RESEARCH PAPER BY RICHARD ATTIAS & ASSOCIATES
PLENARY SESSION Scheduled for: August 30, 6PM

PANEL OVERVIEW

LEADERSHIP: THE NEXT TWO YEARS

Jobs, climate change, security

You see ebola, terrorism, unrest, poverty; we see growth, peace, leadership, and energy. Major challenges facing Africa in the next 48 months include falling oil prices, civil unrest, a lack of jobs, climate change, national security, the economic impact of environmental policies, and on-going food scarcity. How can these leaders prove their countries have upward growth momentum, rather than countries stricken by poverty and starvation? How are today's leaders – public and private sector – addressing these challenges? And what are the potential consequences if we don't act quickly enough?

Regional challenges

Jobs

In 2013 Africa's economies grew by 4% (and Sub-Saharan Africa's by 5%), and they are projected to continue growing over the next decade (OECD, 2014).Much of this growth is fueled by agriculture and foreign direct investment in high skilled enterprises.However, local workers remain excluded from the high skilled labor market.

Underemployment and unemployment in sub-Saharan Africa is higher than most regions of the developing world. The International Labor Organization (*ILO, 2013*) reports that labor markets in developing countries are challenged by an oversupply of labor, a scarcity of capital and a combination of traditional and "modern" economies (*ILO, 2013*). Women and girls, people with disabilities, and youth, in particular, are marginalized. Sub-Saharan Africa's rapidly-growing population of individuals aged 15-24 face even greater employment challenges than their counterparts in other developing countries. In 2013, the global youth unemployment rate was estimated at 12.6% (*ILO, 2013*). In sub-Saharan Africa, youth unemployment was almost 20% (*OECD, 2014*).The 2014 Train My Generation Survey illustrated that youth who were polled cited unemployment as their biggest concern for the future.

ILO attributes high unemployment rates to several factors including skills mismatch, which could either be from over-education or under-education. In Sub-Saharan Africa, with the exception of Liberia, Malawi and Togo, the skills mismatch is mainly from under-education (*ILO, 2013*).Under-education may stem from exclusion from technical and vocational programs due to high tuition costs, but also from lack of preparation for these programs because of lower quality education at the elementary and secondary level. UNESCO reports that Africa's pupil/teacher ratio at the elementary school level is well above most other regions, with 42:1 in 2012, compared to the global pupil/teacher ratio at 24:1 in 2012 (*ILO, 2013*). Gender gaps in primary and secondary education also create a disadvantage for females in the labor force. Governments should continue to improve education at the elementary and secondary level and also invest in more public and alternative vocational and training programs.

Climate Change

Like many developing economies, Africa faces a paradox: it experiences both resource depletion and negative effects from climate change, despite the fact that compared to the global average, it contributes very little to global warming and worldwide carbon emissions. As the continent shifts its economic agenda to incorporating more sustainable goals, new investment will enter the economy, carbon-intensive jobs will be eliminated and there will be a greater need for green jobs and green businesses. With a swelling population, the need will only be greater. With $50billion in annual investment going into Africa, there is an unprecedented opportunity to leverage the private sector and build Africa into a green continent. However, African countries need the right policies to encourage both investments by foreign companies with sustainability objectives, foster the creation of African green businesses, and encourage new energy technologies.

With $128bn FDI in Africa in 2014, and continued FDI growth, the continent has a unique opportunity to encourage investment by sustainable or "green" businesses, or companies that have minimal harm on the environment for future generations (*Ernst and Young, 2015*). The UNEP defines green jobs as work that contributes substantially to preserving or restoring environmental quality (*UNEP, "Green Jobs Report", 2008*). Africa can harness innovations in energy technology to create more green jobs, mitigate climate change and foster inclusive green growth (*UNDP, "Inclusive Green Growth in Africa: Rationale, Challenges and Opportunities", 2014*). African governments can look beyond the renewable energy sector as well, by encouraging low-carbon business practices in existing industries and helping corporations remain competitive in a world where sustainable practice is crucial to a brand's reputation.

UNDP argues that inclusive economic growth and green businesses work in tandem through greater efficiency, innovation and the creation of new markets. (*OECD, "Towards Green*

Growth", 2011). 'Greening' the economy may create new jobs both within the formal and the informal sector. However, challenges remain in promoting inclusive green growth, including lack of innovation capability, technological barriers, lack of capital, and dependence on extractive industries for the majority of jobs. According to UNDP, 8-% of Africa's jobs come from natural resources including minerals, agriculture and forestry. A report by the ILO illustrates that as countries prioritize greening their economies, economic activity will shift away from low energy efficiency activities, which will cause structural shifts in employment to occur. Workers may be displaced as "brown" jobs are eliminated, and existing jobs are transformed into greener positions (*ILO, "Skills for Green Jobs", 2011*). Africa's task is to foster green businesses without stunting current economic growth strategies. Some of this might come from supporting green entrepreneurship and encouraging more sustainable practices within agriculture and other resource dependent sectors like infrastructure, energy and industry.

Drivers of a green economy and green employment will come from government policies including subsidies, research and design budgets, and investment in energy alternatives. (*UNEP, "Green Jobs Report", 2008*). Key drivers of sustainable transformation or growth are investment and technology, and governments need to encourage investment in areas that cause little environmental damage or facilitate greater resource efficiency.

Energy Technology

Africa is currently in a unique position in terms of its energy sector, because foreign companies are targeting the continent for investment in renewables. According to the UNCTAD, fossil fuels were the primary material import and export in Africa between 1980-2008, yet it was a net importer of renewable resources (*UNCTAD, 2012*). Solar, wind and other renewables not only mitigate climate change, but also create millions of jobs. Although projections for individual countries vary, the UNEP estimates that wind energy could generate 2.1 million and solar PVs might generate up to 6.3 million jobs worldwide by the year 2030 (*UNEP, 2008*). McKinsey estimates that renewables have the potential to create 2.5 million temporary jobs across Africa (*McKinsey & Co, "Brighter Africa", 2014*).The energy efficient building sector, agriculture, recycling sectors and transportation sectors also have potential for job related growth (*UNEP Green Jobs Report, 2008*).

New research suggests that transforming an economy away from depleting the environment is not necessarily a recipe for economic stagnation. UNCTAD points out there are three different economic arguments supporting green growth, each sequentially stronger. The first argues that green businesses do not inhibit economic growth; the second argues that green sectors provide some jobs and the final argument is that renewable energy systems will provide basic sources of economic growth (*UNCTAD, 2012*).

Collaboration between entrepreneurs and big business

Innovation is an important catalyst for disruption. New technologies will not thrive in industries that depend on existing, energy inefficient technologies, specifically in sectors like transportation and energy (*OECD, 2012*). The areas that are projected to grow most are in renewable energy, electric vehicles and energy efficiency in building and lighting. However, many developing countries may do not have the intellectual or financial capital to innovate clean technologies (UNCTAD, 2012). Part of this has to do with limited funding for research and design, limited capital for startups and high rates of patents for energy technologies (*UNCTAD, 2012*). Furthermore, competition between private companies may prevent sharing innovative green technologies. Governments may be able to boost collaboration and innovation by creating cooperative research and design centers (*UNEP, "Green Jobs Report, 2008")*. At the same time, in order to ensure that FDI focusing on green technologies enters countries, governments need to ensure that copyright and intellectual property is protected (*OECD, 2012*).

Informal Economy

The informal economy comprises more than 80% of total employment and 90% of new jobs in lower income African countries, and includes activities such as street vending, carpentry, maintenance work, retail trading, recycling and refuse collection, and artisan work (*Organisation Internationale de la Francophonie, "The Informal Sector, Growth, Employment, and Sustainable Development," 2014 and UNPAN, 2013*). The UNRISD notes that many actors working in the informal economy already practice sustainability goals. For example, bottle collectors and waste recyclers collect products out of economic necessity, but their actions, in fact, participate in sustainability goals (*Dawa, Frederick, Kinyanjui, Mary, "Green Economy and Sustainable Development: Which Way for the Informal Economy?", UNRISD, 2012*). Because the informal economy comprises such a large portion of the African workforce, it is important that policymakers include it in the discussion of green economies.

Food Security

Agricultural production in Africa has steadily increased over the past 30 years. However, according to the World Bank, Africa's agriculture yields are lagging compared to other continents (*New Partnership for African Development Agency for the African Union, 2013*). Moreover, out of the major global agricultural producers, Africa's share of agricultural exports has been declining since the 1990s and it has a mere 2% share of the market (*World Bank, 2013*). Although subsidy programs go some way to help farmers purchase costly inputs, unless they are balanced by other government policy measures, only wealthy farmers benefit (*Nash, John, World Bank 2013*). A combination of sophisticated fertilizers and government intervention propelled Asia's green revolution during the 1970s and 1980s, a phenomenon characterized by dramatically improved yields. Governments contributed to the green revolution by stabilizing producer and consumer prices and subsidizing inputs (*McCarther, John, The Brookings Institution, 2013*).

The African Development Agency for the African Union suggests developing regional markets and controlling international integration is the best method for stabilizing prices and securing a domestic market supply for inputs (*New Partnership for African Development Agency for the African Union*, 2013). Policymakers who advocate for collaboration between the private and public sector echo this view. The private sector could develop better, lower cost seeds and fertilizers and farming equipment. McKinsey forecasts that "If Africa could raise yields on key crops to 80% of the world average (like other areas that experienced green revolutions), the value of its agricultural production would rise by $235bn a year over the next two decades" (*New Partnership for African Development Agency for the African Union*, 2013). Improved infrastructure and irrigation would also help produce higher yields.

Inadequate water supply and under-cultivated land also hinder Africa's agricultural growth. The World Bank reports that climate risk contributes to yield problems by exacerbating the effects of inadequate and irregular water supply and soil degradation. "Despite available water resources, a very small proportion of land is under irrigation. The variability of precipitation in time and space in all areas receiving less than 1,200 mm of rain annually leads to high yield variability" (*Nash, John, World Bank, 2013*)..Africa has millions of hectares of uncultivated land. Despite Africa's vast land resources, inefficient land administration on a continental level leads to unsustainable land use practices.

Solution/Recommendations from OECD, World Bank, Brookings Institution and African Development Bank

- Diversifying the economy through agriculture and implementing programs at the grassroots level are other methods for including marginalized groups like youth and women in the labor force. The AfDB forecasts that agriculture in Africa not only has potential for combatting food insecurity, but also for driving growth and filling employment gaps (*African Development Bank*)
- Governments should emphasize the informal sector's potential for job growth by creating market-enhancing programs enabling disadvantaged youth to access training (*World Bank, 2014*)
- Policymakers should develop new skills training programs for workers from sectors that may eventually be eliminated through a green economy, and for workers who wish to transition into new green jobs (*ILO, 2011*)
- Regional cooperation across African borders could help with water management, land regulation and transportation (*Brookings Institution, 2013*)
- Cooperative partnerships between NGOs and governments could ensure sharing and availability of international waters, trans-boundary basins in Africa and improve resource management (*Nash, John, World Bank 2013*)

- Integrated water management for multipurpose dams and agricultural-development corridors, in which facilities for development and processing are concentrated, would help bypass infrastructure and irrigation limitations, as well as allow smaller farmers to participate in otherwise cost-prohibitive markets (*McKinsey, 2011*)
- Governments should avoid strategies for a green economy that impede specific livelihood strategies used by the informal sector. Policy recommendations should include the participation of women, livelihood security and acknowledging cultural beliefs of those working in the informal economy (*UNRISD, 2013*)
- More than 70% of the African population works in agriculture, and many of these workers are small hold farmers. Policymakers should encourage these farmers to engage in more sustainable practices like low tillage, organic fertilizer, and decreased use of environmentally harmful pesticides (*UNDP, 2014*)
- Countries can encourage industrial development by improving resource efficiency and mitigating pollution in high growth sectors like agriculture and manufacturing (*UNCTAD, 2012*)
- In order to fuel sustainable growth, countries should encourage investment in natural resources, and renewable technologies and encourage partnerships between research institutes and corporations in the technology sector (*UNCTAD, 2012*)
- Governments should use a combination of economic, cooperation, regulatory, education and information policy instruments to promote sustainable structural transformation. Some of these might include cooperation or partnerships, subsidies for businesses (*UNCTAD, 2012*)
- Governments should look to multinational corporations investing in Africa for support in their sustainability goals (*UNCTAD, 2012*)
- The informal sector should be incorporated into the mainstream economy through training and planned efforts to accelerate entrepreneurship. Countries should intensify skills development and basic business management knowledge for those working in the informal sector (*UNPAN, 2013*)

Forum Flashback:

NYFA 14*: Both Carlos Lopes, Executive Secretary, UN Economic Commission for Africa and Mostafa Terrab from Morocco's OCP felt that changing perceptions about Africa was essential. Robert Wolf, CEO of 32 Advisors, felt that both manufacturing and infrastructure investment should be a priority to drive economic growth in Africa and create more partnerships.*

NYFA 13*: Lawrence Summers, Charles W. Eliot University Professor and President Emeritus, Harvard University, outlined the conditions necessary for Africa's continued growth. He said that science must thrive to respond to challenges of climate change and illnesses like HIV and*

malaria: "The world must shift its relationship with Africa from aid to investment and focus on five key areas: technology, effective government, dealing well with natural resources, education and peace." Kola Karim, Managing Director of Shoreline Energy International, Nigeria argued that cooperation across Africa in the energy sector and relations between African states must improve.

Prepared by Angela LaSalle, Program and Research team at Richard Attias & Associates, and Masters International Affairs, Columbia University