Obstacles and opportunities for Southern African biofuel: policies and production of biofuel from oilseed and waste-oil in Zambia and South Africa.

Takala-Greenish Lotta*1,2

1University of the West of England [Bristol] – Royaume-Uni
2University of Johannesburg – Afrique du Sud

Résumé

This research explores the current state of biofuel policy, production and processing across Zambia and South Africa. This draws on exploratory fieldwork investigating the scope and actual activities of producing biofuel from soy, jatropha, other oilseeds and waste-oil. The growth in oilseeds farming and processing has been driven by the demand-pull effects of the animal feed industry. One of the by-products of the oil-cake-to-feed extraction is unprocessed grain or vegetable oils. These face a small market demand and high competition resulting in additional disposal costs for the processors. Since 2005 in South Africa and 2008 in Zambia, policy frameworks have been developed to support the set-up of biofuel project sites, legal and pricing frameworks, and distribution channels with the view to developing large-scale biofuel production.

According to Pradhan & Mbohwa (2014, p.1089), "developing biofuels has many advantages, such as efficient utilization of renewable resources; enhanced energy security and energy supply diversification; enhanced rural agriculture development and investment in rural areas; reduced greenhouse gas (GHG) emissions; and increased jobs and improved livelihood." A related discourse and optimism also surround the prospective impact of agro-processing as the source of growth, employment, poverty-reduction, and industry development. "The prospects for continued growth in demand for value-added food and agricultural products constitute an incentive for increased attention to agro-industries development within the context of economic growth, food security and poverty-fighting strategies. Agro-industries, ..., understood as a component of the manufacturing sector where value is added to agricultural raw materials through processing and handling operations, are known to be efficient engines of growth and development.” FAO & UNIDO (2009, p.1-2)

The obstacles and opportunities have been framed within a debate on agro-industrialisation drawing on price-pull effects after the commodity price boom, the growth of poultry production to created demand for oilseeds, and fears about energy dependency. Despite a growth in sector and policy studies on biofuel in these countries, the mechanisms and outcomes remain untested and unimplemented and the conceptual approach presents a number of open questions. Whilst the individual settings and drivers are different, there are common features across the two countries. Expectations of policy implementation have not been borne and future developments in large-scale production of biofuel form oilseed processing remain unlikely. At the same time, there are pockets of successful biofuel production in micro-processing (test)sites using non-food products such as waste oil or indigenous plants such
as Jatropha. Despite a policy rhetoric, the main obstacles and inertia seems to be around the finalisation and implementation of the policies. These point to the power struggles and tensions between key interest groups that continue to obstruct the development of this and other innovative industrial activity. These reveal important information about the policy environment and mechanisms to develop new industries.

Mots-Clés: Biofuel, agro, industrialisation, Zambia, South Africa