[Keynote Speech]

Global Jobs and African Education

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1. Implications of Globalization for African Education

Among other benefits for Africa, globalization presents the opportunity to export labour to the rest of the World and within Africa. It is hard to justify the export of African labour to the developed countries of the World, when this resource is critically needed in Africa. However, one should not lose sight of the fact that Africa has surplus labour, especially of the youth, something in short supply in developed countries. Second, as many African countries prepare to exploit the newly found wealth and accelerate economic growth, Africans who will have had experience in developed countries will come in handy. Third, many of the multinational companies to benefit from the Africa economic boom are located in developed countries; having a pool of Africans who understand their business culture will be an asset for their African operations.

For Africa, there is much potential with regard to the export of doctors, nurses, tourism and hospitality professionals, skilled and unskilled labour, sporting talent, entertainers and teachers of African culture/languages. Africa should also benefit from the youth bulge with almost 70% of the continent's population aged below 30. Forty percent of the World's youthful population resides in Africa. The continent's large deposits of natural resources, a growing continental market, a high spirit of entrepreneurship and rapid embracing of technology, and the fact that Africa is the last unexploited development frontier, also favour international exchanges in education and employment.

2. African Education not Good Enough for Global Competiveness

Although on average, Africa devotes 22% (Kenya and a few other countries over 30%) of the public budget on education, while the world average is 16%, a substantial number of African children do not enroll in school and many of those who do, drop out. As of 2010, compared to the rest of the World, Africa had the lowest gross enrollment and net enrollment ratios at all levels of the education system, the most dropouts and out of school youth, and the most illiterates. The situation is worse at the tertiary education level with Africa registering the lowest gross enrollment ratio of 7% compared to the World average of 29%. There are also major social, religious and geographical disparities in enrollment, completion and outcomes as well as with regard to areas of study all the way to the university. The explanation for this education crisis lies in poor governance, misplaced priorities, inadequate funding, conflicts and wars and some negative cultural and religious values, poor national infrastructure and poverty.

Even for those who are able to remain within the school system, there are major quality issues. At the primary and secondary school levels, Africa has the highest percentage of repeaters in the World. A large percentage of primary school pupils cannot read or write material meant for their respective grades. Quality and relevance are also an issue at the tertiary level as evidenced by; poor rankings of African universities compared to universities elsewhere, the fact that less than a quarter of the students are enrolled in science and technology fields, complaints by employers about graduates who do not seem to have mastered the basics, and the fact that African universities and research institutes' contribution to world knowledge is almost negligible.

As a result, compared to the rest of the World, a lot of Africa's talents are unlikely to develop, contribute to the development of the continent or benefit from global educational and employment opportunities. This is one reason, imports of scientific and other experts into Africa will continue. Donors' prioritization of basic education over tertiary education and their prescriptions that disadvantage the marginalized has not made matters any better. Nor have rather stringent visa requirements for potential African students and those seeking work in developed countries helped.

It is estimated that Africa loses up to \$4billion to pay for over 140,000 expatriates based in Africa. In a way, this is evidence that Africa benefits from the global employment market. Export of African experts comes with some benefits for Africa in the form of financial remittances (estimated at \$1billion for Kenya in 2012), linkages for further training overseas and opening up of new ground for other Africans. Unfortunately, these experts are not available to support development in Africa or to nurture future talent for a continent that has an acute shortage of high-level resources in the most critical fields of development.

3. Generating a Globally Competitive Labour Force

Governance. The African leadership has to lead the way in reforming African education to be globally competitive by:

- Building national consensus on what needs to be done and prioritise economic advancement while not tolerating negative distractions
- Eliminating conflicts and wars while promoting the rule of law, peace building initiatives, inclusiveness and equity in the sharing of national resources
- Promoting positive values of honesty, hard work, nationalism, meritocracy, transparency, fairness, etc.
- Strengthening regional economic and educational ties
- Investing in the IT revolution. Together with education, they are the greatest equalizers
- Raising the vote for research and innovation to at least 1% of GDP
- Involving the private sector in the provision of education at all levels
- Establishing/strengthening centres of excellence nationally and regionally to optimize on scarce resources and to train and upgrade the skills of practitioners
- Supporting graduate training for specializations where there is the greatest need and more so, with universities in South and East Asia from which Africa could learn more than from Europe and North America
- Promote local capacity (in collaboration with foreign experts where needed) for government consultancy projects
- Providing appropriate incentives to get renowned African experts to return home to share and prepare young talented Africans for global opportunities; the strategy of South Korea and Taiwan to bring back their best brains from the developed countries contributed to their economic miracles
- Promoting the export of youth possessing vocational skills given the declining youthful population in developed countries and those talented in sports, drama, art and music where Africa may enjoy a comparative advantage over the rest of the World
- Investing in widely accessible and high quality education from basic to tertiary and vocational/technical, and in non-core curriculum subjects (sports, drama, music, art)
- Making education delivery more cost-effective while managing the excesses of teacher unions
- Insisting on accountability by all teachers from primary to university
- Making a deliberate efforts to get education to be more inclusive of marginalized social, religious and regional groups by making basic education free and compulsory and through affirmative action interventions at all levels

Higher Education Reform. African higher education institutions have to espouse more dramatic reforms for effective global competition labour force by:

- Expanding higher education only if sure of the availability of commensurate resources to support the expansion; quality must come before quantity
- Identifying alternative methods of expanding access and delivery (day universities, distance learning)

- Diversifying funding sources; in addition to governments, student fees, research grants and consultancies and partnerships with industry, philanthropy, and more
- Doing more with less; available resources can accomplish more than is currently the case
- Ensuring that higher education institutions are truly national in outlook before they plan for a global role
- Reaching out to Asian countries (in addition to the traditional allies in the developed World) for research and graduate training
- Linking up with top sporting universities in the developed world and especially the USA to strengthen sports in the respective universities
- Digitizing content and exploiting the full potential of IT
- Paying greater attention to quality education through appropriate quality assurance mechanisms, the basing on recruitment and promotion of staff and students on none other than merit considerations and targeted graduate training
- Reorienting the curriculum to reflect global market needs informed by research findings
- Establish/strengthen programmes on student start-up companies as a way preparing them to benefit from global opportunities
- Identify niche areas for specialization instead of duplicating what is already in existence

The International Community. International partners and governments of developed countries could enhance Africans' exploitation of global employment opportunities by:

- Linking future support to countries to evidence of accountability in government and educational institutions
- Putting more money into science and technology education, IT and higher education.
- Targeting scholarship support to priority areas of development such as nuclear energy, mining, solar power, water and energy, IT, mathematics, the sciences, engineering and high quality vocational/technical education
- Supporting diversification of sports' and entertainment beyond the traditional (swimming, gymnastics, film making, baseball, cricket, American football, etc.) to expand the range of available opportunities
- Lobbying for a more open door policy for prospective African students and employees seeking opportunities in the developed World, as long as they are eligible
- Encouraging basic and high school students' and teacher exchanges between Africa, Europe, North America and Asia; early interaction is good investment for future international cooperation
- Opening up their consultancy and other donor jobs that are focused on Africa to more African experts
- Investing in international student, internship and employment exchanges between Africa, Europe, North America and Asia
- Investing in international student competitions (from primary to university) to expose African talent to professional sporting clubs in the developed countries
- Supporting research and graduate study for African scholars in areas where Africa has a competitive edge (mineral exploitation, tourism, African languages/culture, Sports, solar energy, and more
- Encouraging multinational companies to invest in the education of Africans who would be their ambassadors in Africa; and, in internship and university/industry and business links in support of both scientific and business innovations and post school employment
- Supporting value addition educational programmes to widen opportunities for business with the rest of the World targeting agricultural and mineral products
- Promoting joint consultancy and research projects between African scholars/experts and their counterparts in from Europe, North America and Asia

Is Sub-Saharan Africa Well Placed to Reap from Economic Opportunities Made Possible by Globalization: Global Jobs and African Education

> By Kilemi Mwiria Paper Presented at the 11th Japan Education Forum (Tokyo: February 19, 2014)

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Globalization & African Education

Globalization has important implications for African education and the opportunities that come with it:

- * Training across borders
- * International and regional academic linkages
- * Knowledge acquisition through the Wide World Web
- * International and regional education partnerships
- * The global job market

Globalization & African Education

Africa could benefit more from the global employment market:

- Export of doctors, nurses, tourism and hospitality professionals, skilled and unskilled labour, sporting talent, teaching of African culture/languages, entertainment and the international civil service
- The Africa youth bulge with almost 70% of the continent's population aged below 30
 40% of the World's youthful population resides in Africa
- * Large deposits of natural resources
- * A growing continental market in the continent where the entrepreneurial spirit is very high

Globalization & African Education

- * Reverse brain drain
- Africa is the last unexploited development frontier
- * Out of the twenty world's fastest growing economies more than ten are in Africa
- * Openness to new technology. Currently more than 650 million mobile phone users in Africa, up from 25 million in 2005 (more than 2000% growth). Africa has more mobile phone users that the USA

The Foundation: Basic & Secondary Education

On average, Africa devotes 22% (Kenya and a few other countries over 30%) of the public budget on education, while the world average is 16%.

YET:

As of 2010, compared to the rest of the World, Africa had the lowest gross enrollment ratio (GER) and net enrollment ratio (NER) at all levels of the education system, the most drop outs and out of school youth and the most illiterates (UNESCO, 2012).

This is why Africa cannot compete:

- Pre-primary GER: World 48%, North America & Western Europe 85%, East Asia & Pacific 57%, Arab states 22%, Africa 17%
- Primary NER: World 91%, North America & Western Europe 97%, East Asia & Pacific 96%, Arab states 88%, Africa 77%
- * Secondary NER: World 63%, North America & Western Europe 91%, East Asia & Pacific 73%, South & West Asia 51%, Africa 29%
- Primary school drop out rate: World 23%, North America and Western Europe 0%, East Asia & Pacific 9%, South & West Asia 33%, Africa 42%

- Out of school children: World 18%, North America and Western Europe 2%, East Asia & Pacific 10%, South & West Asia 30%, Africa 36%. Africa accounts for half of the World's out-of-school children (31 out of 61 million)
- * Adult literacy rate: World 84%, North America and Western Europe 99%, East Asia & Pacific 94%, South & West Asia 63%, Africa 62%

Why? Bad governance, misplaced priorities, inadequate funding, conflicts and wars, some negative cultural and religious values, poverty

Result. Compared to the rest of the World, a lot of Africa's talents are unlikely to develop, contribute to the development of the continent and to benefit from global educational and employment opportunities.

Equity of provision/attainment. There are major social, religious and regional disparities in enrollment, completion and outcomes as well as with regard to areas of study all the way to university

As a Result in some countries, more than 30% of the population may not be able to contribute optimally to the continent's development or benefit from global educational opportunities and employment. In developed Europe, North America and emerging Asia, parity has virtually been achieved

Quality & relevance equally of concern

Primary school repetition rate: Africa has the highest percentage of repeaters 35% (11.4 million), followed by South & West Asia (28%), Latin America and the Caribbean (17%), and the Arab states and East Asia and Pacific (9% each).

The South and Eastern Africa Consortium for Monitoring Educational Quality (SACMEQ) assessment done in 2007 and the 2013 Global Monitoring Report conclude that:

 In more than two thirds of the countries assessed, almost half of the students cannot read or write material for their respective grades because they have not mastered the most basic skills.

96% of grade 2 to 4 pupils in Malawi, 94% in Mali, 91% in Zambia and 82% in Uganda could not decode a single word!

Why?

 There are an average of 43 pupils to a teacher in Africa (there are cases of up to 100) compared to a world average 24, 14 in North America & Western Europe, and 18 in East Asia & Pacific and 39 for South & West Asia

Recurrent school strikes, poor infrastructure, inadequate reading materials, a high percentage of untrained teachers, poor management, conflicts, and poverty

* The 2012 GMR has shown how in many African countries, many teachers know no better than their pupils!

Effect: Without a solid basic foundation, Africa's children are disadvantaged relative to other children from the rest of the World from the word go. How then could they be expected to compete at the global scene?

Higher Education Equally Challenged Between 2003 and 2008, enrollment in African

universities increased from 2, 342, 358 to 4,139,797 (a 78% increase; World average is 53%). But there are major problems:

- * Africa's tertiary GER of 7% is the lowest in the World (World average is 29%) and compares badly with all other regions such as North America & Western Europe (76%), East Asia & Pacific (29%) and South & West Asia (17%).
- Mauritius was the big exception; GER increased from 10 to 40% between 1999 and 2011.
- * Also dramatic: Ethiopia's student population (160,000 to 640,000), Ghana's (230,000 to 850,000)

- African Universities rank poorly worldwide. Not a single African university has made it among the top 100 in the last ten years. Last year one of the ranking bodies placed the University of Cape Town (the highest ranked in Africa) at position 126.
- * Similarly, the Global Competiveness Index (GCI) ranks the quality of African higher education lower than elsewhere in the World in most categories.
- * Numerous complaints by employers and professors in graduate school on the poor mastery of basic skills by university graduates

On average less than 20% of African students are enrolled in science and technology related courses, compared to over 50% in emerging economies of Asia (China, South Korea, Singapore, Taiwan). For example, in Botswana, only 12% are enrolled in the sciences, the rest mainly in the social sciences and education.

- African universities/research institutes contribution to world knowledge is almost negligible because lecturers have hardly any resources and time to conduct research. Thus,
- * While the per capita scientific publications in the developed World stands at over 85 and at 16 in developing countries, it is a paltry 0.8 for Africa;

- * Per capita inventions for the developed World stand at 97 compared to 3 for developing countries, and negligible in Africa.
- In 2006, only 35 research and development (R&D) centres were operating in 53 African countries (most poorly resourced) compared to 861 in North America, 655 in East Asia and 1,576 in Europe.
- * The situation is compounded by the loss of some of the best African scientists to developed economies.

YET: in the 1960s, many African universities (e.g. Fourah Bay in Sierra Leone, Makerere in Uganda, University of Ibadan in Nigeria, Legon in Ghana) were leading World institutions.

Why the crisis: Mainly financing Related

- While between 1990 and 2004, the average World per student expenditure was \$4,600; it was \$2,000 for Africa. Yet, the per student expenditure as a proportion of the GDP averaged 2.93 compared to a World average of 1.24 and 0.28 for OECD countries; inefficiency is a major problem.
- Rwanda's student population grew 14 times but the proportion of the higher education budget fell from 35 to 13%.

End Result. Africa cannot deal effectively in the global market or generate globally competitive human resources or for the Continent.

Brain Drain

Under the circumstances, imports of scientific and other experts into Africa is likely to continue

- * It is estimated that Africa loses up to \$4billion to pay for over 140, 000 expatriates based in Africa.
- * An estimated 250,000 highly qualified professional are working outside Africa due to instability at home, lack of recognition by their governments, poor remuneration and generally an unsupportive working environment.

Brain Drain

- * It is estimated that 3 of 10 Africans who go abroad to study do not return.
- * 13% of Kenya's tertiary education students (over 20,000) study in OECD countries.
- * 1 of 9 Africans born in Africa and have a university degree migrates to the OECD countries.
- * Between 1980 and 1991, Ethiopia lost 75% of its skilled workforce; there are more Ethiopian doctors in Chicago than in Ethiopia!

Brain Drain

Based on the above, one could conclude that Africa reaps from the global employment market as export of African experts results in:

- * Big financial remittances (estimated at \$1billion for Kenya in 2012)
- * Opportunities in commerce
- * linkages for further training overseas
- * Opening up of new ground for other Africans

BUT: these experts are not available to support development in Africa or to nurture future talent for a continent that has an acute shortage of high level resources in the most critical fields of development.

The International Community

Aware as many Africans are, that donor money is not Africa's, questions have still been raised regarding:

- * Over-emphasis on basic education (over tertiary)
- * Prescriptions that disadvantage the marginalized even more
- * The reality that Africans seeking education and employment abroad have to contend with very stringent visa requirements.

Result: Globalization of education and resultant employment opportunities less real for African youth compared with their counterparts from the rest of the World.

What Reforms are Needed?

Governance

African leaders of vision and commitment to their people's welfare should lead the way in reforming African education to be globally competitive by:

- * Building national consensus on what needs to be done/ should not tolerate any negative distractions.
- * Eliminating conflicts and wars while promoting the rule of law, peace building initiatives, inclusiveness and equity in the sharing of national resources
- * Promoting positive values of honesty, hard work, nationalism, meritocracy, transparency, fairness, etc.
- * Strengthening regional economic/educational ties
- Investing in the IT revolution; along with education these two are the big equalizers

Governance Reforms

- Raising the vote for research and innovation to at least 1% of GDP
- * Involving the private sector in the provision of education at all levels
- Establishing/strengthening centres of excellence nationally and regionally to optimize on scarce resources and to train and upgrade the skills of practitioners
- * Supporting graduate training for specializations where there is the greatest need and more so with universities in South and East Asia (more to learn)

Governance Reforms

- Promoting local capacity (in collaboration with foreign experts where needed) for government consultancy projects
- * Providing appropriate incentives to get renowned African experts to return home to share and prepare young talented Africans for global opportunities; I am told the strategy of South Korea and Taiwan to bring back their best brains from the developed countries propelled their economic miracles.
- * Promoting the export of youth possessing vocational skills given the declining youthful population in developed countries; and those talented in sports, drama, art and music where Africa may enjoy a comparative advantage over the rest of the World.

Governance Reforms

- Investing in widely accessible and high quality education from basic to tertiary and vocational/technical and non-core curriculum subjects (sports, drama, music, art)
- * Making education delivery more cost-effective while managing the excesses of teacher unions
- * Insisting on accountability by all teachers from primary to university;
- * depoliticizing the teaching profession
- Making a deliberate efforts to get education to be more inclusive of marginalized social, religious and regional groups (free and compulsory basic education) and affirmative action interventions

Higher Education Reform

Key reforms to focus on:

- Expansion accompanied by commensurate resources to support expansion
- * Identifying alternative methods of expanding access and delivery (day universities, distance learning)
- * Get more than governments to support higher education (able students, research grants, consultancies and partnerships with industry, philanthropy)
- * Efficiency; available resources can accomplish more
- Ensuring that higher education institutions are national in outlook before going global

Higher Education Reform

- * Digitizing content and exploiting the full potential of IT
- * Paying greater attention to quality education through appropriate quality assurance mechanisms, the basing on recruitment and promotion of staff and students on none other than merit considerations and targeted graduate training
- * Reaching out to Asian countries (in addition to the traditional allies in the developed World) for research and graduate training
- * Linking up with top sporting universities in the developed World and especially the USA to strengthen sports in universities

Higher Education Reform

- Reorienting the curriculum to reflect global market needs informed by research findings
- Establishing/strengthening programmes on student start up companies as a way preparing them to benefit from global opportunities
- Identifying niche areas for specialization instead of duplicating what is already in existence

The International Community

Donors an other well wishers need to consider:

- * Linking future support to evidence of accountability in government and educational institutions
- * Putting more money into science and technology education, IT and higher education
- Targeting scholarship support to priority areas of development such as nuclear energy, mining, solar power, water and energy, IT, mathematics, the sciences, engineering and high quality vocational/technical education

International Community

Supporting diversification of sports' and entertainment beyond the traditional (swimming, gymnastics, film making, baseball, cricket, American football, etc.) to expand the range of available opportunities

- * Lobbying for a more open door policy for prospective African students and employees seeking opportunities in the developed World, as long as they are eligible
- * Encouraging basic and high school students' and teacher exchanges between Africa, Europe, North America and Asia; early interaction is good investment for future international cooperation
- * Opening up their consultancy and other donor jobs that are focused on Africa to more African experts

International Community

Investing in international student, internship and employment exchanges between Africa, Europe, North America and Asia

- Investing in academic and non-academic international student competitions (from primary to university) to expose African talent to professional sporting clubs in the developed countries
- * Supporting research and graduate study for African scholars in areas where Africa has a competitive edge (mineral exploitation, tourism, African languages/culture, Sports, solar energy, and more

International Community

Encouraging multinational companies to invest in the education of Africans who would be their ambassadors in Africa; and, in internship and university/industry and business links in support of both scientific and business innovations and post school employment

- * Supporting value addition type programmes in agricultural and mineral products to widen global opportunities for business
- * Promoting joint consultancy and research projects between African scholars/experts and their counterparts in Europe, North America and Asia

Conclusion

- * ... Africa is now the new frontier, an important growth pole for the economic recovery and an attractive business destination for capital. The perception gap is closing, and there are serious investors who are seriously interested in Africa... (Ngozi Okonjo-Iweala, Finance Minister of Nigeria)
- * It is estimated that by 2035 Africa's labour force will be larger than that of China or India. This resource needs harnessing within African countries, the regional Africa market and the global market.
- * This labour force will need training for the these different markets

Conclusion

It is hard to justify the export of African labour to developed countries of the World, when this resource is critically needed in Africa.

BUT, Africa:

- * Has surplus labour of the youth which is in short supply in developed countries.
- * As the developed world prepares to exploit Africa's potential, Africans with experience in developed countries will come in handy.
- * For multinationals out to invest in Africa having a pool of Africans who trained in their home countries and understand their business culture will be an asset for their African operations.

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Thank You

I am grateful for this privileged opportunity to address this team of eminent scholars

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