



Tropentag, September 18-21, 2016, Vienna, Austria

“Solidarity in a competing world —
fair use of resources”

The International Soy Market - A Fair Production Alternative for Smallholders in Paraguay?

JOHANNES MÖSSINGER, MATTHIAS SIEBOLD

University of Hohenheim, Inst. of Agricultural Sciences in the Tropics (Hans-Ruthenberg-Institute), Germany

Abstract

Ranking fourth in the list of soy exporters, behind the big global players Brazil, USA and Argentina, Paraguay is stirring up in the world of soy business. Currently Paraguay is reforming its policies for the agricultural sector to meet the demand of the global markets and to be part of the global bioeconomy. Its soy frontier is expanding, and processing facilities are installed to enhance the soy value chain. An international civil organisation, called Round Table on Responsible Soy, promises good agricultural practices and environmental responsibility. Smallholders, as a significant part of the Paraguayan agricultural sector, struggle to cope with the environmental damage caused by cash crop production for export, social conflicts related to land ownership, a lack of suitable cash crops alternatives and start to plant soy.

However, crucial questions still beg for answers: Does soy constitute a fair income alternative and is it the most attractive strategy for small-scale farmers to participate in upcoming bioeconomic markets?

This study investigates the social and economic conditions of the soy business in the district of San Pedro del Parana, Itapúa. The Net-Map tool illustrates the actors involved, their linkages and the decisive positions in the soy business. A farm-based mathematical micro-simulation model, based on representative crops and livestock production as well as own-consumption, is used to analyse data related to smallholder farm labour, costs and revenues. Gross margin opportunities of the soy business for smallholders are compared with actual production schemes and further bioeconomic crops, such as the multipurpose palm *Acrocomia totai*.

Preliminary results suggest a scenario where technological progress and the conditions of (inter-) national markets hits unprepared and weak social smallholder structures, which results in unfair deals and poor economic decisions.

The conclusions help to describe what economic and social barriers, smallholder farmers will have to overcome if they wish to participate in upcoming bioeconomic markets.

Keywords: Bioeconomy, mathematical programming, net-map, paraguay, smallholder, soy