

B) The socio-ecological dimension of the biodiesel programme in Brazil

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As the world largest ethanol producer until last year, and with the longest R&D project in Latin America (since 1975), Brazil turned from a 90 per cent oil importer in 1970 to a self sufficient producer, with biofuel as the second energy source in 2005. In this energy policy context, the recently increased international demand for green energy has opened a new economic opportunity for Brazil. In principle, the large agricultural areas and suitable climate provides a special ecological advantage to grow a variety of feedstock (e.g., sugar-cane, soy, castor oil, palm oil). The 30 years of Pro-Alcohol provides a technological and infrastructural basis on which ethanol production can be scaled up for larger domestic consumption and the export market. The experience learned from ethanol production development can be applied to other biofuel products (e.g. biodiesel). On the other hand, the potential environmental (e.g., new forest clearings, water pollution, soil degradation), and social costs (e.g., control by large farmers, effect on food prices, rural unemployment) are major concerns related to biofuel production.

Recently, the Brazilian government decided to expand the production of ethanol and to launch a new programme to foster biodiesel production. The Biodiesel Programme was created in 2005 with an institutional framework for the production, distribution and commercialisation of biodiesel, as well as investment in R&D programmes. In addition to the goals of reducing diesel imports and increasing production of “clean” energy and fuel supply in the world market with competitive prices, the Biodiesel Programme aims to include small farmers in the feedstock production through the creation of the social fuel stamp. The social fuel stamp is a certification system which encompasses tax incentives, credit lines and technical support for small farmers in arid and semi-arid regions in producing oleaginous seeds such as castor oil and palm oil to supply the biodiesel processing plants. This institutional mechanism is meant to increase the ability of small farmers organized in associations and/or cooperatives to compete with large soybean farmers.

The discussion on social implications of biofuel production in Brazil has been polarized between highly optimistic arguments of solution for sustainable energy and rural development by the federal government and harsh criticisms on the perverse outcome of benefits to the agribusiness in expense of further deforestation, threat to food security, and negative impact to small farms. However, aggregated figures and generalized conclusions are not enough to assess the social outcomes of the Biodiesel Programme. The goal of this project is to evaluate the role of the social fuel stamp on different areas in Brazil. Instead of embracing or rejecting the value of social fuel stamp, we plan to assess its potential and limitations at local and regional levels based on empirical analysis.

This project will be carried out with collaborators in Brazil. The main products from this research will be scientific publications. In addition, a seminar on the “Social Dimension of Biofuel Programme in Latin America” will be organized. Finally, a book or special issue on the subject will be also discussed with colleagues in the field.