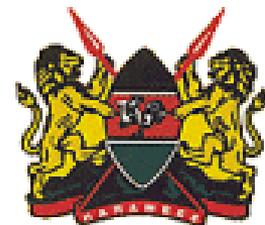


# ENGENDERING CLIMATE CHANGE TECHNOLOGIES AND FINANCING

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Solar radiation powers the climate system.



## The Greenhouse Effect

Some of the infrared radiation passes through the atmosphere but most is absorbed and re-emitted in all directions by greenhouse gas molecules and clouds. The effect of this is to warm the Earth's surface and the lower atmosphere.

Some solar radiation is reflected by the Earth and the atmosphere.



ATMOSPHERE

EARTH

About half the solar radiation is absorbed by the Earth's surface and warms it.

Infrared radiation is emitted from the Earth's surface.



# OUTLINE

- ❑ Technological adaptation and mitigation to changing climate
- ❑ Why and whose technology ?
- ❑ Which technology?
- ❑ How? Applications and gender-blindness?
- ❑ Case studies
- ❑ Climate financing:
  - ❑ Why finance, whose finance and from where to where?
  - How cc is financed?



# Technological adaptation

- Technological adaptations can serve as a potent means of adapting to climate variability and change
- New technologies can be developed to adapt to climate change, and the transfer of appropriate technologies to developing countries forms an important component of the UNFCCC (Mace, 2006)
- There are also potential limits to technology as an adaptation response to climate change including social/cultural acceptance and financial costs



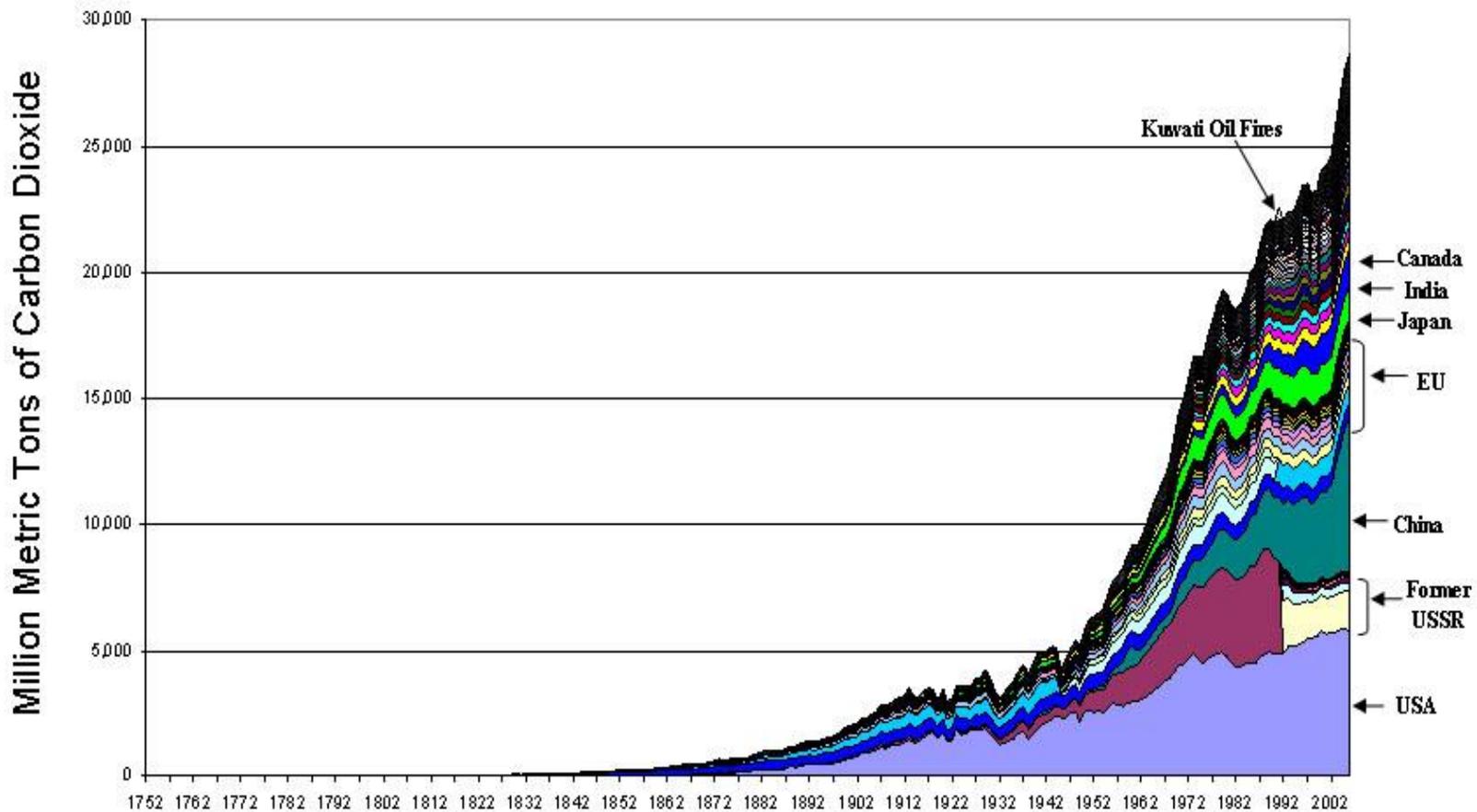
# Why engender technology

- Climate change has gender-specific implications in terms of both vulnerability and adaptive capacity (Dankelman, 2002).
- There are structural differences between men and women through, for example, gender-specific roles in society, work and domestic life.
- These differences affect the vulnerability and capacity of women and men to adapt to climate change;
- In the developing world in particular, women are disproportionately involved in natural resource-dependent activities, such as agriculture (Davison, 1988), compared to salaried occupations.
- Resource-dependent activities are directly dependent on climatic conditions, changes in climate variability projected for future climates are likely to affect women
- Women are more illiterate than men globally and less mobile



# Which and whose technology?

✓ Technology transfer is mainly from the rich/developed to developing countries/LDC; mainly *MEN*!

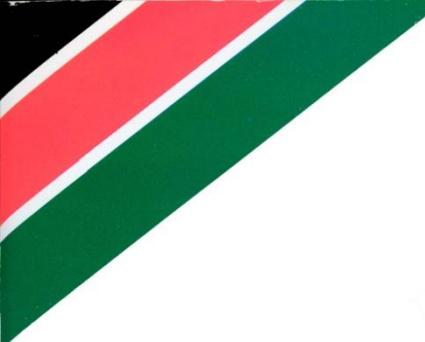


# Manifestations of technology in climate change

✓ High-tech Computerized models, smart phones, GPS, Civil /engineering works-hardware, ICT, climate change research, patent-free technologies, water and energy efficient technologies, Biotechnologies in agriculture and food security, cleaner technologies such as more efficient biomass, biogas, and solar power.

✓ When initiatives for low-carbon technology transformation, involving, for example, energy-efficient cooking stoves, solar cookers, micro-hydro technologies or wind mills fail to take into account a variety of factors of technology choice, such as gender, income and maintenance cost, they often fail (Tsephel et al. 2010). It is not only important to ensure access of both men *and* women to new technologies, but to understand gender risks and opportunities attached to them





# Activity

1. Wear a gendered-technology lens
2. Scan through the paper and;
3. Tease out the technology requirements for the two communities/which areas require technological interventions and why
4. List some of the practical technological innovations/activities from a gender angle to empower and reduce women's vulnerability



# A Gender concern

Technological solutions are not always the solutions preferred by women: *'faster, bigger, further' ...are rather masculine principles, which one may also find in the climate-change policy process. Women tend to believe that technical solutions, such as further development of biofuels, or carbon capture and storage, are not sufficient to meet the requirements of developing a low-carbon economy.*



# Applications of technology in climate change regime

- Climate change prediction
- Early warning signals
- Community Vulnerability Assessments (CVAs) and GHG inventories
- Mapping climate-/disaster prone (flood, drought) areas for mitigation and adaptation strategies
- Building climate-resilient communities through information, capacity development
- Food security improvement
- Time and fuel-poverty among women
- Improving health through reduced indoor pollution/kitchen- use of clean energy facilities/technologies such as solar and ICS
- Empowerment, Mention others!



# Case studies

- Mention some of the technological innovations in climate change in Kenya , and their use in national- or community-level benefits
- Assess the gendered preferences for such technologies
- Are there any gendered impacts of such technologies to recipient counties.



# Climate financing

- Why finance climate change?
- Who finances?
- How / the mechanisms ?



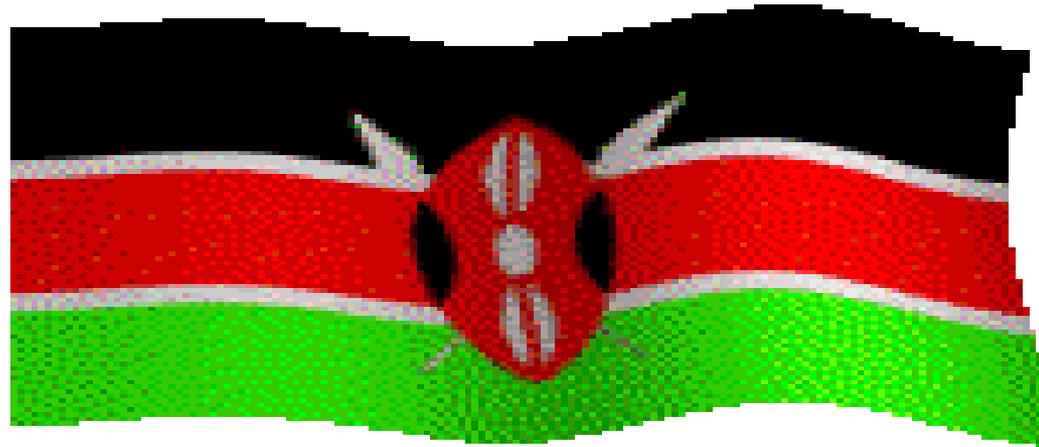
- To date gender has been poorly integrated into climate finance because most climate change finance is intended for large-scale, technology-focused and market-based climate change mitigation initiatives aimed at low-carbon growth
- Much debate, knowledge and experience on gender and climate change has focused on adaptation, to which, at present, just over 8 per cent of global funding for climate change is dedicated
- For mitigation-oriented and market-based climate change responses, there has been a lack of good practice of integrating gender.
- Gender-inequitable laws, regulations and customs tend to impair women's participation in markets by limiting their access to credit, productive assets and information as well as their mobility, and thus restrict their ability to contribute to private- and public-sector development efforts.



- ***The Climate Investment Funds (CIFs)*** .....two main funds – the Clean Technology Fund (CTF) and the Strategic Climate Fund (SCF) – designed to ‘offer interim funding to support developing countries’ mitigation and adaptation efforts’ (UNDP 2009c) in the absence of a binding climate agreement beyond 2012.
- ***The Global Environment Facility (GEF)***..... the core financial mechanism for global environmental protection under the four UN environmental covenants including the UNFCCC, works with ten multilateral organisations across the UN system and multilateral development banks, providing mostly grants and to some extent concessional funding to recipient countries’ projects and programmes under six environment focal areas including climate change (mitigation and adaptation) (Porter et al. 2008: 12).
- ***The Adaptation Fund (AF)***..... set up in 2007 to finance adaptation in particularly vulnerable countries, ‘has a number of unique features in the areas of ownership, access, funding, revenue generation, governance and legal structure’ (UNDP 2009b); includes CDM
- ***Reducing Emissions from Deforestation and Forest Degradation (REDD)***.... mechanism emerging from the UNFCCC, seeks to increase the amount of carbon stored in trees rather than the atmosphere by providing developing countries with financial incentives for reduced deforestation



END



**THANK YOU**

