can produce a critical mass of graduates with 21st Century competencies and skills in order to lead the transformation of all the key sectors of the economy through research and capacity development. To that effect, science, engineering and technology should become more prominent in the programs offered at the tertiary education institutions.

Furthermore, he indicated that UNESCO has developed a myriad of relevant programs and instruments to support member states in the three sub-themes of the Conference and has made Africa one of its key priorities. These programs and instruments are available to member countries and the East African region is already benefitting from them. For example, UNESCO has developed and tabled for ratification the 2014 Addis Convention on *the Recognition of Studies, Certificates, Diplomas, Degrees and Other Academic Qualifications in Higher Education in African States* (known as the Addis Convention). This convention replaces and builds on the 1981 Arusha Convention with the overall aim of strengthening and promoting inter-regional and international co-operation in the field of recognition of qualifications and mobility of students, teaching staff and researchers in Africa, as well as establishing mechanisms for enhancing the quality of higher education institutions and systems. This conference will be an opportunity to follow up on the ratification and signing of the Addis Convention.

He concluded by reaffirming UNESCO's commitment to support the implementation of the Convention together with the commitment of the Chinese government to accompany the process.

ADG Africa, Mr. Firmin Matoko, delivered a goodwill message to the participants. He said that he was hopeful that the deliberations of the conference would lead to effective contributions to the resolution of the multitude of challenges facing African countries and regions. Chief among them is the rampant unemployment that hits young graduates and youth in general, which, if not stemmed, could result in a social ticking bomb. He said that his Department is ready to provide support to the region's member states should they need it.

Mrs. Ann-Therese Ndong Jatta, Director of the UNESCO Regional Office for Eastern Africa, thanked the government of Djibouti for both the vision and political will that made the conference possible. She particularly thanked President Guelleh for taking time to open the conference in spite of many competing demands on his busy schedule.

She then situated the conference in the current challenges and opportunities in the quest to achieving the 17 sustainable development goals (SDGs), and more particularly Goal 4 (SDG4). She said that the theme of this conference, could be seen as a rallying cry to bring all concerned

parties together, and in particular the member States in the Eastern African region to mobilize in an organized and synergistic manner to address the challenges of the quality and relevance of higher education systems, while identifying opportunities, both visible and latent, that can be exploited to achieve the set goals.

She further indicated that the conference was an opportunity to reflect on the ways and means of overhauling and reorienting higher education to serve national and sub-regional developmental needs. With regard to the current status of higher education in the region, she quoted statistics produced by UNESCO's Institute for Statistics (UIS) which show that while access to higher education in sub-Saharan Africa is still at 8% on average, the Eastern Africa region, with the exception of Mauritius and Seychelles, it is below 10% in the rest of region. With regard to relevance of higher education to 21st century skills and competencies, the enrollment of students in scientific fields, is still very minimal, even in Mauritius where close to 54% of students are enrolled in Business Administration related fields against 9% in engineering and manufacturing and 3% in mathematics and natural sciences.

The Eastern Africa region should then rise to the challenges by collaborating closely. Without this space for collaboration, pooling and sharing of financial and human resources, the region is bound to delay progress towards ensuring that the millions of young people who represent $\frac{3}{4}$ of the African population can fulfill their dreams for a better life and prospects. To that effect, she requested the President of Djibouti HE Ismail Omar Guelleh to serve as the spokesperson among his peers in advocating for increased investment in higher education science and technology for sustainable development in the region.

She concluded by indicating that the African Union's Agenda 2063 and its accompanying Education Strategy for Africa (CESA 2016-2025) have delineated the course of action for propelling the African continent into a much brighter future within the next 50 years using competencies and skills. This will entail promoting national, sub-regional and continental responsive reform agendas to expand scarce skillsets in universities like STEM and ICT. This is the only way the continent can harness the potential in agriculture, water, energy, minerals and oil while at the same time staving off the ongoing environmental degradation and climate change that pose great threats to food security, water, and ecological systems and ultimately to human peace and security. To do so, she said, regional institutions ought to be strengthened and countries should together build the infrastructure in order to realize economies of scale. The revival of existing regional economic communities such as COMESA, EAC, ECOWAS, IGAD, SADC, etc. is a welcomed development; however, much is left to be done to achieve the desired benefits of integration.

She then presented the five (5) questions that the Conference should address:

The Key Questions of the Conference

1. How can universities combine natural sciences, and social and human science research to tackle the Sustainable Development Goal challenges of human security, peace and climate change in partnership with scientific networks within the region involved in cutting-edge research?
2. How can universities produce highly qualified specialists and contribute to knowledge production and environment conducive for employment and entrepreneurship of university graduates and young people in general, so they, in turn, can find jobs and income?
3. How can universities in the region work to collaboratively respond to emerging challenges linked to inclusive sustainable growth and development?
4. How can the region work together to pool its intellectual and financial resources through the creation of a sub-regional mechanism on climate change?
5. How can ICTs serve as a vector for quality assurance and implementation of measures to strengthen greater collaboration in research and scientific knowledge production in universities within the region?

Outcomes of the discussions on the position papers for the four thematic areas and the Youth Forum

The format of the conference required that each of the four sub-thematic areas produces a position paper using the objectives and expected outcomes of the conference. It also recognized the important role of the Youth as both beneficiaries and actors in the reform of higher education in Eastern Africa, and Africa in general. The following is the overall outcome of the discussions of the challenges and issues brought to the table by the participants.

The Addis Convention

Challenges and Issues

1. Uneven development in both access and quality:
 - a. **African HE institutions are at varying degrees of development** both in terms of their capacity to respond to the increasing demand for HE due to the youth bulge and the quality and relevance of their programs.
 - b. **The magnitude of the financial burden to expand access and improve quality at the same time is such that very few countries in Africa can afford to go it alone.**

More specifically, and in relation to the developmental challenge, the following problems are observed:

2. Uneven Technical Capacity to improve Quality and Relevance
 - a. **Sub-optimal Governance and Management capacities** to create conducive academic environments for excellence in teaching and learning are lacking in many instances. This brings about demotivation within the academic staff and which in turn affects quality education and then leads to students being frustrated over low quality education. Ultimately, this leads to brain drain of academic staff and wealthy and able students.
 - b. **Irrelevant Programs** as graduates do not find employment in the job markets and the national economies. In a world that is driven by technology, there is a mismatch in enrollments in favor of Humanities compared to STEM.
 - c. **Poor research and innovation capacities.** African universities do not invest much in research and as a result do not produce much. Africa's contribution to scientific knowledge production is estimated at just 1.1% of the world total. Very few African countries have reached the 1% investment threshold of their GDP set by the African Union in promoting research and development.
3. Insufficient funding

- a. **Governments, the main source of funding and donors** are faced with serious financial constraints due to world financial crises. As a result, HE does not seem to be a top priority as a sub-sector of education.
- b. **The private sector** is yet to become a major player in funding HE as the current outputs (graduates and research) of universities do not meet the skills and the innovation needs of the sector.

Status of the implementation of the Addis Convention in the Eastern Africa Region

- With regard to the ratification of the Convention, there is no indication that a single country in the Region has signed the Convention. There could be processes put in place to lead to the ratification but they are not known.
- As regards implementation, the activities of the IWG from 2016 to date (2017) at national, sub-regional and regional levels have not been documented and disseminated. The same can also be said of the implementing and cooperation structures to be created and or to be engaged during the 2016-2017.
- Concerning capacity development, there are certainly activities being carried out at all levels and by national, regional and international actors (e.g. UNESCO, World Bank, etc.) on strengthening cooperation on key issues as identified by the Convention.

Therefore, it is important to initiate a process of communication and information gathering in the 13 countries of the Eastern African Region covered by UNESCO in order to document the progress being made and identify in the same process ratification, implementation and capacity building gaps that can be addressed at all levels.

Outcomes of the Ministerial Roundtable on the Addis Convention during the Conference

It turned out that there was a total misunderstanding of the underpinning vision and objectives within the ministries of education in the region. The policy-makers thought that the Convention was trying to create a binding agreement, that it promoted free intra-Africa mobility of work force by facilitating skills portability and forcing integration.

However, the presentations made by UNESCO during the roundtable clarified the objectives and expected outcomes of the Convention. It is actually about:

1. Creating a binding agreement **on the norms and standards** for the formal procedures of **recognizing foreign higher education qualifications** in a non-discriminatory manner
2. Looking into **improving access to higher education** institutions in the Africa Region through free mobility of students, teachers and researchers

The participants in the roundtable were further informed of what the Convention is not. For example, it:

1. Does **not** force States to recognize all qualifications nor does it imply automatic recognition.

2. Is **not** discriminatory - Parties have to assess qualifications in a fair, transparent and non-discriminatory manner.
3. Does **not** apply to the recognition of qualifications of regulated professions (e.g. medicine, law, etc.) where regulatory national legislation and procedures apply.
4. Does **not** require that all the required processes and institutions be in place for ratification to take place.

The Addis Convention presents actually advantages that were unknown to member states such as:

1. The ratification of the Convention actually demonstrates a clear commitment by national Governments to the Education 2030 Agenda (SDG4).
2. It fosters greater inter-state and regional collaboration.
3. It offers an opportunity for the creation of readily available information on national systems of labour market needs and help the rationalisation of courses / resources.

The presentation by UNESCO also cleared the confusion in the minds of the participants regarding the difference between “**Signing**” (in 2014) **meant** expressing an interest to launch the ratification process. Therefore, **there is no need to sign now to launch a ratification process.**

“**Ratification**” means:

1. endorsement of the Convention at country level (through Parliament);
2. followed by an official letter of ratification deposited to the Director General of UNESCO.

Recommendations

After the explanations provided, the participants in the roundtable made the following recommendations:

1. That all the countries participating in the roundtable expedite the ratification by end of October 2017
2. That Djibouti should champion the Addis Convention and the Djibouti Honorable Minister of Education should write to the Ministers of Education of the other countries to invite them to ratify.
3. That a strategy to better promote the Addis Convention within member states be devised and implemented.
4. That a sub-committee be set up to work on the implementation of the Convention with support from the UNESCO Regional Office for Eastern Africa.

Peace and Security, Social and Human Dynamics of Climate Change in Eastern and Horn of Africa Regions

Issues and Challenges

The position paper identified five sub-thematic areas/topics, namely; *Understanding the Menace of Intra-State and Inter-State Conflicts and Contextualizing the Role of Higher Education in the Region; Environmental Conflicts: Social and Human Dynamics of Climate Change; Gender Gap: Women's Participation in Peacebuilding; Youth, Migration and Extremism; and Regional Cooperation and Integration: The Role of External Actors.*

The choice was guided by the following contextual analysis of the Eastern Africa Regions:

- countries in the Eastern and Horn of Africa regions have faced a myriad of complex violent conflicts over the past five decades. The most intractable conflicts, which largely revolve around problems of diversity management and nation-building, are fought between the state and ethnic, religious and social groups. This type of conflict, which starts at the domestic level often spills beyond the country into neighbouring countries, especially when the group fighting the state shares identity with other groups living in other countries.
- another type of conflict that transcends national boundaries is inter-communal conflicts, which are mostly fought over basic resources, such as land, water and so forth. Evidence suggests that once they break out, these conflicts usually become unmanageable, and often require addressing the roots of the problem, if a lasting and sustainable solution is to be found.

The paper outlined three broad objectives that would serve to guide deliberations.

- First, the most important factors that contribute to the different types of conflicts which continue to ravage the Eastern and Horn of Africa regions, focusing on four main problematics;
- secondly, the conference should examine why African institutions of conflict prevention and conflict resolution have not been able to control violent conflicts that have contributed to eroding the region's efforts at socioeconomic development and democratic governance; and
- third, participants in the conference should discuss some essential steps that need to be undertaken to assist the region in revitalizing the culture and institutions of peace and cooperation, stemming out the culture of violence, with a focus on the

role of higher education, specifically in producing knowledge, and taking actions that seek to address these challenges in a proactive manner.

The following key questions were suggested for deliberations on the challenges of peace and security in the region, as follows:

- i. How can universities and institutions of higher education and research position themselves to better produce social sciences knowledge, relevant to addressing challenges of peace and security, from policy perspectives?
- ii. What type of actions can universities and higher education institutions take to actively engage with broader segments of society, in particular, the youth demographic, and the issue of quality education for all, in seeking a collective response to the challenges of peace and security, including those associated with climate change?
- iii. How can UNESCO work better with existing research networks in the region to strengthen capacities of the latter, in its mission to produce relevant social science knowledge that addresses the region's problems?

Key recommendations from participants

Universities, Peace Research, Curriculum Development and Cooperation

- 1) Governments in the region should work closely with partners, including UNESCO, to transform the education sector, including in particular, reviewing and revising existing curricula, incorporating components of African History, values and principles of peace, non-violence and justice.
- 2) Universities, and in particular, social sciences and humanities faculties must develop and strengthen the capacity of young researchers in research design and methodology, by developing specific courses to achieve that, **by 2018**.
- 3) Universities should work with regional social science and humanities research networks such as the **Council for the Development Social Science Research in Africa (CODESRIA), Greater Horn Horizon Forum (GHHF) and the West Africa Institute for Regional Integration (WAI), among others, to develop interdisciplinary courses bringing together social sciences and natural sciences, etc., with a view to institutionalizing and mainstreaming issues of peace and security across the university system, by 2018.**
- 4) Capitalizing on regional integration schemes, UNESCO should work with governments in the region to promote cooperation and exchange among universities, through the signing of MOUs, **and ratification of the Addis Ababa Convention on the recognition of degrees,**

certificates, etc., among them. The use of ICTs should be explored in promoting this cooperation and exchange of knowledge.

- 5) **National governments and regional bodies such as IGAD, and social sciences and humanities researchers need to put in place mechanisms to facilitate regular dialogue amongst them to ensure that knowledge produced in institutions of higher education** contribute to the development and shaping of national and regional policies and approaches to peace and security. A regular (quarterly) production of *regional policy briefs* on topical issues of peace and security, is a good starting point.

ICT AND EDUCATION

Issues and Challenges

The objective assigned to the ICT sub-thematic area was to deliberate on how to accelerate Information and Communication Technology (ICT) integration in higher education to enhance access, quality and relevance as well as innovation capacities.

In terms of issues and challenges, the following areas and guiding questions provided the frame for discussions:

1. Policy and leadership to effectively integrate ICT in Higher Education;
2. Skilled personnel for supporting teaching, learning and research;
3. The importance of adequate Infrastructure in using ICT in Higher Education;
4. Mobile technology as a means for information and knowledge sharing;
5. Academic research and investment in university research;
6. Open and Distance Education and Learning (ODEL) as a cornerstone for building inclusive knowledge societies.

Each session also deliberated on a specific key question:

- What policy options are necessary for Eastern African countries to expand access to affordable higher education by using ICT?
- What competencies are necessary to effectively make use of ICT in Higher Education and who should be targeted?
- How can higher education institutions ensure adequate infrastructure for use in higher education institutions?
- How can one harness the potential of mobile technology for information and knowledge sharing in higher education institutions?
- What smart strategies can be put in place to support African researchers to contribute towards innovation?
- What can higher education institutions do to ensure inclusive knowledge societies by making use of Open and Distance Learning?

Sharing of country experiences provided the frame for discussions (Senegal, Seychelles and Mauritius). During the discussions, the important role of universities was highlighted. ICT can be used to modernize the management and organizational structure of universities, including outreach, teaching and learning, and research. However, to fulfil the full potential of ICT in transforming universities the following has to be done:

- Develop ICT policies and implement the policies in allocating sufficient budgets and capacity development initiatives.
- Conduct training on ICT skills, knowledge creation, including Open Educational Resource (OER) development.

- Support design, development, and implementation of Open and Distance Learning (ODeL) programmes.
- Adopt pedagogical, research and organizational practices that fully exploit the transformative educational potential ICT.
- Encourage ICT integration in higher education through Open and Distance Learning and Open Educational Resources integration in the curriculum.

The participants reached the following conclusions, which called for:

1) The development of comprehensive and inclusive ICT and m-policies and strategies that are student centered to unleash the potential of ICT to achieve greater quality in education and transform learning and teaching, and enhance knowledge transmission, generation and management in higher education.

2) The promotion of a culture of quality in higher education institutions in staff support and incentives, student support, curricula design, course design, course delivery, strategic planning and development.

3) The preparation of higher education institutions to use ICT adequately to expand the benefits of training and professional development to all personnel. This includes rethinking the role of teaching staff and support staff and reforming their preparation and professional development; providing teaching staff and support staff with system-wide support for the pedagogical use of ICT; incentivizing teaching staff innovation, and developing networks and platforms that allow them to share experiences and approaches.

4) The development of comprehensive national research on science and innovation to generate sound evidence on the integration, use and impact of ICT in education for Knowledge societies, in order to enhance the management of education systems, ensure accountability, and understand the key roles that ICT increasingly plays in the transmission of knowledge, the acquisition of new skills and competencies.

5) Access of Higher education institutions and students to a national backbone, fiber infrastructure and connected digital devices with an accessible and responsive digital learning environment.

6) Recognition of enrolment in quality-assured online courses as an alternative or complementary mode to face-to-face programmes of study and create a regional cross-border consortium of ODeL systems in enhancing ODeL practices, mutualize resources through Open Education Resources and pooling human resources and technical resources.

Final recommendations:

1) Create a regional cross-border consortium of Open Distance and e-Learning (ODeL) systems in enhancing accessible ODeL practices (including for people with disabilities and learning difficulties), pool material, technical and human resources and make use of Open Education Resources

2) Establish a joint research agenda in ICT in education in the Eastern Africa region including publications in open access journals and presentations during conferences on the subject.

Science and Climate Change

Issues and Challenges

The thematic group on Science and Climate Change looked at how higher education and research can be utilized to address issues in the science, technology and innovation, including eradication of hunger and ensuring food and nutrition security, prevention and control of diseases, environmental protection, utilization of natural resources, and climate change. The focus was on capacity requirements and availability, and how the gaps and challenges identified can be addressed. The group had three sessions addressing the following topics: (i) Harnessing STI and knowledge for the sustainable socio-economic development of Africa, (ii) Fostering science for the sustainable management of Africa's natural resources, and (iii) Science for Climate Change Adaptation and Disaster Risk Reduction. The sessions were attended by more than 40 participants, including Vice Chancellors and senior academics from universities in the region, representatives of ministries of education and other national/regional organizations, researchers in relevant fields, and students from the University of Djibouti.

The three sessions of the thematic group on Science and Climate Change made the following recommendations on issues that needed to be addressed:

- (i) Increasing dialogue between higher education institutions and governments;
- (ii) Sharing information and carrying out needs-based research to address government priorities and community needs
- (iii) Developing dynamic curriculum with quality assurance, including new approaches to teaching and learning, curriculum update, use ICTs,
- (iv) Strengthening existing regional networks and establishing new networks for collaborative research and postgraduate programmes, and student and staff mobility
- (v) Collaborating with private sector in the field of science and climate change.
- (vi) Devising policy initiatives to improve funding for higher education and research in sciences and climate change, including private sector support.
- (vii) Improving commercialization of research and making universities entrepreneurial (Business management, incubators, project management, entrepreneurship in curriculum, technology transfer offices)
- (viii) Developing in service training on Climate Change Adaptation
- (ix) Developing certification programmes and accreditation of laboratories – to facilitate mobility

Final Recommendations

The thematic group recognized the need to:

1. Create a centre of excellence to enable member states from the region to enhance partnership and collaboration to adapt and mitigate climate change innovative teaching and research. The first task of the center should be mapping existing capabilities in region, what already exists with respect to teaching (curriculum), research, existing networks, exchanges, resources, and funding opportunities.
2. The thematic group welcomed the offer of Djibouti to coordinate the implementation of the mapping exercise for the development of the Observatory for Climate Change Adaptation and Mitigation working as the hub for a Virtual Centre of Excellence, working with the countries and organizations represented at the meeting.

Youth Forum: Challenges and opportunities for youth and higher education in Eastern Africa

Issues and Challenges

The Conference recognized the important role of youth as the main drivers of social change, and at heart of the implementation of the Sustainable Development Goals (SDGs). It sought to bring to the fore the need for international development stakeholders to genuinely recognize youth as leaders in development, by involving them in the decision-making process, instead of only making them as the topic. As the main audiences and beneficiaries of higher education, young people must have a say concerning the challenges and issues of higher education in Eastern and Horn of Africa.

To integrate the youth voice in the proceedings of the conference, the youth were given the opportunity to have their own forum where they were able to voice their views and expectations by reviewing recommendations made in the four thematic areas and concluding their own recommendations with constructive suggestions for change. The youth also addressed the same 4 thematic areas of the conference, namely; quality education (with the linkage to employment), ICTs in education, peace and security, science, and climate change. As an expected result, the youth produced their own statement outlining the pressing issues and what opportunities and roles that young people have in transforming the education agenda and putting it into practice in the region.

Key Recommendations (see Youth Statement in Appendix for full list of the recommendations)

The youth forum produced the following key recommendations:

With regard to the Addis Abeba Convention, they:

1. Urged the countries of the Eastern Africa region to ratify and implement the Convention
2. Advocated for the implementation of the Youth Charter to be implemented- article 13
3. Urged UNESCO to begin meaningful engagement with youth in forums and networks. African youth should be included in all decision-making processes
4. Urged governments to make unemployment a key priority issue by developing the use of ICT for innovation and employment

Concerning Science and climate change, they urged education leadership to:

1. Introduce resilience issues in curriculum
2. Promote Exchange of good practices

Regarding Peace and Security, they suggested that:

1. A strategy for stemming violent extremism through resilience training and conflict resolution be put in place in institutions of higher learning.
2. Youth/students should be encouraged to volunteer in addressing key societal issues such as relief efforts
3. inter-generational dialogue and leadership training need to be promoted

With regard to ICT integration, they suggested a policy that would:

1. produce graduates that are content creators/innovators

Recommendations and Follow-Up: A regional reform agenda

During the final ministerial roundtable that concluded the conference, participants reviewed the draft outcome document (Conference Statement) and made the following comments and suggestions.

Relevance of the outcome document

There was a common agreement that the outcome document is good and reflects the essence of the debates. There is need however to implement the recommendations therein. A clear strategy needs to be developed for follow-up and its implementation.

The issue of funding the recommendations was also raised. First of all, and if universities have to improve, governments should be pushed to increase R&D to reach the threshold suggested by the African Union: 1% of the GDP. A timeframe is needed. It was also suggested that data on level of R&D across African countries is needed. The ministers and participants agreed that there is need for an R&D survey.

Participants suggested that donors should shift part of the money they allocate from other sectors such as emergencies to issues of capacity building, experience sharing, science, communities and equal opportunities. Investing in the areas would create less conflicts and emergencies.

Target groups

Recommendations embedded in the outcome document need to be taken to governments. In the process, there is need to respect the legal context of each country. It was also suggested that the outcome document should also be taken to the non-conventional different target groups such the disempowered and communities at large.

Closing

In his closing remarks, Hon. Nabil Mohamed Ahmed, Minister of Higher Education and Research, thanked his fellow colleagues, the ministers who were in attendance as well as UNESCO and all the participants for their contributions to the success of the proceedings of the conference. He also indicated that Djibouti was deeply honored by the responsibilities that the conference had assigned to its leaders in the follow-up to the meeting. The draft outcome was approved by acclamation.

Appendices

APPENDIX 1: CONFERENCE STATEMENT

Conference on Higher Education, Policy and Research:

Quality and Future Challenges for East Africa and the Indian Ocean

Regional Statement

4th May 2017

I. Preamble

- We, the thirteen member states of UNESCO in Eastern Africa (namely Comoros, Djibouti, Eritrea, Ethiopia, Kenya, Madagascar, Mauritius, Rwanda, Seychelles, Somalia, South Sudan, Tanzania and Uganda), representatives of universities, scientific networks and other bilateral and multilateral organizations have gathered in Djibouti from 2 to 4 May 2017 to debate on the role of universities and higher education institutions in including more natural sciences, social and human science research to deal with the Sustainable Development Goals (SDGs) challenges of human security, peace and climate change, as well as intercountry and regional cooperation.
- The President of Djibouti, HE Ismail Omar Guelleh, accepted to serve as the spokesperson in advocating for increased investment in higher education science and technology for sustainable development in the region.
- Member States have discussed and agreed on a new strategy towards the ratification and implementation of the [Addis Ababa Convention](#) on the Recognition of Studies, Certificates, Diplomas, Degrees and Other Academic Qualifications in Higher Education in African States.
- Reaffirming our commitment to key global and regional frameworks such as the Sustainable Development Agenda to end poverty, protect the planet, and ensure prosperity for all (Sustainable Development Goals-SDGs); the 2063 Agenda including the STI-Strategy for Africa (STISA 2024) and the Continental Education Strategy for Africa (CESA) and the African Youth Charter and its Decade Plan of Action (DPoA) for transforming the continent's human capital and natural resources; the Qingdao Declaration on Information, Communication and Technologies (ICTs); the Paris agreement on climate change; as well as the importance of leaving no one behind, with a focus on women, youth and people with disabilities .
- Recognizing that Science Technology and Innovation (STI) is the key driver for Africa's socio-economic transformation and the need to be mobilized for new knowledge generation, good governance, socio-economic development, inclusive growth and shared prosperity.
- Recognizing as well that universities and institutions of higher education and research are instrumental in advancing the climate change agenda, peace education and research on conflict resolution, peace-making, and cooperation for socioeconomic development and calling for them to position themselves to better produce social sciences knowledge, relevant to addressing challenges of peace and security.
- Recognizing their key role to actively engage with broader segments of society, in particular, the youth and women, in seeking a collective response to the challenges of peace and security, as

well as their role in promoting regional cooperation and integration, supported for instance by efficient research networks.

- Reaffirming that youth are key actors and agents of change; and investing in Africa's demographic bonus will enable youth to realize their full potential to sustain and grow the social, economic and political development of Africa.
- Reiterating as well that to achieve the goal of inclusive and equitable quality education and lifelong learning by 2030, the use of technology and innovation and information and communication technologies in higher education is critical for the benefit of education systems, knowledge dissemination, information access, quality and effective learning, and more effective service provision.
- Reaffirming the importance of partnerships to advance the development agenda, the recommendations of the conference will be implemented in partnership with UNESCO and other UN entities that participated in the conference such as the Food & Agriculture Organization of the United Nations (FAO), the United Nations Environment Programme (UNEP) and the United Nations Office for Project Services (UNOPS), as well as in partnership with the African Union, the Intergovernmental Authority for Development (IGAD) and the African Virtual University (AVU).

II. Recommendations

- **Addis Convention on the Recognition of Studies, Certificates, Diplomas, Degrees and Other Academic Qualification in Higher Education in African States**
 - 1) Expedite the ratification by end of October 2017 as per the renewed commitment by all countries at the ministerial round-table of the Conference.
 - 2) Djibouti to champion the Addis Convention; Djibouti Honorable Minister of Higher Education and Research to write to the Ministers of Higher Education of the other countries to invite them to ratify.
 - 3) Emphasis on a strategy to better promote the Addis Convention with member states.
 - 4) Future step: establish a sub-committee to work on the implementation of the Convention with support from the UNESCO Regional Office for Eastern Africa.
- **Intercountry and regional cooperation on science and climate change, peace and security, and ICTs**
 - 1) Create a centre of excellence to enable member states from the region to enhance partnership and collaboration to adapt and mitigate climate change innovative teaching and research: as a first task to map existing capabilities in region, what already exists with respect to teaching (curriculum), research, existing networks, exchanges, resources and funding opportunities (under the coordination of Djibouti in partnership with member states and participating organizations).
 - 2) Advocate for member states to devote the 1% GDP threshold for research and development (R & D) as advocated by the African Union.

- 3) Establish or strengthen mechanisms and systems for the collection, analysis and use of quality statistical and qualitative data for decision-making support at all levels.
- 4) Develop interdisciplinary courses bringing together social sciences and natural sciences with a view to institutionalizing and mainstreaming issues of peace, security and gender across the university system in collaboration with research networks such as the Greater Horn Horizon Forum (GHHF), the Council for the Development Social Science Research in Africa (CODESRIA) and the West Africa Institute for Regional Integration (WAI).
- 5) Establish mechanisms for inter-generational dialogue among national governments, regional bodies and researchers to contribute to the development of national and regional policies on peace and security.
- 6) Create a regional cross-border consortium of Open Distance and e-Learning (ODEL) systems in enhancing accessible ODeL practices (including for people with disabilities and learning disabilities), mutualize resources through Open Education Resources, promote open data access mechanisms and pooling human resources and technical resources.
- 7) Establish a joint research agenda in ICT in education in the Eastern Africa region including joint publications in open access journals and presentations during conferences on the subject.
- 8) Establish a working group to promote work experience opportunities for youth and young graduates in terms of internship and short term voluntary work attachments in public and private institutions and businesses.

APPENDIX 2: YOUTH FORUM STATEMENT

Ministerial Conference on Higher Education, Policy and Research

Quality and Future Challenges for East Africa and the Indian Ocean

We, East African youth gathered at the Conference on Higher Education, Policy & Research;

Recalling the commitments made to the Youth at the level of the African Union, and other Regional Institutions, to work towards the socio-economic transformation of the continent in the context of Agenda 2063 and its potential to further Youth Development through Higher Education, Policy and Research;

Recognizing with appreciation that African Heads of States and Government have dedicated their 2017 Theme to “Harnessing the Demographic Dividend through Investments in Youth” and their prioritization for inclusion of Youth in shaping the agenda;

Recognizing the policy and legal instruments that enshrine the rights and responsibilities of young people, including the African Youth Charter in particular Article 13 on Education and Skills Development;

Convinced that youth are key actors and agents of change; and investing in Africa’s demographic bonus will enable youth to realize their full potential to sustain and grow the social, economic and political development of Africa;

Recognizing the opportunity to enhance an enabling environment to institutionalize and meaningfully engage youth within all levels of policy decision making processes;

Aware of the innovation and creativity and thought leadership from young people in leveraging ICT’s and use of new and social media as informal way of tackling development issues across the continent

Concerned that youth suffer the brunt of the impact of climate change especially in rural and marginalized communities; and suffer consequences of conflicts and insecurity including the susceptibility to violent extremism;

We call upon our Governments and all relevant stakeholders to:-

Key Recommendations

1. Accelerate the ratification and implementation of the Addis Abba Convention by all Member States and call upon the African Union to address youth development as a priority goal to be mainstreamed throughout its implementation
2. Enhance the implementation of the African Youth Charter including working in a inter-ministerial and multi-disciplinary nature with other ministries to address all the thematic areas of the Charter including article 13 on Education and Skills development;
3. Meaningfully engage existing youth networks, forums and institutions to ensure a sustainable framework of youth mainstreaming and inclusion in all levels of decision making
4. Prioritize resourcing and financing youth led initiatives, ideas and innovations so they can be scaled up to address broader African development issues
5. Prioritize sustainable responses to address the youth unemployment crisis as one that can undermine our economies if it is not addressed
6. Harmonize Policies on ICT, Peace and Security and Climate Change that may be addressed by Higher Learning Institutions in terms of providing quality training and research for more focused data creation, evidence-based planning and policy development for the promotion of innovative and creative knowledge based societies

Science and Climate Change

1. Provision of opportunities to engage young scientists within climate research, policy design, implementation and review of national climate change policy positions and response strategies including the implementation of the Paris Agreement;
2. Promotion of Inter-University Exchange programmes, particularly through virtual libraries and programmes, in higher learning institutions to enable Youth to better relate to current situations and issues through learning
3. Incentivize the understanding of climate change issues by Youth through practical knowledge on income-generating opportunities on green enterprises and agro-entrepreneurship
4. Incorporating of sustainability and environmental issues in curriculum for increased universal understanding of climate change theories, concepts such as reducing the carbon footprint, and skills development through Global Citizenship Education
5. Increased outreach and sensitization on climate change amongst the Youth, through inter and intra-university learning by leveraging on good practices exchange and peer-peer learning
6. Promotion of inter-generational spaces for students to engage with other stakeholders on emerging issues and ideas to address climate change

Peace and Security, Social and Human Dynamic of Climate Change

1. Higher education to focus on resilience, conflict resolution and post conflict reconstruction including a focus on Peace and Ethics Education, fostering and culture of peace and engendering peace volunteers and support to the socio-economic inclusion refugees and displaced persons through entrepreneurship education and life skills development;
2. Promoting higher education that promotes understanding of african history and heritage while promoting global citizenship with a focus on non-formal learning processes essential to create space for values, giving voice and empowerment, and empowering youth in transformation of the society, region and world at large including targeting rural youth and those from marginalized communities.
3. Higher education to support intergenerational leadership development to bridge the practability gap and equip the students with realistic ways of responding to emergency situations in conflict e.g. mediation exercise, negotiation, bilateral talks, international relations and diplomacy
4. Promote the trans-disciplinary nature of peace through research and social science including comparative benchmarking of the standards of social sciences curriculum in Africa; reform social science research agenda making it relevant, functional and applicable;
5. Increase access to Africa generated/published research for free flow of information and learning; encourage shift from research from a curative tool to a holistic approach to focused contextualization for policy development
6. Increased funding and sponsorship opportunities targeting young women to access higher learning institutions and close the gender gap

Information and Communication Technology

1. Higher Learning Institution to generate graduates to be content creators not content consumers, innovators and not innovation consumers
2. Higher education that ensures new innovations from young people are documented, scaled up, patented and piloted to be of use within national level development planning.
3. Promotion of higher education that embraces innovation, use of new media, ICTs to maintain relevance and practicality in a rapidly globalizing world. Ensuring the information and curriculum equip learners with skills for employability, entrepreneurial values, and creativity to be ready and competitive within the labor market
4. The need to address mismatch of the tertiary education and the demands of a rapidly changing labor market; and addressing the needs of the labor market which is not waiting for education to change but rather changing with the socio-economic trajectory of the world
5. Encourage new and refreshed approaches to research and data creation through the use of ICTs for increased efficiency in addressing climate change challenges
6. Incentive-based ICT based initiatives that reward research at Regional level for Youth and Higher Learning Institutions
7. Encourage Public Private Partnership for collaboration to redefine the curriculum to promptly address the needs of the Youth; Integrate tools that are already being used by Youth for Learning; and update new and emerging areas in ICTs such as in data science, artificial intelligence, virtual reality to increase employability in the prevailing global market
8. Use of ICTs to motivate learning and innovative approaches to generating solutions to challenges and increase engagement for development.