

Land subgroup coordination synthesis and discussion

*Land Modeling Subgroup
EMF-22 Working Group Meeting
Climate Change Control Scenarios
Tsukuba, Japan, December 12-14, 2006*

Discussion topics

- Coordination experiment
- Subgroup future
- Full subgroup coordination exercise

Discussion topics

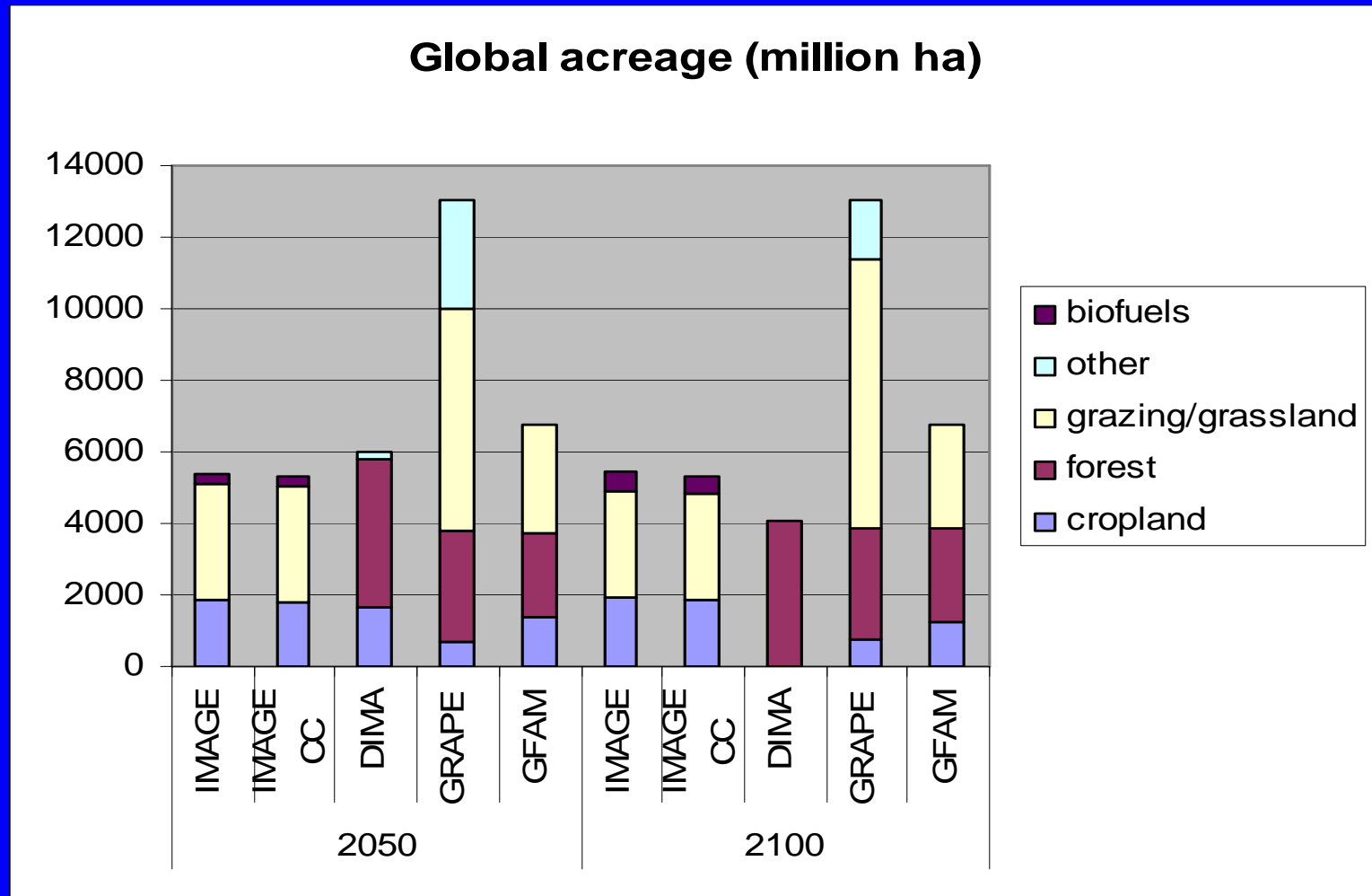
- Coordination experiment
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Coordination scenarios

- Coordinated baseline scenarios attempted by
 - IMAGE
 - GRAPE
 - GFAM
 - DIMA/MESSAGE
 - GCOMAP
 - FASOMGHG2

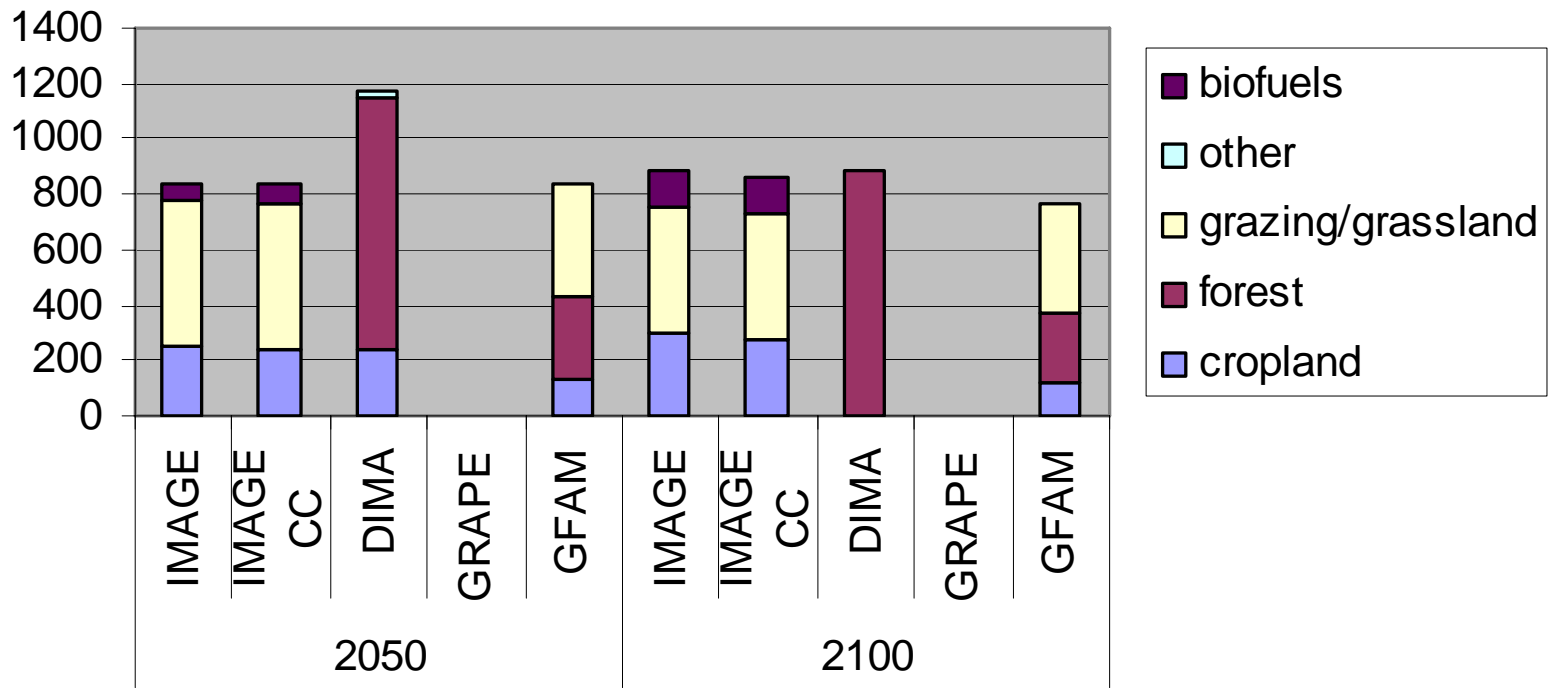
**No policy insights here, just food for
thought**

Global land area

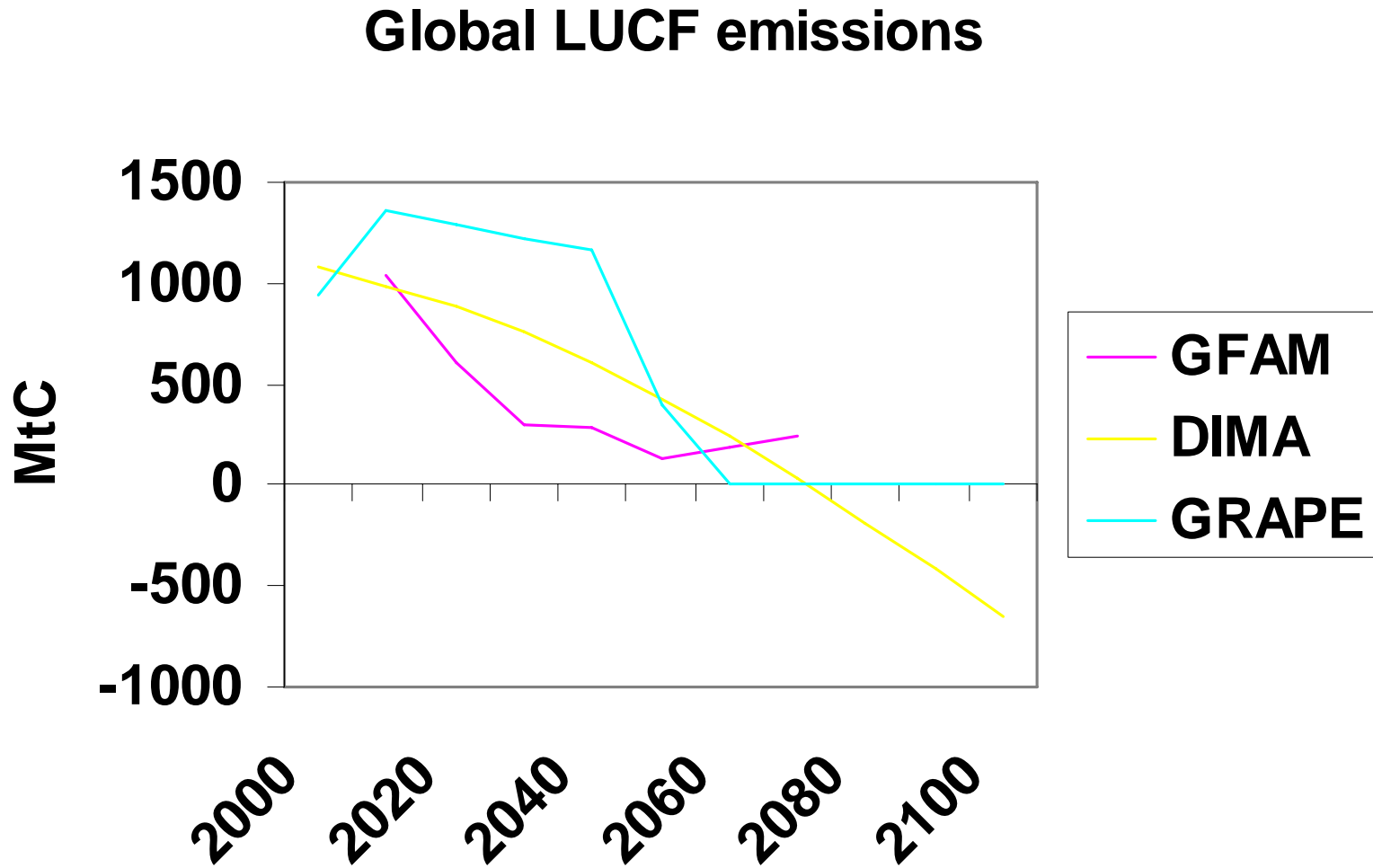


Latin American land area

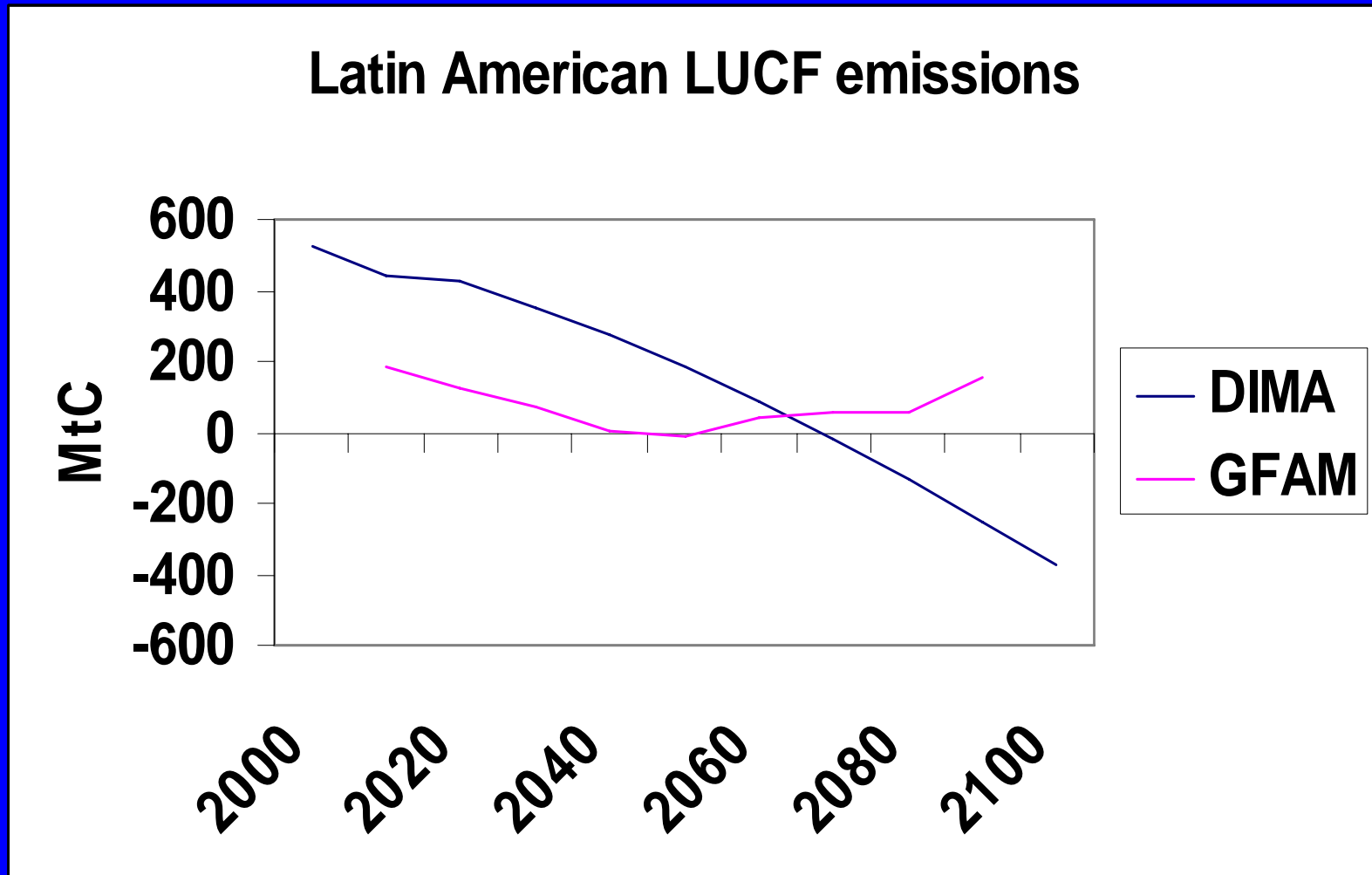
Latin American land area (million ha)



Global LUCF emissions

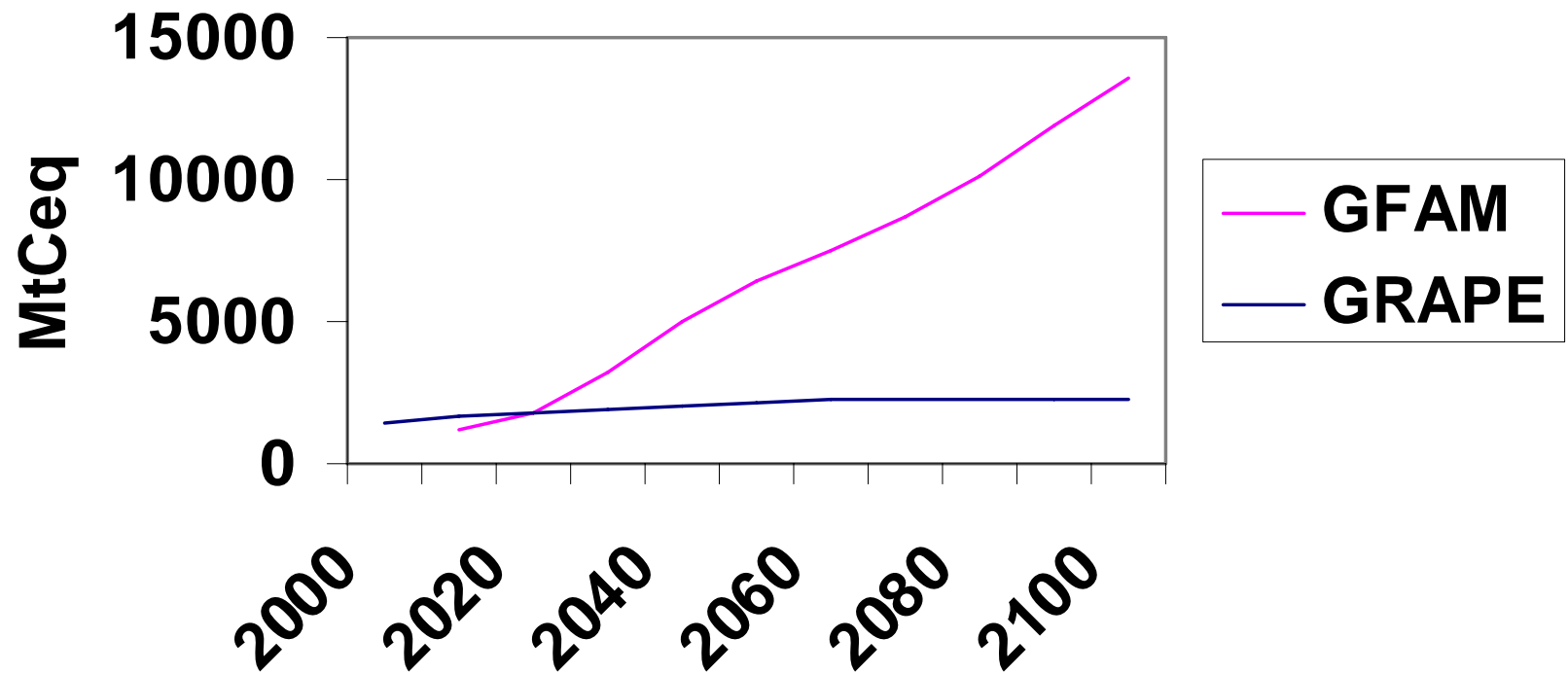


Latin American LUCF emissions



Global agricultural emissions

Global agricultural emissions



Many opportunities for comparison (global and regional)

E.g.,

- Production – ag and timber
- Trade
- Bioenergy supplies, demands, GHG benefit
- Land rents
- Growth rates
- Base year land-use cover

Lessons learned

- Some issues raised
 - Deriving commodity demands from GDP
 - Ag tech change coordination
 - Forest tech change
 - Detailed forest area change data requirements
 - Food preferences
 - Satisfactorily addressed?

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Future coordination exercise

- **Goal: In the spirit of EMF, facilitate model comparison**
- **Method: Coordinate on some basic assumptions**
- **Product: Journal Special Edition – comparison paper and model specific papers**
- **Steps/timeline:**
 - **Design coordination exercise**
 - **Develop proposal for soliciting journal**
 - **Fall 2007? Present coordinated scenarios and preliminary comparison results**
 - **Dec 2007/Jan 2008? Deliver draft papers for review...**

Discussion questions

- **Desirability? Feasibility?**
- **Design?**
 - **Own baseline**
 - **1-2 coordinated baselines**
 - Different assumptions
 - With and without climate/atmospheric feedbacks (for IAMs primarily)
 - **Lean set of coordinated baseline assumptions**
 - Population
 - GDP
 - Agricultural technological change (for land use subgroup)
 - No climate policies
 - No climate/atmospheric feedbacks
 - **Additional coordinated scenarios**
 - Sensitivity runs on technological change?
 - Mitigation scenarios (coordinate baseline and climate policy)

Alternative proposals encouraged!!!!!!

The End