

Climate Change Convention

By

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Climate Change Convention

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- Adaptation to Adverse Effects of Climate Change
- Mitigation of greenhouse gases
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- Conclusion

The Climate Change Convention

- Global warming (climate change) is a serious environmental problem facing the international community today, described by some as a weapon of mass destruction.
- Adverse effects of climate change, manifested through occurrence of extreme weather events, are threatening to undo decades of development efforts.
- The least developed countries are particularly vulnerable to adverse effects of climate change.
- The United Nations Framework Convention on Climate Change (UNFCCC) provides the framework for mitigating causes of climate change and its effects.

Climate Change Convention Contd.

- Available scientific information indicates clearly that the global climate is changing. Observations (recent extreme weather events) confirm this fact
- The Intergovernmental Panel on Climate Change in its Third Assessment Report (TAR) concludes that human activities are main contributors to global warming
- The fourth assessment report confirms the TAR and provides clear policy guidance for actions now

Objective of UNFCCC

- The ultimate objective of this Convention and any other related legal instruments that the Conference of the Parties may adopt is to achieve, in accordance with the relevant provisions of the Convention, *stabilization of greenhouse gases concentrations in the atmosphere at a level that would prevent dangerous anthropogenic interference with the climate system.*

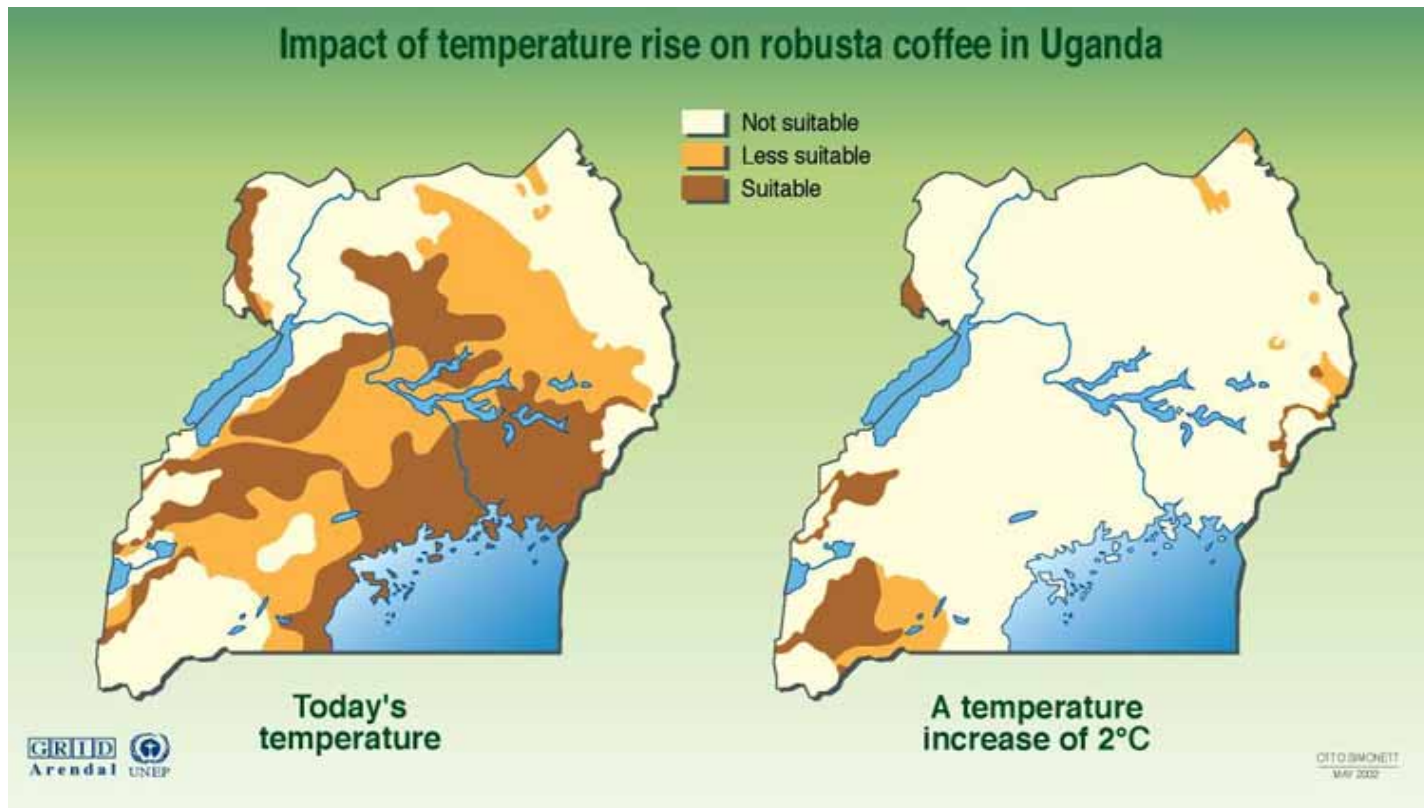
Objective of UNFCCC Contd.

- Such a level should be achieved *within a time-frame sufficient to allow ecosystems to adapt naturally to climate change, to ensure that food production is not threatened and to enable economic development to proceed in a sustainable manner.*

Dangerous Anthropogenic Interference Level

Equilibrium CO ₂ Concentrations	Temperature Increases °C			Comments
	Best Estimate	Very Likely Above	Likely in the Range	
350	1.0	0.5	0.6-1.4	Already Exceeded
<i>450</i>	<i>2.1</i>	<i>1.0</i>	<i>1.4-3.1</i>	<i>Difficult to Achieve about to be exceeded (current level is 430)</i>
<i>550</i>	<i>2.9</i>	<i>1.5</i>	<i>1.9-4.4</i>	<i>Dangerous Level But the Most Likely lower levels should be targeted</i>
650	3.6	1.8	2.4-5.5	Very Dangerous Level

Impact of 2 Degrees C Rise on Coffee Growing Areas



Source: Otto Simonett, Potential impacts of global warming, GRID-Geneva, case studies on climatic change. Geneva, 1989.

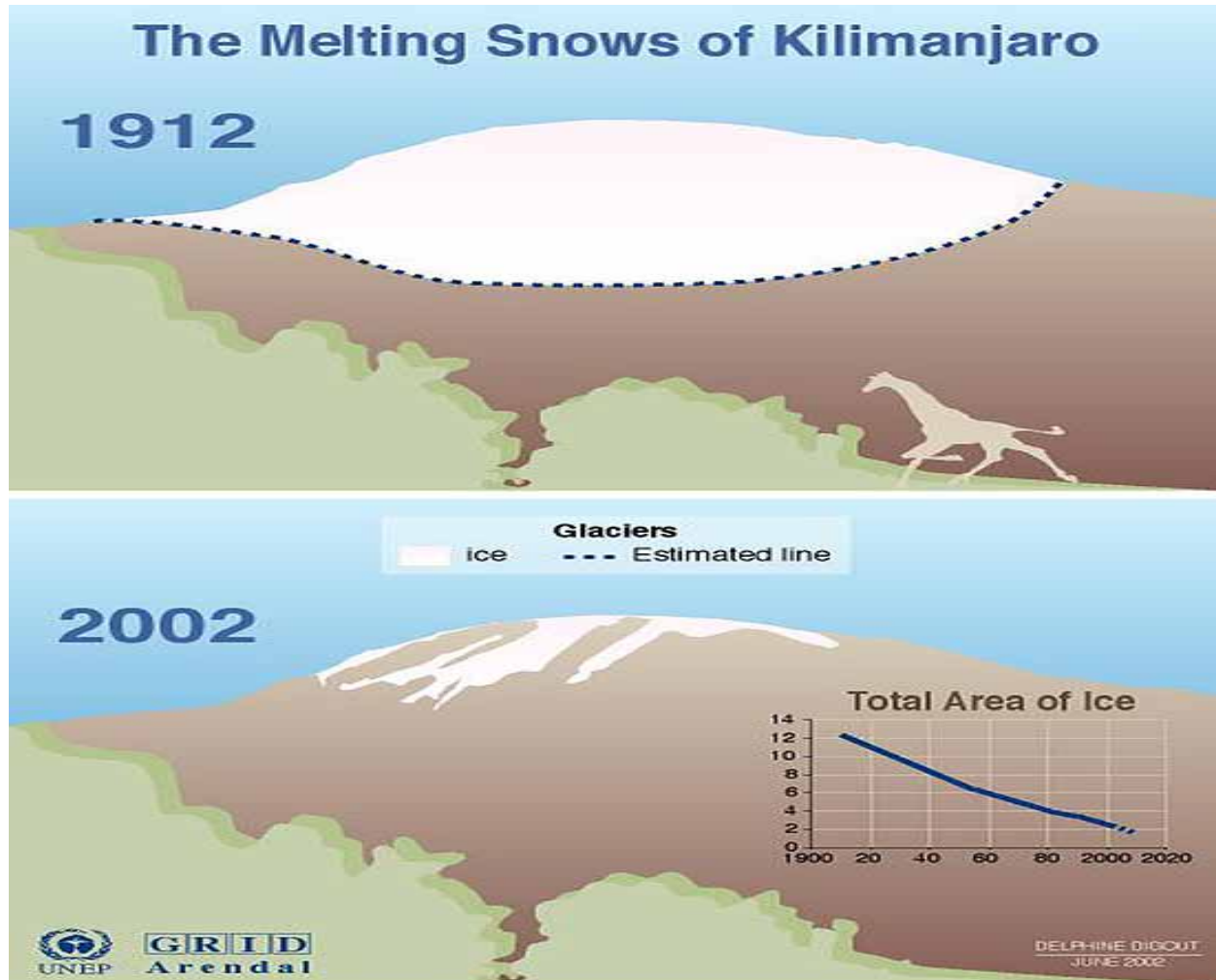
Impacts of 2 degrees Centigrade Increase on Africa

- Serious problems for Africa – food production will be seriously affected
- Economic development will be hampered reducing Africa to a completely helpless region
- Deep GHG emission reduction now is not an option for Africa
- All avenues must be explored at all levels, including political levels

Evidence of Climate Change

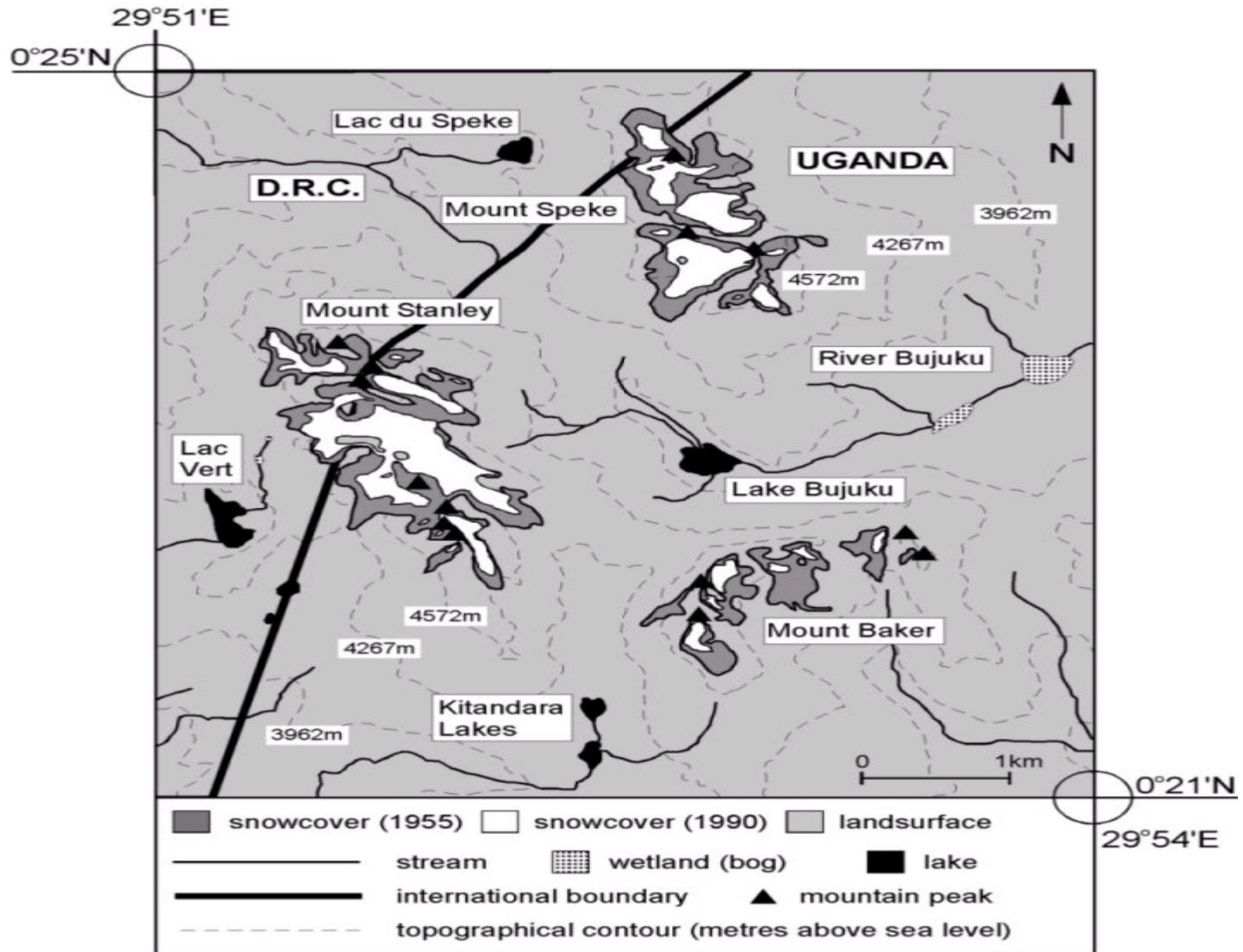
- Retreating of glaciers (Kilimajaro and Rwenzori mountains)
- Increase and widespread occurrences of extreme weather and climate events:
 - floods and droughts in Europe (2002 and 2003 respectively - the heat wave of 2003 left over hundred thousand dead)
 - Occurrences of droughts in Uganda

Melting of Ice Cap on Mount Kilimanjaro

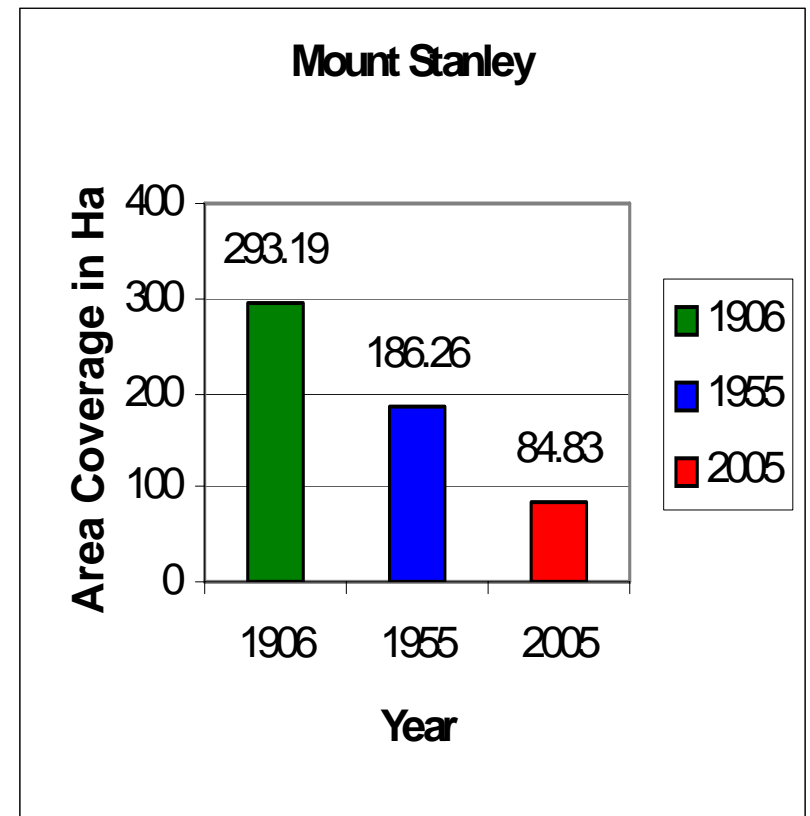
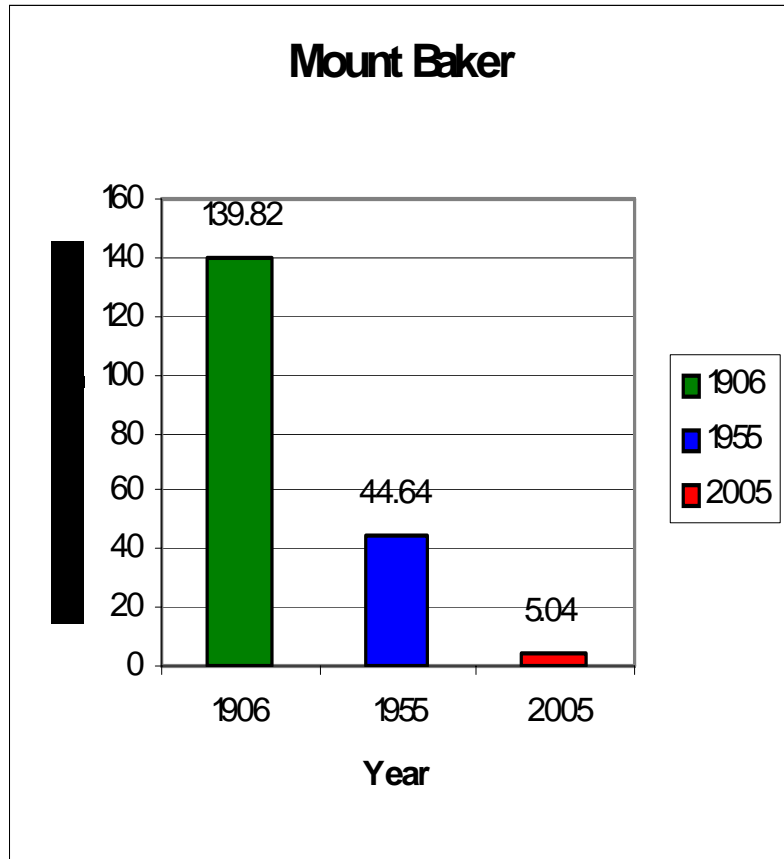


Sources: Meeting of the American Association for the Advancement of Science (AAAS), February 2001 ; Earthobservatory.nasa.gov.

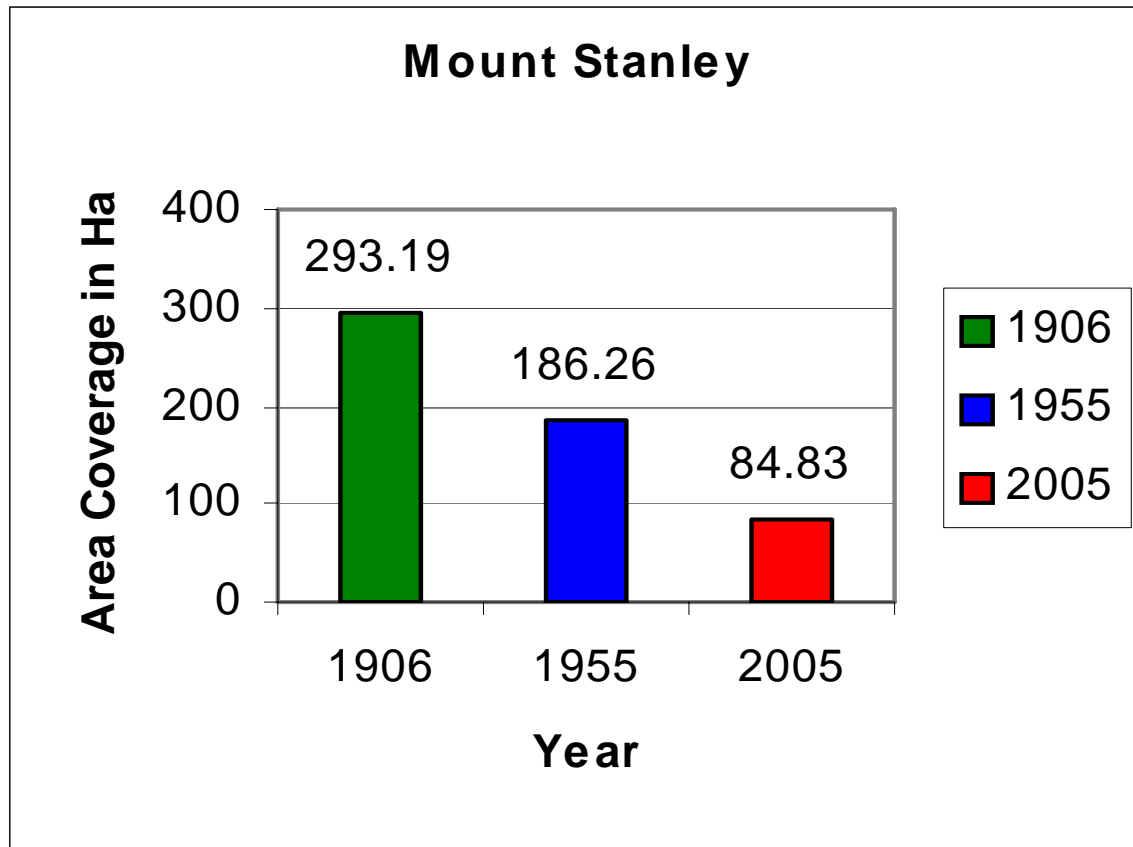
Melting of Ice Cap on Mountains of the Moon



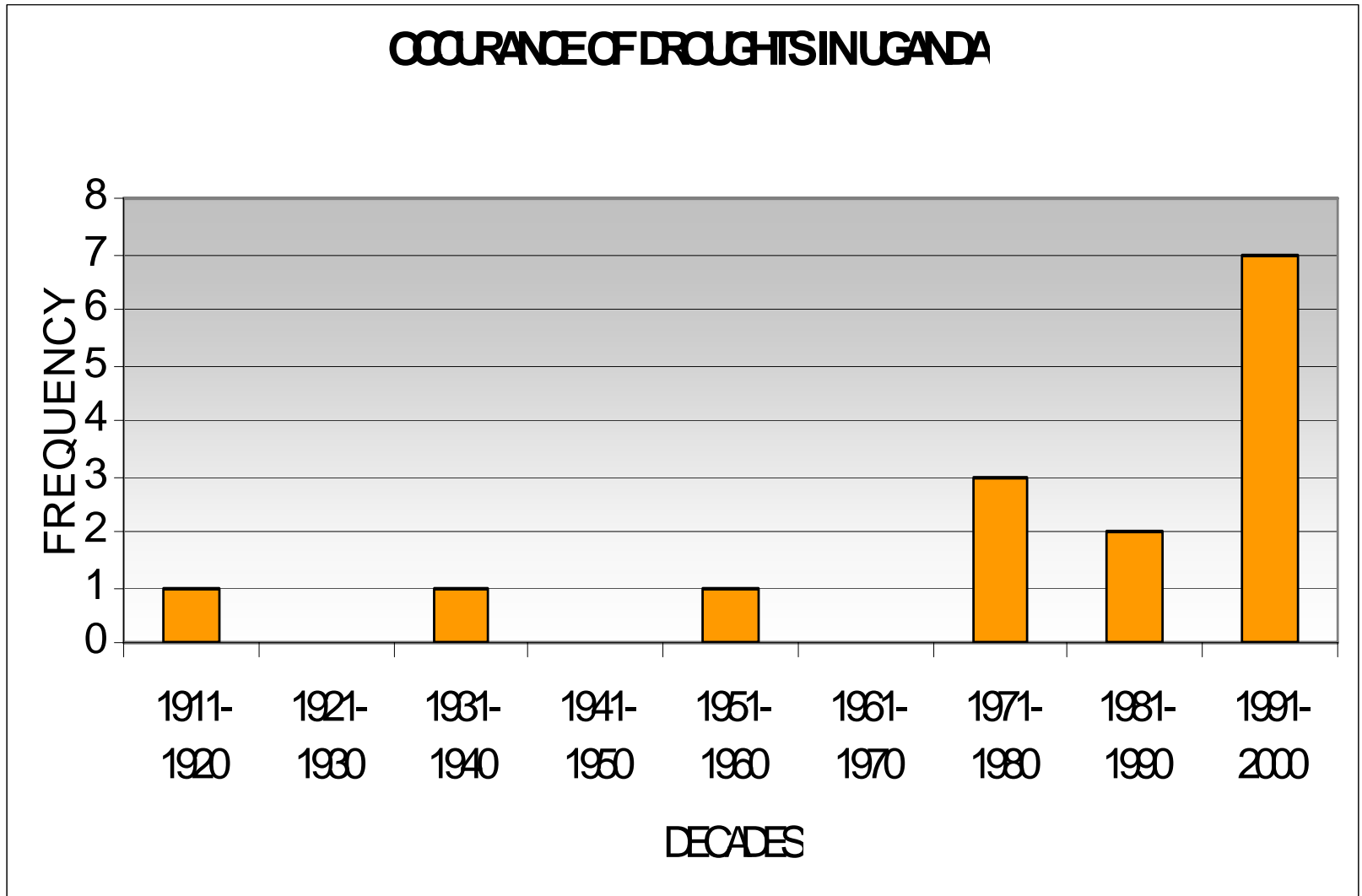
Melting of Rwenzori Mountains



Melting of Rwenzori Mountains Contd.



Occurrence of Droughts in Uganda



Impacts of Climate Change

- Agriculture – reduction in agricultural output hence fall in economic growth and likely famine
- Disruption of transport system – washing of bridges – cutting off of farmers from markets
- Floods and droughts leading to water borne and respiratory diseases
- Floods and droughts leading to contamination of water sources and increased scarcity in semi-arid areas

Impacts of Climate Change Contd.



Impacts of Climate Change Contd.

Land Degradation

- Rainfall is highly variable in the cattle corridor;
- The cattle corridor is prone to droughts and also has the highest animal population
- Increased animal population has led to high pressure on land resources leading to serious land degradation
- Vegetation cover has come under serious pressure from both animal and pastoralists (wood fuel) leading to severe soil erosion during heavy rains
- Weather and climate information coupled with good rangeland management can halt and reverse land degradation in the cattle corridor.

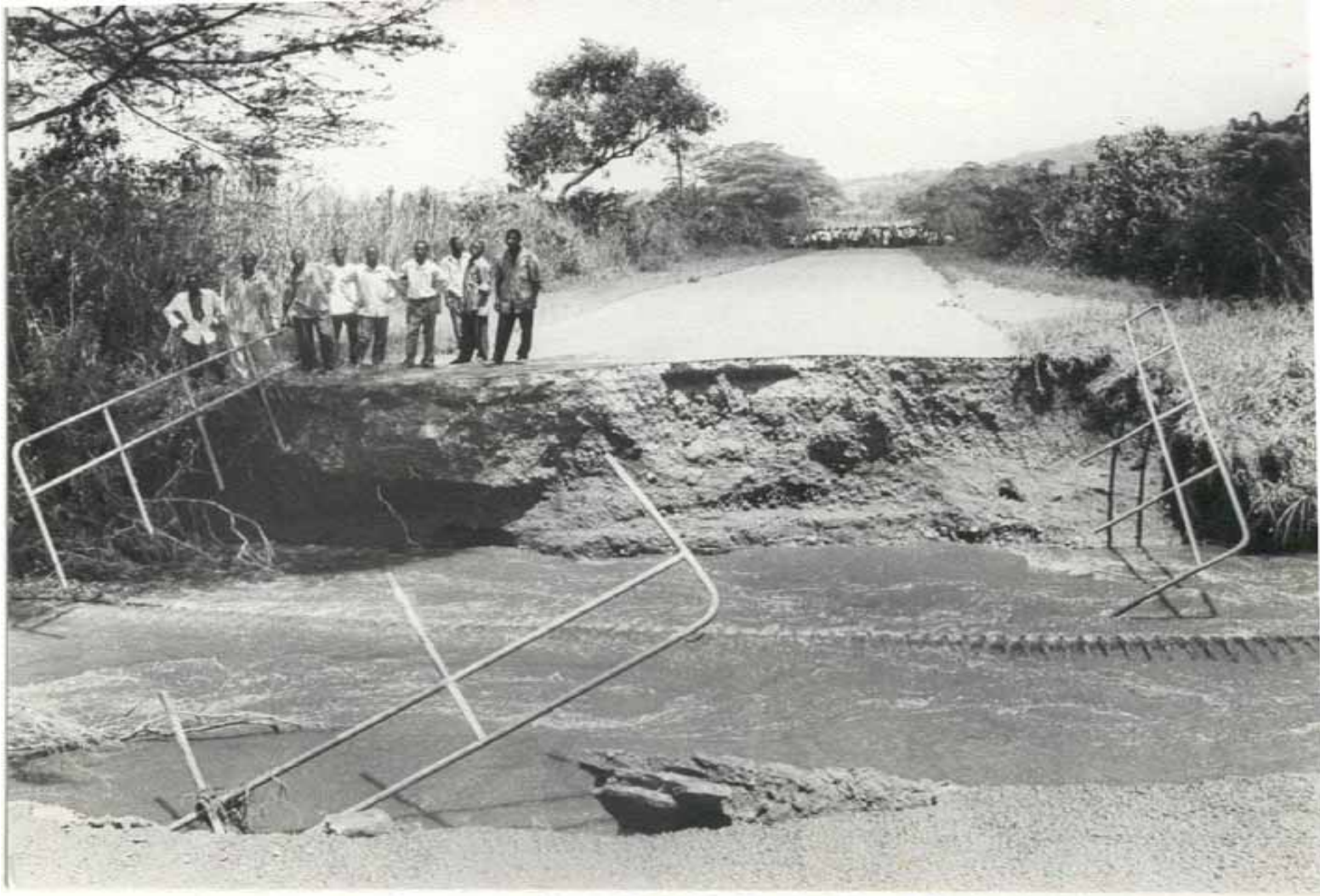
Severely Degraded Vegetation Vulnerable Elderly Woman



Impacts of Landslide



Floods: Washing of Bridges



Impacts on Water Resources

- Water resources will become scarce, particularly in Sub Sahara Africa
- In Uganda the Cattle Corridor is more vulnerable to water stress
- Pollution of water resources both in urban centres and rural areas
- Sanitation will become a more serious problem, particularly in slums

Vulnerability to Climate Change

- All countries are vulnerable to negative impacts of climate change
- Countries have different adaptive capacity the rich have higher adaptive capacity
- Preparedness is more important to mitigating negative impacts of climate change as evidence by Katrina (USA)
- Countries must develop mechanisms to cope with negative impacts of climate change
- Indigenous technologies exist among our people but these need improvement and enhancement

Adaptation to Climate Change

- Adaptation is built into the objective of the Convention:” Such a level should be achieved within a time-frame sufficient to allow ecosystems to adapt naturally to climate change, to ensure that food production is not threatened and to enable economic development to proceed in a sustainable manner”.

Coping Mechanisms

- We have lived with disasters and have developed some coping strategies specific to a given disasters
- Droughts: wild food including fruits and yams, storage preservative facilities/technologies e.g. granaries and honey
- Floods: migrating to high lands or climbing trees (Mozambique 2000 floods)

Coping Strategies Contd.

- These coping mechanics are localized, should be developed and popularised
- Adaptation technologies are area specific and therefore south to south adaptation technology transfer makes more sense
- Promotion of cooperation in this area should be supported.

Coping with impacts of Droughts



Mitigation of Greenhouse Gases

- Convention commits Parties to minimize emissions of greenhouse gases
- It recognizes the contribution of developed countries to the build up of greenhouse gases in the atmosphere and therefore commits these countries to do more
- Convention commit developed countries to reduce their greenhouse gas emissions to the 1990 level by 2000 (not many have complied with this commitment)
- Parties to the Kyoto Protocol will now have no option but to comply with their greenhouse gas emission reduction commitment

Sources of Greenhouse Gases

- Transport
- Energy production
- Agriculture (animal rearing, rice cultivation, poor agricultural practices, etc.)
- Municipal Waste
- Forestry (also a sink) – main source of energy

Implementation of the Convention in Uganda

- The Ministry responsible for Environment coordinates the issues of climate change
- Implementation of activities has drawn on expertise from line ministries
- Preparation of Initial National Communication:
 - An inventory of greenhouse gas emissions and removals,
 - Identification of vulnerable sectors and adaptation options
 - Identification of measures, which could be taken given resources

Implementation of the Convention in Uganda Contd.

- Technology Needs Assessment
- Preparation of the National Adaptation Programmes of Action
 - Identification of urgent and immediate interventions to minimize negative impacts of climate change on rural communities
 - Interventions identified include:
 - Community tree planting,

Implementation of the Convention in Uganda Contd.

- Land Degradation Management
- Strengthening Meteorological Services
- Community Water and Sanitation
- Water for Production
- Drought Adaptation
- Vectors, Pests and Disease Control
- Climate Change and Development Planning
- A conceptual framework for implementing the NAPA is near completion

The Montreal Key Decisions (2005).

- The Climate Change Meeting in Montreal 2005 established two processes:
 - Ad Hoc Working Group to negotiate commitments for developed country Parties to the Kyoto Protocol for the second commitment period and beyond – output legally binding
 - A Dialogue on long-term cooperation action to enhance implementation of the Convention – no output (knowledge – improved understanding)

Key Outcome of Bali

- AWG – clear time table to conclude negotiations for second commitment period and beyond – by 2009
- The Bali Action Plan – the most significant political outcome focusing on:
 - Mitigation
 - Adaptation
 - Development and access to technologies
 - Financing
 - Reduced emissions from deforestation and degradation – capacity building to enable quantification of compensation

Key Outcome of Bali Contd.

- The Adaptation Fund – negotiations on Governance structure and modalities for accessing funds completed
- Adaptation Fund Board established and Members of the Board elected
- GEF invited to server as Secretariat to the Board and Trustee of the fund respectively

Conclusion

- Climate change is a really threat and is affecting our development programmes as evidenced by the Teso and Northern Ugandan Floods of 2007
- Climate change cuts across all nerves of lives and we must all rise to the challenge – the earlier the better
- The CC Dare is giving us an opportunity to come together and think together on the most effective way to:
 - Collectively understand
 - Collectively internalise climate change
 - Collectively propose a response to the challenges
- I would suggest that the three groups focus on:
 - The challenge we have this morning and the next few days is ***how can we effectively devise a mechanism for integrating climate change into our development planning – encompassing all the sectors ?***
 - how awareness on the key sectors could be effectively undertaken
 - How to build capacity required to generate the necessary materials to assist in achieving the goal of integrating climate change into development planning process.

Conclusion Contd.:

Challenges for Uganda

- Climate change is a really threat and is affecting our development programmes as evidenced by the Teso and Northern Ugandan Floods of 2007
- Climate change cuts across all nerves of lives and we must all rise to the challenge – the earlier the better
- There are opportunities to any problem
- Strengthening our institutional and technical capacity is an urgency

Thank You.