



Friends of
the Earth
International

The social impacts of producing biofuel in tropical countries

Longgena Ginting
Friends of the Earth International

the central questions of liquid biofuel efficiency



- Consideration of **whether it takes more energy** to produce (to grow, process, transport and delivery) the ethanol or biodiesel than we can get out ethanol or biodiesel when we burn it
- Evaluation of whether the production of such energy crops presents a significantly **lower direct and indirect environmental and social costs** than fossil fuel production

and the consequences...

The question of efficiency of biofuels is **contentious**, however the efficiency must be considered from a comprehensive perspective:

- Energy and land resource utilisation (where and whose land?)
- Associated ecological and social costs incurred in its production, distribution and consumption

Please refer to studies done by:

- David Pimentel of Cornell University (2001)
- Prof. Ted Patzek of Univ. Berkeley (2005)
- Marcelo E. Dias de Oliveira, Burton E. Vaughan, and Edward J Rykiel, Jr. of Cornell University (2005)
- Pimentel and Patzek (2005)
- EEB (2005)

hidden ecological and social costs

- Intensive liquid biofuel production, especially for transport will develop a competition in land use of between **land for food security and conservation** purposes and **land for fuel**
- Producing biofuel with the current demand level for industrialised countries will certainly have a catastrophic social impact, aggravating existing land conflicts, irrational land-use patterns, etc.
- Also other consequences for ecosystem health and biodiversity, such as: forest destructions, forest fires, soil erosion, agro-chemical, palm oil mill effluent (POME), etc.

- National food policy and people's food sovereignty
- Intensify land rights violations of indigenous and local communities
- The large-scale monoculture scheme is often generating more severe poverty and turns rural landowner communities into labourers
- Plantations workers (especially women) are regularly exposed to toxic substance
- Violence and conflict between local communities with company
- Loss of biodiversity and those species that are able to survive in the new environment of the plantation frequently come into conflict with humans

concerns and conclusions

- Much of bio-liquid fuel will be used in the transport sector, diverting the available fund resources available which can be used to improve technical adaptations in the vehicles including in hybrid vehicles, the efficiency of fuel as well as installing structural changes to reduce energy consumption levels

concerns and conclusions

- ‘Energy plantation’ will directly put the land in the competition between the food production and conservation with the demands of consumers in wealthy countries (the economy system has ensured the global increase in crop production for animal feed, when there are 800 million people who are permanently malnourished all over the globe today)
- Devoting a significant part of cropland to satisfy the non-sustainable lifestyle of developed countries is certainly shifting the problem to the developing countries