

**The enigma of providing clean water &  
sanitation for developing  
countries: Why does this problem persist when  
so many people are working on it?**

**John A. Dracup**

**Professor of the Graduate School, CEE Dept.  
University of California, Berkeley**

**International Water and Sanitation Symposium**

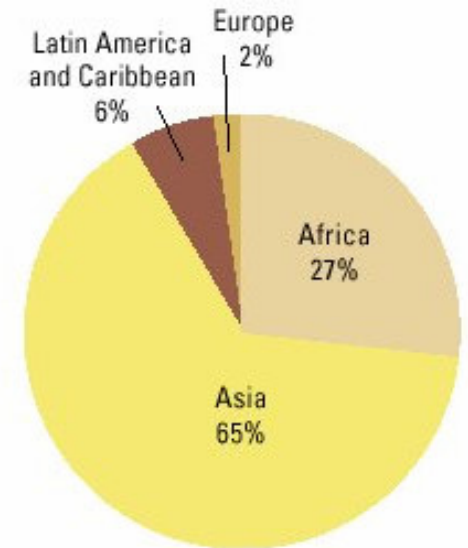
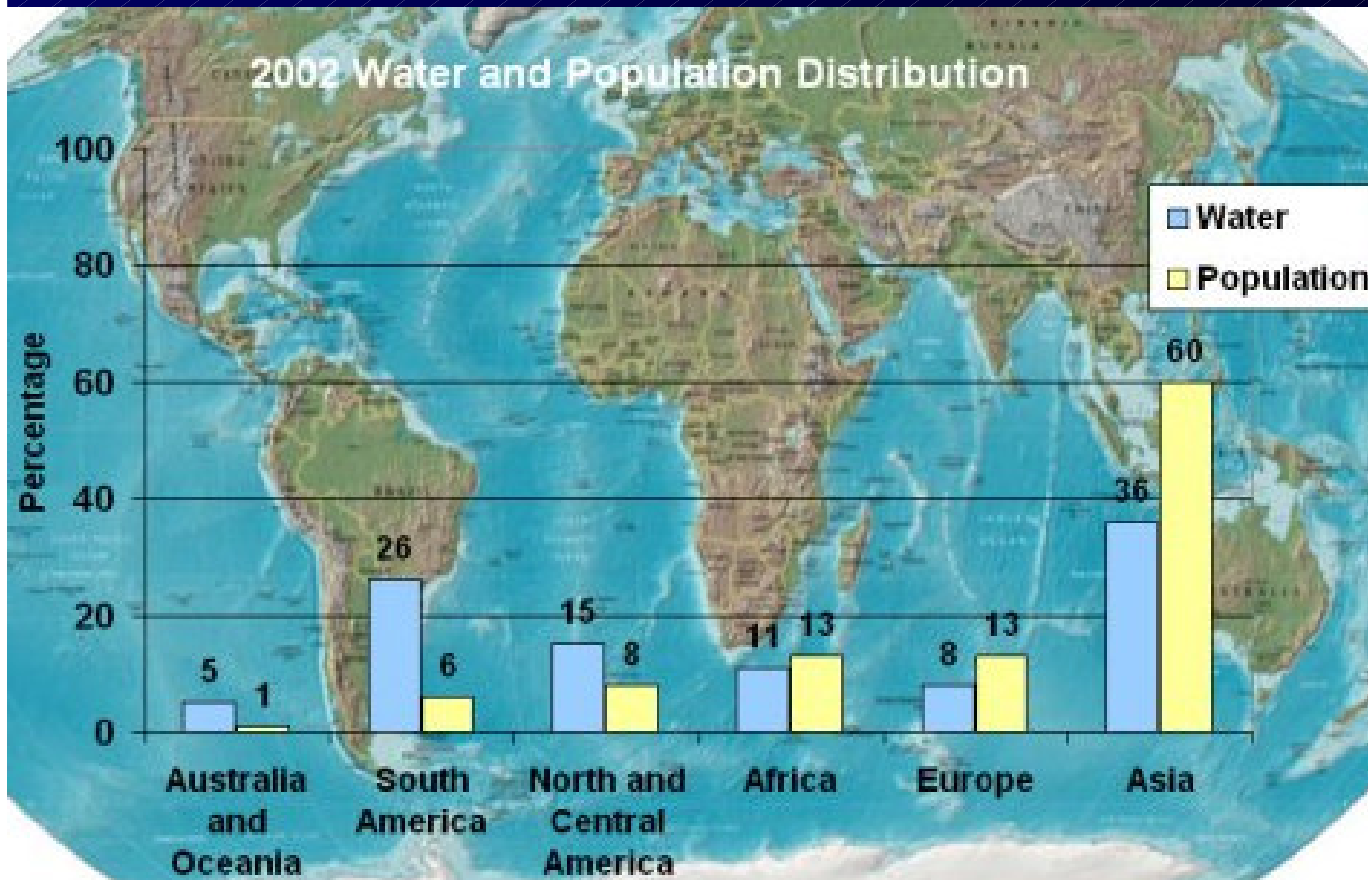
**April 10, 2009**

Richard C.  
Blum Center for Developing Economies

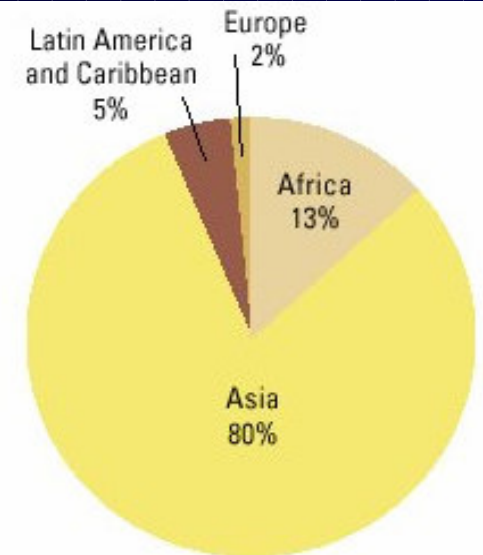
*Google it:*

**Search for "NGOs clean water and sanitation developing countries"  
and you get 307,000 hits**

# Unbalanced Distribution of Resource



Water supply, distribution of unserved populations



Sanitation, distribution of unserved populations

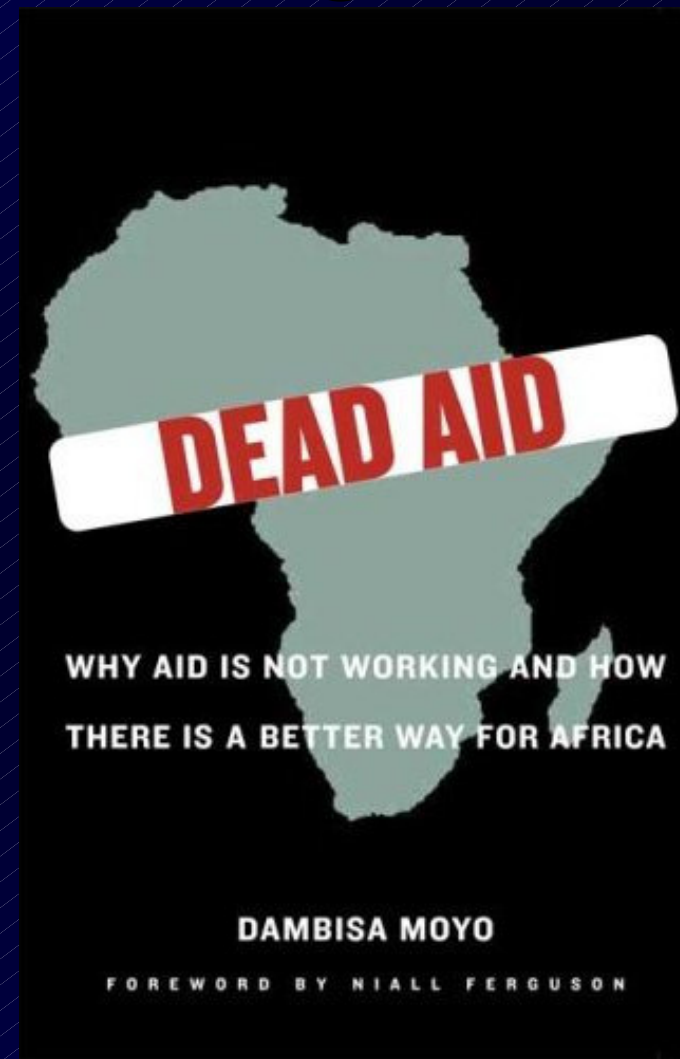
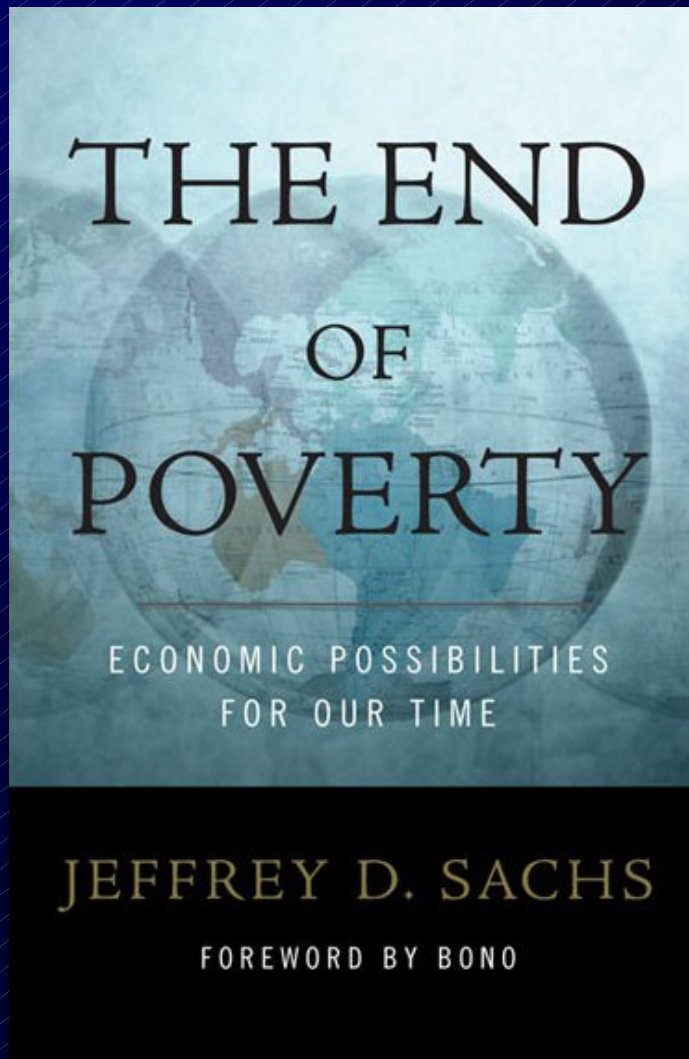
# Tests of Project Feasibility

- **Engineering/Technology:** Can we build it?
- **Economic:** Are the benefits greater than the costs?
- **Financial:** Who will pay for it?
- **Social:** Will the public accept it?
- **Environmental:** It is aligned with the environmental regulations?
- **Political:** Will the politicians approve it?

# Malawi reasons

- Poverty-induced ignorance (“we don't like the taste and smell of chlorine”)
  - Lack of maintenance for EU aid technology
  - Demography: highly rural (disperse) population
  - Groundwater contamination (lack of sewage systems)
  - Can't afford chlorine tablets
- Thanks to: Bill Rankin, President, Global AIDS Interfaith Alliance (GAIA)

# Further reading



**Sachs, Jeffrey, *The End of Poverty: Economic Possibilities for our time*, Penguin Press, NY, 2005.**

- 1. Major upscaling of public investments in Africa.**
- 2. Failures to date due to lack of savings, lack of government investments in infrastructure, cultural barriers, trade barriers, lack of innovation and high fertility rates.**

**Moyo, Dambisa, *Dead Aid: Why Aid is not working and how there is a better way for Africa*, Farrar, Straus and Giroux, NY, 2009**

- 1. Foreign aid is hurting Africa.**
- 2. Aid results in no incentives for improvement.**
- 3. Poverty levels have escalated.**
- 4. Solution: Bond markets at low interest rates and long payback times.**

**THANK YOU**

**QUESTIONS?**

**[dracup@ce.berkeley.edu](mailto:dracup@ce.berkeley.edu)**