## The 'Africa Century'

by

His Excellency
Professor Oluyemi Oluleke Osinbajo, ML, SAN, GCON
@professoryemiosinbago; @yemi.osibanjo
Vice President of the Federal Republic of Nigeria
January 27, 2018 Warwick Africa Summit Lecture
University of Warwick
Coventry, United Kingdom

The following is an abridged version of the presentation via the senior editor of this publication which appears/appeared in a YouTube video (for an exact review, see the video).



I must say that I'm again very deeply honored to have been given this opportunity to be here with you in this visionary conference, and in this great place of learning and inquiry. I must say that I've always been rather partial to Warwick. Let me confess up front that is not just because it is such a University of world--as a clip, I'll tell you the story sometime in 1975 our then young and dashing military head of state general Yakubu Gowon was overthrown in a military coup d'état while he was away from home at a conference in Kampala Uganda, in those days in Africa if you were ousted in a coup, you were either killed or detained general. Gowon was fortunate, he has kept here in the UK, he was offered a place here, while he was here, another coup attempt was made which led to the unfortunate death of a then head of state.

General Gowon, he was as many believe then, falsely accused of being involved in the plot and some of his adversaries called for his extradition, as British authorities and Warwick stood solidly behind him, and he remained here safe as a young brush hot-headed Nigerian

I decided that if I were ever to lead a revolution, and it failed, I would head for Warwick, this place of freedom and refuge, and I'll remain here until the dust settled. Of course there's another good reason why I am partial to Warwick. My son is here, and he's also one of the organizers of this summit.

But that's not exactly the reason why I am happy; here life is cheaper for me, my car for one thing is safe, so I really am pleased that he is here, and I'm also of course excited to be here with you all, and I thank you again very much for this honor the theme of the summit.

I'm told is Ubuntu is relighting the file of Africa, a boon as we've heard already, term with variants in other dialects, and as the Zulus would say "umuntu ngumuntu ngokusebenzisa abanye nginguye engikhona ngenxa yokuthi sonke singobani" which means that a person is a person through others I am what I am because of who we all are, it's a belief in the universal bond of humanity, we validate our own humanity through our responsibility to other human beings, regardless of race, color, gender or belief. Indeed, Africa is because of the rest of the world.

Africa is because of the rest of the world, my thesis this morning, and it is then essentially Africa's historic responsibility through the rest of the world, and I've titled my thoughts the Africa century so my topic will be the Africa century. Two weeks ago I was privileged to give a talk at the Harvard Business School, it was titled Africa rising and as I reflected further on the subject, it became clearer to me, but aside from the encouraging narrative of some of the giant strides that Africa has made in the last 15 years, there is a fairly more profound insight, and that insight is that it is this century that is the African century.

And before I elaborate, let me say that neither that expression that is *the African century* nor the general notion that it implies, is original indeed, many African leaders before me, such as Thabo Mbeki and Nkosazana Dlamini-Zuma have used the same words to describe the great advances that Africa is making, especially in contrast in the last century. The variant that I add to it is that it is *the African century* because in this century, Africa will for good or ill play the defining role in global development, let me repeat that that in this century, Africa will for good or for ill play the defining role in global development, it implies that Africa will shape and will matter in all of the trends that will shape the future of the world in this century.

I say for good or for ill, because either scenario is possible given the checkered history of Africa's development. And it is not always the case that the glaringly obvious path to progress and development is thicker if Africa fails. The global impact will be catastrophic, if it succeeds the global impact will be unimaginable, but there are at least four important respects in which Africa will hold the balance of world development. First is in world population demography, second is an environment and climate change, third is production, especially agriculture manufacturing and technology. And fourth are social exclusion, and its implications for global security. I'll examine first what is described as a doomsday scenario in the four different areas or four different indicators before looking at our present efforts and projections for the future.

Let's take population; by 2035 Africa will have 1.2 billion people. Nigeria, its most populous country will become the fourth most populous nation in the world, and over 50% of that number will be young persons under the age of 25. Today, 60% of the unemployed in Africa are young people, and if we do not change the trajectory of our socio-economic development, we will have millions of jobless young people in the prime of their lives, and we will see that number will be the likely illiterate and poorly trained, and the workforce will be ill-equipped to operate any Industrial Revolution or take advantage of technology.

The anger disillusionment and hopelessness of these young people will drive social unrest, compel more desperate migration northwards, and present a fertile recruiting ground for extremist groups and ideologies, if social conditions remain tenuous. And even the well-educated will be tempted into migration and contribute further to the brain drain.

Now, how about the environment and climate change, so it's generally agreed that although Africa has contributed to global warming, it is and will suffer most of its consequences. Indeed we have already seen extreme weather events such as flash floods, desertification drought and unseasonal occurrences in several parts of Africa. Lake Chad, Africa's fourth largest lake surrounded by Nigeria, Niger, Chad and Cameroon in 1960 covered 25,000 square kilometers, it has now shrunk to less than 1,350, it provided for the integration for irrigation for fishing for livestock for millions, now it is practically non-existent. Lake Tanganyika in East Africa and that's one of the oldest lakes in the world located in the western branch of the great African Rift Valley flowing through countries like Tanzania the Democratic Republic of Congo Burundi and Zambia was recently declared as threatened lake of 2017. While Lake Tanganyika is adversely affected also by human activity, the form of climate change, deforestation, overfishing and hydrocarbon exploitation, again clearly if we maintain the same trajectory, and if we don't implement an aggressive plan for the environment, Africa might be the place where the perfect storm will occur, nor was the perfect storm, it is that apocalyptic event predicted by John Beddington, the former chief scientific adviser to the UK government, and he says that it will occur when competing needs for food water and energy raise ahead of response to that especially response, despite the needs that we have to compensate for in climate change. He said, and I quote, it is predicted that by 2030, the world will need to produce around 50 percent more food and energy together with 30 percent more fresh water. Thus, mitigating and adapting to climate threatens to create a perfect storm of global events, There is not going to be a complete collapse, thank God, but things will start getting really worried if we don't tackle these problems. And of course, as for production, as a culture, we in manufacturing and technology Africa share a global GDP that is only 3%, and unless production is ramped up across agriculture, across manufacturing and technology, the outlook for the continent and the rest of the world will be troubling indeed.

Technical culture, a cultural production and productivity is well below full potential, although the continent has 65% of globally available arable land, up to 50% of it is called uncultivated, assuming we continue at the pace we are going now, Africa will be unable to feed its own population, and will lack the resources to import, and as the food needs of the world rises, the population and of course the population growth as I said earlier, is growing exponentially, a significant portion of the world's arable land which as we've seen as in Africa, will only be superb sub-optimally productive, and the outcome will be an unsustainable dependence on food on food aid and continued insecurity food insecurity in manufacturing.

Africa is at the risk of what is described as premature deindustrialization, in other words, the service sector is growing rapidly in African countries while it is yet to experience industrialization in the first place. This situation has serious implications for job creation competitiveness and participation in the global value chains and it is further complicated by digitalization, and the fourth Industrial Revolution which we know is going to create the loss of several traditional jobs, and we'll talk about that a little later.

As you go further, the fourth area that bears clues is in watching is inequality and social exclusion, the UNDP has reported that every single African country is less equal today than they were in 2010 on account of lack of jobs and opportunity and lingering extreme poverty illiteracy is a factor in sub-Saharan Africa. One in three adults are illiterate, and over 50% of women are illiterate, youth literacy in sub-Saharan Africa is the lowest of any other region, now literacy as defined by UNESCO is mainly someone who can read and write a short simple statement. Hence, there is a very low threshold, and of course, it does not begin to address the issues about functional literacy in the 21st century.

Besides high levels of malnutrition in children, also means stunting in growth and poor development of the brain ability of both individual and society to develop and compete, thus, an impeded low mental capacity of a growing population. So this is what I've described as the doomsday scenario, Africa's population growing exponentially, food production not being able to match population growth, nutritional inadequacy and trans-humans conflict due to shrinking vegetation and water lack of jobs and opportunity for a massively poorly educated youth population, leading to vulnerability to extremism and aggressive legal migration. But perhaps most troubling immediately is an Africa that runs the risk of becoming a convenient breeding ground for extremist groups from where they can launch out to the rest of the world, a horrifying situation.

Indeed, if in the next three decades Africa drops the ball on any of the four indicators I've mentioned, there will be a tragedy for the entire world, neither Africa nor the rest of the world can afford to have these scenarios playing out. As we say in Nigeria, God forbid, but let us flip this doomsday scenarios and see what it is that is being done on the four indicators and what needs to be done to ensure that the 21st century will be *the African century* in the most positive sense with regard to the environment Africa presents, hence, a huge potential and opportunity for itself, and for the world.

The perfect storm can be averted by focusing on the green economy as a source of growth. The green economy is one that promotes environmental sustainability and equitable economic growth at the same time. This can happen for instance through investments in renewable energy sufficient processes and clean technology. Solar installation can for instance be used to tackle Africa's huge energy deficit while creating jobs. Up to two thirds of Africans do not have access to electricity and it is quite feasible to expect that the continent will take a huge chunk of the estimated 25 24 million jobs that will arise from operations and maintenance and manufacturing of solar systems for Nigeria's 180 million people. About 20 million households have no power, and as part of the efforts to diversify power sources in order to improve access, we started a program of providing solar power in several thousand homes in rural villages. Back home we started in a village just outside Abuja is a tableau of Nigeria, the agrarian community is not on the national greed and it has no other source of power, so to charge their phones an entrepreneur with a small generator runs a service. So you take your phone to his shop once a day or so to charge your phone, and you pay a small fee, but it would shut down at about 7:00 p.m. until daylight, but working with a public private partnership model the government-owned Niger Delta Power Holding Company partnered with Azeri technology, a private solar company to provide a domestic solar solution. Surva had provided the same end-to-end service in East Africa, a solar home system including a payment system with the equipment cost about a thousand nine hundred Nara which is about five to six pounds a month, and every home had one mounted on their roof, and for the first time in its existence, the village now has running water, solar powered. The school has power and the school hall is now used as a community hall in the evenings, and each home has four points of light. Children can now stay up and do some studying at night. And many of the women can now process their millet and yams at night as new jobs have been created for solar installers and maintenance. And the management of payment system wherein only one guy has lost his business, however, now there is a phone charger in every household.

This is a trend everywhere; you look with more solar power deployment a lot more it's going to happen, a lot more activity, a lot more commercial activity, a lot more jobs and maintenance, and other systems. Algeria for example created 3,500 jobs just in the construction of the 14 grid-connected solar photovoltaic projects in 2015 with 700 permanent jobs, now expected in operation and management. Kenya has built Africa's largest wind farm at Lake Turkana, providing 310 megawatts of liable low-cost energy to Kenya's national grid with 15% of the country's installed capacity now solar and its construction created more than 2,000 local jobs. The point being made, especially for solar power is that there are just millions of homes waiting to be serviced, especially in the rural areas, besides our solar power demand in Africa and are relatively at a cheap labour cost which make Africa a logical candidate for solar panel and components manufacturing, and a lot of the smart money is looking in the direction of investing in solar manufacturing.

In Africa agriculture is another sector where actions can have positive outcomes for the entire world with the right mix of policies, Africa can feed its growing population in a sustainable manner and meet nutritional standards while also becoming a large-scale supply of grain and food to other parts of the world that are shifting out of agricultural production. To take the example of Nigeria, we are undertaking a concerted effort in agriculture to boost food security and create jobs for our rapidly growing population by excluding our reliance, and reducing our reliance on food imports, which run into the billions of dollars annually. Our rice wheat and fish imports have cost us nearly four billion dollars, however, through investments in agricultural inputs, machinery finance and agricultural extension has seen growing results with agricultural sectors demonstrating positive GDP growth, even while the country was in recession in the last year as a realm of 2017, yet, producing 10 million tons of paddy rice, and rice imports have dropped by 80% with 6 million new jobs created in agriculture. Local and foreign investors from the Dangote group to the New Hope group and Heineken are taking note, expanding their positions in a very dynamic way with a quality and value, and they're going into maze and cashew nuts, et cetera, and with over fifty percent of the world's arable land and over half of that uncultivated is it is becoming clearer that the world would be looking to Africa as its food basket. Just to take China's demand alone, China has 27 percent of the world's population, but only 7 percent of the world's arable land for agriculture, so China needs and has asked even Nigeria for 2 million tons of hybrid soya beans per annum for livestock feed and vegetable oil.

Now we've not been able to meet that demand yet, sesame seed from Africa is also in high demand, about 2 million tons per annum is the demand from China, Vietnam, Japan and the Arab countries: sesame seed all and it used for confectionaries. That demand also like China, which requires 2.3 million tons of cassava chips and cassava products for industrial starch and ethanol. Again, we were not able to meet that demand neither have we been able to meet China's demand for cocoa. How about goat meat, 120 thousand carcasses of goat meat has been required weekly in different Arab countries, there is still a major gap and supply here, as well, and good meat by the way is a very enjoyable delicacy, maybe that's why we're not producing enough. Most of Viet Nam's demand for over 2.5 million tons of Kashi is also unmet. So Africa's role as food provider to the world, especially in the next few decades is a clear opportunity that can provide millions of additional jobs and revenues wich will grow exponentially, if we process and take advantage of the agribusiness value chain. And there is bound to be even more activity, even more jobs besides, Africa is the logical frontier of the green economy, our credentials and sustainable agricultural practices acts as a draw, we have arable largely organic lands that have not been tampered with at all. By some of what we see, organic lands have not been contaminated by chemical fertilizers which mean that Africa can produce food with near hundred-percent environmentally sustainable levels for most of the world's demand, including premium paying customers.

We may also emphasize our environmental potentials by virtue of sustainable land practices, and all plump and plantations in particular are able to go into markets where competitors cannot go, without breaking environmental rules such as Southeast Asia, and all palm production, the projections on the African food and beverage market is exciting. This is a market that's worth up to a trillion dollars and, it will increase by 2030 to about 1.5 trillion dollars foreign direct investment in agriculture that will go from about 10 billion dollars in to 45 billion dollars today.

In addition, the growth of this sector would reduce poverty twice as fast as growth in other sectors, especially if we were able to develop the entrepreneurial capacity of our youth in agribusiness to take advantage of the extremely lucrative agricultural business value chains. Rwanda and Ethiopia are excellent examples, with rich natural resourced. African countries are attaining impressive growth, and they're able to do so because of their focus on agricultural practices that are contemporary and cutting edge. In Rwanda and other nations in Africa, close to 60% if what is most exciting is the emergence of young innovative entrepreneurs, providing thousands of new jobs along the agricultural value chain.

A few examples are Fahad Awadh, a 29 year old entrepreneur from Tanzania who set up a cashew processing facility in Tanzania. The factory brings international standards and traceability to the company's flagship processing facility in Zanzibar which has an installed capacity of 2,500 tons per annum; it recently raised a \$500,000 investment from the Africa Enterprise Challenge Fund to establish another processing facility in the Mtwara region in southeastern Tanzania. Also, a Nigerian social entrepreneur founded AAAS food processing and distribution, an agro processing company, and it sources has produced small cluster farms in rural communities across West Africa which also facilitates access to microfinance and farming technologies for all of the farming groups associated with it, founded about eight years ago and today its annual turnover is in excess of several million dollars. Next there is company in Nigeria worth an estimated 20 million dollars per year started by Sharon Shea, Wilson juice, a fresh juice company founded Southwest Nigeria with their main brand is called Wilson's lemonade that sold at almost every major grocery in Nigeria (150 locations) in bottles with all ingredient lemon from local hibiscus flower sugar cane produced in Nigeria. Another person is Fatima Wushishi, the chief operating officer and co-founder of 5th Harvest Limited, a post harvest solution provider company that strengthens the value chains of crops such as brown oats rice and maize the solution studied at a local farmers that range from Agra commodities procurement services to storage services as well as warehouse receipt finance. Blondie Okpuzor is the CEO and founder of Bath Candy Company Skincare Bath & Body, a social enterprise the company unique for its insistence on environmentally friendly products. Lara Carew, an agricultural economist and CEO of Farm City Limited, a firm land focused on growing vegetables using hydro for hydroponic farming techniques. And there's also Babban Gona, a company that is involved in agriculture of franchise, the company found a need and opportunity in the fact that smallholder farms who aren't able to break even due to low economies of scale, so the company deploys a model that franchises farmer groups and provides them with cost-effective end-to-end services and training and finds markets for their produce.

All of these entrepreneurs that are mentioned across Africa, all of them are under 40 years old and there is just an increasing number, and there is just an increasing number of them day by day. Manufacturing can also be part of this positive story despite fears or premature industrialization. The point has been made elsewhere, and that is there is a potential 85 million jobs that can be relocated to Africa from China through the movement of sunset industries because of the increasing wage gap between unskilled workers there, and those in African countries the ramping up production.

Under this scenario, the situation will be assisted by the establishment of the continent as a free trade area which will create an Africa wide market that enables the economies to scale successful manufacturing which depends the Continental Free Trade Area (via the African Union), which should be ready this year. And one of the major discussions that will be on the table at the Africa summit this weekend, also because of relationships on the development of the African industrial sector, it is possible for the continent to take a more environmentally friendly approach to industrial development.

Just to go back slightly to the point I've just made, because China used to be the world's factory is of course experiencing higher wages, so Africa is going to the next logical place for most of those manufacturing jobs to come. And we're already seeing signs of that opening in Nigeria with special economic zones, and there's a great deal of interest from Chinese companies that want to come and invest in this. In Africa, labor costs are cheaper; it's easier for us also to transport those goods to many parts of Europe. And also, the continental free-trade area which we are opening up in Africa is an excellent opportunity and the prognosis is excellent, an excellent example of some of the rigorous planning, especially in how we can use industry in an excellently friendly way and ensure that industries are compliant with all of the environmental trends that we want to establish like what we've seen in Dukem, Ethiopia with their first industrial park which has one of the most advanced effluent discharge systems in the world, and in the house apart, we have a zero emission water treatment plant, one that is that's really replicated in many different parts of Africa. So many other countries are looking at example technology, especially in my view it is an important plant in Africa's job creation plants in and of itself.

Technology provides opportunities in coding, creating the applications and so many other aspects of so many other aspects of digital technology that can be take advantage of. So today, African technology talent can find employment around the world, and ultimately contribute to the growth and development of their own countries and fortunately on account of the age in which we now live, the age of outsourcing, teleconferencing, remote working, and so on is now very possible, and some of us here, might have heard of Angela, a good example, and Ella is a company that operates primarily in Nigeria and Kenya. Thank you. And Ella is a company that operates primarily in Kenya and Nigeria, co-founded by a young Nigerian in Abuja; the company trains young Africans living in Africa to code and then find jobs for them in Western countries where the demand for skilled coder is high.

But the very nature of coding can be done remotely, which means that talents can stay back in Lagos or Nairobi or elsewhere and still earn decent salaries, build thriving ecosystems and contribute the value of their salaries and taxes to their home countries. So and Ella is operating a model which can be replicated in several parts of the world.

Now I want to say that it is in the area of technology in particular that we believe that Africa will find some of its some of its most interesting opportunities, because the most important developments Africa in digital technology is how young digital entrepreneurs have created solutions to challenges, especially in the various industrial value chains and have created thousands of jobs in the process, and I'll just give you a few examples. There is an innovative a text data supported by a Nigerian company called ventures Capital Ventures, a platform that is really a venture capitalist and invests in several startups, and they have invested in a company founded by a farmer and a software engineer. The company leverages technology to aggregate finances for smallholder farmers, they also provide inputs and farming services that has increased farm yields fourfold for thousands of ordinary farmers around the country. There are also big data collection companies; mobile forms that is creating new employment opportunities for thousands of Africans as data collection agents to collect data on farmers, on farms and map and maps of farmlands. so this also gives farmers better access to finance, here also, they are about to roll out one of the first coin offerings, so crypto-currencies here we come.

Flutterwave, founded in 2016 by a team of ex-bankers, entrepreneurs and engineers, provide the underlying technology platform that allows businesses to make and accept payments anywhere in Africa. They have pound net payment systems with innovative technology, and they are doing incredibly well, they have processed 1.2 billion dollars in payments in ten million transactions in less than three years of operations. Also Pay Stock, founded just in 2015 is doing turnover now of over 5 million dollars in payments monthly. Another African digital technology success story is the Rack Center, a Nigerian owned carrier neutral data center, the first of his type in Africa is in essence a collocation data center that holds IT assets for businesses and delivers cloud solutions to them, it now hosts multinational companies and connects all of the undersea cables servicing the Atlantic coast of Africa.

There is no question that technology will provide for Africa the answer to many of the big issues that confront us, and technology education is also finding jobs for the millions of new entrants into the job market. Technology can enable us to give Africa youth an education that is fit for the times in terms of science, technology, engineering and math, as well as trading across a range of skills relevant to the 21<sup>st</sup> century job market. I will come back to this crucial point, presently a low hanging fruit is using technology in the training of large numbers of young people, leapfrog traditional obstacles such as access to books and educational materials, especially in the rural areas. And our government, as part of our social investment programme has engaged 200,000 unemployed graduates from practically every local government area in Nigeria, and we are employing 300,000 more in the program which is called the empower volunteer probe.

The idea is that these volunteers will work as teachers or as public health officers, but during the course of their employment, they have access to a broad range of technology and entrepreneurial training, and all of that material is loaded onto electronic tablets and are given to them, and it is also available on an open portal.

There are two points to note. First, the training of over 200,000 simultaneously in far-flung parts of the country would have been practically impossible without technology, and second, training in relevant technology and entrepreneurship skills is crucial to preparing these young people for the new market for digital jobs and the numerous extensions.

Now this brings us is a big question, educating young people in Africa for the jobs of the 21st century. There's no question in my mind that we must radically change, not just what we teach, but how we teach. We are in a new educational era, the emphases of academic knowledge and general certifications will not be useful for many of the new jobs.

New curricula and training techniques must be applied and we must begin from the premise that most low-skilled service jobs are disappeared forever as digital technology and robotic takes off and take over. So suddenly bank tellers, shop assistants, production line workers are disappeared, but the development of online services and industrial report robotics respectively, but as someone said, if history is anything to go by, the technologies that take away jobs will also provide and create new jobs. The technologies that take away all of these jobs will provide new jobs. The only problem is that the new jobs will need a different set of skills, maybe more complicated than previous ones. In this case, digital skills and support is the sauce of the explosion in toaster robotics for example, it is eliminating thousands of assembly line jobs. But, it is also creating a demand for people who can design, who can manufacture, program and maintain these machines.

Ddigital skills in this new era are like what vocational education used to be in the old era. Most of the education will be more democratized; it will be online and made available to millions at the same time. The courses will be relevant to work based skills required by industry and therefore be dynamic as industry needs change. I'm sure many of us are familiar with Udacity and online educators like that, many of them of course point in the direction that we're headed. They developed the curriculum for their online training for job-ready skills in collaboration with industry. Many of these online educators are already affiliated with AT&T; Google Facebook and several others at major concerns.

Africa has a unique opportunity to train its large youth population to become the best digitally trained people in the world, beginning from primary schools where code writing and other digital skills can be taught.

And so ladies and gentlemen, there is no question at all that this century is the African century, where Africa will either be the world's nemesis or it will be Xavier. Three things will decide how we fair, leadership, leadership, leadership. Visionary and innovative leadership, but we are not now talking of merely political leadership, after all that political leader has influenced, the direction of world development as profoundly among the likes of the founders of Microsoft, Apple, Facebook or Google, and several others.

So the leaders we are talking about. this generation of African youth, and their friends around the world, some of them who are in this room. who see the incredible opportunity to revolutionize a continent, who see this continent as their business in the next few years, fortunately, and technology has created a level playing field, so you don't need any invitation bring to the table, your ideas and drive is what will earn you a place. But if I were a betting person, I would ask, will Africa fly or fail. I'll surely put my money on Africa flying, especially with all of you, so welcome to the Africa century, thank you very much.