

## **Case study**

# **Jatropha Development in Vietnam**

**Growing alternative energy on waste lands  
a case of win-win  
for a biofuel company and smallholder farmers**

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***Sector: Smallholder Cash Crops (SHCC)***

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## The context/challenge

In rural Vietnam there are still hundreds of thousands of households who are struggling to get out of poverty. Most of these households have to farm on poor quality soils with limited skills or access to services and finance. At the same time the world is looking for new energy sources as the fossil fuel reserves are quickly drying out, with prices of a barrel of crude oil setting new records in 2008 (before falling down again as a result of the credit crunch).

Amidst all the controversy surrounding bio-fuels, food supply and food prices, the Vietnamese government has recognised the need for development of alternative energy to substitute its dependency on fossil fuels and has developed a vision & strategy on alternative bio-fuels. Part of this is to recover so called waste lands (degraded or low-fertile) through the production of *Jatropha* oil seeds. This has the potential to bring a stable income for tens of thousands of rural farmers, especially in the coastal areas of central and southern Vietnam. These waste lands are currently left idle or bring very little returns to farming. Whereas 1 hectare under *Jatropha* cultivation could earn a farmer around US\$ 800 net profit per year, which is expected to increase in the future as research and development will result in better producing varieties.

Green Energy Vietnam (GEV), in a joint venture with Australian JatOil, is the one pioneer company in Vietnam that has started with the cultivation of *Jatropha* on infertile lands in Ninh Thuan, Quang Tri and Thua Thien Hue provinces. For *Jatropha* agronomics they have formed partnerships with leading institutions in Vietnam, Southern Africa and India for the selection of the best varieties suited to the conditions in Vietnam. Green Energy Vietnam approached SNV to support them in the development and set-up of a new company business model through which they can secure feedstock production from smallholder farmers. Leading in this business model will be to adhere to international sustainability guidelines as they are currently being developed by the Roundtable for Sustainable Biofuels. Essential elements in that are, access to land for the smallholders and social and environmental sustainability. Elements which connect very strongly to SNV's corporate values.

## The client

Green Energy Vietnam is a for profit enterprise engaged in the processing and production of bio-fuel. They started as a used vegetable oil re-processing company, using cooking oil from hotels and restaurants to produce bio-diesel. Since early 2008 they have also been engaged in the production and future processing of *Jatropha* oil seeds as feedstock.

The company has the business skills and plan but lack the capacity and experience to engage with local governments and smallholder farmers to get access to productive resources, engage in mass-group contracts and develop micro-finance schemes for its contracted farmers.

They approached SNV if a joined activity could be developed where SNV would advise them, as well as local authorities and farmer representative bodies on the creation of strong and sustainable business linkages.

Both GEV and SNV have the strong belief that the establishment of commercial smallholder plantations of Jatropha offers a win-win situation to create profit for the company and its shareholders as well as reduce poverty by creating income and employment for smallholder farmers living on soils with poor soil fertility.

There is good added value in working together as GEV can benefit from the local networks and expertise that SNV has built up in the last decade with regards to organisation of smallholders, micro-finance, CDM and pro-poor policy development. On the other hand, SNV as a development organisation can benefit from the private sector dynamics that GEV bring into the collaboration.

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 hh in 3 provinces (Ninh Thuan, Quang Tri and Thua Thien Hue) with a functioning professional support network of about 14 trial stations and one agro-station.

#### **Other stakeholders involved & their roles:**

- Jatoil: Australian Investor with whom GEV has a joint venture
- Centre for Forestry Development who do research on Jatropha in partnership with GEV for selection of best varieties and agronomy practises
- VICOPSME Quang Tri: Cooperative Alliance who support GEV in business license negotiations in provinces
- Department of Forestry of Ministry of Agriculture and Rural Development: GEV provides data for policy development on Jatropha.

#### **The method / SNV intervention**

Initially, SNV had an agreement for around 6 months to mediate between local authorities and GEV to build contacts and trust and allow GEV to negotiate business licenses with their preferred provinces. Towards the end of 2008, this resulted in a new 2-year Memorandum of understanding with above mentioned goal. In these 2 years SNV will provide advisory services regarding the development of a smallholder business model in line with RSB standards.

SNV provides direct advisory to the company, reviewing and commenting their farmer contract systems, improving their farmer extension materials etc. SNV, in collaboration with local ca-

capacity builders also 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.

GEV itself had already developed a network of stakeholders before it approached SNV. However SNV added its network of local contacts on the ground and its experience to organise and facilitate the backward linkages along the production chain of Jatropha oil seeds.

In the negotiations between SNV and GEV pro-poor development has always been on the forefront. Through in depth analysis of the opportunities for Jatropha it became clear very soon that it had good pro-poor potential as its prime production resource is poor quality soils. The poor are, in this case in the fortunate position, to have access to this type of resource. Especially in coastal areas which are densely populated, vulnerable to harsh weather conditions and have a high poverty rate.

## **The outcome**

As a result of SNV advisory services GEV has now obtained its business license for development of its prime production & processing area where it will do on site Jatropha research & testing, farmer training etc.

Next to that SNV has facilitated contacts in 3 provinces between cooperatives, forest companies or individual farmers to establish test plots for Jatropha. Based on the knowledge and experience gained through the experiments on these initial plots, in 2009, GEV will roll-out its contracted plantation to around 2,000 ha of Jatropha fields growing to about 8,000 ha in 2010.

Recently, end of 2008, the Department of Forestry has approached SNV and requested our support in the development of a larger national Jatropha action plan which has a target of 300,000 ha of Jatropha in Vietnam by 2015 eventually expanding to 500,000 ha by 2025.

## **The impact**

Through improved client capacity and improved enabling environment, SNV is contributing to the following results at the beneficiaries level:

Increased production, income and employment. So far it is quite early to speak of real impact. 2008 has been the first year of Jatropha planting and only from its 3<sup>rd</sup> year serious harvest can be expected. Good progress has been made though on the policy front where Jatropha has been declared a non-invasive species and classified as an NTFP so it can contribute, through its

planting and production, to reforestation and reduced degradation. It is estimated that around 10,000 households would benefit from this intervention by the end of 2010. And, if the 300,000 ha jatropha national action plan was implemented with 50% of producers being smallholders, another 150,000 households would be directly involved in jatropha production.

## **The lessons learned**

- When working with commercial businesses we have to learn to adapt to a different speed. For them time is money which is not always the case for SNV where processes tend to take up too much time.
- In this case, the business knows how to do business. SNV knows how to work on poverty reduction. This can be a perfect match. But we should not pretend we know how to do their business. Respect and trust to each other is the core element.
- SNV products are well respected, even more respected though is SNV's networking capacity, presence on the ground, capacity and skills of individual advisers and charisma.