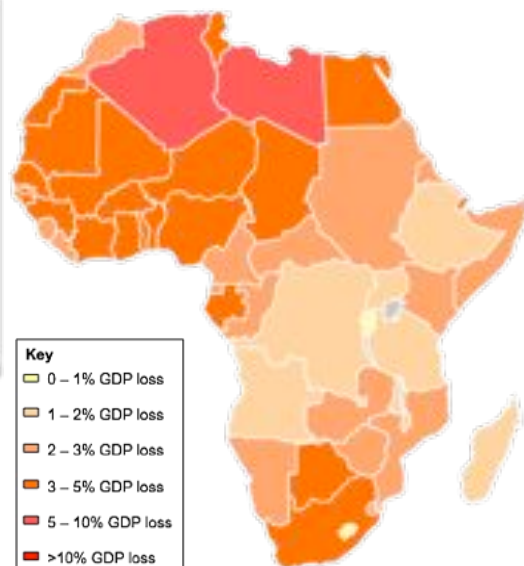


Annual costs of climate change

Africa is particularly at-risk. Costs of impacts of climate change are likely to be higher in Africa than in other world regions.

Source: FUND model runs, using central values, including market and non-market sectors, aggregated positive and negative effects



2030

For further information: see weADAPT.org and contact Tom Downing (tomdowning.sei@gmail.com) or Paul Watkiss (paul_watkiss@btinternet.com). To follow up in Kenya, contact Magdalena Banasiak, DFID (m-banasiak@dfid.gov.uk) or Basra Ali, SEI (basraali.sei@gmail.com).

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The views expressed in this summary are entirely those of the authors and do not necessarily represent the views or policies of the contributing organisations.



ECONOMICS OF CLIMATE CHANGE IN KENYA



“The survival of the planet is at risk...Blaming each other will not help. This is one of those moments when neither failure, nor surrender is an option. ... It is critical that Kenya has a bold, credible and well thought-out adaptation programme for presentation in Copenhagen.”

Prime Minister Raila Odinga

Speaking at the *Climate Change; Common Challenge* conference and in Parliament, 11 November 2009



Existing climate impacts already have significant costs

...at least \$0.5 billion per year now, possibly 3% of GDP by 2030.



Over 60% of the population are at-risk from malaria now, likely to increase with climate change



1998-2000 drought cost \$380 million in crop and livestock losses (total cost of \$2.8 billion)



Urban drainage and infrastructure are increasingly at-risk: the 1997/8 floods cost up to \$1 billion



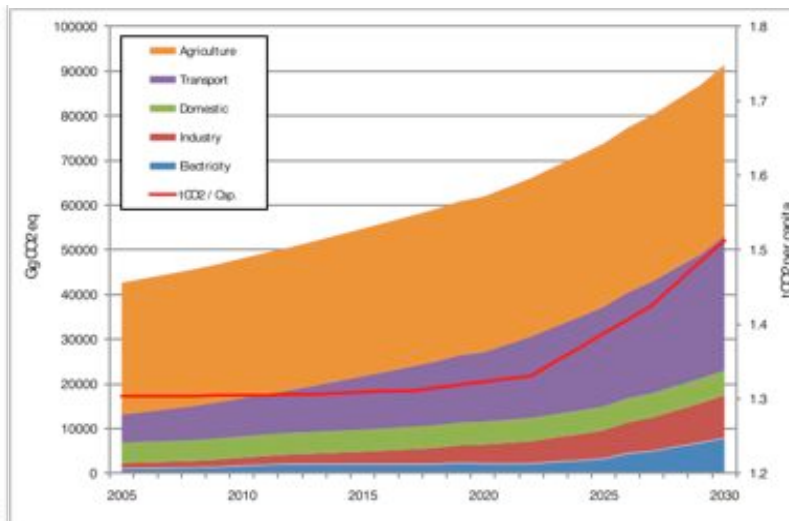
Sea level rise may cost \$10 million per year by 2030: worst case scenario is over \$300 million per year



Ecosystem services underpin GDP in all sectors and throughout the country

Emissions are low now, but might double by 2030

with planned population and economic growth. Agriculture (orange) and transport (purple) are dominant sources.



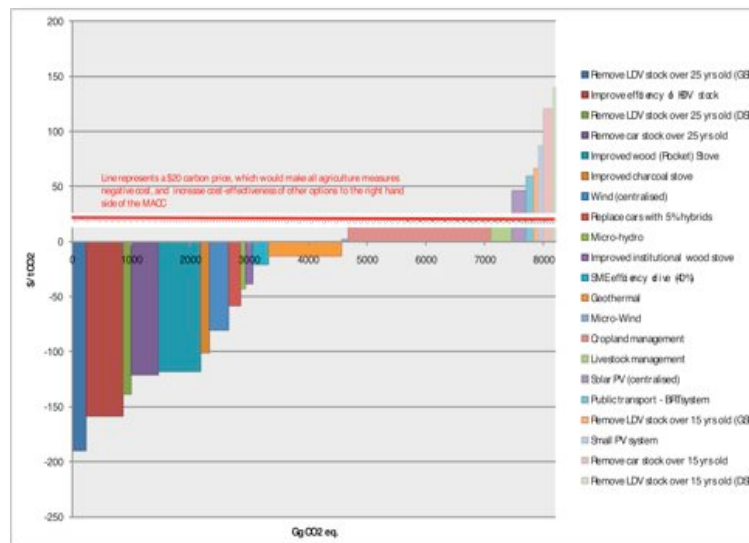
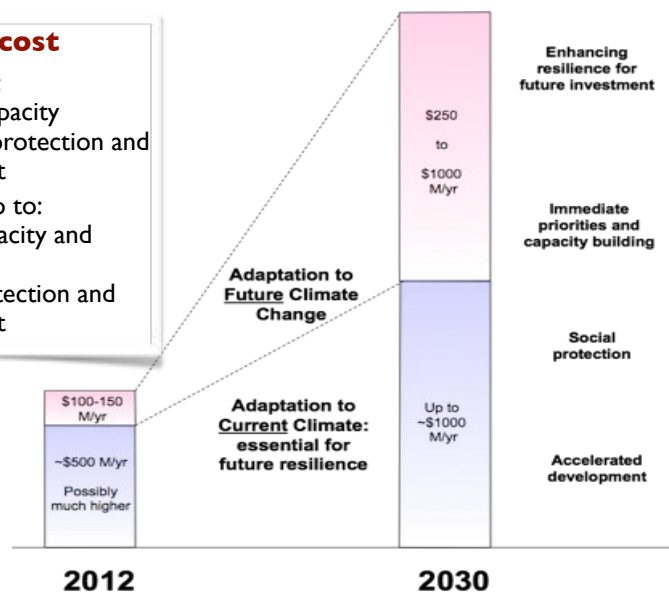
Adaptation has a cost

Urgent, by 2012, up to:

- * \$150 m/yr to build capacity
- * \$500 m/yr for social protection and accelerated development

Increasing, by 2030, up to:

- * \$1 b/yr for added capacity and sectoral resilience
- * \$1 b/yr for social protection and accelerated development



Benefits now: opportunities for future carbon finance

Many measures to reduce GHG emissions are justified now (benefits exceed costs, options on the left of the graph). Other options are justified with increasing carbon finance (on the right). Energy related options alone would reduce 2030 emissions by 22%.

SET NATIONAL POLICY WITH STRATEGIC OBJECTIVES TO LEARN FROM PROTOTYPE SCALING UP TO ACHIEVE ECONOMIC GROWTH WITH RESILIENCE

ADAPT NOW: National planning * Knowledge management * Reduce poverty * Sectoral targets * Prioritise drought & flood responses * Anticipate residual impacts

LOW CARBON FUTURES: Institutional capacity for finance * Appraise options * Mainstream * Screen major plans * Prioritise agriculture, transport, electricity