

## DILIGENT<sup>1</sup>

**Region:** Africa

**Country:** Tanzania

**Crop/Feedstock:** Jatropha

**Practices:** Trainings on good agricultural practices; Inclusion of smallholders in bioenergy supply chain; Contracts with local goods and service providers; Fair and transparent pricing; Integrated Food and Energy Systems;

**Issues:** Access to Land; Income Generation and Inclusion of Smallholders; Local Food Security;

Diligent Tanzania Ltd<sup>2</sup> is a commercial company that produces Jatropha oil and by-products. Diligent promotes Jatropha cultivation by smallholder farmers and guarantees a market for a minimum price.

**Issue:** Income Generation and Smallholder Inclusion; Access to Land

**Practices:** Inclusion of smallholders in bioenergy supply chain (IS); Contracts with local goods and service providers (CN); Fair and transparent pricing (FP)

The smallholder farmers pick the fruits, remove the hulls and sell the seeds to a local collection centre and receive cash on delivery. Diligent collects the seeds from the collection centre and transports them to the Diligent premises in Arusha. The seeds are then pressed in one of the mechanical presses. The Jatropha oil is filtered, stored and sold to local clients or exported. The press cake is pressed into briquettes that are sold at the local market to be used as cooking fuel. The business practices of Diligent Tanzania secure sustainability to a large extent. Diligent Tanzania does not acquire land, does not employ a large number of people to grow their crops and does not use agrochemicals.

Diligent is essentially a market entity that pays a fair price for farmers' crops, and its practices open up a market for a new cash crop for farmers.

**Issue:** Local Food Security

**Practices:** Integrated Food and Energy Systems (IF); Trainings on good agricultural practices (TR)

The farmers are encouraged to plant Jatropha as a hedge around their fields, and to harvest the seeds on the hedges already present. The hedge protects their crops from livestock and functions as demarcation of their fields.

In March 2009, the Netherlands Technical Agreement for Sustainable Biomass (NTA 8080) was completed. This Agreement describes a minimum requirement for the application of biomass for energy purposes. It is intended to be applied to organizations that want to produce, convert, trade, transport and/or use sustainable biomass for energy purposes, and will most likely be acknowledged by the European Commission to be RED compliant. Certification according to one of the acknowledged certification schemes is required to contribute to the European objective of increasing the share of renewable energy use. The six main subjects of the NTA are greenhouse gas emissions, competition with food or other local applications, biodiversity, environment, prosperity and social well-being.

Although the NTA explicitly states that "the sustainability requirements should not be at the cost of smallholders", it has shown that the application of the norm to smallholders, especially in developing countries, is not straightforward. Even though

<sup>1</sup> The information included in this document is based on information provided directly by the producer, which was not verified by the Food and Agriculture Organization of the United Nations (FAO)

<sup>2</sup> [www.diligent-tanzania.com](http://www.diligent-tanzania.com)

smallholders are released from some requirements, obtaining individual certification according to NTA 8080 remains virtually impossible for African smallholder farmers. The norm allows for group certification of smallholder farmers, but the practical applicability of this group certification in the African context has not been tested yet.

The current business practices of Diligent Tanzania do largely meet the sustainability criteria of the RED and NTA 8080. The actual actions will therefore not change considerably. However, proving sustainability is not easy, it requires documentation and tracing of product flows. This will need to become embedded in the daily processes.

Since Diligent Tanzania was already implementing many of the good practices included in the NTA 8080 certification, the benefits of certification for the farmers is not direct (i.e. in changing practices) but indirect, in enlarging their potential market. When their product is certified, it may be exported to Europe. Furthermore, the certification may gain importance for the local market, as sustainability becomes more important in Tanzania as well.

The current project is the first pilot to certify smallholders according to biomass sustainability norms. The objective is to investigate the feasibility of obtaining NTA 8080 certification for a smallholder

scheme in *Jatropha* production, and to promote the implementation of such certification for smallholder schemes through a pilot certification activity and dissemination of lessons learned.

The tangible results of the project will be a feasibility study of smallholder certification, an *interpretation document* for smallholder certification in addition to the Netherlands Technical Agreement and a certified supply chain from cultivation by smallholders in Tanzania to use as biokerosene in aviation.

The project has started in January 2011 and is planned to be finalized in June 2013. The activities include, but are not limited to, the design of a greenhouse gas balance of this specific product chain, assessment of the feasibility of smallholder certification, establishment of a farmer organization as a legal entity for group certification, collection of data on cultivation methods and socio-economic status and impact, and mapping of potential bottlenecks for smallholder certification.