



Brazilian Bioethanol Science
and Technology Laboratory



LACAf I – Production Scale Report out

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Discussion points and main findings

- ✓ Integrated production of *cachaça*, ethanol and livestock products (e.g. meat, milk)
 - Economic and technological conditions for sustainable production of ethanol in microdistilleries
 - Energy self-sufficiency (cooperatives and associations)
 - Energy independence and value adding strategies at the farm level

- ✓ Biofuel production chains assessment
 - Virtual Sugarcane Biorefinery
 - Integrated assessment of agricultural, industrial and transport logistics associated with ethanol production

Discussion points and main findings

- ✓ Life cycle assessment of bioenergy production systems
 - Important outcomes associated with alternative crops (e.g. sweet sorghum) to increase biorefinery economic efficiency
 - Environmental impacts should not be overlooked, particularly regarding to the use of pesticides
- ✓ Sugarcane microdistilleries in Southern Brazil
 - Economic viability is a critical point
 - Integration with other activities (i.e. dairy, sugar, chachaça) seems to be key to the overall sustainability of the project
 - Potential to increase energy self-sufficiency at farm level

Discussion points and main findings

- ✓ Socioeconomic impact of ethanol production in Mozambique
 - The impact of sugarcane cultivation (5 million ha) in Mozambique maybe relatively small
 - More knowledge is needed as the regional impact of ethanol biorefineries
- ✓ Potential an location of new ethanol mills in Mozambique
 - Explore potential sugarcane expansion areas in eight provinces
 - Select proper biophysical and socioeconomic indicators to rank regions according to is suitability to produce sugarcane and accommodate sugar mills

Way forward

- ✓ Outline a work plan as to the different papers (projects) discussed during the meeting
- ✓ Engage partners, particularly those in Lacaf countries, i.e. Mozambique, Colombia and Guatemala, in the design and development of following activities, which includes:
 - Papers' objectives and research questions: tailor made adjustments to address scientific and regionally relevant research questions
 - Methodology and tools (e.g. models): incorporate and share information as to the use and integration of different models
 - Upcoming field work and visits: strength and expand our current network to reach new experts, hopefully keen to collaborate with Lacaf



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Thank you for your attention!

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