

Agriculture, Environment and Human Health Opportunities and Challenges for Sustainable Development



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**OWEN CYLKE
WWF MACROECONOMICS**

Development and the Environment



- **Context**

- demands and trade-offs re environmental services
- environmental degradation
- rural areas and poor people – “Vulnerable Places and Vulnerable People”
- combining to threaten sustainable development

- **Sustainable Development**

- human development and the environment
- natural environment as the foundation for human well-being
- human claims define the prospects for the natural environment
- potential for sustainable development rooted at local level
- yet, national and international enabling environment

Africa, Development and the Environment:



- **Context -**
 - lead economic sector, Green Revolution, factor productivity
- **Regionality**
 - rainforest, savannah, tropical steppe
- **Structure of Production**
 - smallholder, commercial, industrial
- **Agriculture and Development**
 - structural change / economic transition
 - pathway to economic development
 - Africa's and the development escalator
 - pace of change / global and regional asymmetries / productivity gap
 - agriculture as the decisive factor for development

Agriculture, Development and the Environment



- **Green Revolution**
- **Structural Adjustment**
- **Rise of the Global Agro-food System**
- **Demography and Big Numbers**
- **Options**
 - markets
 - productivity
 -
 - it's development stupid
 - pro poor / pro green

Climate, Development and the Environment



- **Climate Change**
 - increased rainfall variability, long term drought trends, reductions in cultivable land, and length of growing season,
- **Adaptation**
 - ecosystems approach / environmental standard
- **Mitigation**
 - carbon sequestration / carbon credits / environmental standard
- **Tensions**
 - regimes / industry / fertilizers / biofuels
- **Green Heart of the Global System**
 - continental initiative

Food Security, Development and the Environment



- **Global Demand for Food**
 - 9 billion – 2050 – 70 percent increase in production
- **Local Access to Food**
 - incomes / nutrition / smallholders
- **Conservation / Sustainable Agriculture**
 - sensitivity to the environment / role of perennials
- **Payments for Environmental Services**
 - use and users / climate
- **Structural Change / Economic Transition**
 - it's development stupid

And Health?



- **Sustainable Development**

- clean water, sanitation and household energy - pneumonia and diarrhea
- environmental management - infectious disease outcomes
- non-communicable diseases - consumption patterns
- shared health agenda - diseases that are environmentally related

- **Demography**

- perhaps the principal challenge to sustainable development

- **Nutrition**

- billion people are hungry – three quarters and and 70% in rural communities – improving smallholder agriculture key to ending poverty and hunger

- **USAID – Food Security**

- nutrition
- vulnerability

Rural Futures



...being an agent for sustainable growth and development implies more than sectoral and technical intervention. In- deed, the real problem pressing Africa is not the dearth of intervention, rather that development needs to happen. Yet, development practice is evolving within increasingly tight technical boundaries losing connectivity between boundaries, but also losing connection to an understanding and shared vision for development and the future of our rural system. Development practice has also taken on a pessimistic tone, focused as it is on challenges and constraints. Greater attention to opportunity might help to moderate that pessimism and create an affirmative prospect for development – for our rural communities, habitat and endeavor. Difficult, perhaps; but a worthy goal for us

Dr. Ibrahim Assane Mayaki, NEPAD, Chief Executive,
South Africa, 2010