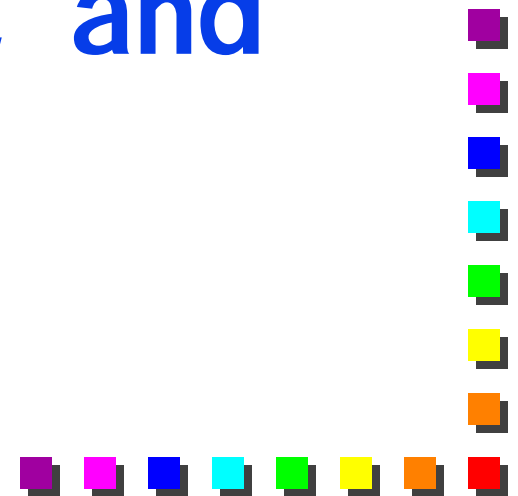


**Too Much Work and Too
Little Time:
Gender Dimensions of
Transport, Water, and
Energy**



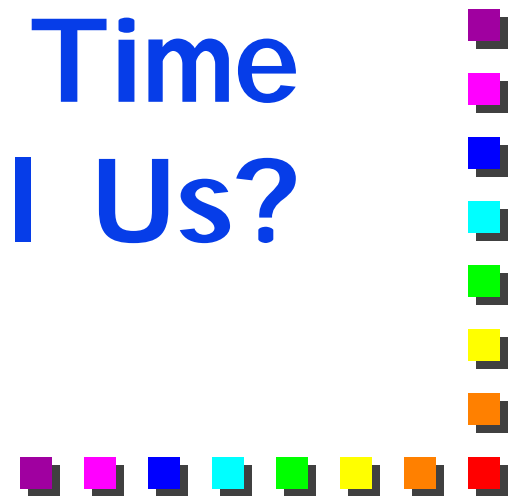
Outline

- The “household economy”
 - time allocation data
- Household maintenance
 - domestic activities: transport, water, energy, preparing food
 - disaggregation by task and by gender
- Policy implications & agenda

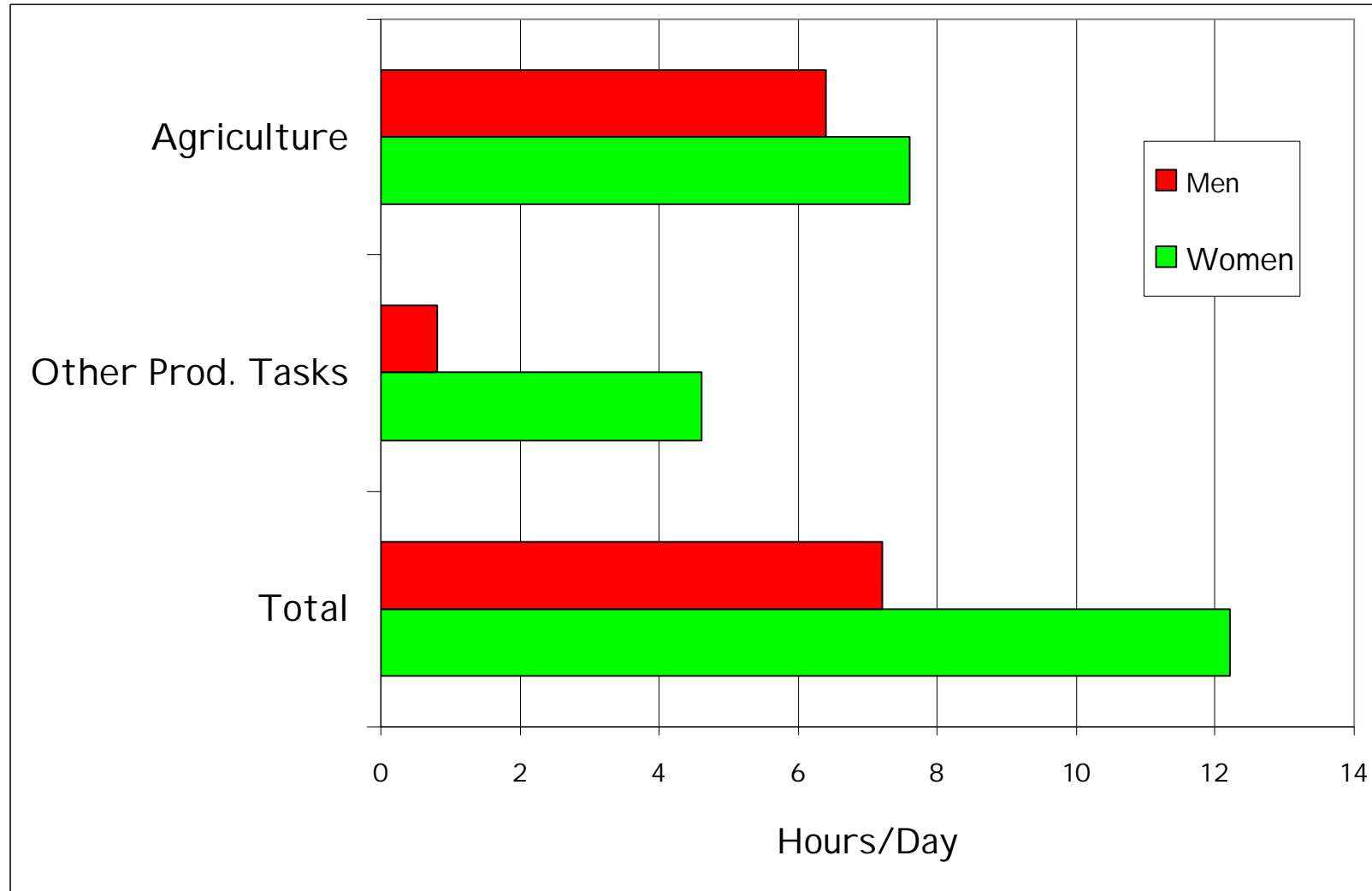


I

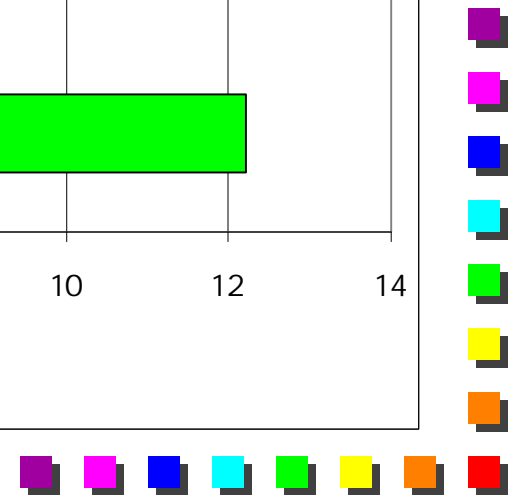
Revisiting the Household Economy: What do Time Allocation Data Tell Us?



Zambia: Time Allocation



Source: Saito 1992.



Interdependent ...

GENDER DIVISION OF LABOR
ACCESS & CONTROL
OF RESOURCES

MARKET

Labor
Segmentation

Key Characteristics

MONETIZED
ECONOMY
PREDOMINANTLY
MALE
GOVERNED
BY LAW

HOUSEHOLD

Labor Immobility
Valued at 30-50%
of GDP

Key Characteristics

UNPAID NON-
MONETIZED
PREDOMINANTLY
FEMALE
GOVERNED
BY CUSTOM

LABOR SUPPLY



Invisible?

MARKET

Labor
Segmentation

Key Characteristics

MONETIZED
ECONOMY
PREDOMINANTLY
MALE
GOVERNED
BY LAW



||

Disaggregating Household Activities by **Task** and **Gender**



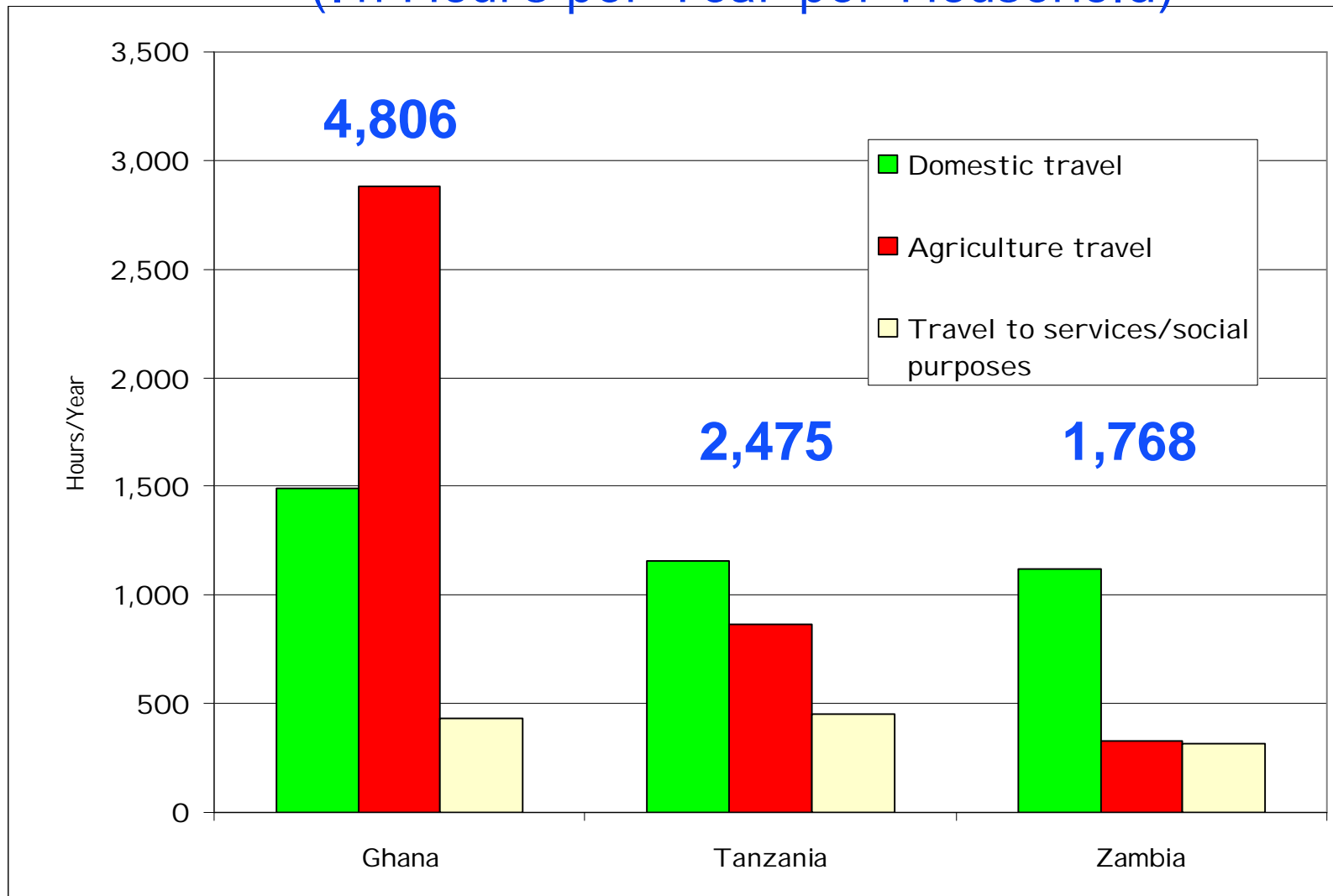
Transport Study Areas

- **Ghana:** 8 villages; 51 HH
 - Combination of three study areas covering major zones
- **Tanzania:** 19 villages; 431 HH
 - Makete district in Southwest
- **Zambia:** 4 villages; 169 HH
 - Kasama district in Northern province



Distribution of Transport Tasks

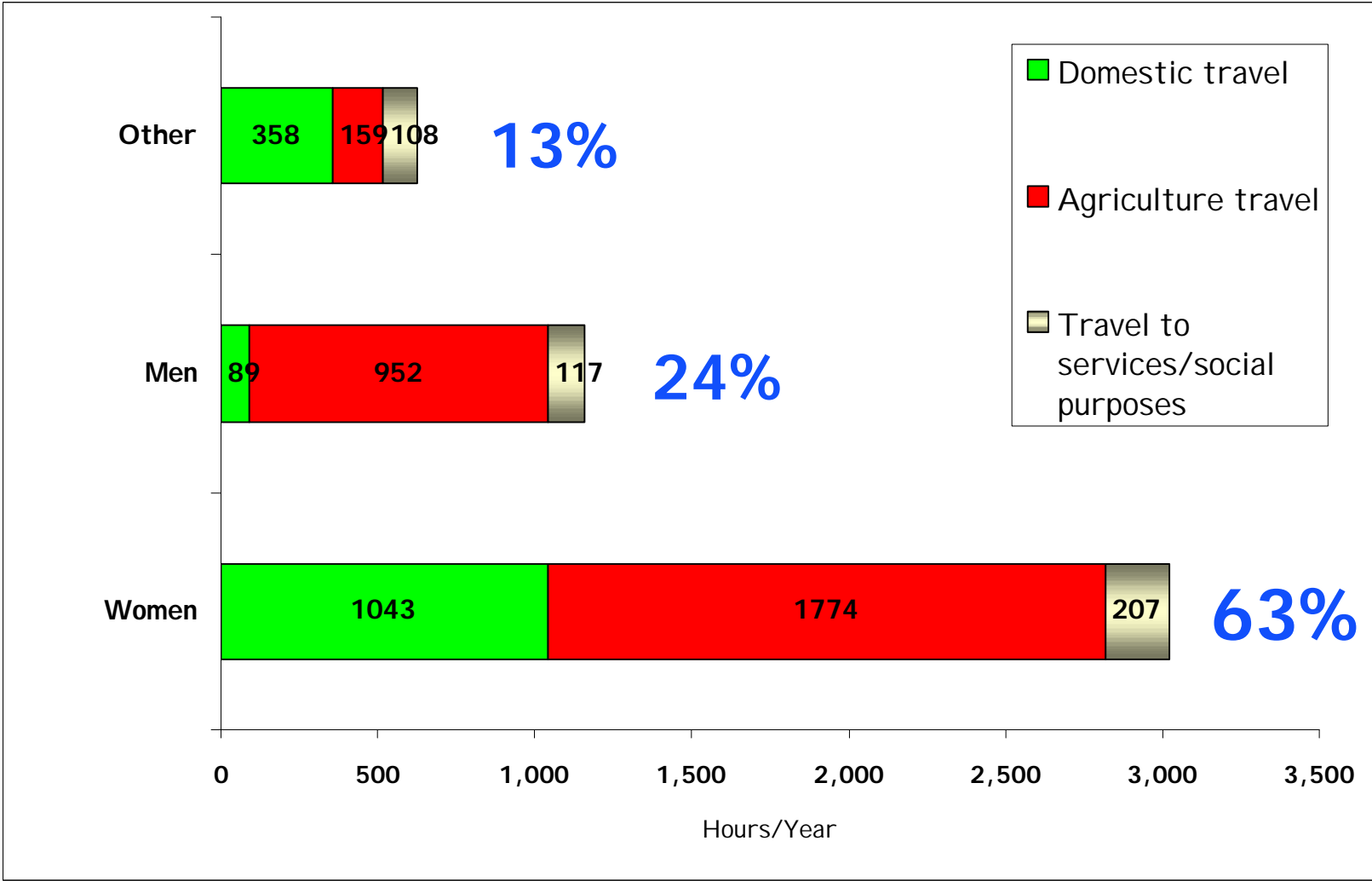
(In Hours per Year per Household)



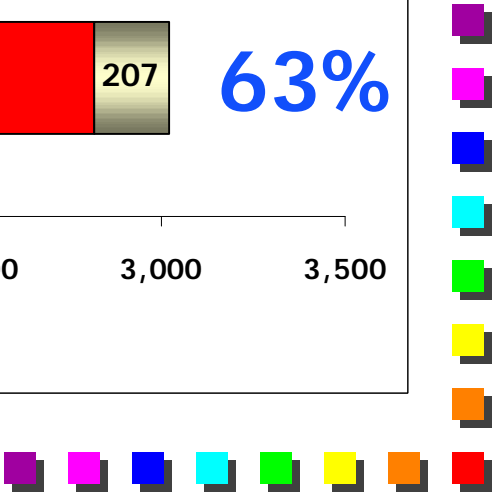
Source: Christina Malmberg-Calvo. 1994, *Women in Rural Transport ...*
SSTP Working Paper No. 11. World Bank and ECA.



Ghana: Transport Tasks



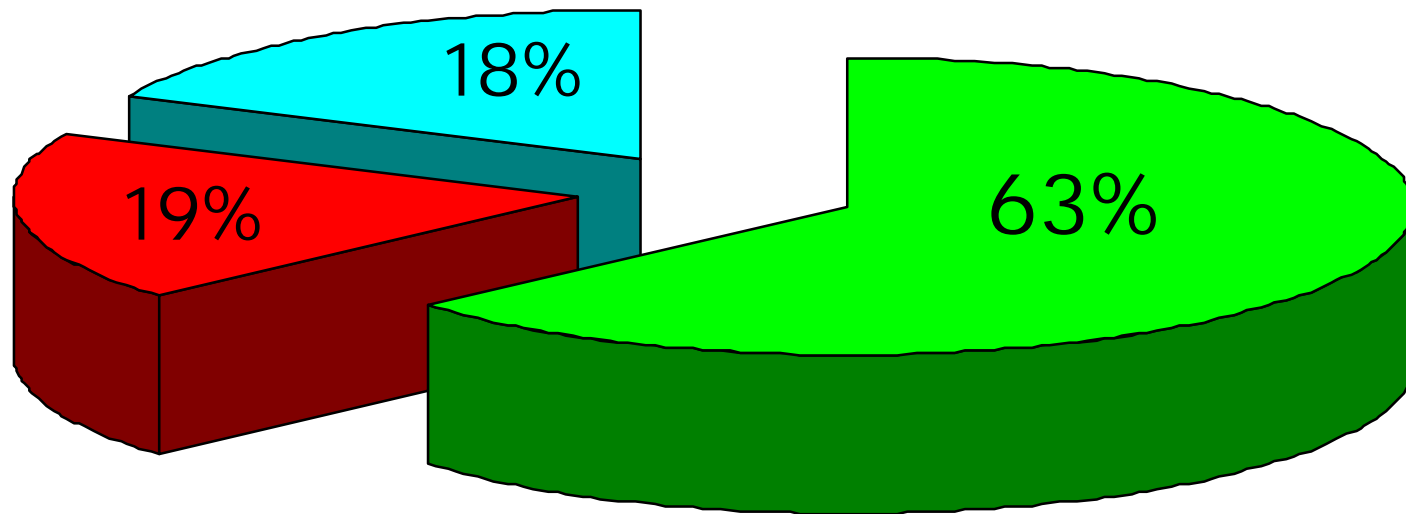
Source: Estimates based on Malmberg-Calvo, C. 1994, *Women in Rural Transport ...* SSTP Working Paper No. 11. World Bank and ECA.



Zambia: Transport Tasks



Domestic Travel Time (%)		
Women	Men	Other
96	1	3

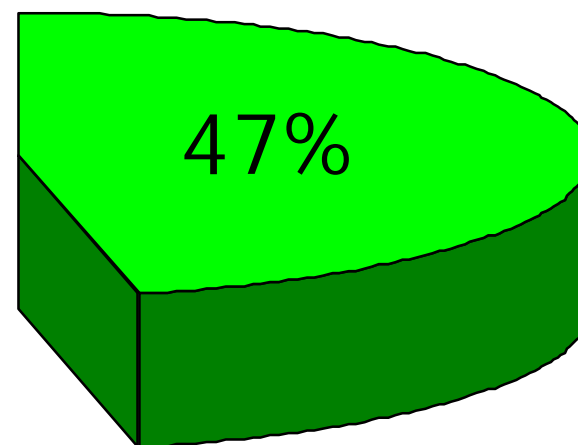
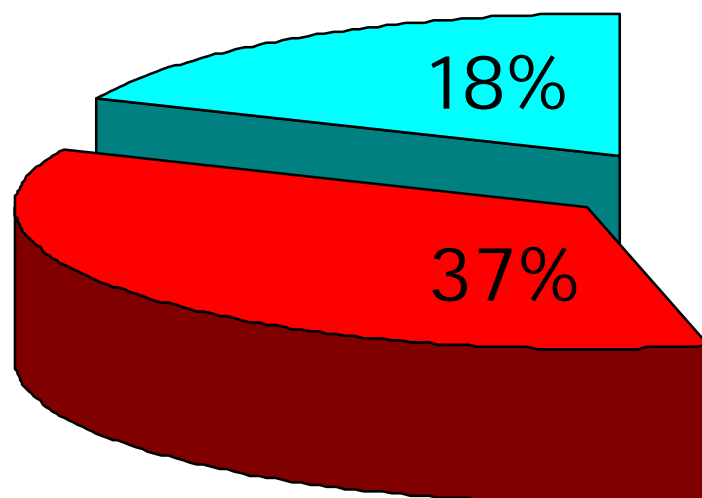


2.35 hours per adult female per day

Source: Christina Malmberg-Calvo. 1994, *Women in Rural Transport ...*
SSTP Working Paper No. 11. World Bank and ECA.



Tanzania: Transport Tasks



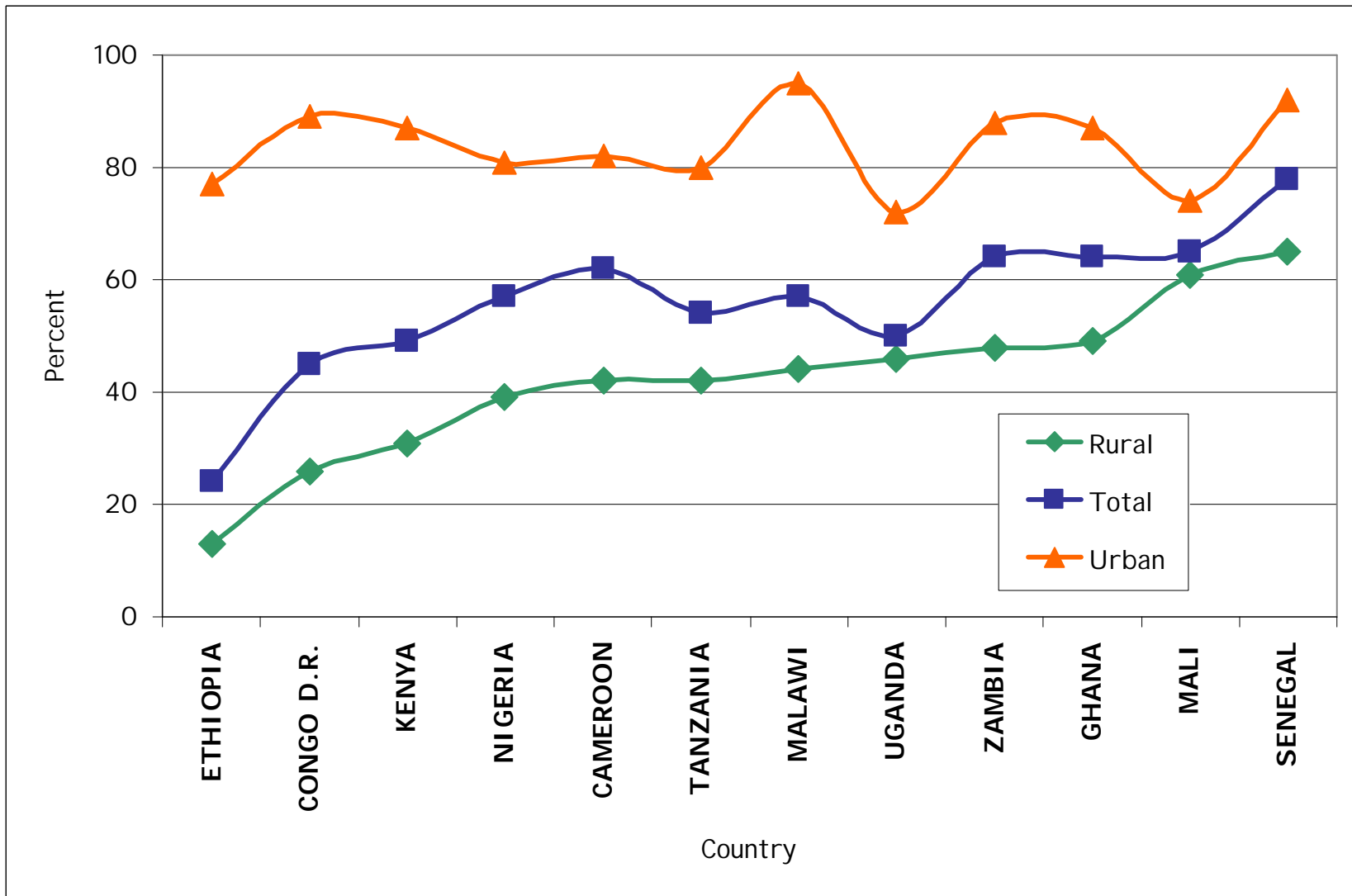
Domestic Travel Time (%)		
Women	Men	Other
80	6	14

1.89 hours per adult female per day

Source: Christina Malmberg-Calvo. 1994, *Women in Rural Transport ...*
SSTP Working Paper No. 11. World Bank and ECA.



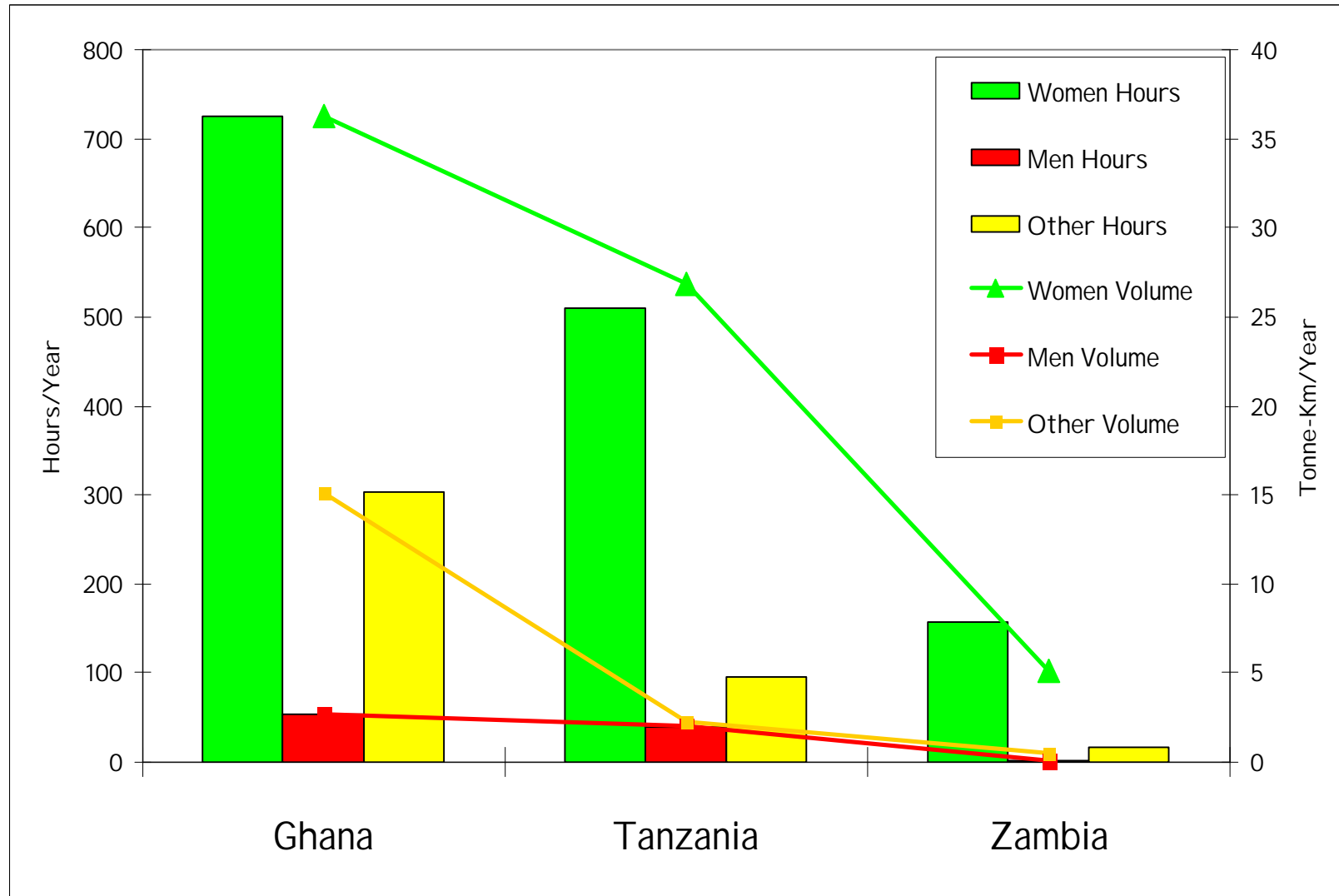
Security: Access to Water



Source: www.unicef.org/statis (2000).



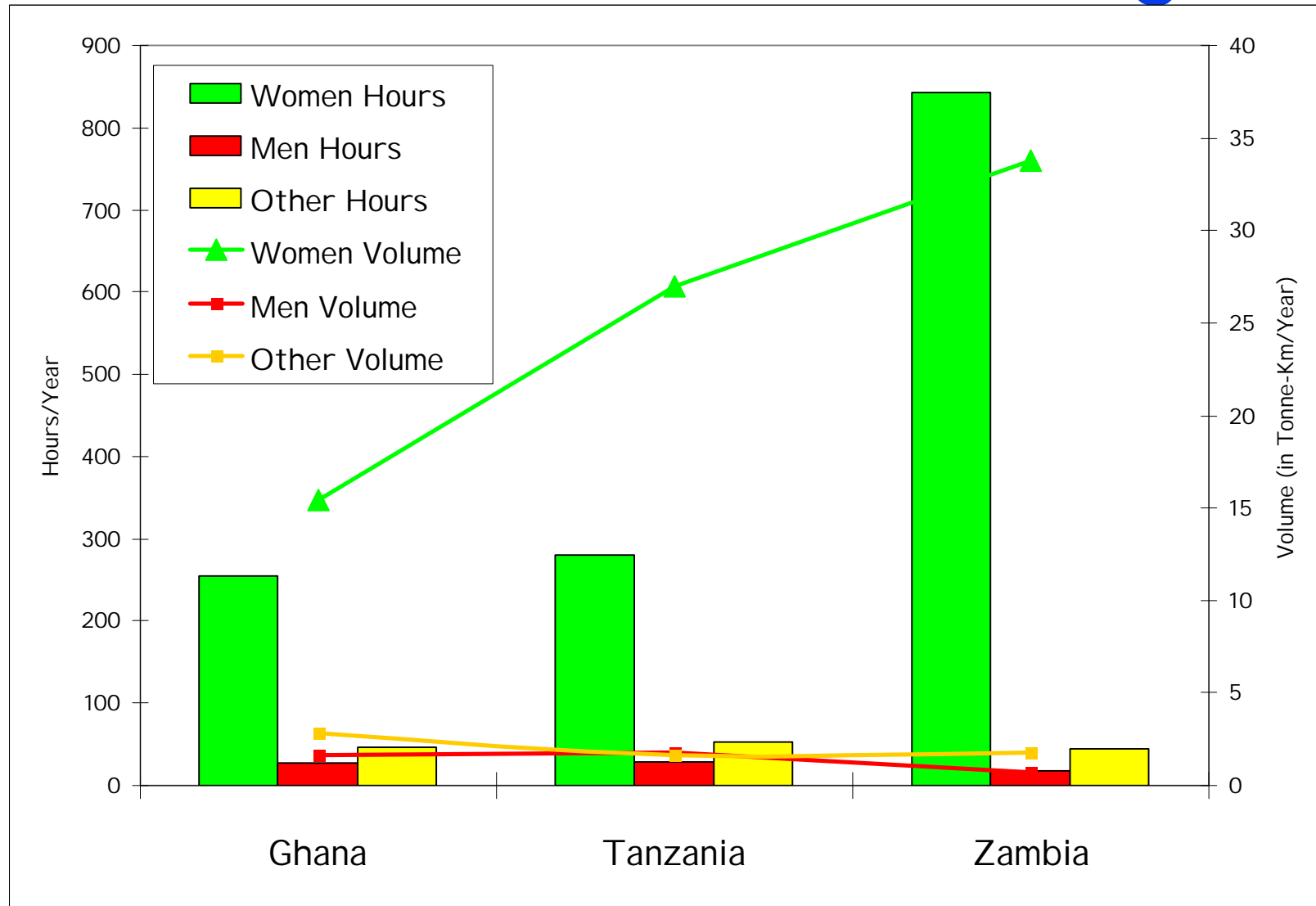
Water Provisioning



Source: Christina Malmberg-Calvo. 1994, *Women in Rural Transport ...*
 SSTP Working Paper No. 11. World Bank and ECA.



Wood Fuel Provisioning

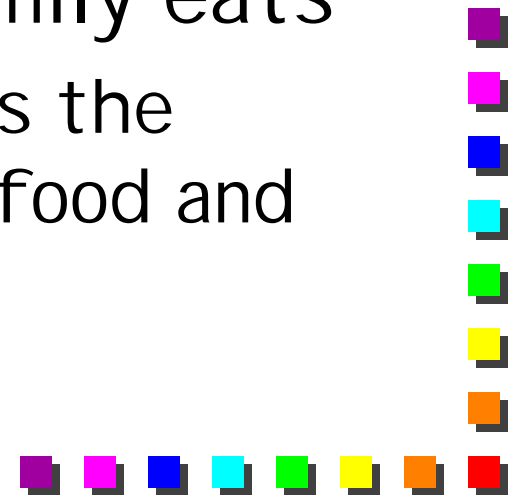


Source: Christina Malmberg-Calvo. 1994, *Women in Rural Transport ...*
 SSTP Working Paper No. 11. World Bank and ECA.



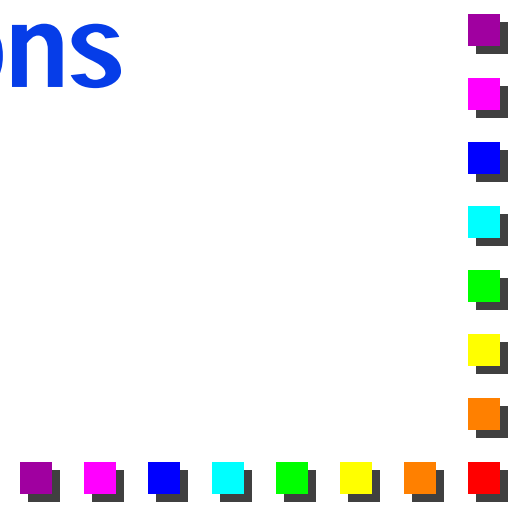
"The Last Straw"

- Time required to prepare maize by manual methods: **13 hours** to pound enough maize to feed a family for between four and five days
- A woman spends **4-5 hours every day** to prepare the food her family eats
 - this is **twice** the time it takes the villagers to **grow and gather** food and cash crops



|||

Policy Implications



Policy Implications: 1

- Significance of the **Household Economy**
 - 5+ hours/day in these tasks **over and above** 7+ hours/day for women in agriculture tasks
 - **low productivity** common to **both** sets of activities
 - still not mentioned: **child care!**
 - lack of “**specialized**” time



Children: Essential Labor Force

- Integrated into production systems of the household
- Girls: 4 times more hours on productive tasks than boys
 - Of this, 1/2 in domestic tasks
 - ... while boys go to school
 - Substantial farm work:
boys 15 minutes/day
girls 40 minutes/day

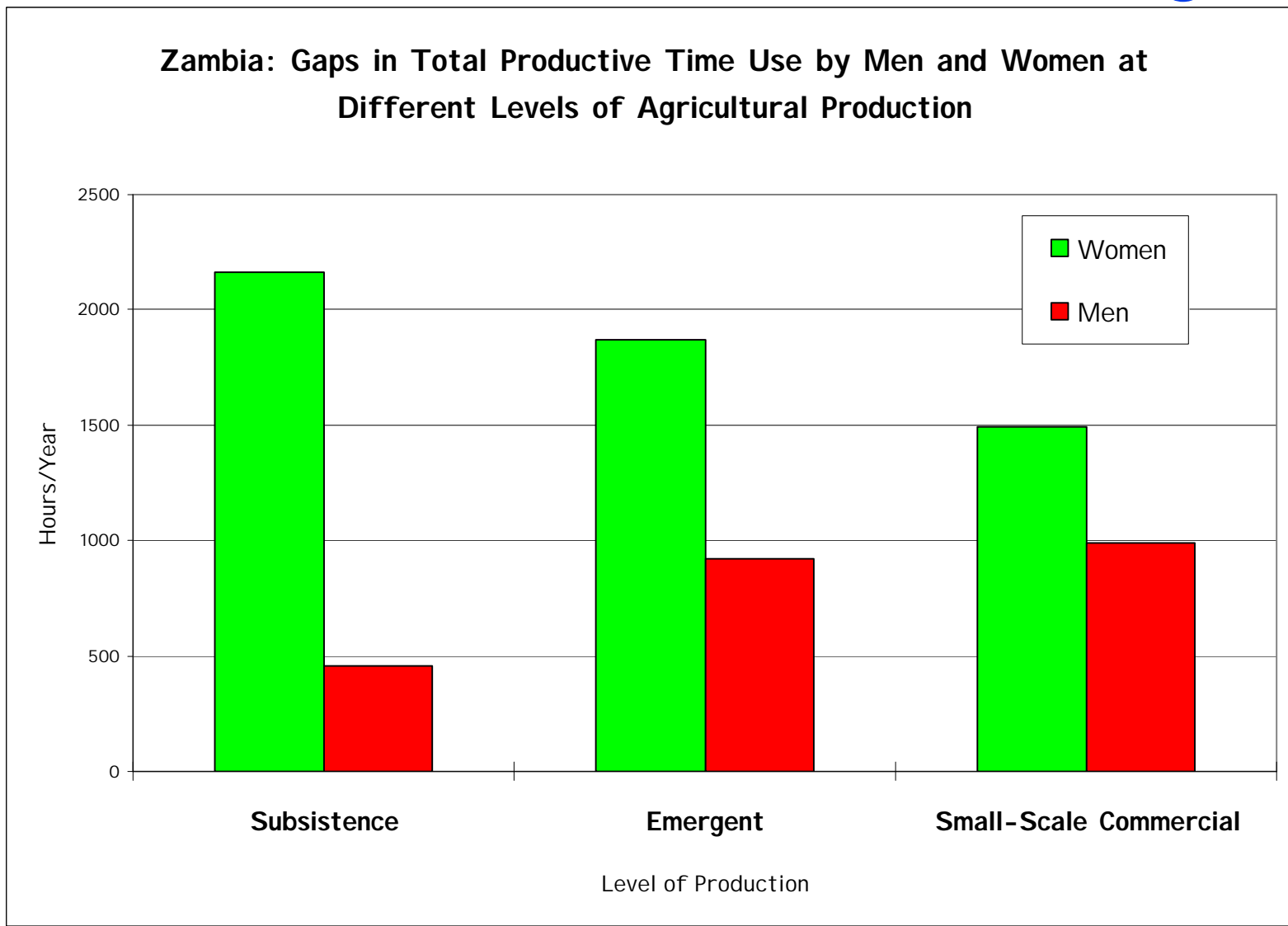


Policy Implications: 2

- **Time is a poverty problem**
 - **too little time** = trade-offs
 - scarce factor of production
 - labor scarcity as binding constraint (**child labor?**)
 - **valuation** of time (esp. women's)
 - **gender division of labor**
 - "limited substitutability" for domestic tasks



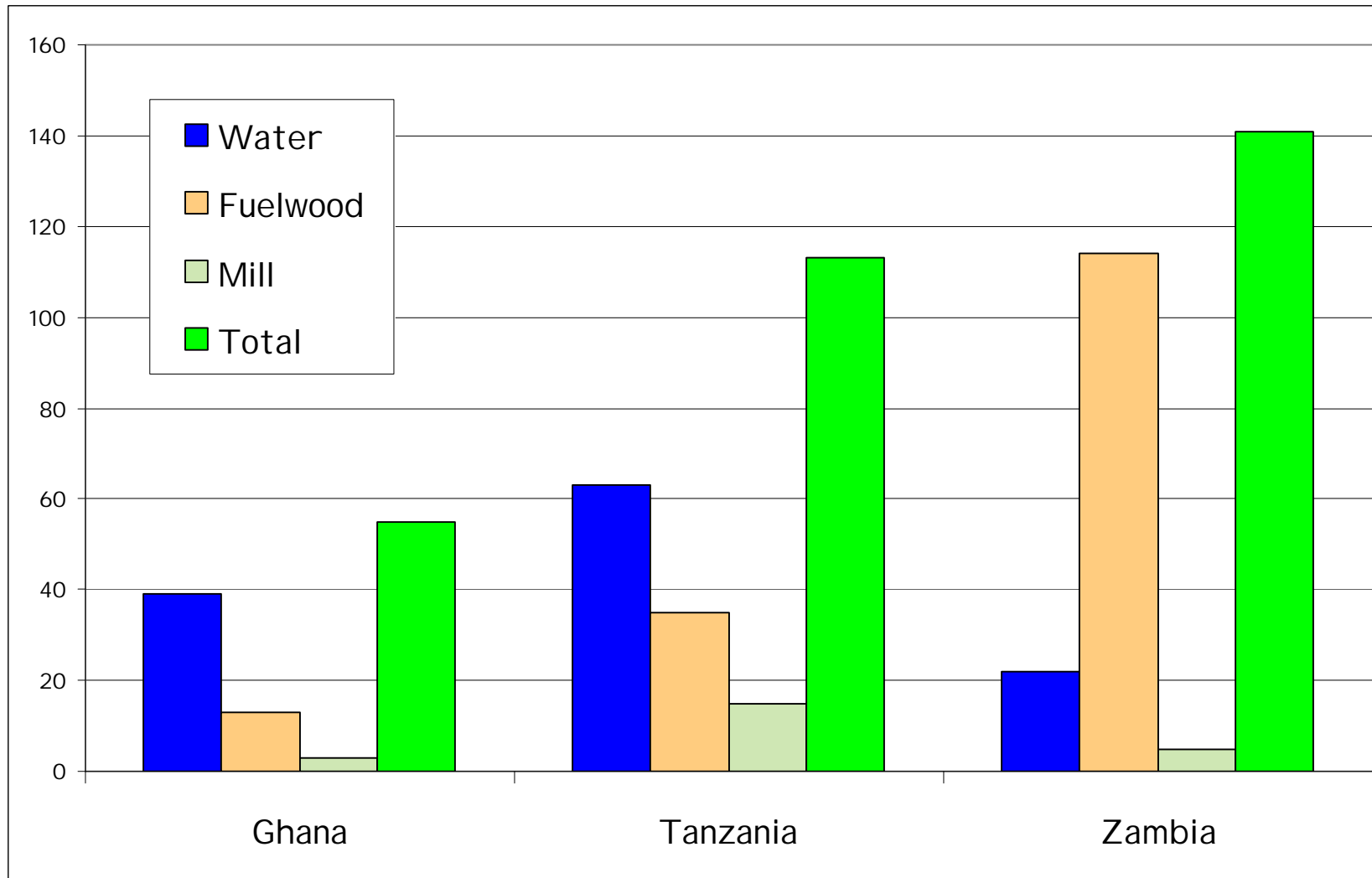
Zambia: Time & Poverty



Source: Allen 1988.



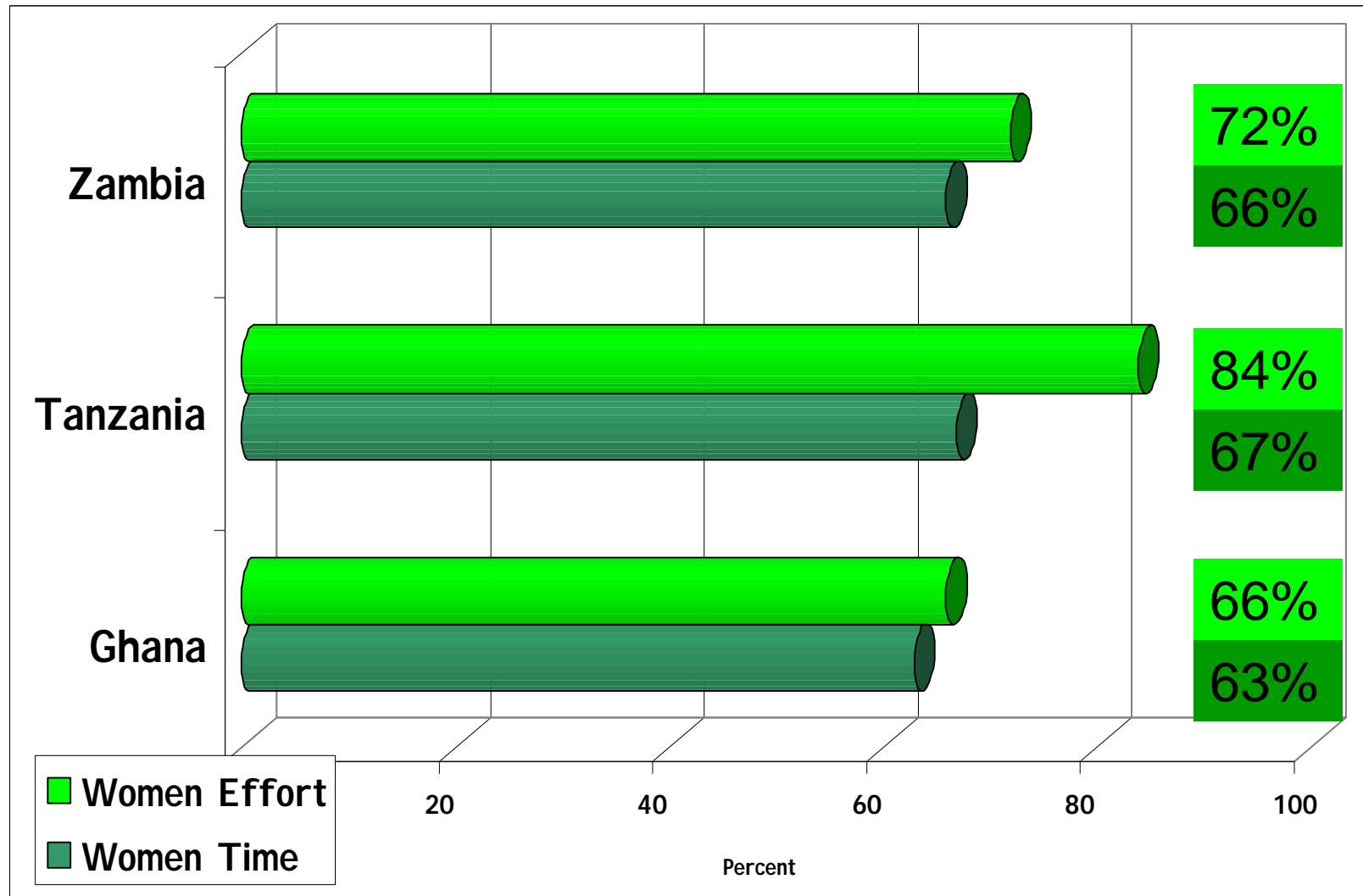
Women's Minutes/Day by Task



Source: Christina Malmberg-Calvo. 1994, *Women in Rural Transport ...*
SSTP Working Paper No. 11. World Bank and ECA.



Time and Effort



Source: Christina Malmberg-Calvo. 1994, *Women in Rural Transport ...*
SSTP Working Paper No. 11. World Bank and ECA.

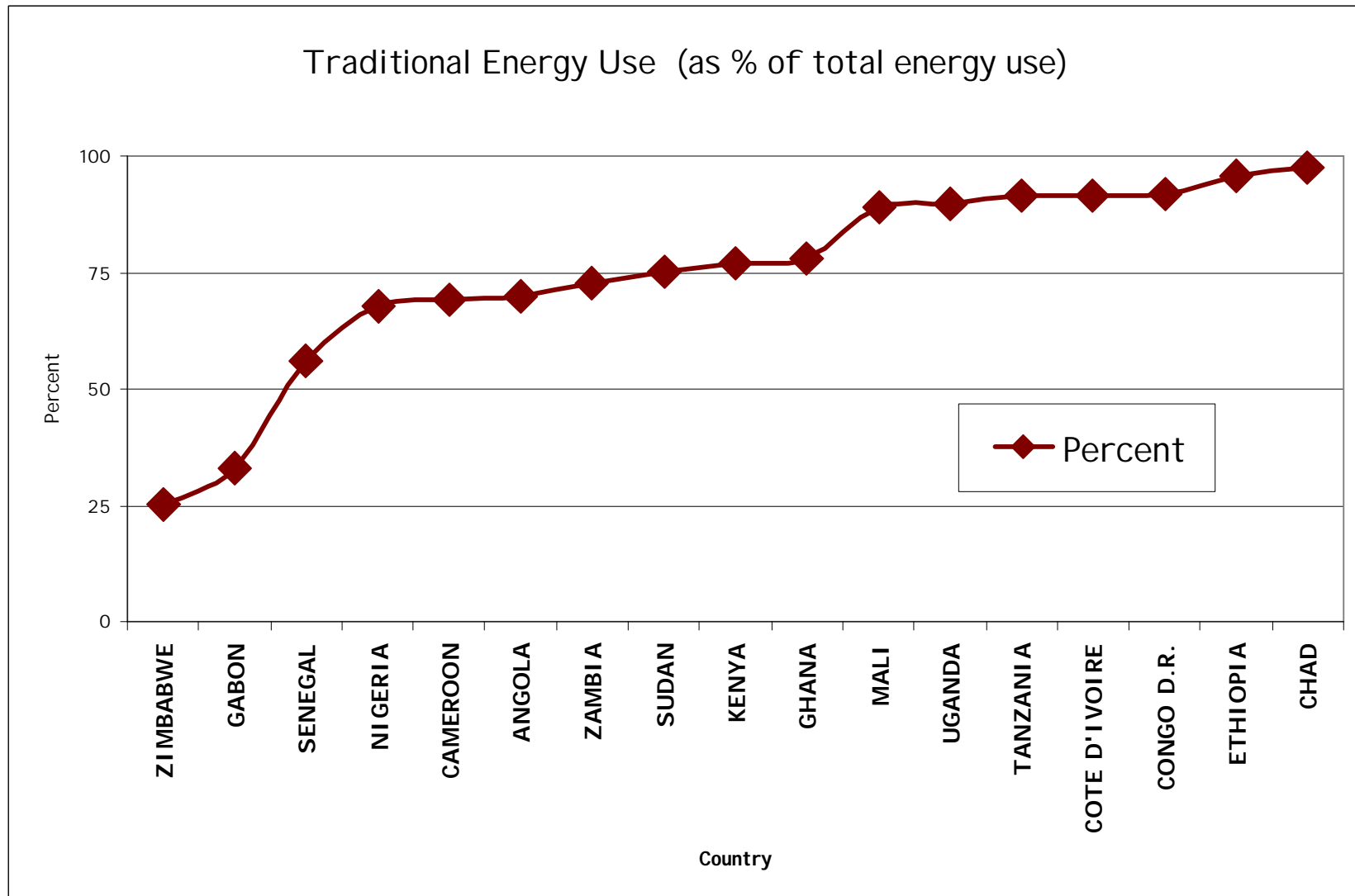


Policy Implications: 3

- Investing in the **household economy** reduces poverty:
 - give **highest priority** in PRS
 - address **ALL** key areas to ensure **benefit of time savings**
 - water supply and sanitation
 - fuelwood and domestic energy
 - labor-saving technology (mills, stoves, etc.)



Traditional Energy

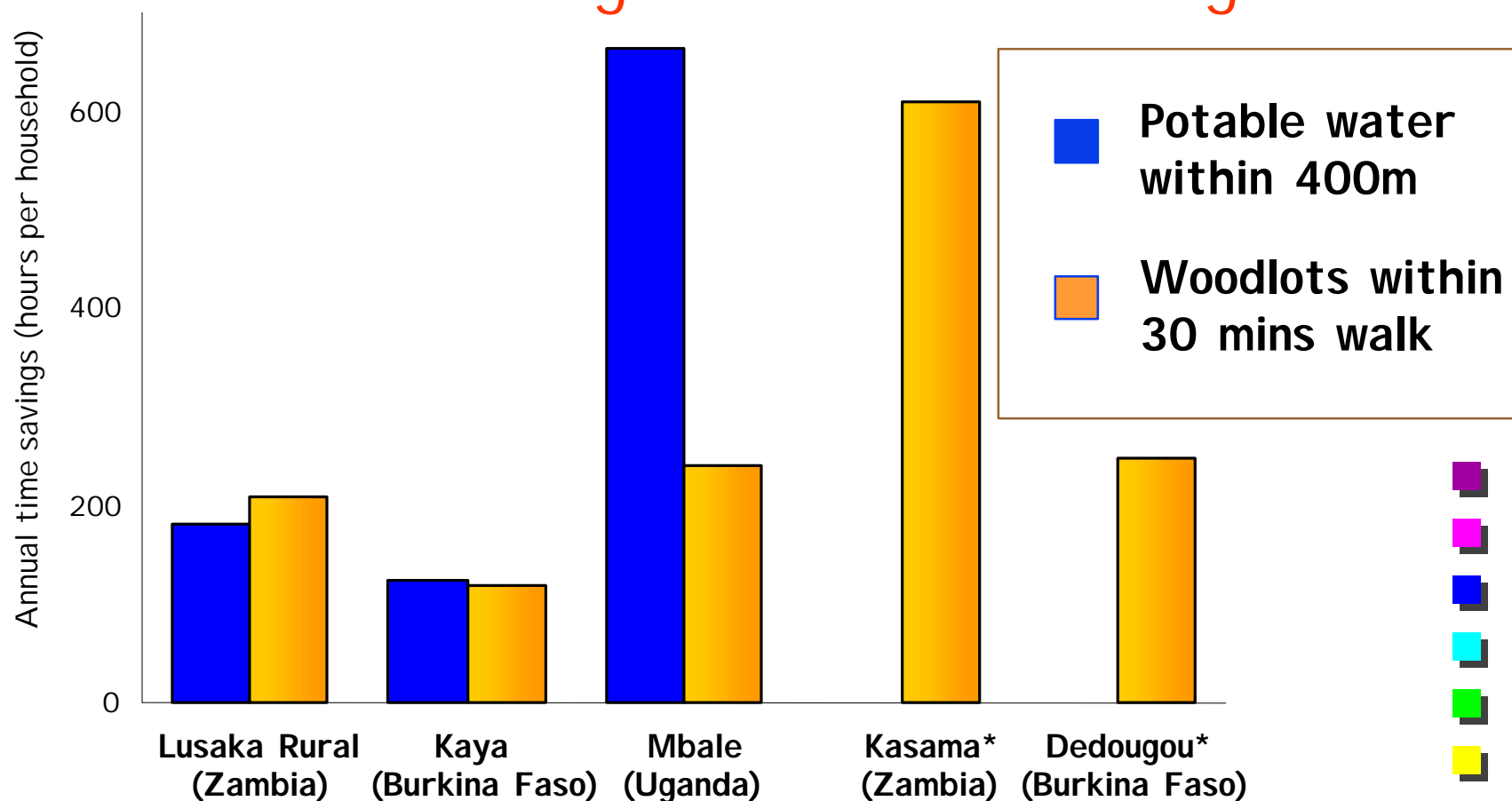


Source: World Development Indicators, 2001.



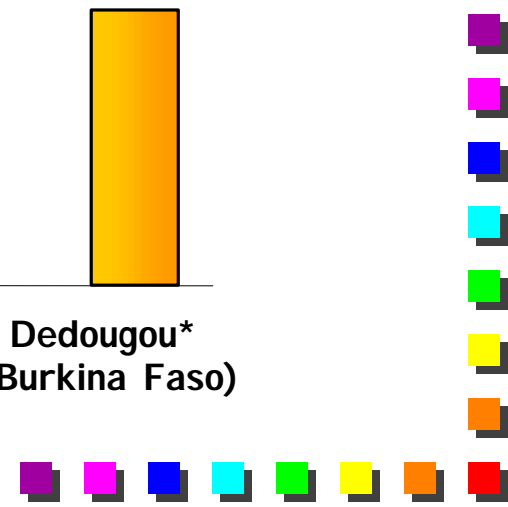
Water and fuel investments significantly reduce collection time

Potential average annual time savings



* Kasama & Dedougou already within the target for water.

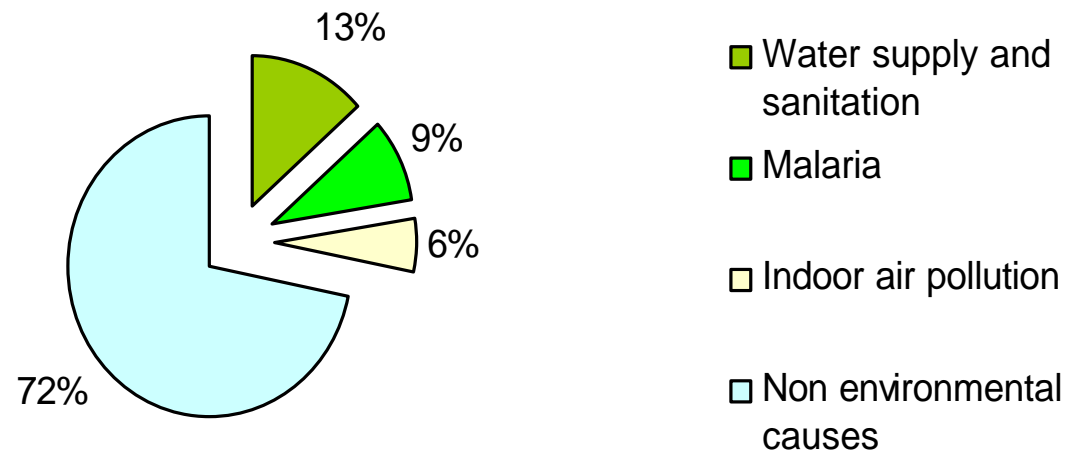
Source: Barwell 1996, in *Engendering Development*, PRR, 2001.



Environmental Health

- In SSA 30 percent of illness and death is attributable to environmental factors

% of DALYs Lost : Sub - Saharan Africa

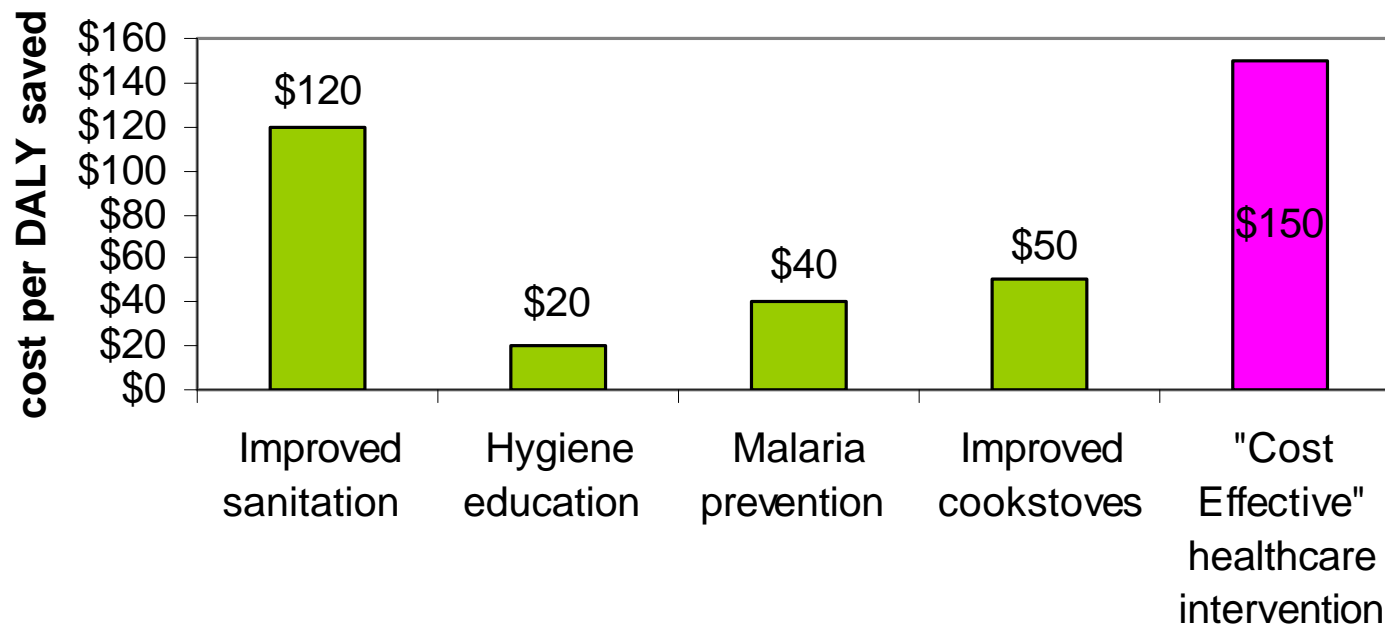


Source : Murray and Lopez, 1996.
Data mostly pre-date the effects of AIDS.

Environmental Health

- Environmental health interventions can be **highly cost-effective**

Cost effectiveness of Env Health interventions

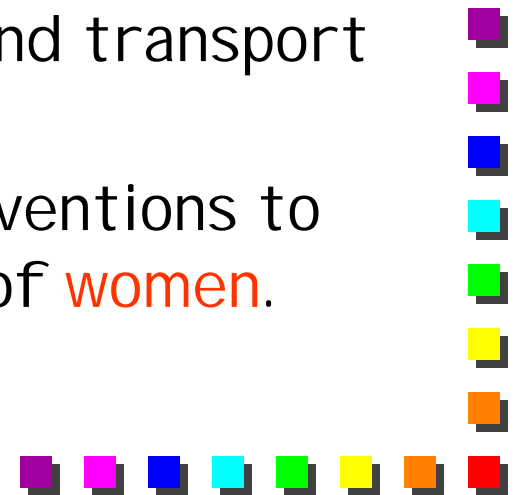


Note : Estimates vary widely, depending on circumstances. These are considered high estimates. Estimate for healthcare comes from WDR 1993.



Transport

- **Problems** in transport sector. Solutions?
- **Attitudes**: Load carrying is **women's work**,
- How can men's and women's transport activities be **redistributed** more equally?
- Transport interventions enhance **men's** mobility. Design around **different** needs:
 - Gender-inclusive access to IMT and transport technology (cultural obstacles).
 - Reorient focus of transport interventions to meet specific needs/constraints of **women**.



Domestic Energy Enhancement Program (DEEP)

- **Energy**: biomass (woodfuel)
- **Water**/sanitation: synergy
- Prioritize **domestic technology**
- **Transport**: footpaths & IMT
- Key **indicators** for PRS:
 - **water within 400 meters**
 - **woodlots within 30-minute walk**

