

The destroying hunt for 'green' gold

by the example of *Jatropha*

Article by Heike Lipper

Translation by Corinna Lonsdale



Foto: Heike Lipper

Jatropha plantation in northwest India, by subcompany of IKF Technologies, Frankfurt

*International companies and NGOs propagate *Jatropha curcas* for the 'Bio'fuel market – a shrub originating from the south. The plant has already made itself a bad name by being poisonous as well as having caused the expulsion from land and destroying subsistence farming of peasants.*

About 900.000 ha of *Jatropha* were planted until 2008, which is about half the size of Saxony. According to future prospects and due to the permanently increasing availability of seeds and land the plantation areas are rapidly growing. Some countries are generously offering land areas in exchange for foreign currency; beneath them India with 13 million ha and Ethiopia with 17 million ha.

The investors are established companies in the car, oil and technology business. Among them is Toyota, promoting efforts of local project development to decrease poverty in India, whilst planning a first oil refinery on the Philippines. Bayer Crop Science is working on resistance against herbicides and development of international quality standards for *Jatropha* in collaboration with Daimler and the US company Archer Daniels Midland (ADM) – ADM already significantly involved in the destruction of rainforests in Indonesia resulting from palm oil plantations.

Initial cases of land-expulsion in Tanzania and biopiracy in India arose in connection with *Jatropha* plantations – created by the British companies D1 Oils and Sun Biofuels. Additionally several German companies i.e. PROKON, Elaion AG, Flora

Ecopower, JatroSolutions and IKF technologies are investing in Jatropha plantations in Tanzania, Madagascar, Mozambique or India.

However one company rebound. Not even a year ago British Petroleum (bp) celebrated the joint venture with D1 Oils. But already in the summer of 2009 British Petroleum quit the contract. According to media reports the profits expected of the 'wonder plant' Jatropha did not occur.

Due to the advantage of a higher compatibility with high temperatures the oil is not only attractive for car tanks. After first test flights, Boeing and Air New Zealand are planning further research for blending up to 50 % with Kerosene. 15 renowned international airline companies are members of the 'Sustainable Aviation Fuel Users Group' and participating in the Round table for 'sustainable biofuels' trying to prove that the production of 'bio' kerosene does not compete with cultivating food and does not endanger drinking water reserves. Arguments which have already broadly been disproved.



The fruit of Jatropha tastes nutty, but is toxic.

Foto: Ulrike Bickel

The Indian science institute CSMCRI has effected research on Jatropha in cooperation with the Daimler AG. Already in 2006 the institute announced that Jatropha needs irrigation of approximately 100 litre per plant during the four months of dry season, which equals almost 250.000 litre of valuable drinking water per hectare. A current research of the university of Enschede confirms the high usage. Compared to 12 other plants used for agrofuels, the ecological water footprint for Jatropha is the largest.

According to additional reports from India and Mozambique, Jatropha is being planted on secondary forest areas as well as on arable land suitable for the production of food. Already in 2007 small farmers in India demanded the acknowledgement for the right for food as an international human right. Concurrently they demanded a moratorium for Jatropha plantations. Families in Baridih in India destroyed Jatropha which had been planted by the forest department without any arrangement made with the people who had been using the land for farming since decades. In other districts peasants were threatened with imprisonment if they were not willing to render their rice fields to the government for planting Jatropha. Further fields formerly pastured by cows, sheep and goats supplying meat and milk to the village were also used for plantations. According to the companies occupying the fields the animals might still graze within the plantations. Nevertheless when cattle successively destroyed the plantations in several areas they were kept away from the plantations in order to leave the Jatropha plants at better quality.

An additional risk for animals as well as for human being is the poison contained in all plant elements of Jatropha. In the northern province of Rajasthan cows died after grazing Jatropha plants. It was also reported that several children fell ill after the consumption of the tasty Jatropha nuts, unaware of their toxic content.

Governments of southern countries support the modern "land colonialism" of the north. Representatives of the government of India announce that Jatropha is planted on marginal or degraded land. As there is no proper definition for these terms, the floodgates are opened to land grabbers. Some North Indian regional governments are assigned to make land available for the plantation of Jatropha. Up to 5000 ha can be given to one single company in so called Public Private Partnership; some of those land areas are used by local village people to supply their families with fire wood, cattle stock and nutrients. Indian partners of the German based company IKF Technologies negotiate buy back agreements with small farmers in Jarkhand and Orissa, which include that the farmers must deliver their harvests to the company for up to 20 years. The payment results from the minimum state price of the regional government which is 7,5 Rupees per kilogram, far less than the international price of 12 up to 40 Rupees per kg of Jatropha seeds (7 Rupees = 0,10 €). Initial calculations made by an Indian industrial association for the production of Jatropha oil are based upon the raw material prices which are far below the minimum state price – consequently lowering the income of farmers on a long term.

Meanwhile the companies are setting up infrastructure for the European market. The British company D1 Oil will start its first production of Jatropha 'bio'fuel in Great Britain; and the Norwegian company Wärtilä is planning a first energy production based on Asian Jatropha oil in Belgium by the beginning of next year. Green Bio Fuel is planning to build a production plant for about 100.000 litre of Jatropha oil imported from Mozambique in Switzerland. By building up production in the northern countries companies propagate development of jobs in the countries of origin – without mentioning the poverty that is being produced at the same time.

The figures linger on: in Africa one in four people suffers from hunger; a number that increased to more than 1 billion worldwide by 2009. One clear reason of growing poverty is augmentation of international food prices. Especially agrofuels take a considerable part in price surges, according to the world bank in 2009 they constitute almost 75 %. Studies published currently by Forum of international agrarian policy (FIA) e.V., Swissaid and by FoodFirst Information and Action Network (FIAN) prove that energy plants similar to Jatropha are being planted on arable land good for food production, and that the plantation causes an increasing dependency of small farmers on foreign investors. Additional consequences arise from international price policy: solely in 2008 about 1500 small farmers committed suicide in India, increasing debts with banks and companies taking their livelihood and leaving no alternative solutions.

Initial remedies for small farmers in southern countries lay in a breakpoint of growing agrofuel plantations. Although a moratorium of agrofuels in Europe failed in 2008, a Swiss parliamentary initiative is demanding a five year stop of agrofuel plantations right now. Non governmental development organisations hope to stop the sell out of oil seeds from the south to the north. Because the alarming competition for food is steadily growing between almost one billion car drivers and two billion people living below poverty level.



Heike Lipper is an activist of the tropical forest working group of Robin Wood NGO, and did a research on Jatropha plantations in India. www.robinwood.de/tropenwald