Hintergrundinformationen aus der internationalen Entwicklungszusammenarbeit

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Environmental Challenges and the Controversy about Palm Oil Production – Case Studies from Malaysia, Indonesia and Myanmar

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- After palm oil was brought to South East Asia from central Africa in the 20th century the worldwide production has grown by 65 percent over the past decade. Demand is still increasing, especially after the European Union agreed to its 10 percent target for biofuels in their total transport consumption.
- As biggest and second biggest producer of palm oil Indonesia and Malaysia account together for more than 85 percent of the production for the world market, and trade mainly with China, the European Union and India.
- Myanmar started as well with palm oil production but is also investing heavily in ´Jatropha curcas´-tree for an alternative biofuel.
- The massive growth of the plantations is causing enormous environmental problems like monocultures, loss of biodiversity and climate change but as well social issues caused by lack of workers' rights and diverse conflicts with indigenous people.
- The "Roundtable on Sustainable Palm Oil" was founded in 2004 to tackle these issues, but so far the multi-stakeholder platform consisting of the palm oil industry, related manufacturers and civil society has only made limited progress.

From Seeds to World Markets

During the last couple of years palm oil production was not only booming in South East Asia but is well-known also in Europe and other Western industrial nations due to the transnational campaigns against the environmental and social problems caused by the huge plantations. The palm oil plant, *elaeis guineensis*, originates from central Africa and was brought by the British colonial industry to South East Asia only in the beginning of the last century. After almost 100 years palm oil is now increasingly being produced on large-scale plantations in tropical lowland regions especially in Indonesia and Malaysia as well as on the Philippines, in Myanmar and Thailand. Today the world market consists of 38.13 million tons annually, and Indonesia and Malaysia as largest and second-largest producer of palm oil in the world account together for more than 85 percent of exports, mainly to China, the European Union and India. The world largest companies *Sime Darby* (state-owned by Malaysia, 531,299 hectares plantations, 65 palm oil plants in Malaysia and Indonesia, around 100,000 workers)[1] and *Wilmar International* (world biggest private palm oil trader with 500,000 hectares plantations, 33 palm oil plants all over the world, around 70,000 workers) [2] give an idea of the rate of concentration in this industry.

The plant and their derivates cannot only be used for biofuels but for more than 60 related products. Today it is widely used also as cooking oil, food ingredients and cosmetic products, for products of the chemical industry as well as animal feed. Big multinational compa-

[1] See Sime Darby, 2008: "Annual Report 2008", Kuala Lumpur

[2] See Wilmar International, 2008: "Growing in Challenging Times", Singapore

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nies like Unilever, Nestle, Cargill, Archer Daniels Midland, Procter & Gamble or Kraft are using palm oil products worldwide. Transnational campaigns in the 1990s targeted the loss of biodiversity (especially endangered species like the Orang-Utan), the danger for climate change as studies have shown that Indonesia and Malaysia are actually producing more CO-2 due to intensive conversion of land into palm oil plantations and social conflicts between indigenous people and companies. Further criticism also concerns the labour conditions of workers on the plantations. To enable the campaigning NGOs and local networks to get in constant cooperation and communication with multinational companies growing and selling palm oil, the "Roundtable on Sustainable Palm Oil" was founded in 2004. In the meantime, it issues certificates to palm oil producer and retailer for sustainable practices. This initiative was joined by global NGOs like WWF International or Oxfam International but is still criticised by others as "*greenwashing*" initiative because of its ineffective cooperation.[3] The demand for palm oil increased from 2003 onwards was also stimulated by the introduction of the biofuel-directive of the European Commission that aims for a 10 percent share of renewable fuels in the overall energy consumption in the transport sector by 2020.[4] These developments let to a boom of the whole industry and today's growing world market. At the same time the controversy about the sustainability of the palm oil industry, especially in the leading producing states Indonesia and Malaysia, has been increasing. Further points of concern are the predicted increase in demand from emerging economies like China and most probably India in the near future.

Malaysia: Mono Culture - First Rubber now Palm Oil Producer

The Malaysian plantation economy was originally based on rubber, which was introduced by the British colonial economy. In 1918 there were already 500,000 hectares under cultivation. The international demand was enormous and so Malaysia rose to become the number one natural rubber producing country until it was hit hard by the depression of the 1930s and afterwards. Palm oil production was brought to Malaysia also by the British already in 1917. However, until the 1960s the production was of an experimental nature in Selangor state alone. From the 1970s onwards the government wanted to reduce the dependence on the dominating rubber production and, following a recommendation by the World Bank, encouraged the agriculture sector to replace more and more rubber with oil palm plantations. With strong support through foreign investment and from developing banks the palm oil production started in 1971 with 300,000 hectares and reached almost four million hectares in 2007. The industry grew rapidly due to increased foreign demand for vegetable oils and led to an increase of the planted area by 172 percent only between 1990 and 2001. Today the main producing areas of palm oil in Malaysia are Johor, Sabah and Pahang-region.[5] In 2007 the palm oil sector produced around 15.8 million tons of oil on 4.3 million hectares, which made Malaysia the second biggest producer in the world with 41 percent share of the world-market of palm oil from a total production of 38.13 million tons. The main export markets are China with 3.94 million tonnes or 28.73 percent of total palm oil exports. EU and Pakistan are next, with an intake of 2.06 million tonnes and 1.07 million tonnes, respectively. The whole industry provides employment for around 900,000 people and accounts for more than four percent of Malaysia's GDP.[6]

The diverse interests of Malay palm oil-producers and palm-based products and their derivatives are represented by a number of industry organisations. The principal organisations are the Malaysian Palm Oil Association (MPOA), the Malaysian Palm Oil Board (MPOB) and the Malaysian Palm Oil Promotional Council (MPOPC). MPOA is the plantation owners' association which has more than 100 members and more than 1.4 million hectares planted under oil palm. This amounts to

[3] See "International Declaration Against the ´Greenwashing´ of Palm Oil by the Roundtable on Sustainable Palm Oil (RSPO)", 2008

[4] European Parliament, 2008: "Legislative Resolution of 17 December 2008 on the proposal for a directive of the European Parliament and the Council of the use of energy from renewable sources", Brussels

[5] Cheng Hai Teoh, 2002: "The Palm Oil Industry in Malaysia: From Seed to Frying Pan" by WWF Switzerland, Kuala Lumpur

[6] Malaysia Palm Oil Council, 2007: "MPOC Annual Report 2007", Kuala Lumpur

70 percent of the area under private ownership. MPOB is the public sector establishment responsible for undertaking research and development and for regulatory and licensing functions for the industry. The third organisation, MPOPC, is responsible to promote Malaysian palm oil. These organisations faced massive transnational campaigns in the 1990s concerning the serious environmental and social problems that were caused by the massive growth of palm oil plantations in Malaysia. Such campaigns focused mainly on the issue of deforestation (i.e. in Borneo), the loss of biodiversity (i.e. Orang-Utan), fire clearing of old plantations and social conflicts with indigenous people. After the establishment of the "Roundtable on Sustainable Palm Oil" in 2004 a lot of companies joined this global forum and developed criteria for sustainable production.

Indonesia: World-largest Palm Oil Producer

Like Malaysia also Indonesia saw its historical chance to grow palm oil as biofuel for export demands and thus started expanding plantations. During the last decade the palm oil industry has been a major source of growth for the agricultural sector and has also significantly contributed to Indonesia's economy, which was emphasized by the responsible Minister for Agriculture during the "Roundtable on Sustainable Palm Oil" 2004 in Jakarta.[7] In 2007 the palm oil production rose up to 16.7 million tons, which sums up to 44 percent of the world market and made Indonesia for the first time the world´s largest producer for palm oil. To date more than 6.8 million hectares are used for palm oil plantations and it is estimated that around 3.3 million family members are depending on this industry in Indonesia.[8] A significant change in the industry took place during the past year, as Indonesia surpassed Malaysia as the world leader. This designation will continue and Indonesia's production rate will outpace Malaysia for the foreseeable future as the government is aiming to grow palm oil on 8.2 million hectares in 2010 and reach 20 million hectares in 2025. Half of these plantations are planned to establish with mega projects in Kalimantan, on the island of Borneo, which is one of the biodiversity hotspots in the region.[9] After the establishment of the "Roundtable on Sustainable Palm Oil" an Indonesian contact-office was opened by the initiative of NGOs and palm oil producers in 2006 and slowly started to introduce the certification process.

The expansion of the palm oil industry has major implications for rural Indonesians. It implies a major reallocation of land and resources, dramatic changes on the vegetation and the local ecosystems, substantial investment and new infrastructures, movements of people and settlements, major transformation of local and international trade, and it requires the intervention of multiple government agencies. Done right, palm oil should generate wealth and employment for local communities but a study of "Sawit Watch" found out that some 18 million hectares of forests (three times as much as designated) were cleared from rainforest in the name of palm oil expansion. Furthermore, 576 ongoing conflicts were registered between communities and companies until July 2009. Some of these conflicts can be traced back to earlier land disputes but most recent conflicts are about land rights, compensation, unmet promises and smallholding arrangements.[10] Interventions of transnational campaigns and NGOs took also place regarding the development plan of a palm oil belt in the border areas of Kalimantan, which started in 2005 with an estimated 1.8 million hectares area but has not been completed due to the ongoing heated public discussion.

Myanmar: ´Jatropha curcas´ tree a new source for biofuel?

As a member state of the "Association of Southeast Asian Nations" (ASEAN) Myanmar

[7] Prof. Bungaran Saragih, 2004: "Keynote Speech of Minister for Agriculture of the Republic of Indonesia in the Roundtable of Substainable Palm Oil", Jakarta

[8] Oetami Dewi, 2008: "The Heart of Borneo and the Palm Oil Mega-Project: Transnational Interventions", Jakarta

[9] Christina Schott, 2008: "Biodiesel aus Palmöl und nachhaltige Produktion in Indonesien – ein Widerspruch in sich?, Kurzbericht Friedrich-Ebert-Stiftung Indonesia, Jakarta

[10] Forest Peoples Programme, Perkumpulan Sawit Watch, HuMA and the World Agroforestry Centre, 2006: "Promised Land: Palm Oil and Land Acquisition in Indonesia - Implications for Local Communities and Indigenous Peoples", Jakarta

was following very closely the developments of the palm oil production over the last decades in Indonesia and Malaysia. Until the mid-1990s the country was still importing palm oil from these two countries for its domestic consumption. Given that the country at the time suffered from a serious balance of payment deficit, the question of how to curb the volume of palm oil imports has become a big issue for the government. Therefore since 1998 the government encouraged the establishment of oil palm plantations by 17 large private companies in Tanintharyi, especially in the Kautaung region. It is expected that with this investment domestic palm oil will be supplied in large quantities in the near future, although the cropped area covered only 54,000 hectares in 2004 and is likely to remain at a low level as it would require 200,000 hectares to replace all the imports by domestic production.[11] Statistics have shown that in 2000 the country was depending almost fully on import of palm oil from neighbouring countries with 96.9 percent imports and only 3.1 percent own production for the domestic market of altogether 190,000 tons.[12]

A recently conducted field-study by the "Ethnic Community Development Forum" analyses the national policy of the Myanmar government on the production of biofuel. Each of Burma's states and divisions, regardless of size, are expected to plant at least 500,000 hectares of the *´Jatropha curcas´*-tree for biodiesel production and export. This tree belongs, unlike palm oil, to the "second generation biofuels", which are used exclusively for fuel production and thus aim to provide more sustainable supplies. To meet these targets for example in Yangon Division 20 percent of all available land will be covered with *jatropha*, and in the less populated states like the Karenni state, everybody will have to plant 2,400 trees to reach the quota. The study also emphasise that plantations up to 1,000 hectares in size have ignored local climate and soil conditions and planted haphazardly, resulting in crop failure rates ranging from 25 to 75 percent. These developments have created serious environmental challenges in these regions. The report calls upon the government to change these recent arbitrary measures into a sustainable development policy for the agricultural sector in which renewable energy plays an important role, especially so since agriculture is the backbone of Myanmar's economy.[13]

Civil Society and Transnational Campaigns

The palm oil industry was and is targeted by transnational campaigns that criticise unsustainable production practices and point to serious environmental and social conflicts caused by the massive plantations. These critics can be summarised along three conflict lines. First of all civil society organisations are criticising the loss of biodiversity and deforestation in the tropical rain forest of the producing countries. The rapid and massive expansion of oil palm makes it hard to avoid significant impacts on remaining ecosystems, including the endangered habitats of rare and threatened species like the Orang Utan, Sumatran tiger and the indigenous elephant. Even if the major companies commit themself due to national law and the regulations of the "Roundtable on Sustainable Palm Oil" (RSPO) the use of fire for land clearing is still widely reported and the "Wilmar Group" was even sued by Indonesian authorities for ´intentional and systematic burning with the purpose to clear land for plantation development´. Often these companies operate large-scale land clearing as well in violation of existing law without the needed "Environmental Impact Assessment" (EIA) reports, which aim to protect environment and endangered species.[14] Secondly, such deforestation also adds to global greenhouse gas emissions – as, according to recent reports, does the conversion of peat land and peat land forests to plantation – clearly undermining the palm oil industry's

[11] Koichi Fujita/Ikuko Okamoto, 2006: "Agricultural Policies and Development of Myanmar's Agricultural Sector: An Overview", from Institute of Developing Economies, Discussion-Paper No. 63, Tokyo, p. 16

[12] Yusof Basiron, 2002: "Palm oil and its global supply and demand prospects" from Oil Palm Industry Economic Journal, Vol. 2 No.1, p. 5

[13] Ethnic Community Development Forum, 2008: "Biofuel by Decree – Unmasking Burma´s bio-energy", Yangon, p. 10

[14] Milieudefensie (Friends of the Earth Netherlands), Lembaga Gemawan and KONTAK Rakyat Borneop, 2007: "Policy, practice, pride and prejudice", Amsterdam, p. 7

claim to be CO-2 neutral. According to these scientists, Palm oil plantations are the main contributors to 1.5 percent annual rate of deforestation in Indonesia and Malaysia and create a *´biofuel carbon debt´* by releasing 17 to 420 times more CO-2 than the annual greenhouse gas reductions these biofuels provide by displacing fossil fuels.[15] And last but not least the plantations cause conflicts between indigenous people and the companies – as reported with over 500 causes in Indonesia[16] - as well as violation of workers´ rights and migration problems, which are raised by union activists. In Malaysia alone some hundred thousand migrant worker from Indonesia are working in the domestic palm oil industry and face "gross human rights violations" and anti-union attitudes as the "International Union of Foodworkers" (IUF) found out whilst their organising work.[17]

All these criticisms led to transnational campaigns in the 1990s, where consumers in Europe were informed about the impact of their consumption on the environment in South East Asia and strong alliances were build. Under the pressure of these massive campaigns the RSPO was founded in 2004 as an international association. Its members include representatives of the palm oil industry (102 members), consumer goods manufacturers (40), banks (9), retailer (24) as well as from international and national civil society organisations (20). The association agreed upon fundamental rules for sustainable palm oil production, which are nowadays used as a basis for the certification of sustainable palm oil production for RSPO-members. This body was joined by some NGOs, like WWF International or OXFAM International as well as Sawit Watch and other national and regional organisations. Other NGOs criticise the process as "*greenwashing*" and summarised their view in an "International Declaration Against the ´Greenwashing´ of Palm Oil by the Roundtable on Sustainable Palm Oil" in 2008. This declaration raises concerns about deforestation, increased greenhouse gas emissions and their impact on climate change, and the violation of human rights. It rejects the RSPO and its working methods totally on the basis that they only serve the multinational companies and because RSPO has no binding enforcement tools.

Summary and Recommendations

As has been briefly outlined the palm oil industry in South East Asia is rapidly growing due to increasing demands mainly from China, India and especially the European Union. Indonesia and Malaysia built up massive industries over the last ten years with strong public and private investments, which led to their status as number one and two producers on the world market. Both governments decided to further develop the industry. However, the respective government's questionable commitments to develop sustainable concepts for the palm oil industry that consider the direct impacts of deforestation, the loss of biodiversity and the many social problems are branded as "*greenwashing*" by transnational campaigns. The political pressure generated by these campaigns has even increased through recently conducted studies which show that palm oil production is not CO-2 neutral but instead has led to a substantial increase in emissions in both Indonesia and Malaysia. This development is certainly contra-productive when it comes to the ongoing efforts to conclude a new climate change agreement under the "United Nations Framework Convention on Climate Change" (UNFCCC) in Copenhagen at the end of 2009 and seriously questions these countries' commitment to the global combat against climate change. On the other side the palm oil industry contributes a large part to the GDP and creates employment for million workers in both countries. In addition, the palm oil industry is one of the first sectors in which the Southern countries build up a global industry and have a competitive advantage, which challenges Northern industries. Furthermore, the world market is still developing and growing bigger: So far the member states of the European Union have achieved only 3.3 percent share of biofuel of the total consumption of transport in 2009 of the targeted 10 percent in 2020. Thus, a continuous enormous

[15] Joseph Fargione/Jason Hill/David Tilman/Stephen Polasky/Peter Hawthorne, 2008: "Land Clearing and the Biofuel Carbon Debt", ScienceExpress Report, Minneapolis, p. 1

[16] Rudy Lumuru/Norman Jiwan, 2009: "Making Oil Well", Perkumpulan Sawit Watch, Jakarta

[17] International Union of Foodworkers, 2006: "Marketing Substainability: RSPO ignores serious rights violations", Geneva

increase in demand for renewable biofuels over the next ten years is to be expected.[18]

The controversy about the palm oil industry will continue and maybe even intensify as other biofuels are currently in the experimental phase in South East Asia, like the *´Jatropha curcas´*-tree in Myanmar. As the issues and also the motivation from civil society organisations are diverse, they will stay divided – some committed to dialogue in the RSPO, some in opposition to monitor developments and campaign towards politics and companies to act. What would be needed for a sustainable palm oil production is an effective monitoring and control system of the currently existing commitments. Such a system should involve all stakeholders and especially the indigenous people as direct concerned group. Additionally, Indonesia and Malaysia need to keep in mind the importance of economic diversification in order to avoid becoming too dependent on the palm oil sector. As Malaysia experienced already in the last century the dominance of one product – the natural rubber – can lead to considerable economic problems in case of a rapid decline of this industry. Therefore it must be in the interest of both governments to support diverse agriculture industry and ensure sustainability in order to avoid negative consequences caused by climate change or an economic crisis. But Indonesia and Malaysia cannot face these problems alone, also China, the European Union and India as worldwide biggest palm oil-importing regions need to take criteria for sustainable palm oil production more serious and limit their import to certified products. And last but not least the UNCCC have to declare differences between rain forests and palm oil plantations in their CO-2 certification process "Reducing Emissions from Deforestation and Degradation" (REDD) to encourage governments protecting rain forests as natural resources.

[18] Euro-Observer, 2009: "Biofuels Barometer – July 2009", Brussels