

Potential for Revenue Generation through Environmental Fiscal Reforms in Tanzania and Kenya?

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A Research Project within the Environment for Development Initiative

- **EfD Centers:**

- Central America – CATIE (Costa Rica)
- China – Peking University
- Ethiopia – EDRI/Addis Ababa University
- Kenya – KIPPRA/Nairobi University
- South Africa – University of Cape Town
- Tanzania – University of Dar/NEMC

- **EfD Partners**

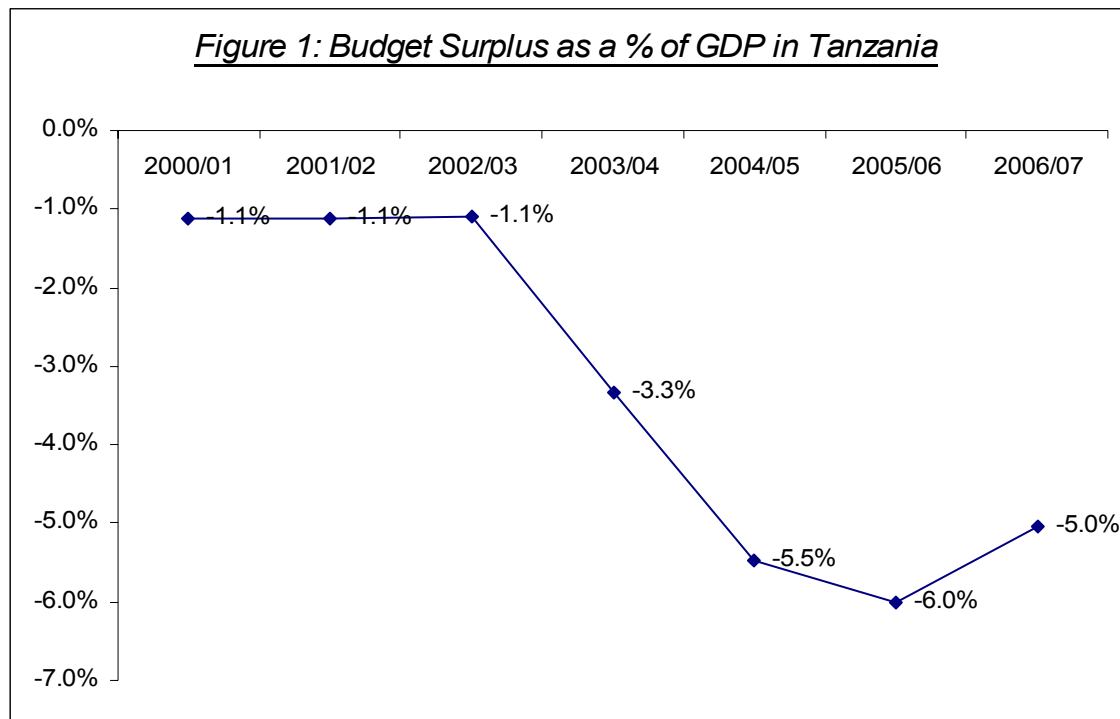
- Environmental Economics Unit, Gothenburg University
- Resources for the Future, Washington D.C.

Outline

- Why focus on revenue potential?
- Potential for revenue generation through EFR
 - Kenya
 - Tanzania
- The importance of fuel taxation
- Conclusions

Revenue generation a top priority for poor countries with deficit budgets

Tanzania Trend in Budget Deficit



Potential for revenue generation through EFR in Kenya

Limited use of EFR so far

- Kenya uses fiscal instruments to pursue environmental objectives albeit in a limited way;
 - subsidies more prevalent
 - fees and royalties too low to induce behavior change
 - taxes and levies rare.
- However, 120% excise duty on shopping plastic bags introduced in 2007/08 Budget.

Policy Instruments Used

- Increase in excise duty on petroleum products for gasoline and for diesel
- Levy of Kshs.1 per litre of Kerosene to raise revenue for use in water harvesting and other projects
- Surcharge on imported second hand vehicles
- Increase in excise duty on motor vehicles to decongest roads
- Reduction of import duty, excise duty, VAT on diesel and residual fuels; LPG; Kerosene; imported timber and other wood products to reduce deforestation

Low revenues generated from EFR

- Revenue from forestry and mining is 0.16% of total tax revenue, i.e. <0.1% of the total amount of revenue generated in 2002/03 and 2003/04.
- Fisheries revenue (5% import duty; 0.5% export royalty; vessel licence fees; others) about 0.05% of total revenue in 2005, with about 59% collected from foreign vessel licences.
- Revenue from petroleum taxes about 5-6% of total revenue; About 78% of revenue from petroleum from the two domestic levies.
- Revenue from EFR taxes is about 6% of total tax revenue and 1.7% of GDP

High potential of raising revenue through EFR in Kenya

- Heavy dependence on wood fuel and ecosystem services. Wood fuel supplies 70% of energy, 21% from petroleum and 9% from electricity (largely hydroelectricity)
- High pressure from stakeholders, donors, civil society and consumers
- Obligation from MEAs and hosting of UNEP
- Stronger surveillance of the country's exclusive economic zone (EEZ) and the strong demand for Nile Perch in the export market
- Facilitative legal structure
- Persistently high budget deficits despite high VAT, corporate, and income tax rates
- Experience of other countries: contribution of environment-related taxes to overall tax revenue is quite high in countries like Korea (13.09%), Greece (11.72%) and Switzerland (11.03%)

To realize this potential, Kenya needs to:

- Develop a proactive policy of EFR
- Raise the level of political will
- Strengthen administrative and revenue collection capacity
- Strengthen the capacity to design effective EFR instruments
- Tackle governance issues including corruption more effectively

Potential for revenue generation through EFR in Tanzania

Use of EFR in Tanzania

- Various policy and legal documents specifically encourage and permit the use of economic policy instruments for environmental management.
- Some economic policy instruments have been put in place, for example
 - 120% excise duty on plastic shopping bags,
 - Differential import duty on cars depending on engine size and the age (for second hand cars) of the cars.
- Some studies indicate a considerable potential to raise revenue through new/adjusted mix of policy instruments and through improved revenue collection in specific sectors.
- However, few systematic studies conducted

Poor Revenue Collection is a Key Problem

- **Tanzania Forestry:**

- ~ 58 USD million lost annually due to the under-collection of natural forest product royalties in the districts
- trade statistics show that China imported ten times more timber products from Tanzania than appear on Tanzania's own export records.

(Source: *Forestry, Governance and National Development: Lessons Learned from a Logging Boom in Southern Tanzania* (Milledge et al, 2007))

- **Tanzania Fishery:**

- Only ~30% of revenue accruing to local level government collected

(Source: *Fiscal arrangements in the Tanzanian fisheries sector* (FAO, 2004))

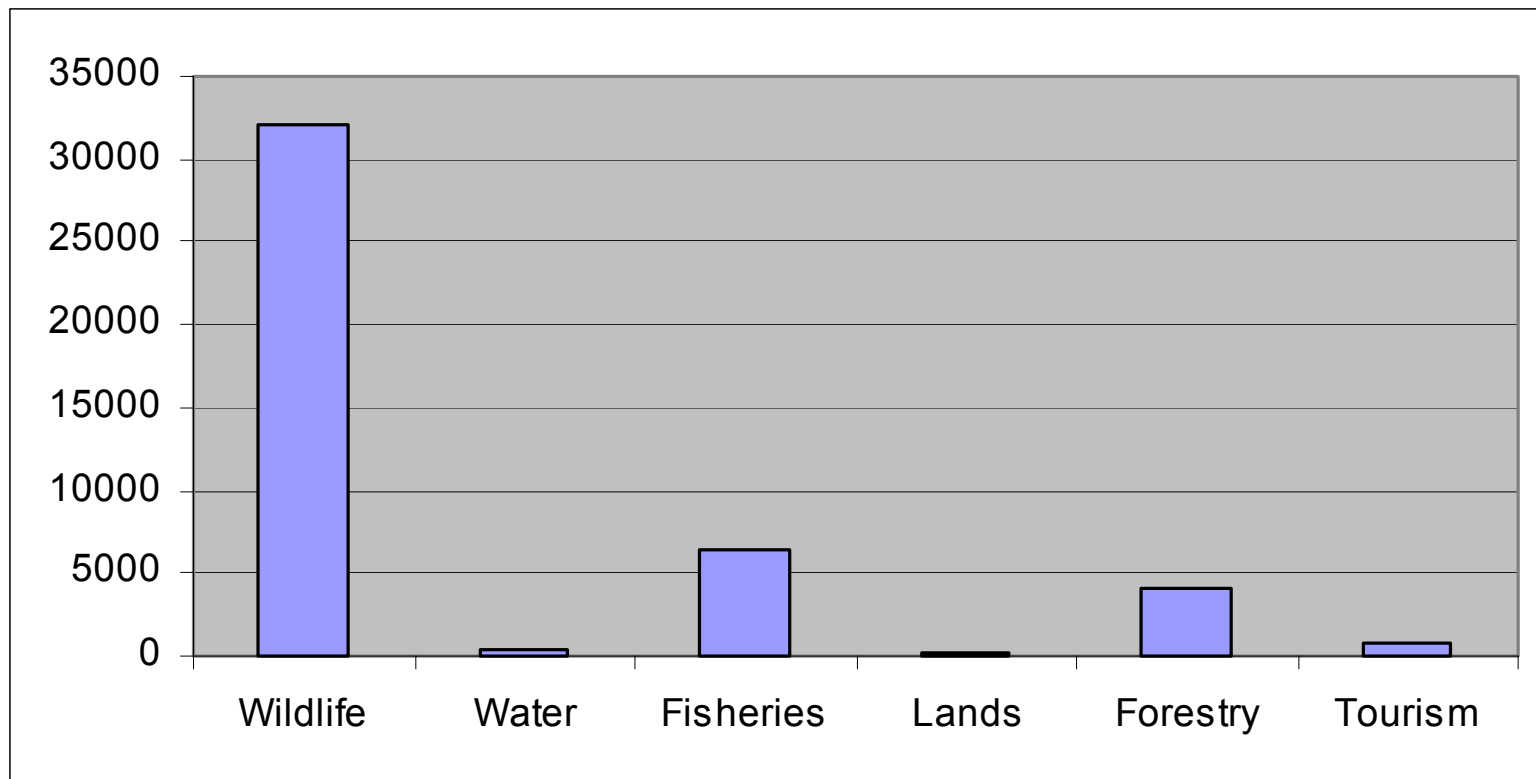
Tanzania Public Environmental Expenditure Review (2004)

”A critical turning point in highlighting:

- the considerable potential for environmental resources to contribute to revenue
- significant under pricing, and very low revenue collection in e.g. fisheries and wildlife
- the relatively low levels of investment and recurrent expenditure on environmental assets and improved revenue capture “

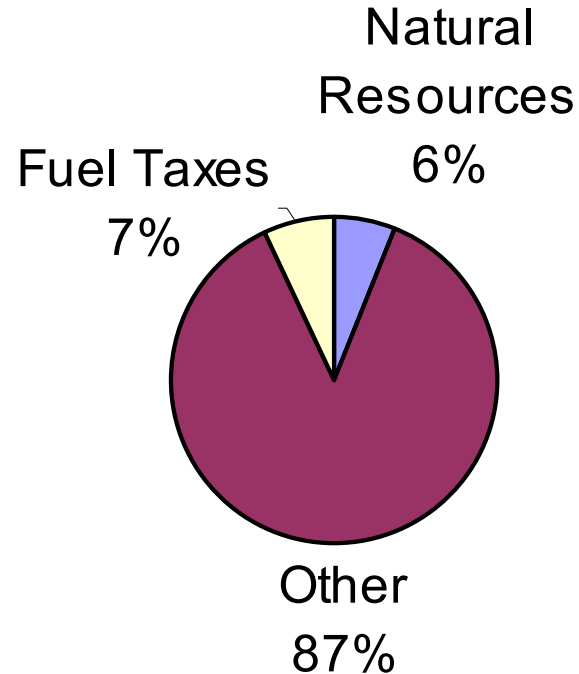
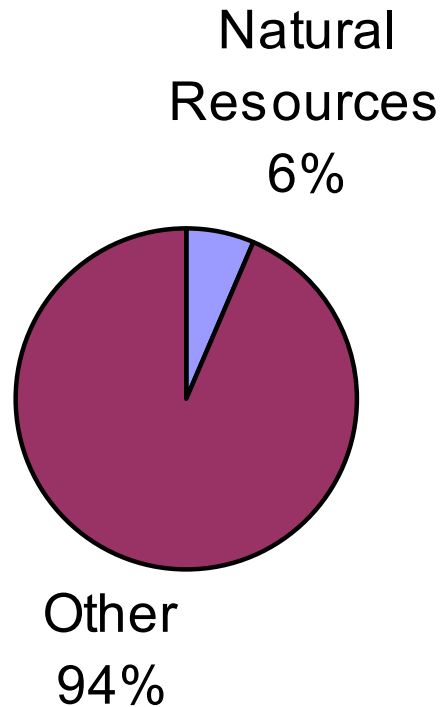
Source: Assey et al (2007), *Environment at the heart of Tanzania's development: Lessons from Tanzania's National Strategy for Growth and Reduction of Poverty (MUKUKUTA)*

Tanzania: Revenue from Natural Resource sectors FY 2001/2002 (Million Tsh)



Source: Tanzania Public Environmental Expenditure Review (2004)

Natural Resources Revenue as share of Total Government Revenue

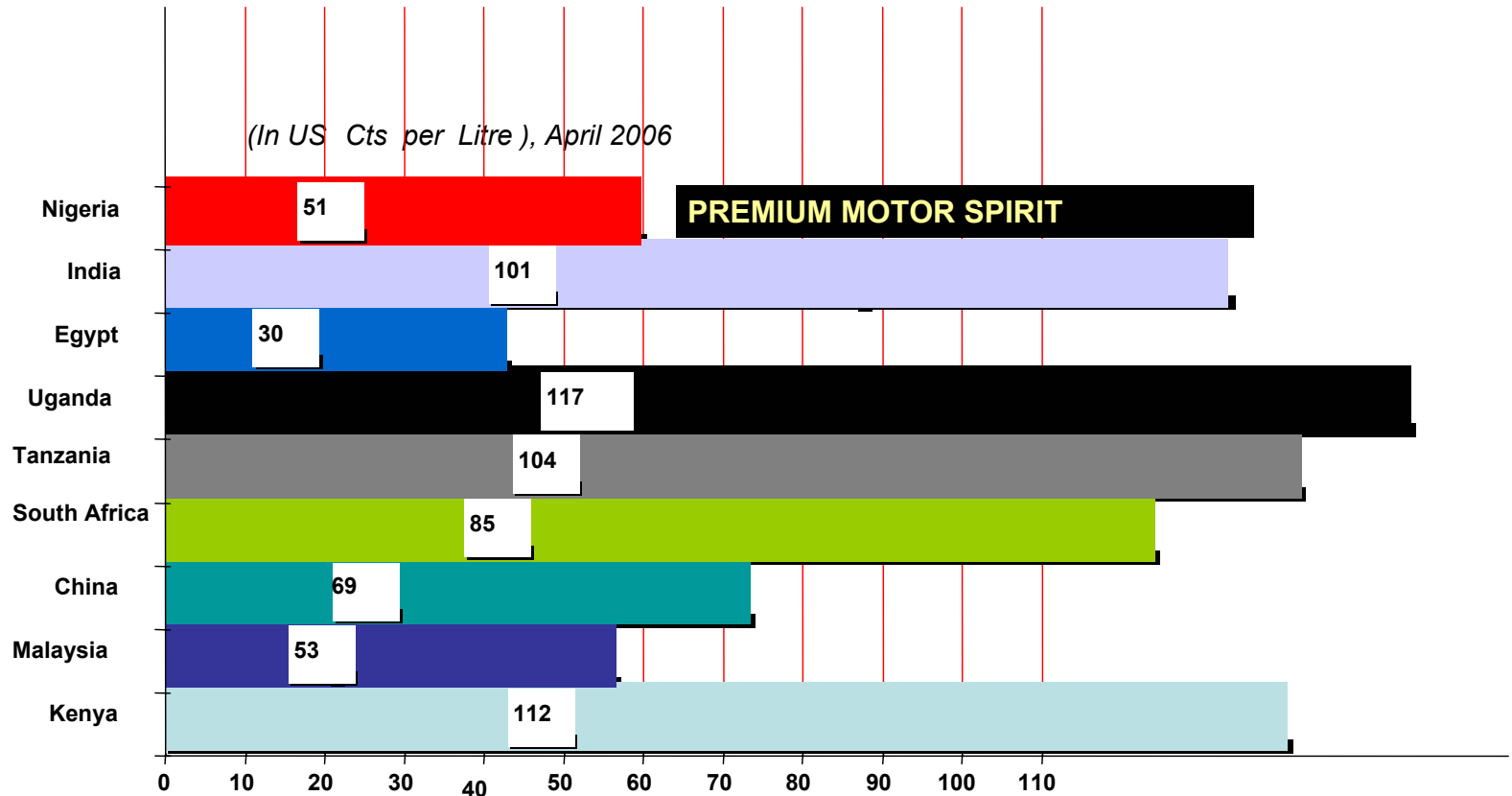


Source: Tanzania Public Environmental Expenditure Review (2004) and Metschies, G, International Fuel Prices 2005

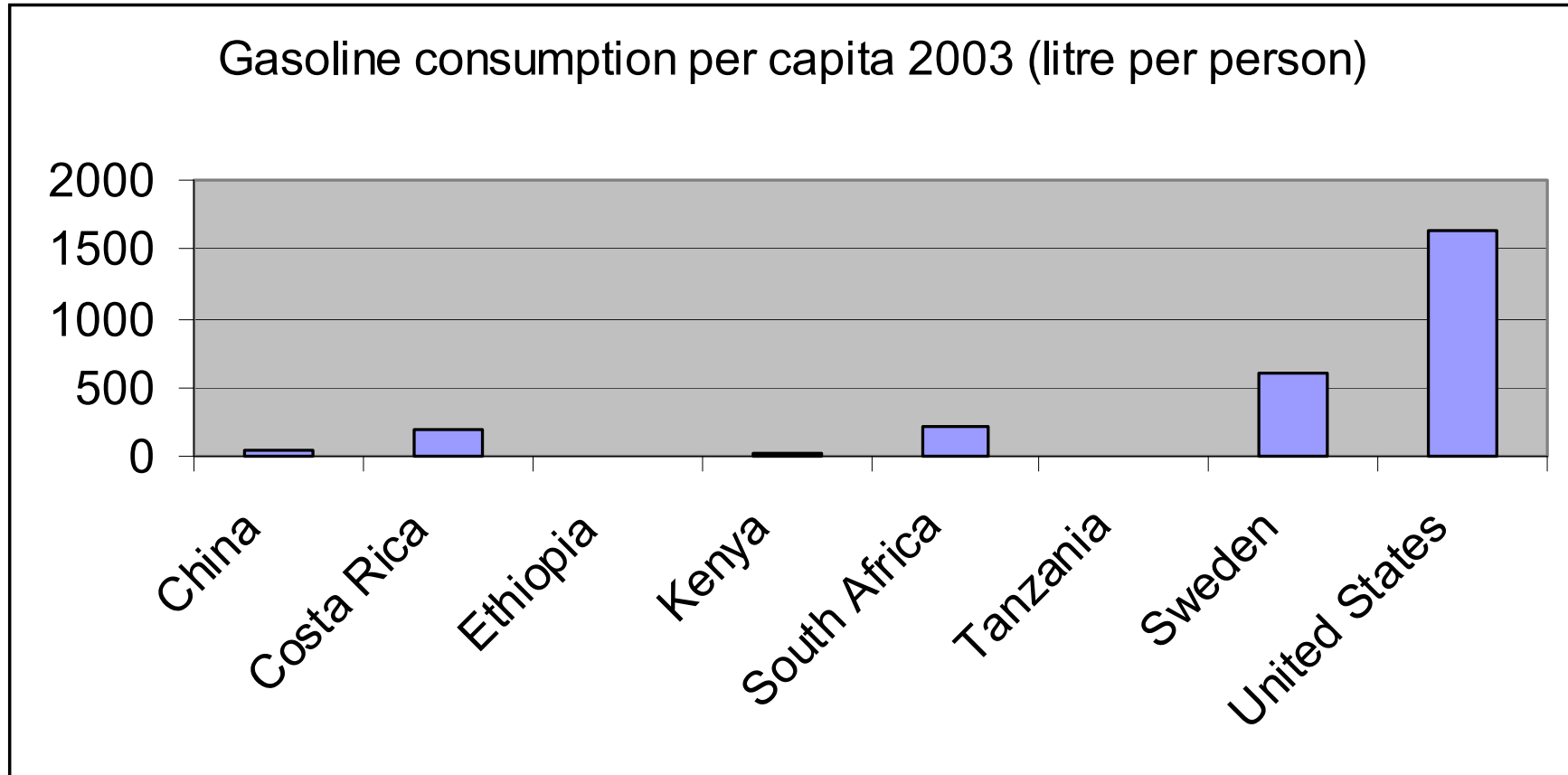
The Importance of Fuel Taxes

- One of few environmentally related taxes that generate significant revenue
 - In OECD countries about 90% of the revenues from the environmentally related taxes stems from taxes on motor vehicle fuels and motor vehicles.
 - Tanzania ~7% of total govnm revenue, Kenya ~6%, Mozambique ~10%
- Key instrument to combat global warming
- Is there a potential to raise further revenues from fuel taxes in countries like Kenya and Tanzania?

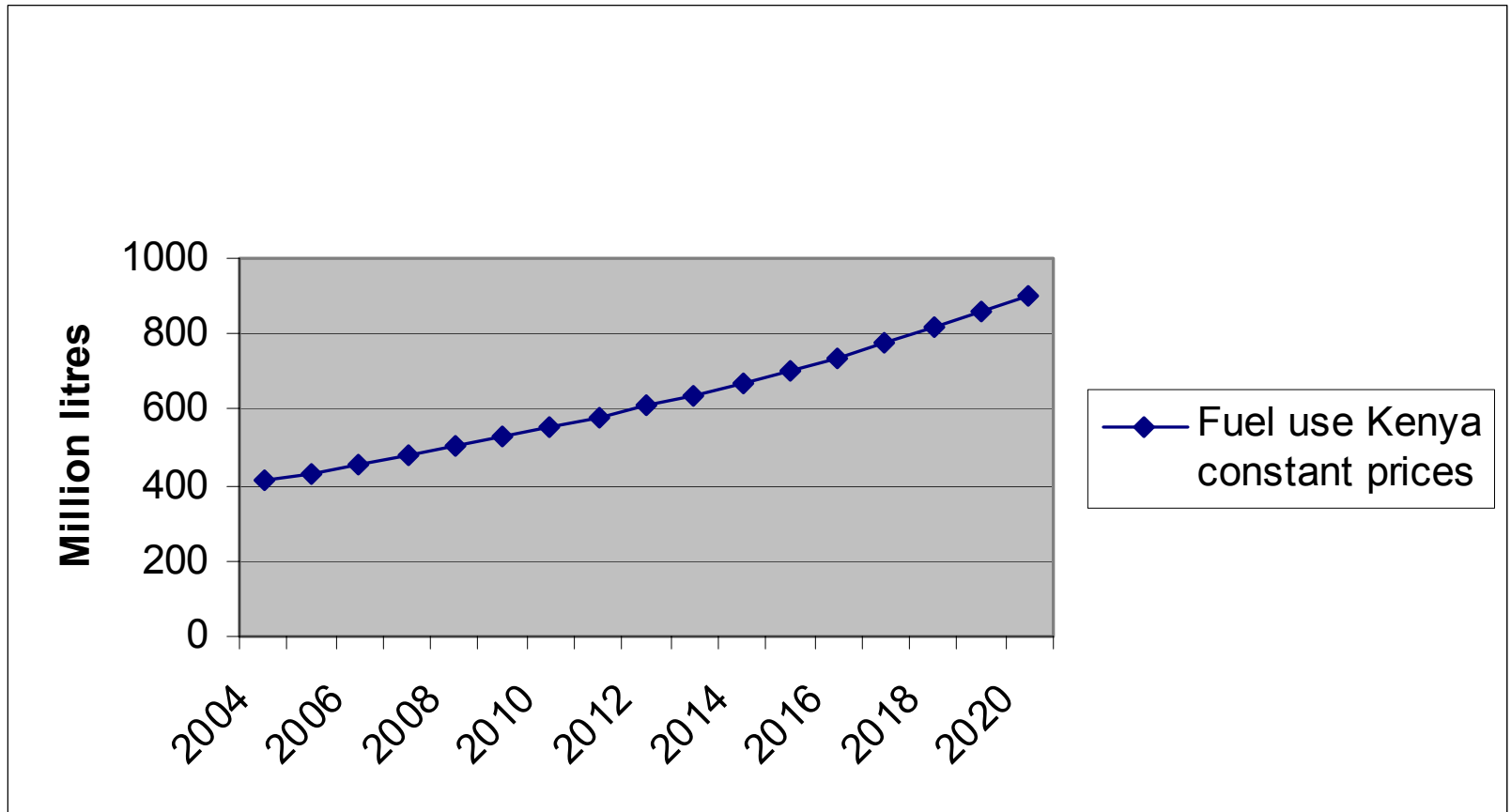
Fuel prices are relatively high



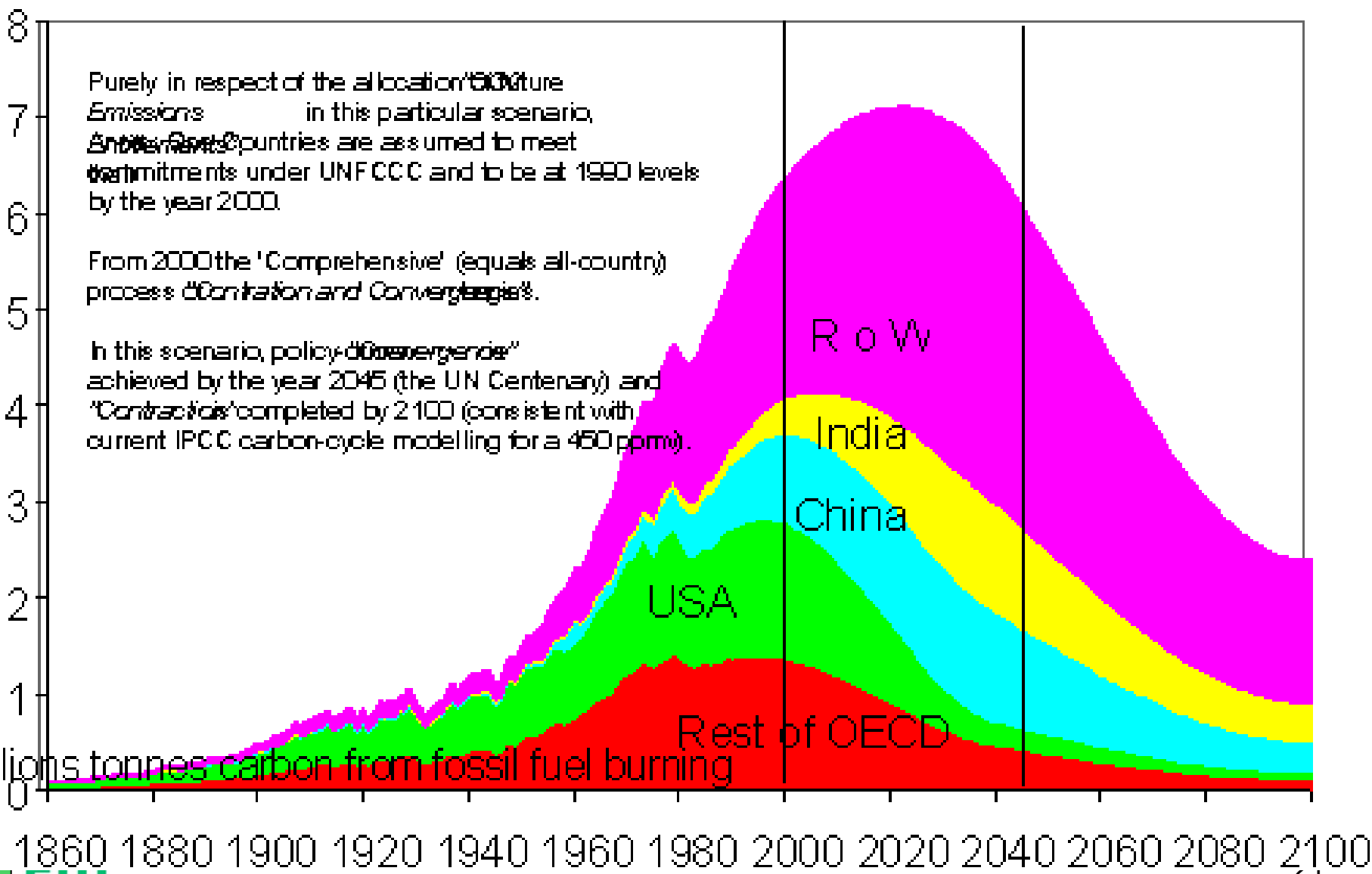
Gasoline Consumption per capita is very low



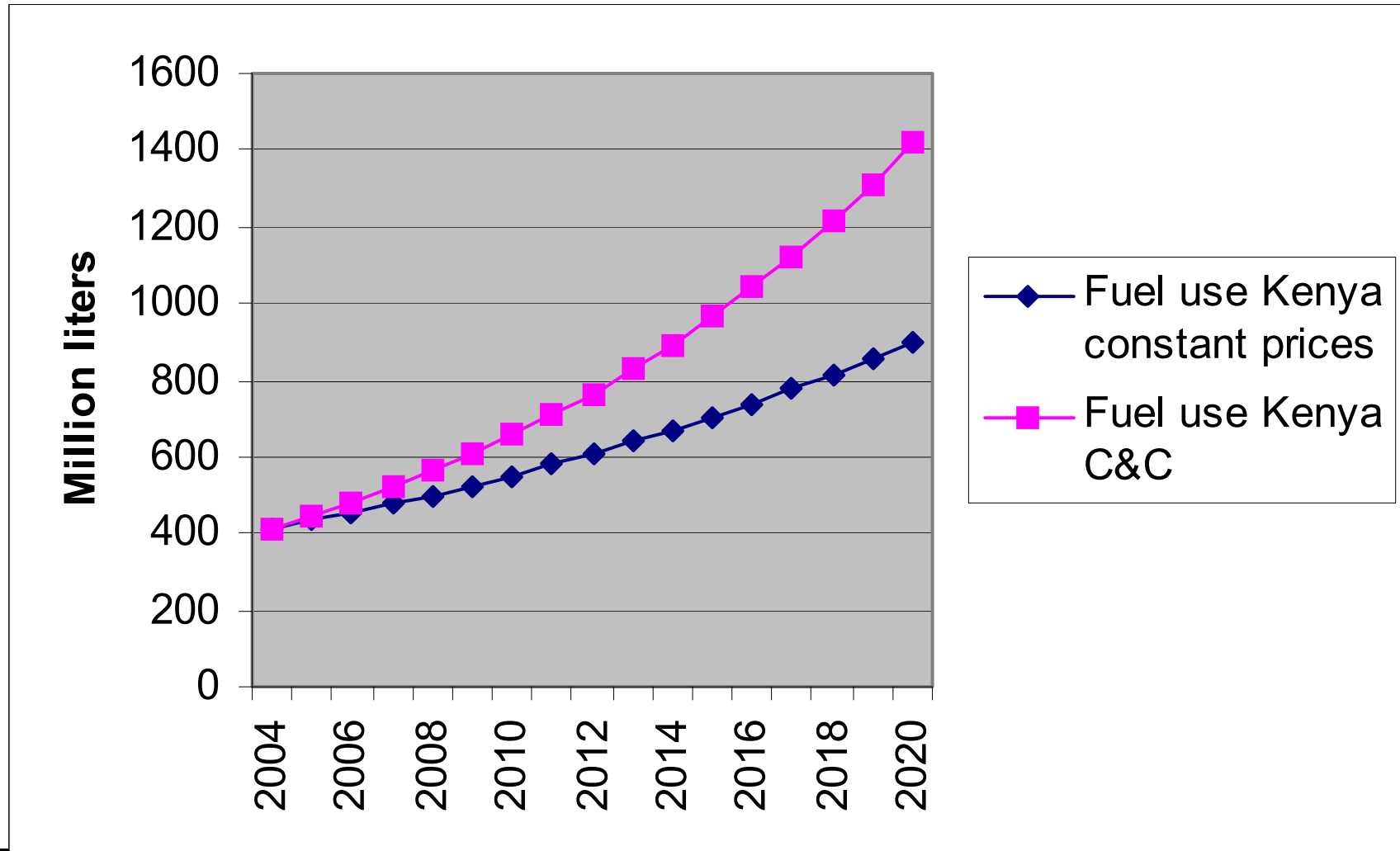
A. 5 % growth rate and constant prices



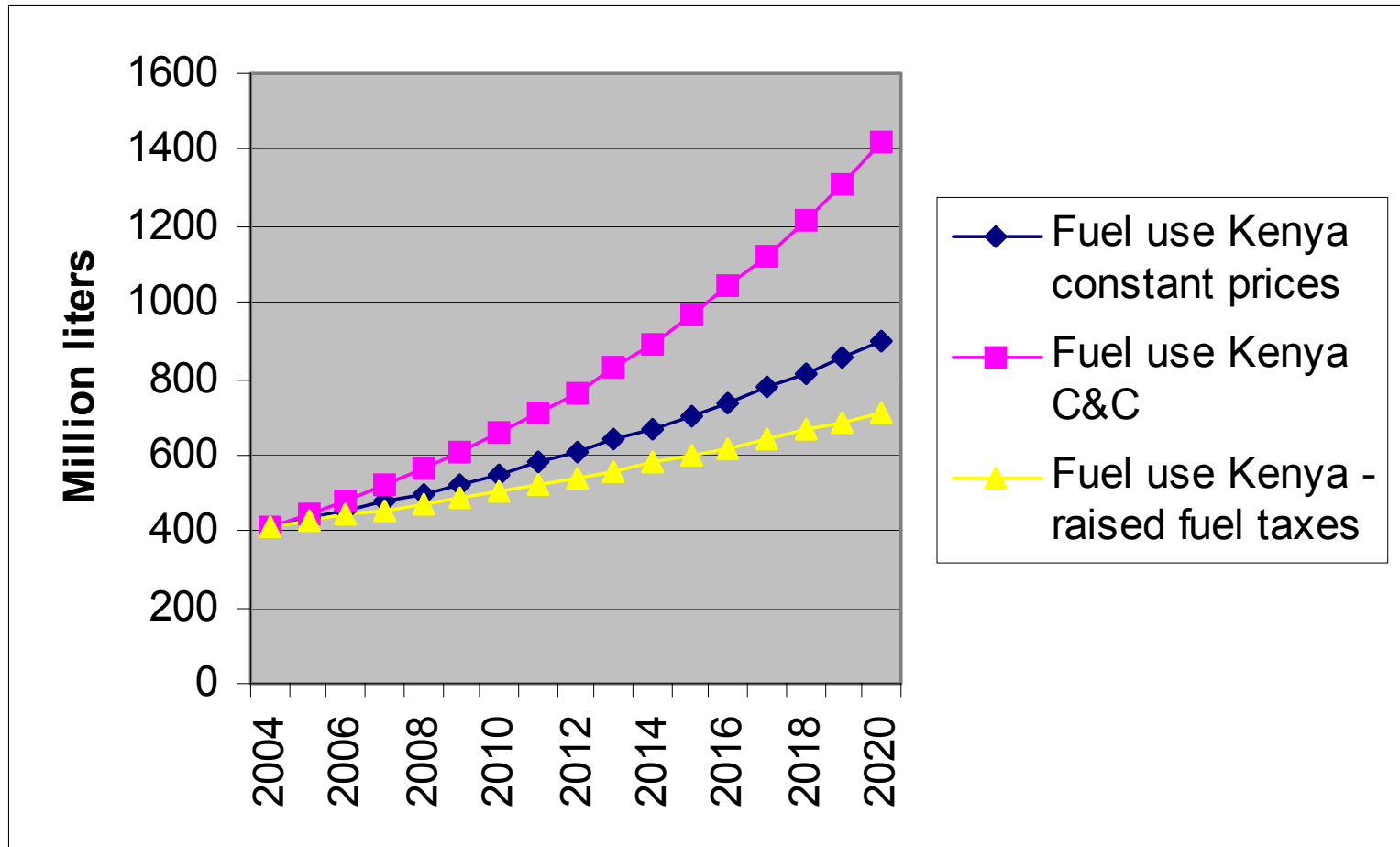
HISTORY & GCI CO2 SCENARIO for 450 ppmv under "CONTRACTION & CONVERGENCE"



B. Equal per capita CO2 emissions (Contraction and Convergence)



C. Raised fuel taxes



Potential to increase revenues from fuel taxes?

- With existing tax levels, fuel demand will increase in line with increased income (GDP)
- A higher global carbon price provides an opportunity for raised fuel taxes also in low income countries
- Even a small increase in fuel taxes can yield considerable government revenue
- However, effects on poverty and the environment needs to be taken into account

Conclusions

- A focus on revenue generation can be an entry point for a broader dialogue on EFR
- Current revenues from EFR are low (except for fuel taxation)
- Potential to raise revenue
 - Raised taxes, royalties etc
 - Improved revenue collection
- Data is poor and few systematic studies conducted
- Empirical (and comparative) research needed to complement theoretical developments

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