Sustainable Production of Bioenergy: A Road for Market and Smallholder Oriented Rural Development for Poverty Alleviation

MANFRED VAN ECKERT

Deutsche Gesellschaft für Technische Zusammenarbeit (GTZ), Division Agriculture, Fisheries and Food, Germany

Abstract

The demand for energy from biomass (bioenergy) and liquid biofuels is increasing all over the world. Drivers for bioenergy are the uncertainty of future domestic energy supply, the increasing demand for energy worldwide with sharply increased energy and oil prices as well as the need for reducing GHG (green house gas) emissions in order to achieve the targets defined in the global climate change policies.

Bioenergy is seen as an opportunity for enhanced market and smallholder oriented rural development in many developing countries where comparative advantages of bio energy production exist. Private investors and companies are increasingly acquiring land and prepare for large investments in industrialised monoculture oriented systems for bioenergy production in the rural areas of many developing countries. However, a comprehensive set of sustainability criteria needs to be fulfilled for the expansion of bioenergy in order to ensure its ecological effectiveness as well as to prevent ecological damages and to ensure that social standards and the right to food are maintained. These sustainability standards will become the requirement for access to the european markets and are supportive for fostering smallholder oriented bio energy value chain development.

This contribution will it will present results of an assessment of bioenergy potentials and the possible impact of a national bioenergy policy for bioenergy.

Furthermore it will outline the key elements of out grower concepts for smallholder focused bioenergy production systems for palm oil and sugar cane production and will briefly describe the costs and benefits for decentralised electrical grid and biofuels production systems based on the jatropha shrub (Jatropha curcas) and kapok tree (Ceiba pentandra).

Keywords: Bioenergy, bioenergy strategies, economic policy, impact of national bioenergy policies and targets, investment in agriculture, jatropha, kapok, poverty alleviation, rural economic development

Contact Address: Manfred van Eckert, Deutsche Gesellschaft für Technische Zusammenarbeit (GTZ), Division Agriculture, Fisheries and Food, Dag-Hammarskjöld Weg 1-5, 65760 Eschborn, Germany, e-mail: manfred.eckert-van@gtz.de