The Biofuel, Food and Environment Trilemma

G. David Tilman
The Biofuel, Food and Environment Trilemma

- Meeting food demand over the next 50 years would require from 1 to 1.5 billion hectares of new crop and pasture land.
- Significant additional land could be cleared under certain biofuels strategies.
- This introduces potential serious conflicts between food production, energy production, and the environment.
The Biofuel, Food and Environment Trilemma

- This trilemma is solvable with the right investments
  - In the agricultural infrastructure of developing countries to increase yields
  - In meat-production systems
  - In crop-breeding and agricultural technology to further increase yields
  - In sensible biofuels programs that target already-cleared or degraded lands of low agricultural or ‘environmental’ productivity