



## POLICY BRIEF

Joint Government/NGOs Roundtable on

Multilateral Development Banks

April 2009

# Stop subsidising large-scale biofuels cultivation

The rapid expansion of the biofuel industry is having a number of serious environmental and social impacts, with consequences for sustainable development at both a local and global level.

Australia's funding to the multilateral development banks (MDB) should not support large-scale cultivation of energy crops especially oil palm.

The World Bank, Asian Development Bank and other foreign investment lobbies have been highly influential in driving the expansion of the biofuel industry, financing and promoting oil palm and other biofuel feedstocks as a valuable source of export income for poor countries. In Papua New Guinea, all of the oil palm development projects have been supported by the World Bank and the Asia Development Bank.

Currently, a US\$27.5 million World Bank loan<sup>i</sup> is financing expansion of oil palm in Papua New Guinea despite protest from civil society and the adverse impacts from this kind of projects.

Although the palm oil industry is lucrative for multinational companies that refine and export the product, it provides minimal return for farmers. Growing palm oil is high risk, involves heavy labour, and income is completely vulnerable to fluctuations in the price of palm oil on commodity markets. Under the smallholder schemes companies are cushioned from the risk of farming, while local landowners are excluded from the profits of exporting<sup>ii</sup>.

## Energy crops production

Rapid expansion of energy crops cultivation in recent years has been driven by an anticipated surge in demand for biofuel as the world seeks alternatives to fossil fuels to power its vehicle fleet. Oil palm especially has been promoted in the Asia-Pacific region. The areas now occupied by oil palm plantations in South East Asia are huge - - in excess of 420,000 hectares in Malaysia, 2,800,000 hectares in Indonesia. About 85 percent of the world's palm oil comes from Malaysia and Indonesia alone.

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## **Local environmental impacts**

The clearing of forest and peatlands to make room for oil palm and other plantations is rapidly hastening the destruction of the planet's last great biodiversity resources – the tropical forests of South East Asia and Melanesia. Apart from the loss of biodiversity through deforestation, land clearing for oil palm has also resulted in soil erosion, leading to excessive sedimentation and contamination<sup>iii</sup> of waterways used by rural communities for cooking, washing, drinking and food production. The intensive use of fertiliser and herbicide on oil palm plantations also poses a risk of polluted run-off entering nearby waterways.<sup>iv</sup>

## **Contributing to global warming**

According to a recent report, degraded peatlands in South East Asia produce 2 billion tonnes of carbon dioxide per year due to peatland oxidation and peatland fires, which is equivalent to almost 8 percent of the total global carbon dioxide emissions from fossil fuels.<sup>v</sup> A significant driver of peatland degradation in SE Asia is oil palm production, and about one-quarter of Indonesia's plantations are on drained peat bogs.

A recent study undertaken by the University of Leicester has found that massive amounts of carbon dioxide are released from peatland in South-East Asia when it is converted from natural swamp forest to plantations of oil palm or pulpwood trees. In its natural state, peat swamp forest acts as a carbon sink, accumulating 2.6 tonnes per hectare per year as a consequence of tree growth and peat accumulation. In contrast, degraded peatland or peatland under plantation agriculture is a major source of carbon emissions, emitting between 170 and 280 tonnes per hectare per year – or 1,000-1,900 tonnes/hectare/year over the 25 year life cycle of the plantation crop.<sup>vi</sup>

Since the areas occupied by oil palm plantations in South-East Asia are huge, the combined 25-year life cycle carbon emissions are enormous – in the region of 3,220 megatonnes CO<sub>2</sub> equivalent.

The irony of this situation is that oil palm production is being driven largely by a surge in demand for biofuels, as the world searches for alternatives to oil in an effort to reduce carbon emissions and combat climate change. However, palm oil cannot be considered a 'clean' fuel since the carbon emissions created by the land clearance its production creates, is estimated to be 20 times more than the emissions saved by replacing oil in cars.

## **Undermining global food security**

The world is already seeing the effects of substituting food production with cash crop (such as oil palm) production in order to fuel cars or manufacture food ingredients. World market prices for food staples such as rice and wheat, on which millions of the world's poorest people depend, have risen sharply in recent months, and according to the Food and Agriculture Organisation (FAO), thirty-seven countries currently face food crises.<sup>vii</sup> This has led to calls by the World Bank, the FAO and the International Monetary Fund for the West to act quickly to assist countries at risk of mass starvation, while food riots have occurred in Haiti, Indonesia, the Philippines and Cameroon in recent weeks.<sup>viii</sup> The IMF's managing director Dominique Strauss-Kahn has warned if food prices remain high, there will be war and other dire consequences for people in developing countries, and added that the problem could create trade imbalances that would affect even major advanced economies, "so that [the global food crisis] is not only a humanitarian question".<sup>ix</sup>

## **Undermining local food security**

Large-scale monoculture cash crop projects have turned subsistence farmers to cash crop growers whose incomes then become dependent on highly variable world commodity prices.<sup>x</sup> For instance in Malaysia, the average price of palm oil fell from \$US530 a tonne in 1998 to US\$150 in 2001.<sup>xi</sup> Furthermore, the income received by small farmers is affected by the fact that have very little market power and lie at the bottom end of a long value chain where other more powerful participants will always capture a larger 'slice' of the

available profits. There is massive inequality of rewards in the industry, with working, landowning families receiving a tiny fraction of industry revenues. xii

Not only have many local communities found that the large incomes promised by the transnational oil palm companies which contracted them as growers have not eventuated, but they are now also dependent on buying rather than producing their own food.xiii As village populations have grown, villagers have found themselves without enough land to survive, as all surplus land has been handed over for oil palm production.xiv Furthermore, after 50 years or so when the usual 2 crops of oil palm have been grown and the oil palm company has moved on, landholders are left with degraded land unfit for a return to subsistence production.

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**Additional Notes:**

In Indonesia, some six million hectares of land, mostly converted from tropical rainforests and in peat land, are under oil palm cultivation. In 2007, the Indonesian Government signed 58 agreements worth US\$12.4 billion in order to produce about 200,000 barrels of oil-equivalent biofuel per day by 2010. This could result in the emission of an additional 300 million tonnes of carbon dioxide to the atmosphere each year.

Deforestation is already the second-largest contributor to rising levels of carbon dioxide in the atmosphere. As a result of deforestation, some of which is for palm oil plantations, Indonesia is the third-largest emitter of carbon dioxide, after the USA and China. Deforestation to make way for large-scale mono-cropping of energy crops obliterates the ‘green credentials’ of the biofuel. In addition, land clearing for large-scale plantations will accelerate the destruction of peatlands, which are vitally important carbon stores – containing nearly 30 per cent of all land carbon stores while covering only three per cent of the land area. But, the rise of the biofuel market is having still wider effects. Its economic attraction is leading to conflict between crops grown for food and those grown for fuel. Increasingly, the result is expected to be both greater competition for land and higher food prices.

Tropical forests contain more than 50 percent of the life on earth, and yet cover less than 7 per cent of the planet’s surface. Forest ecosystems play a crucial role in regulating carbon cycles, acting either as a source or a sink for carbon dioxide depending on how they are managed. Forests also provide vital ecosystem services such as food, medicines and reliable clean water upon which about 1.4 billion people depend for their livelihoods and culture.

Worldwide, an estimated 20 million hectares of rainforest are destroyed each year – an area equivalent to the size of Victoria. Alarmingly, more than 40 percent of the earth’s rainforests have already been destroyed. Deforestation not only robs the world of an important source of genetic biodiversity and a vital carbon sink, it also further impoverishes some of the world’s poorest people. Forest destruction and depletion threatens local communities’ culture, food security and access to clean water, as well as increasing their vulnerability to ‘natural’ disasters such as landslides and severe floods.

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<sup>i</sup> The World Bank is extending credit to PNG for the Project through IDA, for PNG Smallholder Agricultural Development Project (2007 – 2012). World Bank finance totals USD 27.5 million, 40% of total project funds.

<sup>ii</sup> Under the Influence, Jubilee Australia Report 2007, page 13

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- <sup>iii</sup> Oil palm effluence leads to eutrophication is the process by which a waterway becomes high in dissolved nutrients, leading to the over-production of oxygen-depleting plant life such as blue-green algae, rendering the water toxic to human and other life.
- <sup>iv</sup> Anderson, T. (2006) *Oil Palm and Small Farmers in Papua New Guinea*, Report for the Centre for Environmental Law and Community Rights on the economic prospects for small farmers in PNG's oil palm industry, University of Sydney
- <sup>v</sup> Delft Hydraulics (2006) *Peat-CO2. Assessment of CO2 emissions from drained peatlands in SE Asia*. Delft Hydraulics in cooperation with Wetlands International, Alterra Wageningen. [Accessed at <http://www.wetlands.org/news.aspx?id=804eddfb-4492-4749-85a9-5db67c2f1bb8>, 23 April 2008]
- <sup>vi</sup> Get proper Univ of Leicester reference
- <sup>vii</sup> AAP (2008) "IMF chief warns of war over food", <http://newsinfo.inquirer.net/inquirerheadlines/nation/view/20080414-130185/IMF-chief-warns-of-war-over-food> [accessed 14 April 2008]
- <sup>viii</sup> Blair, D. and Evans-Pritchard, A. (2008) "A World of Hunger", *The Age*, p. 9, Tuesday April 15
- <sup>ix</sup> AAP (2008) "IMF chief warns of war over food", <http://newsinfo.inquirer.net/inquirerheadlines/nation/view/20080414-130185/IMF-chief-warns-of-war-over-food> [accessed 14 April 2008]
- <sup>x</sup> Anderson, T. (2003) *A Grand Deceit: The World Bank's claims of 'good governance' in Papua New Guinea*.
- <sup>xi</sup> Tan, L. (2004) "Nucleus-Agro Enterprises in Papua New Guinea" in *ADB and the Environment: A Monitoring Framework for the ADB's Environment Policy*, Dacanay, R. and Rosien, J (eds). Philippine Reconstruction Movement with NGO Forum on the ADB, Quezon City, Philippines.
- <sup>xii</sup> Anderson, T. (2006) *Oil Palm and Small Farmers in Papua New Guinea*, Report for the Centre for Environmental Law and Community Rights on the economic prospects for small farmers in PNG's oil palm industry, University of Sydney
- <sup>xiii</sup> Tan, L. (2004) "Nucleus-Agro Enterprises in Papua New Guinea" in *ADB and the Environment: A Monitoring Framework for the ADB's Environment Policy*, Dacanay, R. and Rosien, J (eds). Philippine Reconstruction Movement with NGO Forum on the ADB, Quezon City, Philippines.
- <sup>xiv</sup> ENBSEK (date?) Oil Palm Case Study – West New Britain and Consequences for East New Britain, A community discussion paper prepared by East New Britain Social Action Committee, Papua New Guinea