Bioenergy Strategies

CAPTURING THE OPPORTUNITIES;
MINIMIZING THE RISKS

MELINDA KIMBLE
UN FOUNDATION
What are the Opportunities?

- Development requires energy
- 80% of global energy mix is fossil fuel
- Energy demand will increase 40% by 2035
- Even to maintain 10-12% of total energy supply; bioenergy use will expand.
- Bioenergy is unique
  - Transport
  - Combined Heat and Power
  - Mechanical Energy
  - Baseline power in combination with solar/wind
What are the Risks?

- **Food production must also increase – 35% by 2035.**
  - Reality: Reducing post-harvest loss and doubling yields in Africa would address this challenge.

- **Bioenergy production will compete with food.**
  - Reality: Bioenergy can improve food production (co-products, soil treatments).

- **Agricultural efficiency/productivity will remain low.**
  - Reality: Efficiency gains are needed in all areas.

- **Agriculture is energy-intensive**
  - Reality: Integrated bioenergy systems at the farm level can reduce this problem.
What is Needed

- **Policies are central to bioenergy development**
  - GBEP offers support in adopting policies; testing strategies

- **Systems are needed**
  - Bioenergy development must be integrated into overall energy and agricultural sector planning
  - Processing systems; storage capacity
  - Distribution systems; technology applications are necessary

- **Markets are essential**
  - Ethanol and biomass need global markets; these are emerging but too slowly.
  - Biodiesel products are more easily traded.

- **Finance and equity investment are essential**