## Palm Oil – sustainability is possible!

Promotion and certification of smallholders helps sustainable palm oil production

On behalf of





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#### Background

Expanding world population and rising energy prices, not to mention changes in eating habits, mean that demand for vegetable oils around the world can be expected to grow in the coming decades. Inevitably, therefore, demand for palm oil as one of the world's most important vegetable oils will also increase.

Compared with the other major oil crops - rapeseed, soy and sunflowers - the oil palm is the highest-yielding provider of vegetable oil worldwide. Oil yields per hectare are almost ten times higher than those of soy, which is mainly grown to produce protein-rich animal feed. Oil palms can produce 4.3 tonnes of oil per hectare, while soy achieves oil yields of only 0.5 tonnes, but between 1.5 and 3 tonnes of vegetable protein. Palm oil cultivation also has positive effects on the incomes and livelihoods of farming families and hence on development in rural areas.

Despite these favourable characteristics, the points of criticism should not be underestimated. Destruction of rainforests, extinction of endangered species, displacement of small farmers and giant monoculture plantations – all of these are reasons for the poor reputation of this agricultural commodity. The often justified criticism is directed at the production method and not against palm oil itself. Palm oil has a future, provided it is produced sustainably.

Whether in soaps, cosmetics, pizza, ice cream, candles or washing powder, palm oil can be found in half of all foods and many household products sold in supermarkets. In addition to its use in food production and the manufacturing of cleaning agents and detergents, palm oil is also increasingly being used in Europe and in the producer countries as a renewable raw material for generating electricity and heat, and as a biofuel.

![](_page_2_Picture_6.jpeg)

#### Promotion and certification of smallholders helps sustainable palm oil production

Rural development plays a fundamental role in the global fight against hunger and poverty:

- three out of every four people in developing countries live in rural regions
- 2.1 billion people have to manage on less than two dollars a day
- 880 million people have less than one dollar a day at their disposal.

The majority of people in rural regions live from agriculture or depend on it in some way. For the bulk of the population in developing countries it is the sole source of income. If poverty and hunger are to be reduced, development of the agricultural sector is absolutely essential.

Smallholder farms have a key role to play in global agriculture. Smallholders need targeted and practical support helping them to access expanding markets, financial services and quality and management consultancy services so that they can respond to the growing challenges they are facing. This know-how enables the smallholders to supply sufficient agricultural products and commodities sustainably and to secure their incomes.

The demands on the palm oil sector are particularly high. Making the change to sustainable palm oil production presents smallholders with major financial and organisational challenges. Individual farming practices have to be documented transparently and in full. For the oil palm farmers, this initially means extra work and it presupposes a relevant level of knowledge, which they often do not possess. Although smallholders generally have to fund the costs of auditing in advance by themselves, sustainable and certified production of palm oil pays off for them perceptibly in the long term. Improved methods of cultivation and harvesting help to increase yields. As the quality of the fresh fruit bunches improves, the oil palm farmers can negotiate higher prices.

Thanks to its excellent market prospects and the high profit per unit area, oil palm offers exceptional income-generating opportunities in rural regions and hence also for smallholders and their families. Sustainability certification paves the way for access to international markets. This ensures long-term opportunities for employment and income generation in rural areas of the producer countries.

![](_page_3_Picture_9.jpeg)

# Sustainability initiatives in the palm oil sector

![](_page_4_Picture_1.jpeg)

In order to be able to meet the growing demand for palm oil while at the same time improving the unfavourable surrounding circumstances associated with its production, it is essential that internationally applicable sustainability standards are followed. The Roundtable on Sustainable Palm Oil (RSPO) is the most important international initiative on sustainably certified palm oil established to date.

The RSPO was formed in 2004 as a joint initiative by WWF and companies in the palm oil sector, food companies, banks and representatives of civil society with the aim of ensuring sustainable production of palm oil. The RSPO has over 350 ordinary members. A large number of international non-governmental organisations, including WWF, Oxfam International, Sawit Watch and others, are represented in the RSPO. The members of the RSPO account for roughly 50% of global palm oil production and also include the most important buyers and the processing industry. RSPO members commit themselves to transparency and the release of information, and to the compliance to local, national and international laws and regulations. RSPO certification is based on economic, social and ecological criteria:

- Economic criterion: continuous efficiency improvements; documentation on the improvement of production conditions and continuous increases in yield which lead to work and employment
- Ecological criterion: rainforest or other areas of high conservation value may not be destroyed to make way for new plantations
- Social criterion: working conditions must be consistent with industry standards and minimum wages must be paid. The RSPO also addresses health and safety at work.

In July 2010 there were already two million tonnes of RSPO-certified palm oil available on the world market, with an upward trend. The members of the RSPO are working hard on developing the standard further. This includes taking account of improvements with greater involvement of smallholders, calculation of greenhouse gas emissions etc. Experience shows that certification can contribute to lessening the problem of deforestation, but is not able to solve it completely on its own. This calls for cooperation between governments and the palm oil sector. The RSPO represents a good platform for this purpose.

![](_page_4_Picture_8.jpeg)

![](_page_4_Picture_9.jpeg)

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#### Palm oil for bioenergy

![](_page_5_Picture_1.jpeg)

The use of palm oil for producing energy in the producer countries as well as in Europe has been growing in importance for many years.

In the European Union, under the Renewable Energy Directive (RED) of 23 April 2009, only those vegetable oils that have been verifiably certified as sustainable can receive state support for energy use and may be counted towards national renewable energy targets. Along with the United Kingdom and the Netherlands, Germany is a pioneer in the implementation of the EU-RED, and as of 1 January 2011 only certified vegetable oil – and therefore also palm oil – will receive support. The energy industry is currently making efforts to procure sustainably produced and certified vegetable oils. Two certification systems have already been recognised in Germany as issuers of standards for sustainability certification: International Sustainability and Carbon Certification (ISCC) and REDCert. The first certificates under the ISCC and REDCert systems have already been issued. RSPO and ISCC have applied for recognition at EU level.

Only about eight per cent of global palm oil production is used for energy purposes. More than 90 % of production goes to the food, cosmetics, cleaning agent and detergent industries. The energy sector is therefore demanding that all areas of use should be covered by the state sustainability requirements.

#### What has this got to do with us?

Palm oil on the shopping list: According to estimates by WWF, half of all foods contain palm oil. German consumers are not aware of this, because palm oil is not explicitly named in the list of ingredients. Labelling alone, however, is not the solution. Consumers should be informed about the sustainability of the products. Nongovernmental organisations and the energy industry are demanding proof of sustainability for the food and cosmetics industries too, and for the manufacturers of cleaning products and detergents. By demanding certification and buying sustainably produced products, consumers could make an important contribution to the sustainable production of palm oil. The EU-RED coming into effect: As of 1 January 2011, the EU Renewable Energy Directive EU-RED on sustainable production of bioenergy will apply in Germany. For operators of combined heat and power (co-generation) plants, the petroleum industry and energy suppliers, this means that they have to use certified palm oil (or other vegetable oils) to be entitled to state subsidies or – in the fuel sector – to meet their obligatory biofuel quotas and be able to benefit from energy tax relief.

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![](_page_6_Picture_0.jpeg)

#### The example of Thailand

With support from the Thai-German project Sustainable Palm Oil Production promoted by the German Federal Ministry of Environment and it's International Climate Initiative, the palm oil sector in Thailand is in the process of introducing international sustainability standards such as the RSPO.

To ensure that these standards for palm oil production can be successfully mainstreamed in Thailand, the situation of smallholders is taken into account through intensive agricultural advisory work, thereby laying the foundations for certification. Roughly 80% of the palm oil produced in Thailand comes from smallholders, by contrast with the major producing countries Malaysia and Indonesia, where largescale plantations dominate.

The project is currently working with four palm oil mills and about 1,000 smallholders, who are undergoing training in sustainable farm management. Improved cultivation methods and the selective use of fertilisers and pesticides have an important role to play here. The project also focuses on optimising harvesting practices and cooperation with mills and middlemen in order to increase the oil content of the fruits.

![](_page_6_Picture_5.jpeg)

For example, choosing the right harvesting time determines the oil content in the fruit bunches. The smallholders and their workers benefit from the rules on health and safety at work, such as keeping pesticides in locked stores and not on the kitchen counter alongside cooking oils.

Working closely with palm oil mills ensures that further processing of the oil is carried out sustainably too. During the production process large volumes of wastewater are run off; this is subsequently fed into ponds, where it ferments and releases methane. Capturing the methane and using it to generate power with the aid of biogas plants prevents climate-damaging emissions, while at the same time producing renewable energy. The use of biogas technology enables the palm oil mills to achieve very good greenhouse gas balances, which are crucial for attaining the greenhouse gas mitigation targets set by the EU-RED.

![](_page_6_Picture_8.jpeg)

![](_page_7_Picture_0.jpeg)

At the national level, the project initiates a dialogue between the various actors from politics and business in the palm oil sector. At the private-sector level, the RSPO sustainability standard will be established and institutionalised after being adapted to the Thai context. At the government level a consulting process is taking place regarding promotion of sustainable palm oil production, with the emphasis on good practice. The project is being implemented in close collaboration with the Thai Office of Agricultural Economics (OAE).

![](_page_7_Picture_3.jpeg)

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#### The role of GTZ

As a federally owned organisation working in the field of international cooperation for sustainable development, the Deutsche Gesellschaft für Technische Zusammenarbeit (GTZ) GmbH provides forward-looking solutions to address these complex issues. The example of Thailand shows that it is perfectly possible for palm oil pro-

duction to be sustainable, and that smallholders can benefit from it while at the same time helping to develop and to conserve a diverse agricultural landscape.

A core competency of GTZ is capacity development. Capacity is the ability of people, organisations and societies to shape development on a sustainable basis. This entails identifying problems and then developing and successfully implementing strategies to reach solutions. In the case of Sustainable Palm Oil Production in Thailand, GTZ together with palm oil mills and oil palm smallholders has developed a model showing how all stakeholders involved can benefit from improved cooperation and the certification of sustainability. GTZ supports both the mills and the farmers in developing the necessary capacities and advises them on the associated learning processes and processes of change. In relation to the issue of palm oil, this includes concepts and instruments at all levels of the production and value chain, beginning with the cultivation of oil palms, i.e. the planting of oil

> palms by smallholders or mill owned plantations, through to the palm oil industry, in other words collection points ("ramps"), palm oil mills and refineries, and transport. In this way we promote sustainable development in rural regions, contribute to higher incomes, improved living conditions and

better natural resource management, and make sure that consumers in Europe are able to share in this positive development.

![](_page_8_Picture_7.jpeg)

### Palm oil production in South-East-Asia

| ltem / country                   | Indonesia | Malaysia | Thailand | Papua NG |
|----------------------------------|-----------|----------|----------|----------|
| Total land area (Mln Ha)         | 181.16    | 32.85    | 51.29    | 45.29    |
| % Forest area                    | 46.78     | 62.73    | 28.19    | 64.39    |
| % Agricultural area              | 26.77     | 23.95    | 38.66    | 2.30     |
| Oil palm harvested area (Mln ha) | 5.00      | 3.90     | 0.45     | 0.096    |
| % Oil Palm to Agricultural area  | 10.31     | 49.56    | 2.28     | 9.23     |
| Yield (Mln.tons) FFB             | 85        | 83       | 9.27     | 1.4      |
| Yield (Mln.tons) CPO             | 16.9      | 17.7     | 1.3      | 0.4      |
| Productivity (tons/Ha)           | 17.00     | 21.28    | 20.08    | 14.58    |
| Area under smallholders (%)*     | 44        | 41       | 76       | 42       |

Source: FAOSTAT (2008), \* Worldbank (2010)

#### World Consumption of Oils & Fats

![](_page_10_Figure_1.jpeg)

![](_page_10_Figure_2.jpeg)

Oils & Fats: World Consumption by Category – January to December 2008 in total: 159.9 million t

Supply and Sales of RSPO-certified sustainable palm oil in million tons per half-year between 2008 and 2010

![](_page_11_Picture_0.jpeg)

Deutsche Gesellschaft für Technische Zusammenarbeit (GTZ) GmbH

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