Economic Commission for Africa | African Union Commission | African Development Bank

ClimDev-Africa

The cost of adaptation to climate change in Africa

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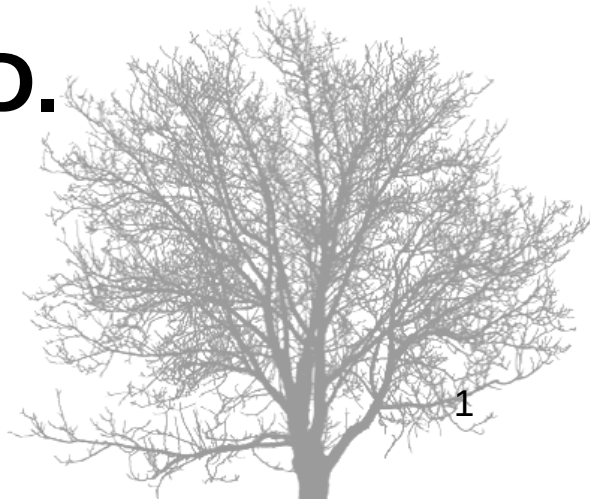
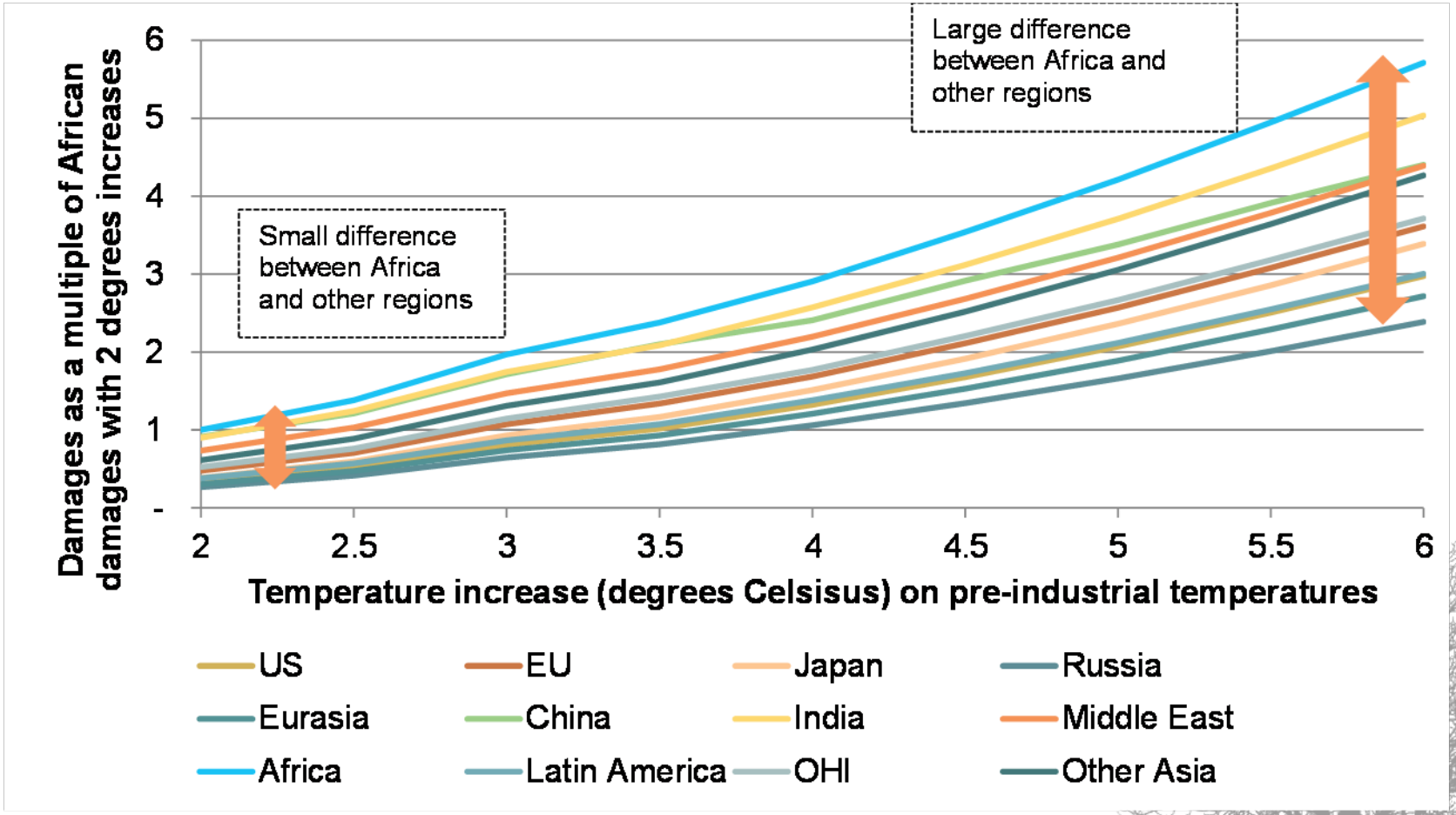


Africa is particularly exposed to the most dangerous climate change



….Message….

- **Africa's immediate adaptation priority is to improve its current adaptive capacity**

- ***With more than 45% of Africa's population living in countries with the lowest adaptive capacity in the world, financing adaptation is crucial for Africa.***

Estimating the costs of adaptation in Africa is a challenging exercise and the resulting literature provides a wide range of estimates

All adaptation studies suggest range between US$20 – US$30 billion per annum by 2030

Current flows of adaptation money to Africa are massively lower than this US$ 20 – 30 billion –a cumulative total of US$ 350m of adaptation funding approved for spending in Africa to date, of which approximately US$ 130m has been received

Africa has received just US$132m of adaptation funding to date

Source of funding	Funding approved (US$ m)	Funding received (US $m)
Least Developed Countries Fund	95.7	64.5
MDG Achievement Fund – Environment and Climate Change thematic window	20.0	15.6
International Climate Initiative	12.1	12.1
GEF Trust Fund - Climate Change focal area (GEF 4)	3.3	3.3
Strategic Priority on Adaptation	9.6	9.6
Special Climate Change Fund	28.2	20.5
Global Climate Change Alliance	51.6	1.0
Pilot Program for Climate Resilience	113	1.5
Adaptation Fund	15.1	3.8
Total	**349**	**132**

The $350m represent approximately one hundredth of the future annual requirements –*this demonstrates the scale of the challenge*.

It also demonstrates the urgent need for African leaders to engage in the debate on the sources of future climate change finance.

As a percentage of GDP, Africa's current adaptation estimates are higher than in any other region of the world at around 1.3-1.4% (with Sub-Saharan Africa at 1.7-1.8% of GDP).

Key message….

There is a pressing need in Africa to mobilise resources to address the continent's *current* limitations to deal with climate events, as well as resources to deal with future climate change

Types of studies on adaptation costing

- '**top down**' studies which develop regional/national estimates for the costs of adaptation based on aggregate information
- '**bottom-up**' studies which are typically less holistic in scope, but, by using individual case studies, offer both increased accuracy and examples of how climate change may impact on the studied populations.

Bottom-up studies

- A number of conclusions can be drawn from bottom-up adaptation studies in Africa:
- The WB studies showed that Ghana's GDP could fall by more than **7%** without adaptation
- The OECD studies showed that around **25%** of all development projects could be affected by climate change in Africa
- And that water, agriculture and health will be particular areas of focus for adaptation spending in Africa

Generations of studies on adaptation costing

The 1st.Generation studies

- Calculates adaptation needs by estimating the fraction of current investment flows that is climate sensitive and then uses a 'mark- up' factor that estimates the cost of 'climate-proofing' future capital investment
- Focused on adapting physical capital (e.g. buildings and infrastructure) and imply costs of US$2-13 billion for Africa (in the context of global estimates of US$4-110 billion).

The 2nd.Generation Studies

more detailed analysis was undertaken to overcome some of the deficiencies associated with the 1st generation of studies.

- However, it is still not a complete assessment of adaptation needs, with areas such as ecosystem adaptation still missing.
- Data collected suggests that the costs of adaptation in Africa might be around 18 billion per annum* in the period 2010-2050

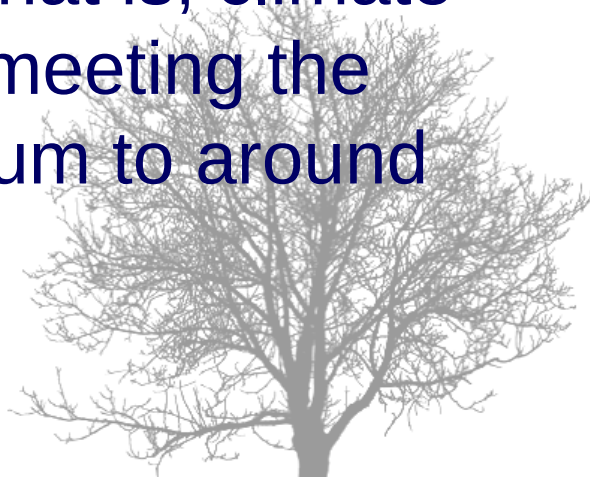
3rd. generation studies

address the challenge of estimating the costs of adaptation in Africa taking into account its current gap in adaptive capacity

most of these studies suggest a figure between US$ 20 and 30 billion per annum, but possibly as high as US$ 60 billion

3rd Generation Studies

- **A study by Fankhauser and Schmidt-Traub (2010) explicitly takes climate-resilient development, rather than adaptation, as the starting point.**
- It finds that the annual cost of 'climate proofing' the **MDGs** in the period **2010-2020** is between **US$20 billion and US$30 billion** greater than the cost of meeting the MDGs alone. That is, climate change might increase the cost of meeting the MDGs from **US$72 billion** per annum to around **US$100 billion per annum**

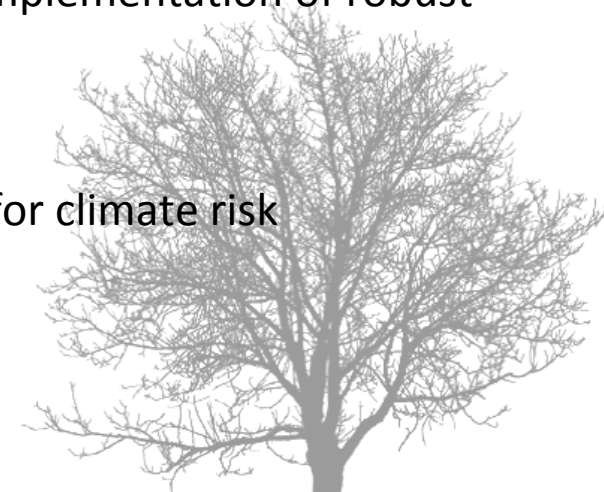


Low Carbon Development

- **Increased Investment in Clean Energy and Energy Efficiency**
  - Morocco: Concentrated solar power (CSP) plant Ouarzazate
  - Egypt: Gulf of Suez Wind Farm
  - Kenya: Menengai Geothermal Project
  - Regional: Small Hydro Programme - East Africa tea factories
- **Promoting Sustainable Transport**
  - Kenya: Nairobi Metro
  - Burundi: Railway Project (Burundi/Rwanda/Tanzania)
  - Nigeria: Bus-based mass transport support for Abuja, Kano and Lagos
  - Egypt: Taxi replacement scheme
- **Strengthening Sustainable Land Use and Forestry Management**
  - Malawi: Integrated Natural Resource Management
  - Multinational: Mano River Union Forest Conservation Program-
  - Egypt: Farm Level Irrigation Modernization Project-

Climate–Resilient Development

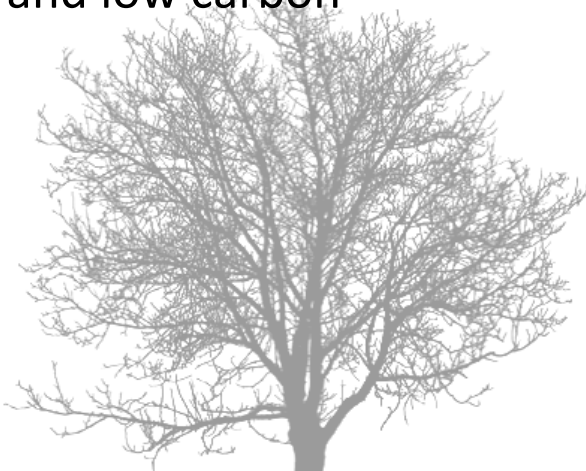
- **Enhancing adaptive capacity through Sustainable Land Use and Integrated Water Resources Management**
  - Integrated Water Resources Management
  - Institutional Support and Project Studies Component under the Banks Water Business Plan
- **Building Resilience of Key Infrastructure and Urban Systems**
  - Development of Regional Integration Strategy Papers (RISP)
  - Urban Development Strategy, the Bank will deliver robust infrastructure, strengthen urban governance and support the development and implementation of robust policies and related institutions.
- **Climate-proofing AfDB's portfolio**
  - A screening tool is being developed to screen projects for climate risk
  - Several capacity building initiatives for TMs and others



Financing Platform

- **The financing platform will perform three main tasks**
  - Increase Africa's access to global funds: CIFs, GEF, AF, etc.
  - Expand internal resource envelope available to climate change activities (SEFA, ClimDev, CBFF, etc).
  - Explore new funding avenues through public-private partnerships and capital markets (The Green Bond).

- **Expected outcome**
  - Increased resources for financing both resilient and low carbon development
  - Increased participation in the carbon market
  - Enhanced partnership with all donors



Anticipated Investment Plan

Sectors	Number of projects in scenario 1	Number of projects in scenario 2	Total Number of projects	Amount (UA billions)	Share (%)
Energy	19	9	28	2.064	25
Transport	9	2	11	1.583	19
Water	42	0	42	1.993	25
Agriculture & Agro-industry	50	16	66	2.510	31
Total	120	27	147	8.150	100

Thank you

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