

# **Climate Change and Africa's Poor**

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# The Problem

- **Global community emitting more CO<sub>2</sub> than the world's atmosphere capacity to absorb—result CC**
- **CC—single greatest challenge to Human Development**
- **Potential to stall and reverse efforts to reduce poverty & achieve other MDGs**
  - **Africa will suffer the earliest and most damaging setbacks**



# Risk and vulnerability

- The **state of human development** shapes the process by which climate related risks is converted into vulnerability
- **Africa is the least developed continent**
  - All 22 countries in low HD are in SSA



# The human development backdrop

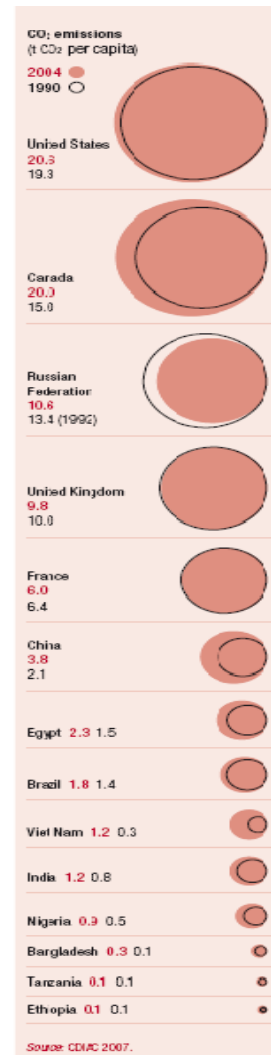
- Four out of 10 people in SSA live in absolute poverty
- Lowest average life expectancy
- Around **32 per cent** of children do not live to celebrate their 5<sup>th</sup> birthday
  - Malaria kills 800,000 children below age five annually
  - Accounts for 68% of adults & 90% of children infected with HIV—76% of deaths from AIDS occurs in the region
- About 4 in 10 adults are illiterate (1 in 2 women)
- One-fourth of children of primary school going age are not in school (girls 32%)



# The human development backdrop

- **SSA accounts for 68% of adults and nearly 90% of children infected with HIV**
  - More than 76% of global deaths due to AIDS-related illnesses in 2007 occurred in sub-Saharan Africa.
- **Accounts for 90% of deaths from malaria**
  - Around 800,000 children under 5 die each year from malaria
- **45% of the population do not have access to safe water**
  - In Tanzania women and their daughters spend on average 250 hours/person/year collecting water
- **63% do not have access to sanitation**

# Inequality in carbon footprints



The distribution of current emissions points to an **inverse relationship** between climate change **vulnerability** and **responsibility**



# Rich countries deeper carbon footprint

- SSA accounts for 11% of the world's population but only 2% of global emissions
- The **state of Texas** (population 23 million) has a deeper carbon footprint than the whole sub-Saharan Africa (720 million people)



# **Rich countries deeper carbon footprint**

- **Only one-third of SSA population has access to modern energy services**
- **Electrification rate is only 26%**
- **80% rely on traditional biomass for cooking**
  - **In Tanzania women use on average 700 hours/person/year to collect fuel-wood**
  - **Walking 5 kilometres on foot**
  - **Indoor air pollution kills 400 children each day—majority in Africa**

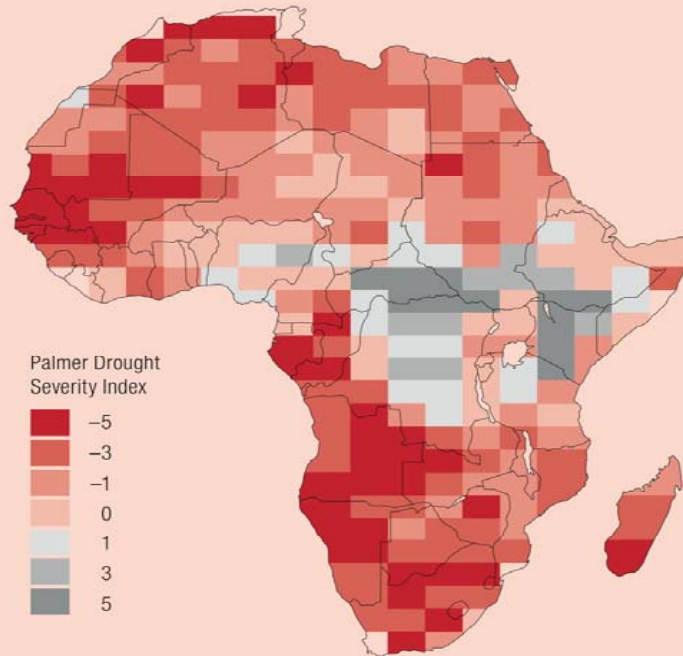


# Implications for SSA

Map 2.1

Drying out: Africa's drought area is expanding

Drought severity under IPCC scenario A2 (change relative to 2000 by 2090)



*Note:* The boundaries shown and the designations used on this map do not imply official endorsement or acceptance by the United Nations.

**IPCC scenarios** describe plausible future patterns of population growth, economic growth, technological change and associated CO<sub>2</sub> emissions. The **A1 scenarios** assume rapid economic and population growth combined with reliance on fossil fuels (A1F1), non-fossil energy (A1T) or a combination (A1B). The **A2 scenario**, used here, assumes lower economic growth, less globalization and continued high population growth. A negative change in the Palmer Drought Severity Index, calculated based on precipitation and evaporation projections, implies more severe droughts.

Source: Met Office 2006.

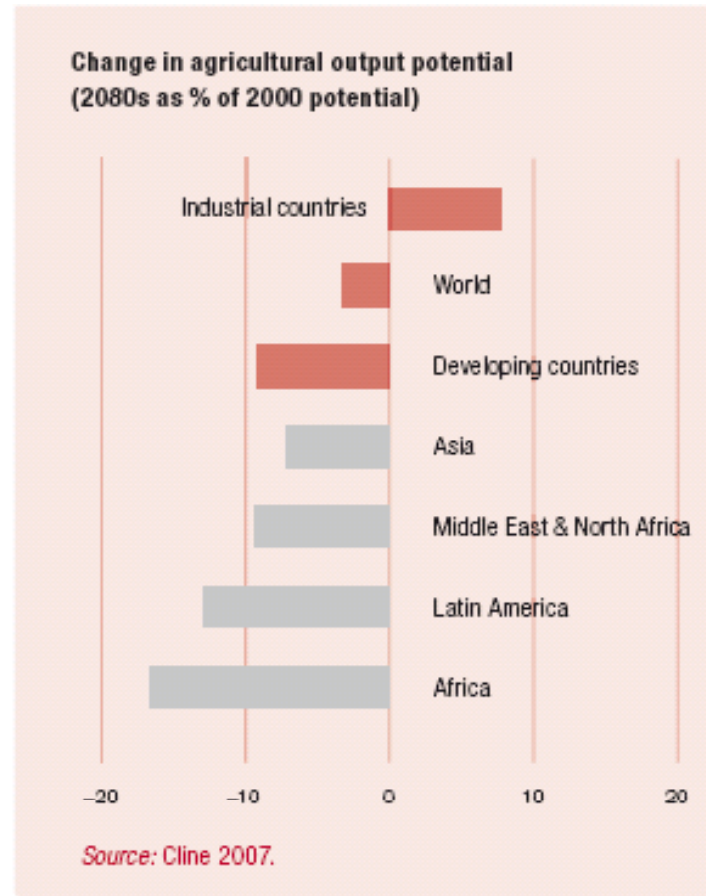
Normal =0

Drought =  
negative  
numbers

Rainfall =  
positive  
numbers:

# Implications for SSA

**Climate change will hurt developing country agriculture**



For dry-land SSA this could be as high as US\$26 billion in revenue losses



# Implications for SSA

**Between 75 and 250 million people will have their livelihood compromised**

**Heightened **water insecurity****

**350-600 million people in will be at risk of increased water stress**

**The collapse of ice sheets on Greenland and the west Antarctic would submerge cities like Lagos**

**Sea levels are projected to rise in Africa by 15–95 cm by the year 2100**

**30 % Africa's coastal infrastructure through inundation and coastal erosion**



# Implications for SSA

## Collapse of **ecosystems**

Losses of environmental resources will further impoverish the poor

## Increased **health risks-** increased

exposure to malaria-additional 200,000 child deaths

Cholera epidemic following floods (Ethiopia 2006)



## **Women vulnerability to climate change effects**

- **Livelihood strategies depend more on natural resources**
  - **livelihoods would be compromised**
- **Limited asset ownership & control**
  - **less able to cope**
- **Traditional gender role**
  - **Increased labour intensity**
    - **The girl child may have to forgo education to help collect water & firewood**
  - **Increased time and income poverty**
  - **Effects on women's health**



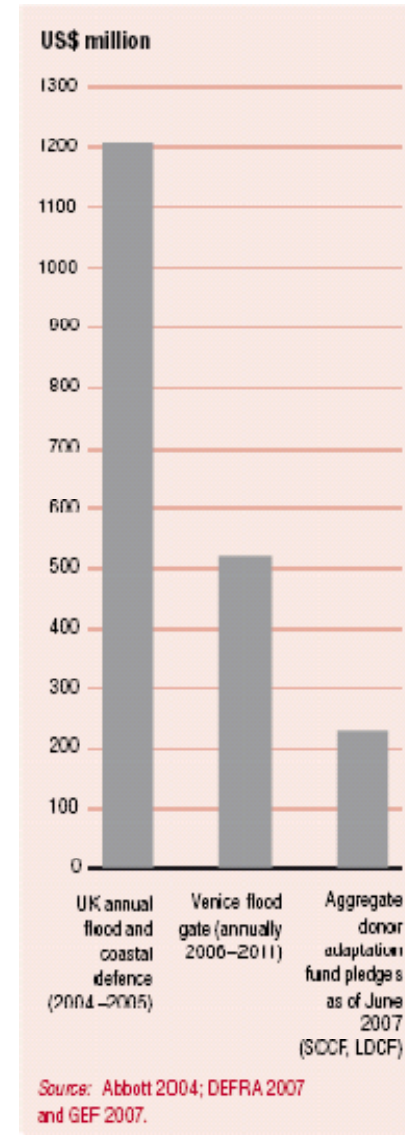
# Low human development traps in operation

- **Forced trade-offs undermine future opportunities**
  - transferring children from classrooms to the labour market
  - **Food rationing:**
  - In Ethiopia, being born during a drought year increases the probability of children being malnourished by **36%**--translates into **2 million** additional malnourished children in 2005
  - For Kenya, probability of being malnourished increases by **50%**
  - In Niger, children aged  $\leq 2$  years are **72%** more likely to be stunted if they were born during a drought year

# Adaptation capacity

**Africa more  
vulnerable but  
less capacity to  
adapt**

**Developed  
country  
investments  
dwarf  
adaptation  
funds**



# Addressing the problems

- **Put in place adaptation financing strategy—meet the aid target of 0.7% of GNI & provide additional funding for CC adaptation**
- **Integrate adaptation into poverty reduction strategies**
- **Re-orientation of public policies towards helping vulnerable people create and manage their own schemes for coping with potentially catastrophic risks.**
  - **Social protection measures: employment-based programmes to support cash or food transfer schemes (productive safety net programme in Ethiopia; Kalomo pilot project in Zambia)**





# Addressing the problems

- Climate proof infrastructure and building resilience of poor people to cope
  - Strengthen indigenous adaptation mechanisms
- Strengthen disaster response system
- Finance transition from relief to recovery



# Improving access to modern energy services

- National energy reforms to enhance energy efficiency
- Address energy-gender issues in macro level policies
- Early adoption of clean energy technologies and best-practice international standards:
  - to increase access to modern energy services without increasing emission levels
  - Providing financial and technical support to tap renewable energy sources



- **Improve access to meteorological information**

- Expanding the continent's meteorological monitoring network, so that farmers can access better information about climate patterns in the region—1/25,460 km<sup>2</sup> (1/8 of WMO recommended minimum)
- Invest in water-storage or “water harvesting”
- Build on indigenous water harvesting technologies

- **This is not charity but social debt owed to poor and vulnerable people in Africa!**

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***<http://hdr.undp.org>***

**Thank you!!!**