

MAU FOREST IN THE RIFT VALLEY: KENYA'S LARGEST WATER TOWER: MODEL FOR THE CHALLENGES AND OPPORTUNITIES OF SUSTAINABLE DEVELOPMENT PROJECT? (4755)

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GAME PLAN

- Key words
- The Mau Forest
- Cause and effect
- Wangari Maathai
- National/Parliament debate
- Government response
- Outcomes
- Sustainable development
- Kenya Forest Service Vs. Kenya Wildlife Service
- Implications
 - Legal
 - Economic/Social/
 - Climate and Weather
 - Outcomes
 - Ecological and Environmental
- Observations
- Way Ahead

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KEY WORDS

- community participation; forest and wildlife conservation; sustainable development; capacity building; nature tourism; Kenya national parks and reserves; Land management; land use planning; forest cover; ecological balance; economic benefits; peri urban development; agro-forestry; forest cover

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THE MAU FOREST

- Mau forest is Kenya's largest water tower –
- Stores rain during the wet seasons and pumps it out during the dry months.
- It used to cover 400 thousand hectares, but 100 thousands of these have been expropriated.
- The Mau Forest Task Force identified the period between 1996 and 2005 as the worst decade for the forest cover in the country, in general
 - More than 100,000 hectares - one quarter of the protected forest reserve - have been settled and cleared.
 - Tearing out the trees at the heart of Kenya has triggered a cascade of drought and despair in the surrounding hills and valleys.

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WANGARI MAATHAI

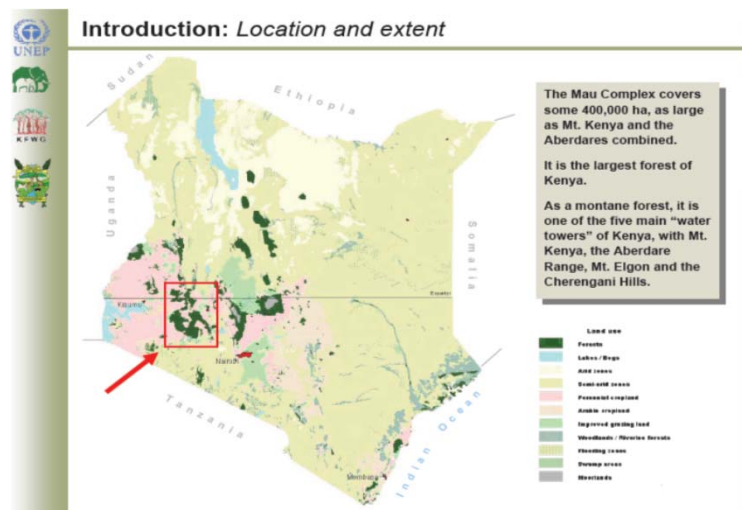
- "The plunder of Kenya's forests has continued over the years despite pleas to conserve them because of ***mismanagement, irresponsible and corrupt*** behaviour of politicians and government officials.
- This destruction has manifested itself in the form of deforestation, the shamba system, human settlements, cultivation, lumber and timber production for city development; charcoal production and grazing.
- In addition to the Mau forests complex, all the other four water towers namely; Mt Kenya, Aberdare Ranges, Mt Elgon, and Cherengani Hills have receded alarmingly."

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LOCATION AND EXTENT



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THE COMMUNITIES IN AND AROUND THE FORESTS



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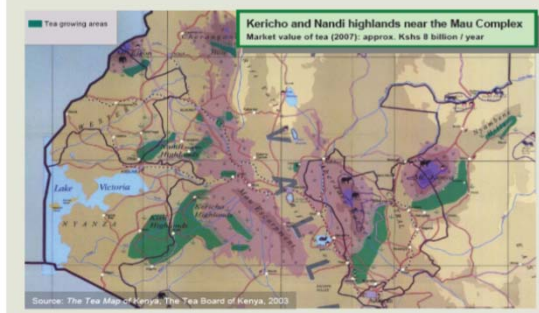
AGRICULTURAL UNDERTAKING

Values: Major micro-climate regulators for crops

Tea growing areas are located near montane forests where conditions for optimum tea production are met:

- Constant moisture
- Soil temperature between 16 and 25 °C
- Air temperature between 10 and 30 °C

The largest tea growing areas in Kenya are near the Mau Complex, in particular South West Mau forest (Kericho), Tinderet and Northern Tinderet forests .



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DESTRUCTION: CLEARING FOR SETTLEMENT

Maasai Mau: forest destruction



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SETTLEMENT OF CITIZENS

Maasai Mau: forest destruction



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TEA ESTATES IN FORESTS?

Transmara FR: *Private tea estates*



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CAUSE AND EFFECT

- Consequences.
 - Some social, some economic, and the most dramatic have been the weather patterns.
 - In this age when climate change and environmental protection for sustainability
 - We no longer can predict the weather,
 - Farming has become a hit and miss thing
 - Forest cover 12.5% in 1963 – independence
 - Forest cover 1.7% in 2008

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OUTCOMES

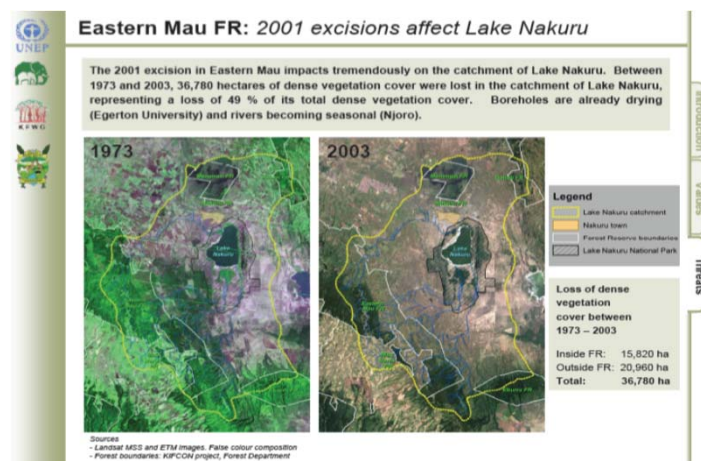
- Rivers flowing from forest are drying up
- As they disappear: So does...
 - Kenya's harvests (and food security)
 - Kenya's cattle and other livestock farms
 - Kenya's hydro-electricity
 - Her tea industry
 - Her lakes -
 - Famous wildlife parks –
 - Maasai Mara; Lake Nakuru.

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THEN AND NOW!!



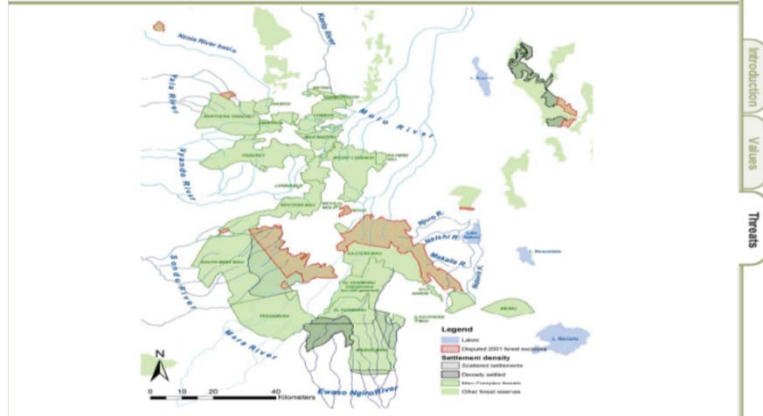
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ENCROACHMENTS

Threats: 2001 forest excisions and illegal encroachments



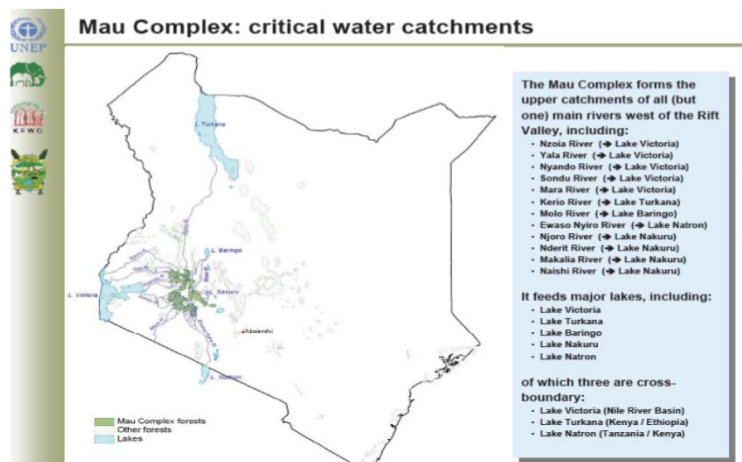
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WATER CATCHMENT AREAS

Mau Complex: critical water catchments

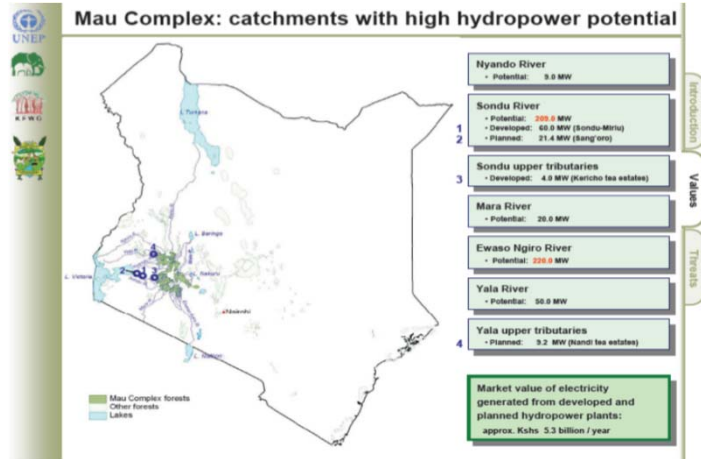


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HYDROPOWER

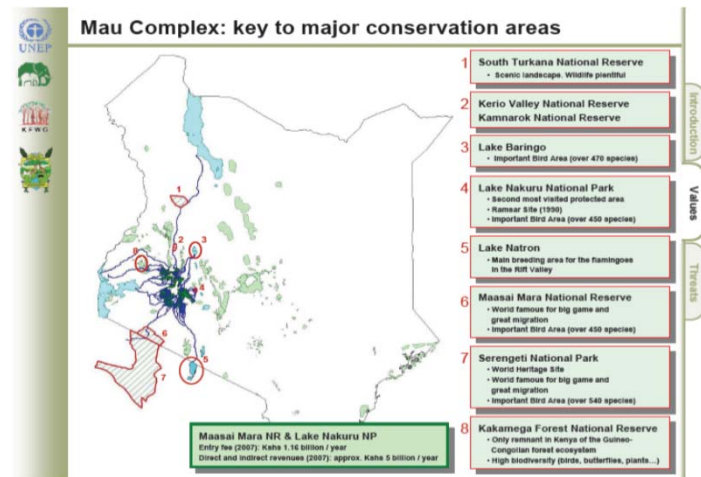


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CONSERVATION AND ENHANCEMENT



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NATIONAL DEBATE

- NORTH RIFT MEMBERS OF PARLIAMENT
- SOUTH RIFT MEMBERS OF PARLIAMENT
- HUMAN RIGHTS ACTIVISTS AND LAWYERS
- OTHERS – JOHN BERNARD SHAW
 - 3 KINDS OF PEOPLE

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SUSTAINABLE DEVELOPMENT

- “economic and social development that meets the needs of the current generation without undermining the ability of future generations to meet their own needs”.

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SUSTAINABLE DEVELOPMENT

- 1) *Agenda 21*—Over 100 programme areas, ranging from trade and environment, through agriculture and desertification, to capacity building and technology transfer.
- 2) *The Rio Declaration on Environment and Development*—Key principles to guide the integration of environment and development policies
- 3) *The Statement of Principles on Forests*—the first global consensus on the management, conservation, and sustainable development of the world's forests.
- 4) *The Framework Convention on Climate Change*—a legally binding agreement to stabilize greenhouse gases in the atmosphere at levels that will not upset the global climate.
- 5) *The Convention on Biological Diversity*—a legally binding agreement to conserve the world's genetic, species, and ecosystem diversity and share the benefits of its use in a fair and equitable way.

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SUSTAINABLE DEVELOPMENT

- **KWS – Formed In 1989 Is Success Story**
 - Wildlife conservation and management Dept
 - 59 National Parks and Reserves
 - 70% of wildlife lives outside protected areas
 - Clear indication of Government commitment to Wildlife Conservation
- **KFS – Act of Parliament 2005**
 - It took until 2008/9 to operationalize the act

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KENYA FORESTS SERVICE

- Twenty years of vandalizing of our forests. Government cannot escape culpability.
- The Forests Department was a Department in the Ministry of Environment and Natural Resources
- Therefore party to the mismanagement and resultant destruction
- Not only of Mau Forest, but all the other four towers.

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GOVERNMENT RESPONSE

- Government is facing the challenge by deciding to replant/restore the Mau Forest cover
- Hopefully use the effort as a model to recover the other water towers.
- One aspect of restoring the forest is to relocate those who “invaded” it.
- Some have title deeds and one wonders how these were obtained without the connivance of the Surveyor.
- The hottest debate in our parliament is who, how, how much should be compensated.
- Is the principle acceptable?

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OBSERVATIONS AND CONCLUSIONS

- Majority of our people don't know their rights, duties, obligations
- Majority don't have alternative fuel sources
- Forest is major source of livelihood, and current approaches are not sustainable
- Laws that encourage peri-urban development are missing – either or
- Rural – urban migration accelerated
- Government has severe weaknesses
- Poor agricultural practices, no extension services to guide/advise farmers
- Tree harvesting not matched with replacement
- Mismanagement, abuse and corruption in forestry
- Civil society organizations have lost faith in Government
- Abundance of unskilled, semi-skilled labour
- On other hand one hundred millions seedlings need to be planted

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WHAT IS TO BE DONE?

- **EMPOWER THE PEOPLE**
 - Civic education
 - Other knowledge
 - Cooperatives – conservation related enterprises
 - Cultural based arts and crafts
- **Make laws that cater for sustainability**
- **Public Private Partnerships**
 - NCBDA, NAKO, KEP SA
 - Infuse the Discipline of Games into Conservation
 - Develop and Offer alternative sources of fuel
 - Land management practices a la AWF approach
- **Develop social infrastructure – school, health, disaster management, water, sanitation, roads to make them feel they belong**

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Possible solutions

- Rainwater harvesting techniques
- Develop dams and pans
- Waste Recycling, reducing, re-using
- Agro-forestry – in place of clearing to plant
- Design and develop cooperatives – there are models

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