Climate change and development in Africa

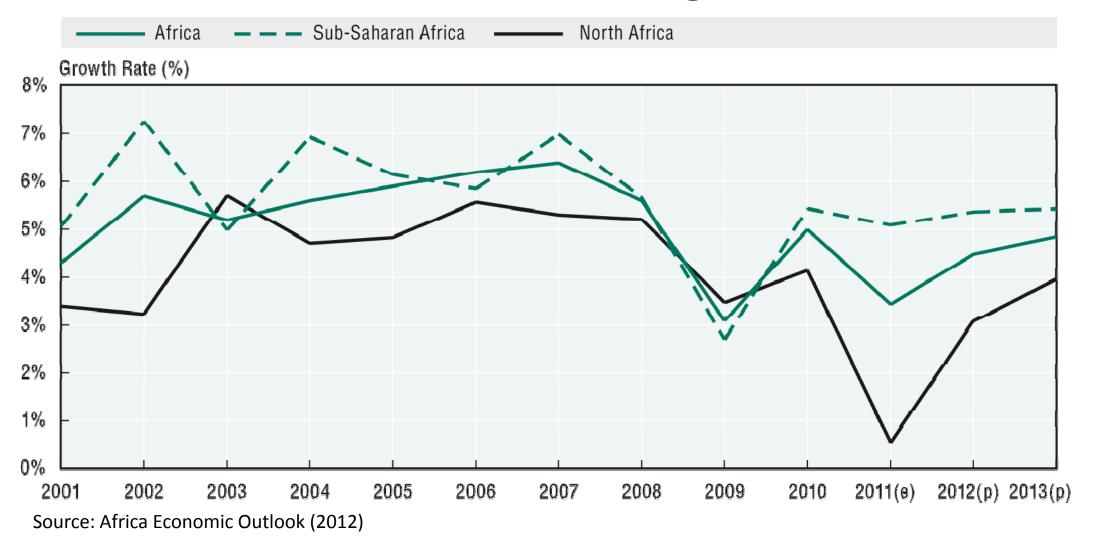
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Africa's economic growth



- Africa experiences stable economic growth (except period of financial turmoil in 2008 and Arab Spring in 2011).
- Current African economic growth is led by increase of commodity export and hike of commodity price

Climate-related Challenges and opportunities

Mitigation

- Challenges
 - It is estimated that 585 million people in SSA (3/4 of continent's population) do not have energy access.
 - 85% of those people live in rural area, where dependence on biomass for cooking and lighting.
 - 30 countries report regular power shortages and many others face power outages.
 - Due to rapid economic growth and population increase, energy demand will be significantly increased.

Opportunities

- Africa carries 15% of the world's hydro-power potential, of which less than 10% is currently tapped.
- Significant potential exists also in solar, wind, biomass and geothermal energy
- While the current lack of infrastructure poses a challenge for development, it opens the opportunity to shift towards a greener, more sustainable development pathway.
- There will be a growing demand for maintaining natural resources and carbon stocks, which play an important role in climate change mitigation and regulation. The emergence of new funding mechanisms and payment for ecosystem services (PES) schemes, such as REDD+, are underline this. In many ways, Africa holds an important key to the global mitigation efforts.

Climate-related Challenges and opportunities

Adaptation

Challenges

- With agriculture and other natural resource based sectors being of critical importance to livelihoods and GDP in most African countries, the continent is considered highly vulnerable to shifts in climatic condition.
- Climate change not only impacts on ecosystem goods and services and therefore the
 productive potential of Africa's natural capital, it also has direct consequences for human
 health by influencing the incidence of diseases and disaster risk.
- Water stress is also expected to be exacerbated by climate change in part of Africa.
- The prevalence of climate related disasters, which frequently result in the loss of lives and economic shocks, furthermore illustrates that many African countries are already struggling to adapt to current climatic conditions.

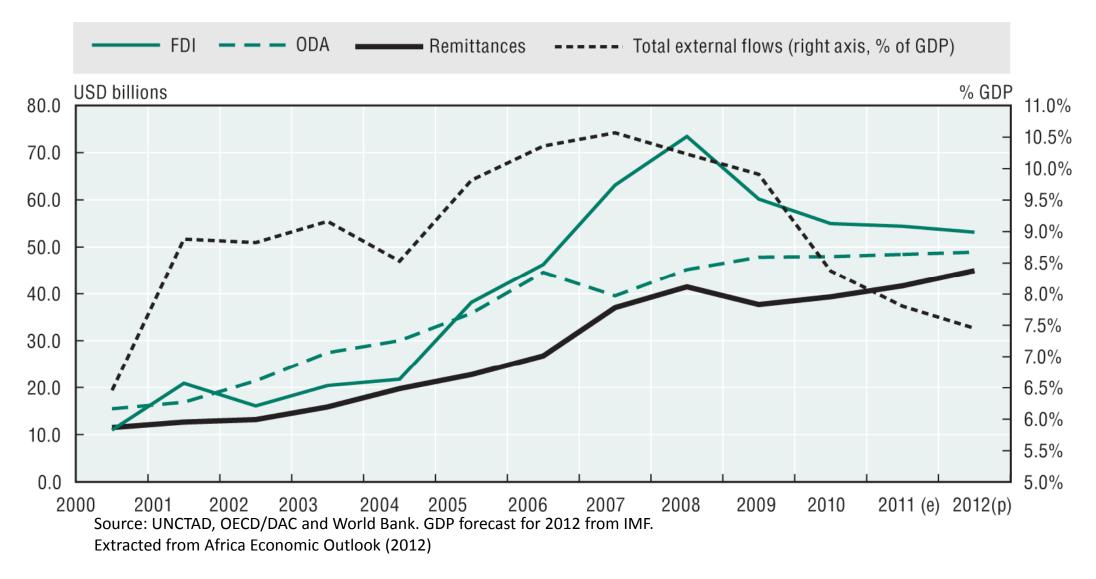
Potential

- Sustainable Land and water management is focused on improving food security, improving land productivity, while using natural resources sustainably and strengthening resilience to climate change.
- Given that many of the land and water resource management concerns require cross-boundary solution, a stronger push for regional integration and cooperation is necessary.
- Regional integration is also important for development of market and new business opportunity.

Economic cost of Climate change

- The economic costs of climate change in Africa are estimated to be equivalent to 1.5 -3% of Africa's annual GDP through 2030, a figure that is much higher than for other regions in the world (SEI, 2009).
- The Grantham Research Institute have estimated the incremental adaptation cost and that of putting Africa on a low-carbon growth pathway with significant emission reductions at about \$22–31 billion per year by 2015 and \$52–68 billion per year by 2030.
- Recent estimates of the cost of putting Africa on a low-carbon growth pathway are about US\$9–12 billion per year by 2015 while the incremental cost of adaptation in Africa is estimated between US\$13 – US\$19 billion, if proper actions are not taken now (AfDB, 2011).

External Financial flows to Africa



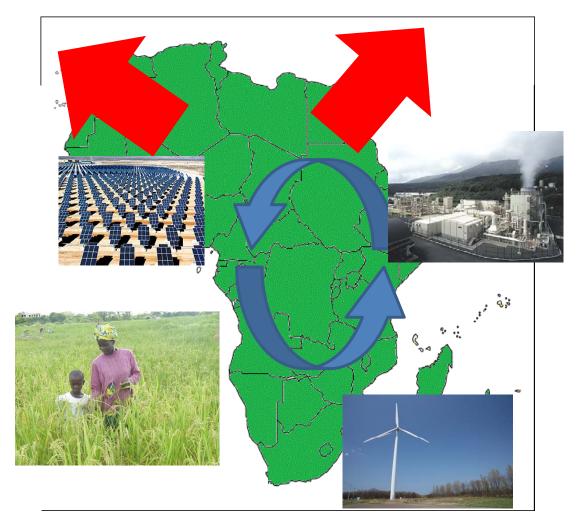
 External financial flows to Africa is constantly increasing despite decreasing of FDI due to global financial turmoil.

Towards Inclusive Low Carbon and Climate Resilient Africa



- Limited use of natural resource within the continent
- Many of row materials are exported

- Effective and efficient use of renewable energy within the continent
- → use resource for continent's development
- Export processed products with value-added
- → Promote regional integration



Towards Inclusive Low Carbon and Climate Resilient Africa

Adequate regulatory and policy frameworks need to be put in place.

- Government regulations and standards will need to provide the overall policy framework to encourage a transition to a green economy.
- A clear, predictable and stable policy environment can create the confidence required to stimulate private investment. The proactive engagement of government, industry and consumers would enable African countries to fully participate in shaping the norms for environmentally sound goods and services.
- Regulations and incentives are needed for stimulating green investments and addressing externalities, which have led to an inefficient use of resources.

Engagement of the private sector is key.

- While public sector is important for paving the way towards a greener economy through improved policies, regulations and institutions, the public sector does not have the fiscal means and the entrepreneurial ability to involve itself in the economy as a producer or trader.
- LCCR economic model requires the successful engagement of the private sector on a broad scale.
 This means improving the investment climate for the private sector. It requires among other
 things, political support, a stable macro-economic and legal environment, transparent, fair and
 effective regulation, mechanisms to promote specific business models such as Public Private
 Partnerships (PPPs) and the availability of concessional funding and grants for project
 preparation and seed capital.

Towards Inclusive Low Carbon and Climate Resilient Africa

- Access to information and support for innovation through research and development activities is critical for economic diversification in Africa and identifying opportunities for a greener economy.
 - Information access is critical in the 21st century. For Africa this means expanding backbone fibre optic and satellite systems, GSM networks and mobile phone networks. There is the need to strengthen partnerships, which enable technology transfer and enhance South-South cooperation. Leap-frogging to more efficient technologies and infrastructure will only work if the skill base in Africa is substantially improved.
- Predictable access to adequate financing for Green Growth.
 - While efficient gains can be made by transitioning towards a greener economy with no or little extra costs, other efforts require substantial upfront investments.
 - Innovative payment for ecosystem services (schemes should be developed for incentivizing sustainable natural resource use (e.g. soil, carbon, water). Hence, it is important that the international community sends also clear signals with regards to sustained and adequate funding support. In addition to global financing mechanisms, African countries could benefit from new funding instruments that are emerging at the regional level.



Thank you very much for your attention!