## Brazil Case Study: Key Challenges for LCG in Land Use and Forestry LUCF

- Brazil's GHG emissions nearly equal China's except bulk is from land-use
- Estimation of current land use changes

   Requires ag, land-use, including livestock and
  - forestry—more complex than power
- Agricultural growth at static yields requires increased lands to ensure econ growth
  - Inertia & current price trends lead to more of the same
  - How to change?

## Brazil Case Study: Barriers to Implementation of LCG in LUCF Sector

- Challenge: Huge, largely uncontrolled area
- Need to cut down on deforestation
  - Cut down on treadmill deforestation (clearance for low productivity for pastures)
  - Use existing ag land more intensively and productively, especially the pasture land
- Need to reforest to improve C storage and uptake
- Others:
  - Reduce livestock emissions
  - Reduce ag emissions

## **Brazil Case Study: Policy Implications**

- Huge challenge to understand incentive structures and to regulate, monitor, alter them
- Reduce illegal logging (costs)
- Ag extension services to improve ag productivity across huge, largely area
  - Informal agriculturalist operate outside of systems
  - Land titling/ownership rights
  - Access to credit, increasing intensity requires capital
- Reforestation: proper mix (costs, revenues)
  - plantation (revenues)
  - protection of legal reserves (perhaps no revenues)