



Biofuels Newsletter



Connecting People's Capacities

Issue 1 – May 2010

Dear reader,

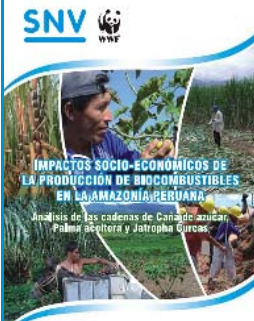
We are very pleased to present to you the first issue of the SNV Biofuels Newsletter. We intend to provide you every four to six months with a digital update of our activities in the field of biofuels and hope you will enjoy reading these brief reports.

In this issue:

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Impact assessments to orient sustainable and inclusive biofuels production in the Amazon

SNV and WWF analyse socioeconomic and environmental risks and benefits



Peru possesses a large potential for biofuel production. In that context, the Peruvian government approved the Law for the Promotion of Biofuel Markets and subsequent regulations, with mandatory blending of biodiesel and ethanol. Given the proposed change in the Peruvian energy matrix, SNV together with the World Wildlife Fund (WWF) implemented a project to analyse the socioeconomic and environmental risks and benefits caused by the production of biofuels and energy crops in (agricultural areas within) the Peruvian Amazon.

In the socioeconomic study, cultivating Oil palm turned out to be the most profitable for small scale producers, according to the analysed scenarios in the local conditions of the Peruvian Amazon. However, its use for biodiesel production is questioned due to its traditional use for food products and possible negative impacts in food security and prices of derived food products. Furthermore, current prices make it more attractive to use Oil palm for alimentation purposes then for biodiesel. The profitability of Jatropha and sugar cane, compared with the analysed food crops in the area (corn and rice; the main traditional crops of potential Jatropha and sugar cane farmers, respectively), is still higher. These might be interesting alternative crops for the corresponding farmers, who at present face a difficult market situation in corn and rice, with reduced productivity and income levels.

In the environmental impact study, a Life Cycle Assessment (LCA) for biofuel production was conducted. The LCA considered energy efficiency and Green House Gas (GHG) reduction besides other environmental aspects such as soil use and degradation and use of fertiliser and pesticides. The scenarios that proved to have a positive environmental impact in the agricultural stage are cultivation of Oil palm and Jatropha on already deforested lands with scarce vegetation. Production of biodiesel from Oil palm and Jatropha causing large scale deforestation (and therefore significant GHG emissions) was confirmed to be environmentally unsustainable.

These results were discussed with relevant stakeholders and presented at several events at local, national and international level. Hence, the results contribute to policy making and improved practices for a sustainable and inclusive development of the biofuels sector.

[Please click here to download the SNV-WWF studies \(in Spanish; studies contain English summaries\)](#)

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Small scale farmers in Zambia benefit from SNV intervention in biofuels value chain

Brief results of ongoing country wide Jatropha programme



Rural Zambia is characterised by a huge disparity between supply and demand for energy. Many households use biomass for cooking purposes unsustainably. SNV in Zambia set up a country wide biofuels programme to increase access to energy as well as income opportunities for rural communities. The programme started in 2008 and distinguishes three pillars: (1) promoting contract farming arrangements between small scale farmers and biodiesel firms; (2) empowering small scale farmers to establish Jatropha based processing enterprises; and (3) promoting the establishment of community based rural energy enterprises.

To develop a sector for rural enterprises, thereby creating income and employment opportunities, a unique six step rural enterprise development approach was applied. This model, developed by SNV and partner JL Mutale Enterprises, hosts an integrated package of services, not only equipping the community based enterprises with entrepreneurship skills, but as well vocational skills, processing knowhow and business management skills.

The SNV Jatropha programme has seen a rather productive year. Sixteen community-owned enterprises were established across three provinces; engaged in buying and processing of Jatropha. A total of 300 farmers received skills training in processing Jatropha oil for producing soap, fertiliser and lantern oil. In addressing the domestic energy supply, an energy enterprise is established in the Northern Province, expecting to produce 1,500 litres of biodiesel per year. Scaling up to other provinces is in progress. Seven thousand Jatropha farmers are represented through nine established district associations. These entities have developed 48 Jatropha nurseries in order to increase farmers' access to planting material and training and extension support. It is estimated that at least USD\$ 150,000 has been earned from Jatropha seedling sales through these arrangements.

[Please click here to read the story of a Zambian Jatropha farmer](#)

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From coffee waste to bioethanol: renewable energy innovation in Central America

First bioethanol plant for coffee waste launched



During the Honduran cultural coffee festival last March, SNV, Café Orgánico Marcala, S. A. (COMSA), the Foundation for Investment and Development of Exports (FIDE) and the Foundation for Rural Enterprise Development (FUNDER) officially launched the first bioethanol plant for coffee waste in Central America. The plant has the capacity to produce 500 litres of ethanol per day and was designed with the technical assistance of EcoEnergy BG using local labour and materials. SNV focuses, through innovative market-based solutions, on improving income and clean energy opportunities for low-income communities.

The launch of the bioethanol plant is part of the Environment Support Programme (PREMACA), which is funded by DANIDA (Danish International Development Agency). SNV provides technical advisory services to the programme, based on its three pillars: establishing eco-enterprises, sustainable management of natural resources and poverty reduction in Honduras. The main target of this programme is to increase the competitiveness of coffee companies, generating positive economic, social and environmental impacts. The inauguration event was attended by producers, processing professionals, coffee buyers, public ministries and representatives of FIDE, FUNDER, and Ecoenergy BG.

[Please click here to read the full press release \(in Spanish\)](#)

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A pro-farmer partnership in Vietnam for climate change mitigation

Smallholders profit from SNV's collaboration with Green Energy Vietnam



Vietnam is characterised by having millions of hectares of marginal or less-productive lands available for sustainable production of biofuels feedstock. **Green Energy Vietnam (GEV)** is a for-profit company running a business in *Jatropha* cultivation (in 2009, approximate total of 2,000 ha), thereby contracting Vietnamese farmer cooperatives and unions to secure large amounts of feedstock production. GEV processes the biomass for domestic and global sale. The cooperatives and unions are contracted for the long-term (30 years), contributing to a sustainable income for farming households. Besides contracting, GEV is active on household level, training people in feedstock production, as well as institutional level, developing appropriate policies and implementation mechanisms for contract farming modalities.

Since 2008, GEV has sought the advisory services from SNV in jointly building the capacity of the farmer cooperatives and unions in the management of the contract farming system. A model, which helps to secure feedstock production by smallholders for GEV, is being developed according to the international sustainability guidelines adopted by the Roundtable for Sustainable Biofuels (RSB). SNV, via local organisations, provides training services on agricultural extension for company staff and group leaders. Lastly, SNV advises on the applicability of carbon credits for parts of GEV's operation in line with the Kyoto protocol. With the advisory support of SNV, GEV will have, by the end of 2010, introduced a smallholder business model for *Jatropha* farming to around 10,000 households in three provinces (Ninh Thuan, Quang Tri and Thua Thien Hue) with a functioning professional support network and applied research station.

[Please click here to read the full case study](#)

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Jatropha based biofuels production in the Koulikoro Region, Mali

Local feedstock producers connected to oil processing company



The Koulikoro Region in Mali is situated in the tropical semi-arid belt of the country. Climatic conditions are suitable for the cultivation of *Jatropha* plants. The rural-based organisation **ULSPP** (Local *Jatropha* Producers Union) is the leading organisation for the production of *Jatropha* in the region since 2007. The union consists of 12 producer cooperatives, representing a total of 2,500 members, including 500 women. The *Jatropha* production area covers over 3,600 hectares.

SNV, as well as the Regional Chamber of Agriculture (CRA) and the Association of Professional Producers (AOPP), are working together with the producer's union on key aspects of value chain development, providing: financial intermediation support and assistance via micro finance institutions; technical advice on best agricultural practices (e.g. intercropping planting systems), specifically the nut production, and quality reporting; and business plan support. The latter aspect is contributing to the formal agreement between the feedstock producer's union ULSPP and the biofuels processing company **Mali biocarburant (MBsa)**. The union is currently 20% shareholder in MBsa, which aims to secure its supply of *Jatropha* oil for biofuels production as well as the development of the by-product glycerine for soap making.

As the nut production of the union is only at its beginning stages, the producers have not yet produced enough quantity of *Jatropha* nuts to produce a subsequent quantity of raw oil for its partner MBsa. The mobile press owned by the union enables them to press one litre of raw oil from three kilograms of nuts:

Year	Quantity of nut pressed / kilogram	Volume of bio oil obtained / litre
2008	1,500	500
2009	6,500	2,160

[Please click here to go the website of SNV/Mali](#)

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For more information about the activities of SNV on biofuels, please contact Mr. Wim J. van Nes, e-mail: wvannes@snvworld.org. We would be grateful to receive your feedback on this first issue of the SNV Biofuels Newsletter through e-mail: biofuels@snvworld.org

For more information on SNV, please visit our website: www.snvworld.org

SNV is dedicated to a society in which all people enjoy the freedom to pursue their own sustainable development.
We contribute to this by strengthening the capacity of local organisations.

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