

## OAE GIZ SUSTAINABLE PALM OIL<sup>1</sup>

**Region:** Asia

**Country:** Thailand

**Crop/Feedstock:** Oil palm

**Practices:** Inclusion of smallholders in bioenergy value chain (IS); Contracts with local goods and service providers (CN); Training and education programs (TE); Integrated Food and Energy Systems (IF); Provision of improved agricultural inputs and/or equipment (PR); Training on good agricultural practices (TR); Adherence to (AT): ILO Declaration on Fundamental Principles and Rights to Work and related Conventions ; ISO 26000 – Social Responsibility; Social Accountability (SA) 80005; Health and safety equipment/devices and information (HS); Development or improvement of energy infrastructure (DE)

**Issues:** Access to Land; Income Generation and Inclusion of Smallholders; Local Food Security; Employment, Wages and Labour Conditions; Community Development; Energy Security and Local Access to Energy

The project on Sustainable Palm Oil Production for Bioenergy in Thailand was commissioned by the German Federal Ministry of Environment, Nature Conservation and Nuclear Safety (BMU) under the International Climate Initiative (ICI) and implemented by GIZ in cooperation with the Ministry of Agriculture and Cooperatives and the Office of Agricultural Economics (OAE) in Thailand<sup>2</sup>. The overall objective of the project is to make certified palm oil from Thai smallholders, in compliance with European sustainability standards, available on the market. The two main approaches for meeting this objective are 1) working with the Thai palm oil sector stakeholders on the National Interpretation of the RSPO standard, as well as calculating GHG emissions and monitoring impacts from palm oil production; and 2) providing capacity building and technical assistance to mills and smallholders to prepare them for certification. The project is working with private palm oil crushing mills to support smallholder groups in optimizing the entire value chain with regard to farm efficiency, product quality, and consequently to receive RSPO (Round Table on Sustainable Palm Oil) sustainable palm oil certification for smallholders while strengthening

export competitiveness. By applying a *Partnership Farming* approach – an inclusive business model between palm oil crushing mills and smallholders – and engaging with responsible government institutions, the project established the necessary support structures to pursue certification.

**Issue:** Access to Land; Income Generation and Inclusion of Smallholders; Community Development

**Practices:** Inclusion of smallholders in bioenergy value chain (IS); Contracts with local goods and service providers (CN); Training and education programs (TE)

The project specifically addresses smallholder oil palm farmers and encourages partnerships with the participating palm oil crushing mills. As smallholders are dominating the production in Thailand due to the land tenure situation, crushing mills are dependent on including smallholders in the supply chain. However, including smallholders into RSPO is a major challenge. Incentives for certification are created by offering trainings and by several services from the mills like discounted fertilizer supply, agronomic advice, preferential purchase of fresh fruit bunch (FFB),

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

<sup>2</sup> The budget of 3.43 Million Euro (4.87 Million USD) has been provided for a framework of three years from the 1st of January 2009 until the end of 2011, and has been extended until August 2012. 1 Euro equals 1.42 USD, September 4, 2011

premium price for quality FFB etc. RSPO itself has not yet established any support system for smallholders and incentives are lacking.

There is a huge potential to increase FFB yields as well as oil yields by hectare. In Thailand, FFB yields of smallholders are relatively low and oil extraction rates (OER) are very low. By introducing good harvesting practices and quality standards for FFB combined with quality pricing, the project aims at increasing OER and breaking the circle of bad practices.

Palm oil is increasingly used for bioenergy in Thailand and in addition bioenergy is created from biogas facilities in the oil mills or power plants using oil palm residues as a feedstock. This ensures a stable demand for FFB that is produced by smallholders in Thailand. FFB yields provide a stable income, which is higher than the income from many other agricultural activities. Landowners are increasingly converting their agricultural land to oil palm cultivation to benefit from the income generating opportunities. Landownership by numerous smallholders plays a crucial role in this respect.



The improvement of FFB yield and OER are a priority because of the significant economic benefits for smallholder farmers and the potential to improve the competitiveness of the Thai palm oil and oil palm production.

The main challenges are the lack of incentives for farmers to invest in practices to produce good quality FFB since intermediaries benefit from the common practices or lower quality FFB. The overcapacity in oil palm crushing does not allow stringent quality requirements by the crushing mills and government regulations are also lacking. Potential replicability in other projects is considered as high but requires intensive fieldwork and the establishment of better relationships between farmers and crushing mills. Up-scaling the project is already planned and funding sources are currently being investigated.

**Issue:** Local Food Security  
**Practices:** Integrated Food and Energy Systems (IF); Provision of improved agricultural inputs and/or equipment (PR); Training on good agricultural practices (TR);

Through the project and with participation from the private sector and government agencies, trainings on improving yields in oil palm through optimized fertilizer application and better farm management are conducted. This is combined with trainings on Occupational Health and Safety (OHS) and environmental impacts.

Mushrooms are planted in oil palm plantations using empty oil palm fruit bunches. Livestock in oil palm is practised by some smallholders. Oil palm fronds can also be used as animal feed.

Food security in Thailand is also not much of an issue due to good market access for palm producers and stable incomes from oil palm yields.

**Issue:** Employment, Wages and Labour Conditions; Community Development

**Practices:** Adherence to (AT): ILO Declaration on Fundamental Principles and Rights to Work and related Conventions ; ISO 26000 - Social Responsibility; Social Accountability (SA) 80005; Health and safety equipment/ devices and information (HS)

Trainings on OHS are conducted within the project for the labourers on smallholder farms and for smallholders themselves. Wages on oil palm plantations are much higher than minimum wages in Thailand as limited labour is available and oil palm yields provide stable incomes. Oil palm harvesting is considered skilled labour. Immigrant workers are provided with housing and other needs by smallholder farmers to ensure their availability for farm work. There is currently a shortage of skilled labour in this area, which affects the quality of the FFB.

**Issue:** Community development

**Practice:** Health and safety equipment/ devices and information (HS)

The project follows RSPO requirements according to the Thai National Interpretation, which includes issues like community development, provision of sanitation and health services, etc. In general, oil palm cultivation has a high potential to contribute to community development as can be seen in the cultivation areas (e.g. South Thailand), at least when smallholders are included in the production process through landownership.

**Issue:** Energy Security and Local Access to Energy

**Practice:** Development or improvement of energy infrastructure (DE)

As described above, palm oil and the residues from production and from oil palm cultivation are used to generate energy (biogas, burning of residues) or for biodiesel. Well managed palm oil crushing mills are self-sufficient in their energy supply and in addition can feed electricity into the grid. Palm oil based biodiesel is used both on the local and national market. One cooperative in the project produces biodiesel (B100) and uses it in its operations.