

# Towards sustainable palm oil: a framework for action

**ECONOMY**

**SOCIETY**

**ENVIRONMENT**



Based on the proceedings of the symposium 'Sustainable palm oil: challenges, a common vision and the way forwards'. Convened by the Zoological Society of London, in collaboration with ProForest and the Wildlife Conservation Society

# Towards sustainable palm oil: a framework for action

This publication is based on the proceedings of the symposium 'Sustainable palm oil: challenges, a common vision and the way forwards'.

This symposium was convened by the Zoological Society of London, ProForest and the Wildlife Conservation Society and took place on the 5th & 6th May 2011 at the Zoological Society of London.

**November 2011**

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Inside cover image © Tom Maddox

Although the content of this report is based on the presentations and discussions which took place over the course of the symposium, it does not necessarily reflect the views of all of the speakers and organisations involved

This symposium was convened as part of the Zoological Society of London's Biodiversity and Oil Palm project, which between October 2009 and September 2011 was funded by a grant from the Biodiversity & Agricultural Commodities Programme of the International Finance Corporation and Wilmar International



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**“ Whether you are directly or indirectly involved in the production and consumption of palm oil, ultimately, the net environmental and social impact of this industry is everyone’s business. ”**

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## EXECUTIVE SUMMARY

We no longer live in a society where responsibility for the way that agricultural commodities are produced begins and ends with the grower. Palm oil, as the world's leading type of vegetable oil, for which there is increasing demand for the production of food and fuel, is no exception. It is now increasingly recognised that stakeholders throughout the value chain, from policy makers, investors and growers to processors, retailers and civil society, have an important role to play in reconciling oil palm expansion with the conservation of biodiversity, maintenance of ecosystem services and socio-economic development.

While it is becoming widely accepted that there is an urgent need to increase the sustainability of current practices relating to the production and use of palm oil, consensus has yet to be reached on how this can best be achieved. Towards this end, in May 2011 the Zoological Society of London, in collaboration with ProForest and the Wildlife Conservation Society, convened a symposium entitled 'Sustainable palm oil: challenges, a common vision and the way forward'. The aim of this symposium was to bring together leading scientists, policy makers, companies and NGOs to present the latest science and discuss effective policies, tools and practice for increasing the sustainability of global palm oil production.

The key outcomes from the symposium are outlined below;

Based on the latest science and practical experience, four fundamental pre-requisites for environmentally and socially responsible palm oil production were identified. These are:

- Avoid the conversion of biodiverse and carbon rich natural ecosystems;
- Maximise biodiversity and ecosystem services within oil palm landscapes;
- Respect land tenure and resource use rights;
- Ensure equitable sharing of socio-economic benefits.



“ We no longer live in a society where responsibility for the way that agricultural commodities are produced begins and ends with the grower. ”

Fulfilling these criteria depends on identifying and directing oil palm expansion towards land that is most suitable for responsible cultivation, frequently termed 'degraded land'. This is proving to be extremely challenging. Over the course of this symposium, land use planning was identified as the mechanism with the greatest potential to achieve this goal. However, the current public and private policy environment in many of the major regions for current and future oil palm expansion, presents significant challenges to progress at present. Examples of weaknesses in land use planning processes in Indonesia and West and Central Africa were discussed, as well as tools and measures that could be used to strengthen these systems. The potential for the Roundtable on Sustainable Palm Oil (RSPO) certification scheme, the High Conservation Value (HCV) approach, Biodiversity offsets and the principle of Free Prior and Informed Consent (FPIC) to contribute to delivering more responsible palm oil production was assessed. Speakers emphasised that although none of these approaches constitute a silver bullet, efforts should be focused on improving existing tools and approaches instead of inventing completely new ones.

In order to reduce the negative environmental and social impacts of palm oil production it is essential that the demands and influences of policy makers, investors, civil society and members of the supply chain are aligned with the requirements for responsible palm oil production. In recognition of this, frequent reference was made to the current state of the market for Certified Sustainable Palm Oil (CSPO), as this is currently the best proxy available for more environmentally and socially responsible palm oil consumption. The possible reasons for the relatively slow market uptake for CSPO, as well as current efforts and further actions required to boost demand, were discussed.

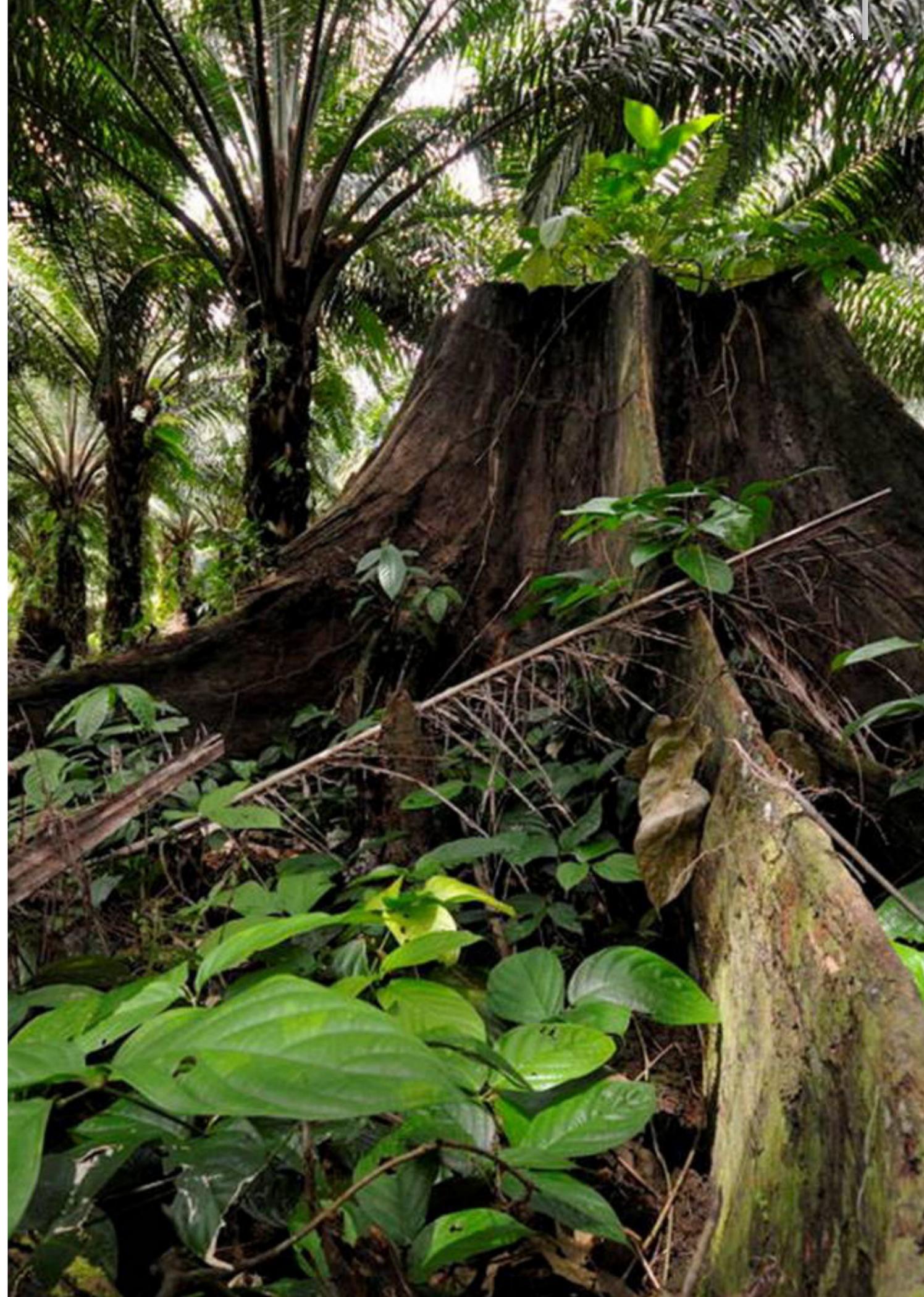
Over the course of the symposium a range of actions were highlighted which, if implemented by the relevant stakeholders, could make a valuable contribution to reducing the negative environmental and social impacts of palm oil production and consumption. To date, most efforts to achieve this goal have focused on the European market and the current major regions of palm oil production in South East Asia. However, it was emphasised that there is an urgent need to assimilate lessons learned and best practices from these regions into the new frontiers for oil palm expansion, namely West and Central Africa and South America. Engaging the major markets for palm oil, particularly China, India and domestic markets in producer countries, was also highlighted as critical. Implementing improved approaches from the outset in countries that are on the brink of large scale expansion, particularly the development of systematic and inclusive land use planning processes, presents a huge opportunity to ensure that the potential for oil palm to reduce the net environmental impact of global vegetable oil production and be a positive force for socio-economic change is realised, and that the adverse impacts that have occurred in South East Asia are minimised as far as possible.



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(Right) © Tim Cockerill



# PALM OIL IS A COMMODITY WITH A SPLIT PERSONALITY



## VITAL STATISTICS: THE OIL PALM

**Scientific name:** *Elaeis guineensis*  
**Native to:** West Africa  
**Lifecycle:** 25 – 30 years, year round production  
**Average yield globally:** 3.5 tonnes/ha  
**Oil palm area harvested:** 14.9 million ha in 2009

(Source: FAO STAT, 2009. Accessed on 8th November 2011 from: <http://faostat.fao.org>)

### Largest producers:

1. Indonesia (25.4 million tonnes)
2. Malaysia (18.4 million tonnes)
3. Thailand (1.45 million tonnes)
4. Colombia (0.9 million tonnes)
5. Nigeria (0.85 million tonnes)

(Source: US States Department of Agriculture, 2011. Accessed on 8th November 2011 from: [www.indexmundi.com/agriculture/?commodity=palm-oil&graph=production](http://www.indexmundi.com/agriculture/?commodity=palm-oil&graph=production))

**Major uses:** found in 50% packaged products on the supermarket shelf (food & non-food), biofuel

## INTRODUCTION

Palm oil, the world's leading type of vegetable oil, is a commodity with a split personality. On the one hand, oil palm is a remarkably efficient source of vegetable oil, capable of producing the same volume of oil as soybean, rapeseed and sunflower on less than 20% of the land area needed for these other crops. As a consequence of this, oil palm has the potential to play an important role in satisfying rapidly increasing global demand for vegetable oil while keeping the conversion of natural ecosystems to a minimum. Furthermore, the higher profitability and levels of manual labour required to produce palm oil in comparison to other vegetable oils means it can be a positive force for socio-economic development and poverty alleviation. On the other hand, large scale oil palm plantations are competing for space with tropical rainforests that are rich in biodiversity and carbon and land which communities depend on to meet their basic needs. As a result, expansion of this sector in Indonesia and Malaysia, which currently produce over 90% of the world's palm oil, has supported economic development but also had significant negative environmental and social impacts. Unless environmentally and socially responsible production becomes widespread in the palm oil sector, there is a risk that these adverse impacts will be replicated in the African and Latin American countries that are poised to become the new frontiers for large scale oil palm expansion.

Media and civil society campaigns in Europe and North America have tended to focus on the negative rather than the positive aspects of palm oil production. Some of these have advocated avoiding the use of palm oil completely. Whilst boycotts may be a useful tool for raising awareness of the issues and stimulating stakeholder behaviour change, they have done little to reduce global demand for palm oil. Given that vegetable oils from different sources (e.g. oil palm, soybean, rapeseed, sunflower) are largely interchangeable for a multitude of uses, if one set of buyers excludes palm oil and replaces it with an alternative, the palm oil will simply be sold to another group of buyers. For example, EU biofuel policies have resulted in increased use of rapeseed and soybean oil in Europe, thus diverting significant volumes of these vegetable oils from other markets. Palm oil, as a profitable, cheap and versatile form of vegetable oil, has to a large extent filled this gap in the market with the result that palm oil use has increased. All indications are that global demand for vegetable oil will continue to rise as demand for food and fuel increases so it is inevitable that oil palm expansion will continue. Considering the increasing demand, the 'interchangeability' of vegetable oils and the fact that the production of alternatives to palm oil requires a larger land area, shunning palm oil is not a solution. It is therefore essential that environmentally and socially responsible production becomes 'business as usual' for the palm oil industry.

Over the last decade there has been growing recognition by business, policy makers and civil society that sustainable production and consumption must be the way forward. This is critical to securing access to the natural resources and ecosystem services on which both business and human existence ultimately depend. Within the palm oil sector, the establishment of the multi-stakeholder Roundtable on Sustainable Palm Oil (RSPO) certification scheme has generated significant momentum for efforts to improve the sustainability of palm oil production and consumption.

However, much work is still needed, by the full spectrum of palm oil stakeholders, if environmentally and socially responsible palm oil production is to become the norm. An important component of achieving this in practice is to ensure that emerging policies and good practice guidelines aiming to promote sustainable production are based on the best possible science. This is a major challenge in tropical ecosystems, where many pertinent scientific questions still need to be answered and socio-economic structures are complex. However, ongoing research programmes and the growing body of practical experience offer a wealth of information that should be utilised.

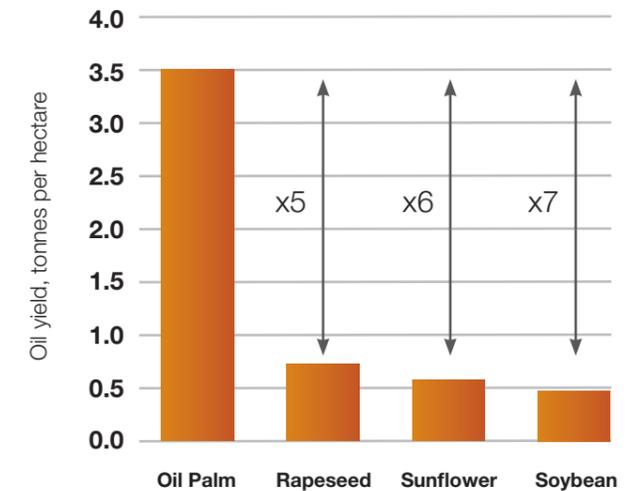
Therefore, the Zoological Society of London, in collaboration with Proforest and the Wildlife Conservation Society, convened a symposium 'Sustainable palm oil: challenges, a common vision and the way forwards', which was held in London on the 5th & 6th of May, 2011. The aim of the Symposium was to bring together leading scientists, policy makers, companies and NGOs to present the latest science and discuss effective policies and practice for increasing the sustainability of global palm oil production.

This publication, which summarises the outcomes of the symposium, is divided into five sections which:

- Define the key elements of responsible palm oil production, based on a review of the science and practicalities of reconciling environmental and socio-economic goals for production (Section 1).
- Summarise the actions needed, and barriers which must be overcome, to identify and direct oil palm expansion towards land suitable for responsible production (Section 2).
- Review the strengths and weaknesses of the tools and approaches currently available to transform the market towards sustainable palm oil production and consumption, highlighting areas where further work is needed (Section 3 & Section 4).
- Identify how each group of palm oil stakeholders, from policy makers and investors to producers and retailers, can contribute towards achieving this goal (Section 5).

*'Among oil-bearing crops, oil palm's yield per ha averages five times that of rapeseed, six times that of sunflower and seven times soybean's.'*

James Fry, LMC International



**It is essential that environmentally and socially responsible palm oil becomes 'business as usual' for the palm oil industry**



## SECTION 1:

# Key elements of responsible palm oil production

In order to balance the positive and negative impacts of palm oil production it is necessary to develop a good understanding of the relationship between oil palm and the environment, society and economy in the regions where it is produced. This section discusses the most significant environmental and socio-economic issues identified during the symposium and summarises the evidence presented. Four key requirements for responsible palm oil production were highlighted;

- Avoiding the conversion of biodiverse and carbon rich natural forests
- Maximising biodiversity and ecosystem services in oil palm landscapes
- Respect for land tenure and resource use rights
- Equitable sharing of socio-economic benefits from palm oil



Borneo orangutan © Samantha Davies



Oil palm smallholders  
© Wild Asia/Lim Ying Ying

**Sustainable development: 'Development that meets the needs of the present without compromising the ability of future generations to meet their own needs'**

*World Commission on the Environment and Development's report Our Common Future, 1987*

## 1. Avoiding the conversion of biodiverse and carbon rich natural forests

*Oil palm cultivation is best suited to the regions of the world that are naturally occupied by moist tropical rainforests, which are the most biodiverse terrestrial ecosystems on the planet and play a critical role in maintaining the climate. Minimising the contribution of oil palm expansion to the conversion of tropical forest ecosystems as far as possible is fundamental to reducing the environmental impact of palm oil production.*

### Greenhouse Gas (GHG) emissions from land use change



© ZSL/Sophie Persey

The level of GHG emissions or sequestration resulting from oil palm development depends on the type of land the plantation is developed on. Data presented at the symposium showed that while oil palm plantations contain around 30-50 tonnes of carbon per hectare (t C/ha) when averaged over its lifecycle, intact tropical forests can contain up to 250 t C/ha. The carbon stock of disturbed and degraded forests range from close to 250 t C/ha, to around 30 t C/ha in areas that have been severely degraded. Degraded grasslands and existing agricultural areas may contain even less than 30 t C/ha. Therefore, while replacing intact or lightly disturbed forest results in significant net emissions, developing oil palm plantations on degraded grasslands or severely degraded forest with a lower carbon stock than oil palm can result in net sequestration.

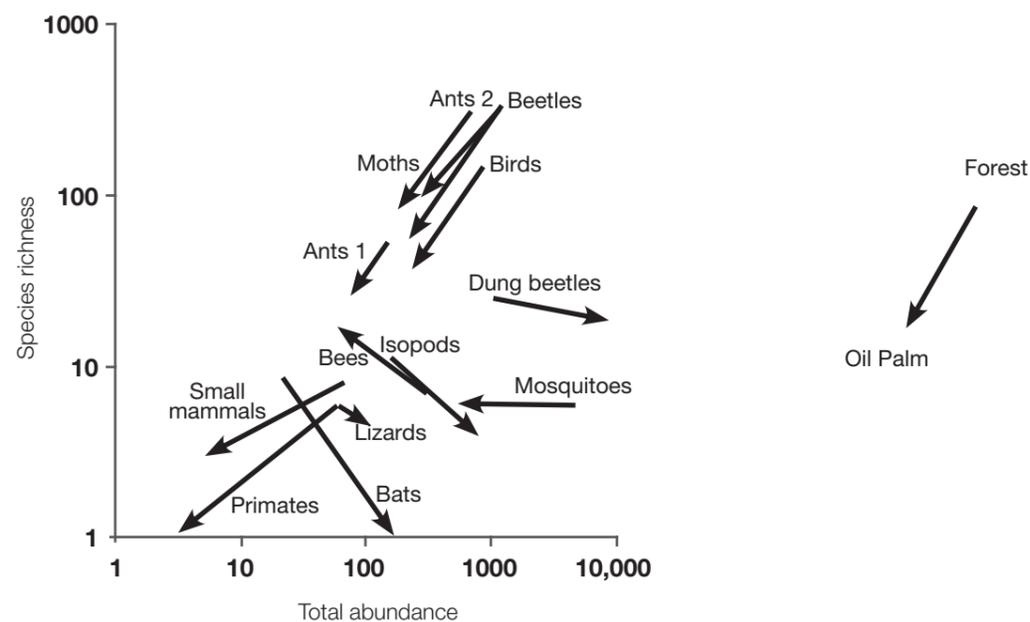
It was also highlighted that the balance of carbon emitted and sequestered as a result of oil palm development will be affected by the carbon content of the soil and the way that the land is prepared. GHG emissions will be much higher if oil palm is planted on peat soils, which contain between 300-800 tonnes of carbon per metre depth per hectare (t C/m/ha), in comparison to mineral soils, which contain between 15-200 t C/m/ha in the surface layer of soil. On peat soils, both the reduction in the water table due to drainage and the method of land clearance are important factors in determining the volume of carbon that is released. If fire is used to clear the land then this may burn the peat layer and cause further oxidation of the carbon it contains. There is also a high risk that carbon will be emitted from mineral soils when natural forests are converted to oil palm.

## Biodiversity loss

Oil palm monocultures support far fewer species than intact, disturbed and in some cases even highly degraded natural forest. Research focusing on a wide variety of different species groups, from ants to large mammals, has shown that forest specialist species are highly intolerant of oil palm monoculture. Therefore, not only will the conversion of biodiverse natural forests to oil palm reduce the amount of suitable habitat available to these species, in many cases it also makes it harder to access by further fragmenting the forest that remains. This will increase the likelihood of forest dependent species, many of which are already of high conservation concern, becoming locally extinct.

The limited number of species that are able to persist within oil palm monocultures tends to be common species with general habitat requirements, a characteristic that is often associated with invasive species and pests, such as rats. Research presented at the symposium suggests that the replacement of a wide variety of forest specialist species with a few generalist species will result in a community of species which collectively supports a more limited range of functional traits than in biodiverse natural forest ecosystems. As a consequence of this, interactions between species become very simplified. This can result in essential ecosystem functions, such as nutrient cycling, pollination and pest control, being carried out less efficiently or not at all. Relying on just one or two species to perform vital ecosystem functions will reduce the resilience of the ecosystem, as it is less equipped to cope with change over time.

## The impact of the conversion of forest to oil palm on species diversity and abundance



Published in: Foster W.A., Turner E.C., Snaddon J.L., Fayle T.M., Broad G.R., Chung A.Y.C., Cockerill T.D., Eggleton E., Ellwood M.D.F., Chey V.K., Yusah K.M. (2011). *Establishing the evidence base for maintaining biodiversity and ecosystem function in the oil palm landscapes of South East Asia*. Philosophical Transactions of the Royal Society B.

## The Million Dollar Weevil

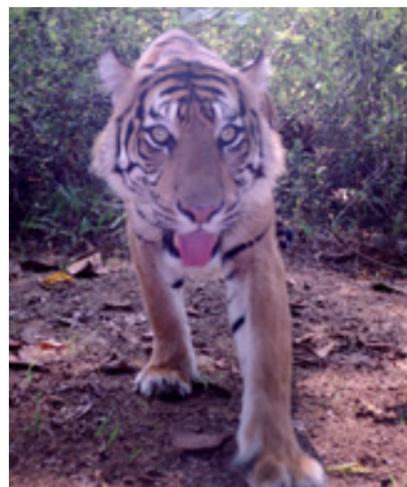


The weevil that pollinates oil palm  
(*Elaeidobius kamerunicus*) © Tim Cockerill

## “ Sustain-aGility

– building the capacity to respond to future changes

Sumatran tiger © ZSL



- When the oil palm was introduced to Malaysia yields were much lower than in West Africa, where this species is native.
- It was widely thought that the oil palm was pollinated by wind, yet unlike in West Africa, oil palms in Malaysia required hand pollination.
- In 1979, observations of oil palm in Cameroon found that both the male and female flowers were visited by a number of different species of weevil. If these species were excluded, pollination did not occur.
- Similar observations in Malaysia identified a species of moth and a species of thrip that visited the oil palm flowers, but they were not very effective at pollinating the flowers.
- In 1981, one of the weevil species responsible for pollination in Cameroon (*Elaeidobius kamerunicus*) was introduced into Malaysia.
- As a result, hand pollination was no longer necessary and yields increased by 20%. In 1983, the introduction of these natural pollinators was estimated to save oil palm growers US\$115 million per year. The expansion of oil palm in South East Asia and the increased price of palm oil means that today the value of these pollinators is likely to have increased exponentially.
- However, this valuable ecosystem service is dependent on just one or two species of insect, the populations of which stem from just a few individuals. This makes these populations more vulnerable to disease and less capable of adapting to changes in their environment.
- If populations of these weevils were to be lost, the cost to the palm oil industry would be huge. This demonstrates the importance of conserving natural levels of biodiversity, as having multiple species with the ability to perform vital functions such as pollination provides an insurance strategy against disease and ecological change.

Greathead et al (1983) *The multi-million dollar weevil that pollinates oil palms*.  
*Royal Entomological Society of London, Volume 7, Number 3.*

## 2. Maintain biodiversity & ecosystem services within oil palm landscapes

*Retaining habitat complexity within landscapes dominated by oil palm is the key to maintaining biodiversity, and in turn the performance of vital ecosystem functions. It was suggested that achieving this requires a strategy that, in addition to avoiding the conversion and fragmentation of large areas of contiguous forest, combines the following approaches:*

- *Retaining forest fragments that play an important role in supporting biodiversity within the landscape. Effectiveness is dependent on the size, habitat quality and isolation of the fragment.*
- *In some situations increasing the heterogeneity of the oil palm monoculture can help to increase the biodiversity it supports to a limited degree*

### “ Plant diversity begets animal diversity ”

© Tim Cockerill



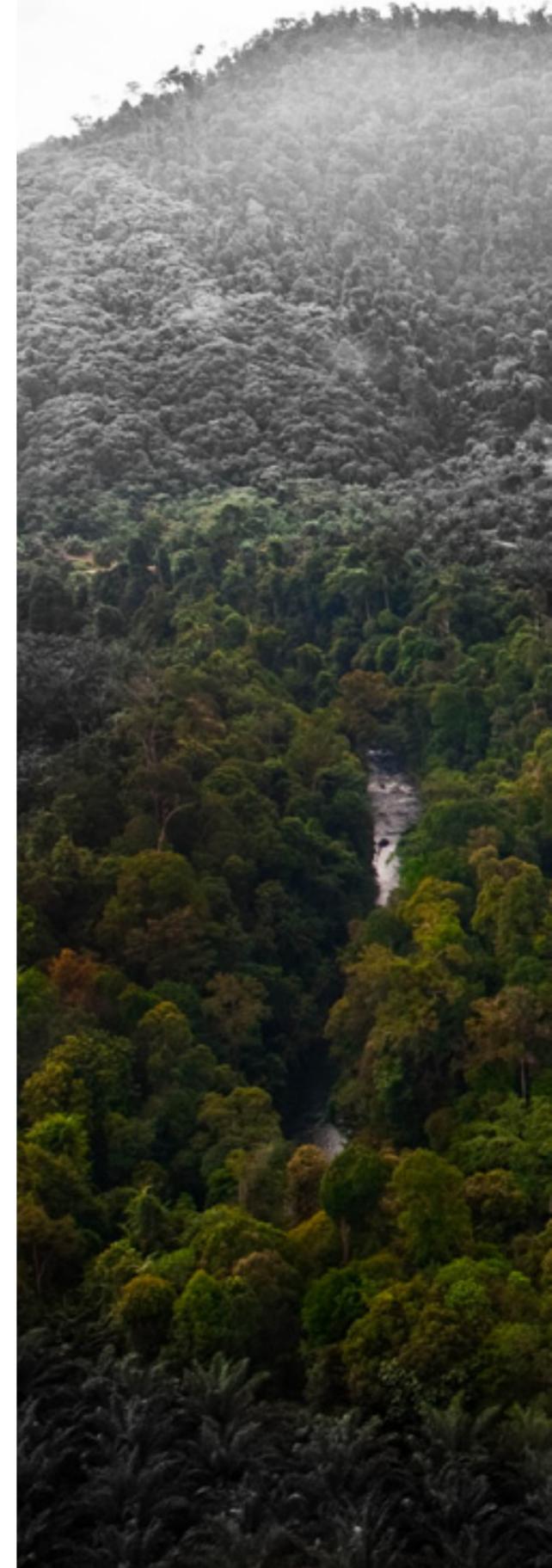
Maximising the area and quality of natural habitat that remains was identified by speakers at the symposium as the most effective means of conserving biodiversity within landscapes dominated by oil palm. Given that larger, contiguous areas of forest support the highest levels of biodiversity, minimising the contribution of oil palm expansion to the conversion and fragmentation of these ecosystems as far as possible should be a priority.

In addition to this, conserving forest fragments within oil palm concessions can help to increase biodiversity at both the local level, as a result of species utilising these patches ‘spilling over’ into the surrounding crop, and at the landscape level, by providing crucial stepping stones or refuges to enable forest dependent species to move between core areas of their natural habitat that are separated by large expanses of oil palm. This is essential to ensure the long term survival of these species, as it allows forest areas where local extinctions have occurred to be re-colonised and genetic diversity to be preserved. The ability of a particular fragment to fulfil these functions will vary depending on the size, habitat quality and location of the fragment within the landscape. As a general rule, the smaller and more isolated a patch of forest becomes, the lower its ability to support healthy populations of a wide variety of species. Combined with the higher exposure to harmful biotic and abiotic edge effects that reduce the quality of the habitat, smaller patches of forest surrounded by oil palm monoculture are of lower biodiversity value than larger areas of contiguous forest. However, to date research to elucidate the quantitative relationship between the size and isolation of forest fragments surrounded by oil palm and their ability to support different species remains limited. However, this information is urgently needed to ensure that limited resources are used most effectively to conserve biodiversity within oil palm landscapes.

Research on ants, butterflies and birds presented at the symposium suggests that measures to increase the heterogeneity of the oil palm monoculture, such as retaining high densities of epiphytic ferns and more extensive ground cover, can also help to enhance biodiversity at a local level to a limited extent. However, it is recognised that in some cases this may reduce yields.

There remains much debate about what is the most efficient and effective strategy for reconciling palm oil production with the conservation of biodiversity and ecosystem services. At one end of the spectrum is the ‘land sharing’ approach, where efforts are focused on maximising biodiversity within the landscape by increasing the heterogeneity of the oil palm monoculture and conserving fragments of natural habitats within oil palm concessions. At the other end of the spectrum is the ‘land sparing’ approach, whereby production is intensified within oil palm concessions to reduce the need for expansion and the pressure to convert larger areas of contiguous forest. For example, this could involve converting small patches of low quality forest that remain within the concession but that have poor prospects for continuing to be of value to biodiversity in the long term, and offsetting this impact on biodiversity (See Section on Biodiversity Offsets. At present, there is insufficient scientific evidence to determine the cost:benefit ratio of each strategy. However, the most pragmatic option will largely be determined by the policy and regulatory framework in each region of oil palm expansion, and is likely to lie somewhere in the continuum between these two approaches.

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### 3. Respect land tenure and resource use rights

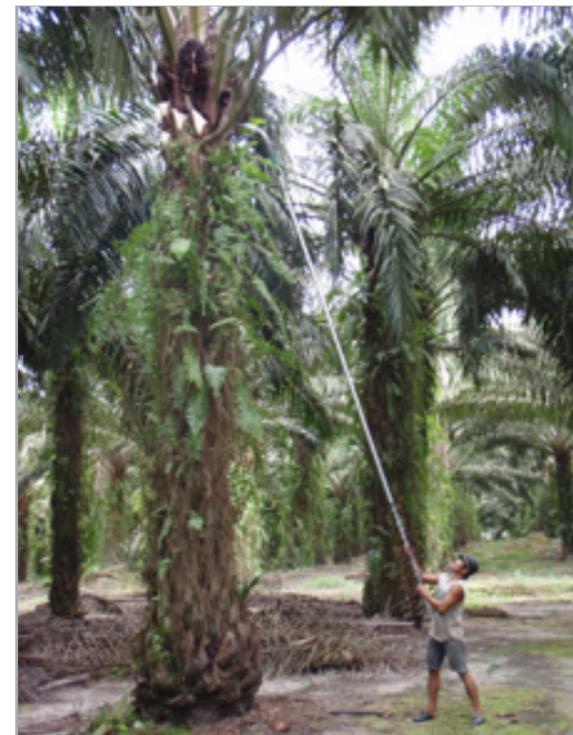
*Oil palm expansion has frequently resulted in conflict between companies and local communities, largely due to ambiguity in land and resource use rights. Overcoming this is extremely challenging but critical to enable oil palm expansion to take place in the most ecologically degraded areas, which tend to be more densely populated than forested areas.*

Several speakers explained that land tenure and resource use rights are poorly defined and documented in many of the regions of the world where oil palm expansion is occurring. As a consequence of this, companies have frequently been allocated licenses for oil palm development that overlap with areas that are owned or used by local communities. In South East Asia this has frequently resulted in conflict, with companies being accused of coercing or forcing local communities to give up land to which they believe they have a legitimate claim, whether or not this is recognised by the state. The action needed to resolve overlapping land use claims varies between countries and even regions. In Papua New Guinea (PNG), there are regulations to guide the formation of a community panel with which a palm oil producer can negotiate to determine the conditions under which it can rent the land. In countries where such regulations do not exist, it can be extremely challenging and time consuming to determine who can legitimately represent the consensus of a particular community and thus who should be involved in consultations with the company wishing to acquire the land. The situation is made even more complex by the diverse vested interests involved. Discussions over the course of the symposium identified ambiguity over land tenure and resource use rights as a significant barrier to oil palm expansion on non-forest lands, both in South East Asia and West and Central Africa, due to the fact that they tend to be more densely populated than forested areas. Whilst there is a strong incentive for companies, smallholders and local communities to resolve these issues, several speakers argued that this is one of the greatest challenges to improving the sustainability of natural resource management.



### 4. Equitable sharing of socio-economic benefits

*Palm oil production generates substantial revenues for both producer governments and the private sector. The expansion of this industry has also played an important role in generating employment, improving infrastructure and boosting the local economy in key regions of production. Whilst oil palm is highly suited for cultivation by smallholders, the ability of this stakeholder group to maximise the potential economic benefits of growing this crop varies widely depending on a number of factors.*



Harvesting the oil palm fruit © ZSL/Sophie Persey

It was acknowledged that oil palm is highly suitable as a smallholder crop because it has high yields and production is very labour intensive in comparison to other crops, such as soybean which is highly mechanised. This limits the economies of scale that can be achieved by large producers. One speaker proposed that, given the current high price of palm oil, oil palm is a strong contender for the most profitable smallholder crop in wet tropical regions, with the exception of coca, the pre-cursor to cocaine. However, it was stressed that the ability of smallholders to maximise the potential benefits of palm oil production varies widely depending on the local situation. There are some examples, such as the largest smallholder oil palm co-operative in Southern Thailand, where ownership of between 2-4ha of oil palm has dramatically improved the quality of life of smallholders over a relatively short time span. In this example, people who had very little 20 years ago now own cars and are able to provide their children with higher education. However, there are many situations where the potential socio-economic benefits for smallholders are not maximised.

#### SMALLHOLDERS

**Estimated number of smallholders directly employed globally:**  
6 million

**% of total area of global oil palm:** 40-50%

**% of total global palm oil production:** 20-30%

**Median planted area:** 2 - 4 ha (range = 0 - 50ha)

**Average yield:** 2-3 tonnes CPO/ha (approx half yield of well established plantation in Malaysia)

#### PALM OIL & THE INDONESIAN ECONOMY

##### Foreign exchange:

\$12.4 billion in 2008 (most valuable export after oil and gas) (Bahroeny 2009)

##### Employment:

Approx 1 person employed for every 7 ha of oil palm. Income for 3.5 million households (14 million people) engaged as smallholders & plantation workers (Bahroeny 2009)

##### Private sector:

Estimated to range between US \$375 - \$1,8661 (Estimate given by a speaker at the symposium based on a CPO yield of 4-7 tonnes/ha and CPO price of US \$ 497/tonne (In 2011 the price has ranged between US \$1,065 and US \$1,286 on the c.i.f North West Europe)



© Meri Orth

**In Indonesia and Malaysia the mill assesses the quality of the FFB purchased in order to determine the price, but the methodology for this is frequently unclear**

One reason for this which was discussed at the symposium is that smallholders are frequently highly dependent on large producers or traders both to obtain the initial capital needed to establish a plot of oil palm and to purchase the fruit produced. Speakers reported that this can result in smallholder income being less than expected. This may be because the smallholders do not fully understand the terms and conditions of their agreement with the company or trader. For example, the company may keep back a proportion of the amount due to the smallholder for their fruit to cover the cost of replanting their oil palms. Alternatively, it may be because the smallholder is being taken advantage of. Examples given include situations where smallholders receive unrealistically high yield estimates for their oil palms, or the lack of transparency by traders or mill operators about how the price paid for their Fresh Fruit Bunches (FFB) is calculated, allowing low prices to be paid. In Papua New Guinea there is a fixed, published price for the purchase of FFB from smallholders, which is not influenced by quality. In Indonesia and Malaysia the mill assesses the quality of the FFB purchased in order to determine the price, but the methodology for this is frequently unclear. The fact that loan agreements frequently 'tie' smallholders to certain mills means that smallholders may have little control over the price they receive for their FFB. Similarly, the need for FFB to be processed as quickly as possible in order to maximise the volume of oil produced means that even independent smallholders may effectively be limited to a single mill or trader in many regions.

Several of the speakers reported that a further factor that limits the socio-economic benefits smallholders derive from palm oil production is the low yields achieved in comparison to large producers. This is strongly linked to weaknesses in the agricultural practices employed and inadequate financial planning. Smallholders frequently have limited access to fertilisers, the infrastructure required to transport FFB to a mill quickly, or the best planting material. Furthermore, it was noted that smallholders may lack the knowledge and skills required to implement best agricultural practices developed by large producers. The average yield achieved by smallholders is further reduced by the fact that smallholders rarely save sufficient funds to re-plant oil palm when yields become sub-optimal.

Fresh Fruit Bunches being delivered to the mill

© ZSL/Tom Maddox



In Indonesia, large producers are legally obliged to allocate a certain proportion of their concessions for smallholder production (plasma schemes), which creates an opportunity for transfer of knowledge to smallholders. However, companies may find it easier to take control of the way in which plasma schemes are managed instead of engaging and educating smallholders in order that they have the capacity to manage these areas efficiently themselves. In addition to this, regulations in Indonesia currently require companies wishing to develop a palm oil mill to establish a plantation to feed the mill, which reduces the incentive for mill owners to invest in increasing the yields of oil palm in the local area that is being managed by independent smallholders. Despite this, some large RSPO member producers are starting to develop plans at the board level to invest in smallholder capacity building, although it may be some time before this translates into improvements on the ground.

It was suggested that in order to maximise the socio-economic benefits of palm oil production for smallholders, measures are needed to increase yields and ensure that business agreements with large producers and traders are fair and transparent. This speaker went on to suggest that there is also a need for training schemes to promote both good agricultural practices and financial management. Increasing the yield of areas managed by smallholders has the potential to increase the socio-economic benefits for these producers, whilst also reducing the need for further expansion and the environmental risks associated with this. However, it was highlighted that the tendency of smallholders to plant all available land means that large areas managed by smallholders can have a higher environmental impact than a concession managed by a company that can afford to leave areas unplanted in order to conserve biodiversity and ecosystem services and may have a longer term vision for the productivity of the area.

Oil palm smallholders in Ghana © ProForest



## SECTION 2:

# Identifying land suitable for responsible cultivation

“Indonesia has more than 30 million hectares of degraded land which are critical to our sustainable economic growth...allowing for expansion of palm oil and forestry into degraded land is one of the areas that the government is committed to and working on....Our basic policy is utilizing the already degraded land for productive purposes while exercising best practices, of not expanding uncontrollably land use for agriculture that is threatening for our environment”

Abstract from the key note speech by the President of the Republic of Indonesia, Susilo Bambang Yudhoyono, at the Business for the Environment Global Summit in Jakarta, Indonesia on the 28th April 2011.

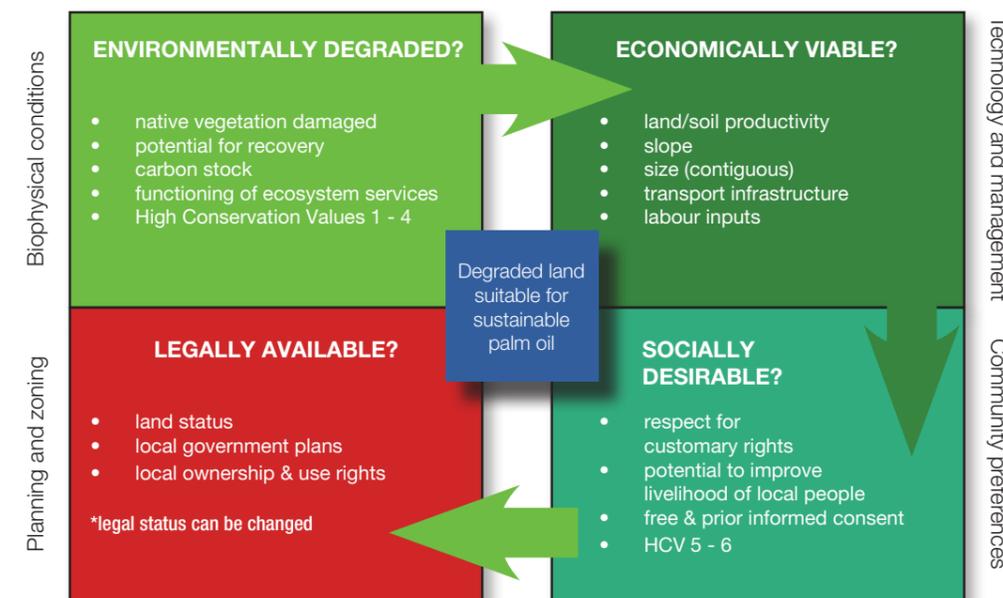
*A recurrent theme of the symposium was that where oil palm expansion takes place is critical to determining the environmental and social impact of palm oil production. Directing expansion towards land that is most suitable for responsible production requires a transparent and participatory methodology to identify and map these areas. This information must be conveyed to decision makers and measures taken to overcome the practical and policy related barriers which can prevent these areas from being targeted for oil palm expansion at present.*

There has been much discussion and mounting political support, particularly in Indonesia, for the use of ‘degraded’ land as a means of mitigating the environmental and social impact of planned oil palm expansion. Although there is wide support for this concept, there has been opposition to the use of the term ‘degraded’, for fear that it could result in oil palm expansion being directed to physically degraded areas, which may still be extremely valuable to local communities as well as to wildlife. One speaker suggested that using a more positive term to describe areas with limited environmental and social value could help to allay these concerns and make these areas more appealing to palm oil producers looking to expand, for example, ‘Responsible Cultivation Areas’.

At present, there is a lack of a clear and widely accepted definition of land which is suitable for responsible cultivation, which has resulted in highly varied estimates of the extent to which such areas could accommodate ambitious targets for oil palm expansion. This stems from the fact that there is little information available about where this land is located. Instead of a static definition, it was recommended that a transparent and participatory methodology be developed to identify and map land that is suitable for responsible cultivation. This should take into consideration the ecological, social and legal status of the land, as well as whether or not it would be economically viable for either large scale or small scale palm oil production.

### Considerations in using degraded land

Moray McLeish/World Resources Institute



A number of the speakers at the symposium described practical barriers which currently hinder the utilisation of responsible cultivation areas for oil palm expansion. One such barrier is that decision makers rarely have access to the data required to identify and map land that falls into this category. But rapid technological advances in forest cover mapping and intensified effort to conduct landscape level assessments of various ecological attributes promise to make the data needed to determine the ecological value of a particular area more widely available. In contrast, mapping community resource use and land use rights in order to determine the social value of a particular area is an extremely challenging, time consuming and resource intensive process. The tendency for non-forested areas to be densely populated was identified by participants of the symposium as a key reason why large scale producers may find it easier to expand into forested areas, because access to land is likely to be more reliable. In many cases, this is thought to be a more important consideration for producers looking to expand than the conventional wisdom that companies require timber revenues to fund oil palm development. A further practical barrier to the utilisation of responsible cultivation areas for large scale production is that this land is generally only available in small patches, whereas most companies would ideally aim to develop contiguous areas of between 5,000ha to 20,000ha. In theory, these patches of land would be better suited to smallholder production, but the viability of such a strategy is dependent on accessibility to a palm oil mill.

In situations where it would be practical for responsible cultivation areas to be utilised for oil palm expansion, it is essential that the regulatory framework enables producers to access this land. In Indonesia, many of the areas suitable for responsible production are currently unavailable for legal oil palm expansion because they are categorised as part of the forest estate, even though they are no longer forested. Several mechanisms are available to reclassify the land in order to make it available for oil palm expansion, including releasing these areas from the forest estate, land swaps and the revisions of district and provincial level spatial plans that occur every five years. However, these processes can be both time consuming and expensive for both the companies and local governments involved, providing little incentive to initiate or engage in this process. In countries with devolved governance such as Indonesia, the distribution of responsible cultivation areas between different regions is likely to determine the level of political support for directing expansion towards this land, as this will in turn affect the distribution of the socio-economic benefits associated with palm oil production between regions. Although mechanisms to make land suitable for responsible cultivation accessible for oil palm expansion are needed, it is important to ensure that sufficient safeguards are in place to prevent these same mechanisms being used to excise areas which are still forested.

In other countries that are set to become major producers of palm oil, such as Brazil and number of Central and West African countries, it has yet to become clear whether the regulatory framework will create similar barriers to the utilisation of the areas most suitable for responsible cultivation. In order to facilitate responsible production in these regions from the outset, it is essential that efforts are made to map responsible cultivation areas, convey this information to decision makers and create an enabling regulatory framework.

## SECTION 3:

# Existing tools & approaches to promote responsible production

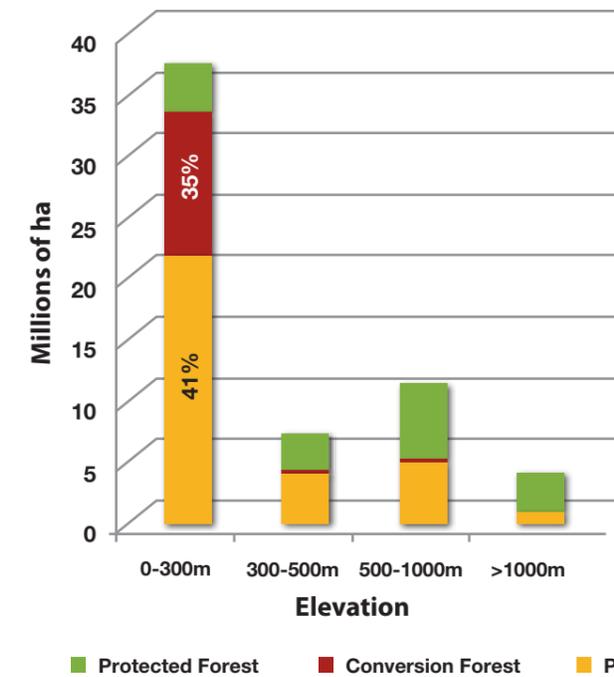
There are a number of existing tools and approaches that have an important role to play in delivering more responsible palm oil production on a wider scale. Some of these are relatively new and still require further work. However, many speakers emphasised that effort should be focused on strengthening and improving the implementation of these existing tools and approaches in preference to developing alternatives. For each of the five key tools and approaches that were discussed over the course of the symposium, their current ability to promote responsible production is assessed and areas where further work is needed are highlighted. The tools and approaches discussed are:

- Land use planning
- The Roundtable on Sustainable Palm Oil (RSPO)
- The High Conservation Value (HCV) approach
- Biodiversity offsets
- Free Prior and Informed Consent (FPIC)

**Many speakers emphasised that effort should be focused on strengthening and improving the implementation of existing tools and approaches in preference to developing alternatives.**

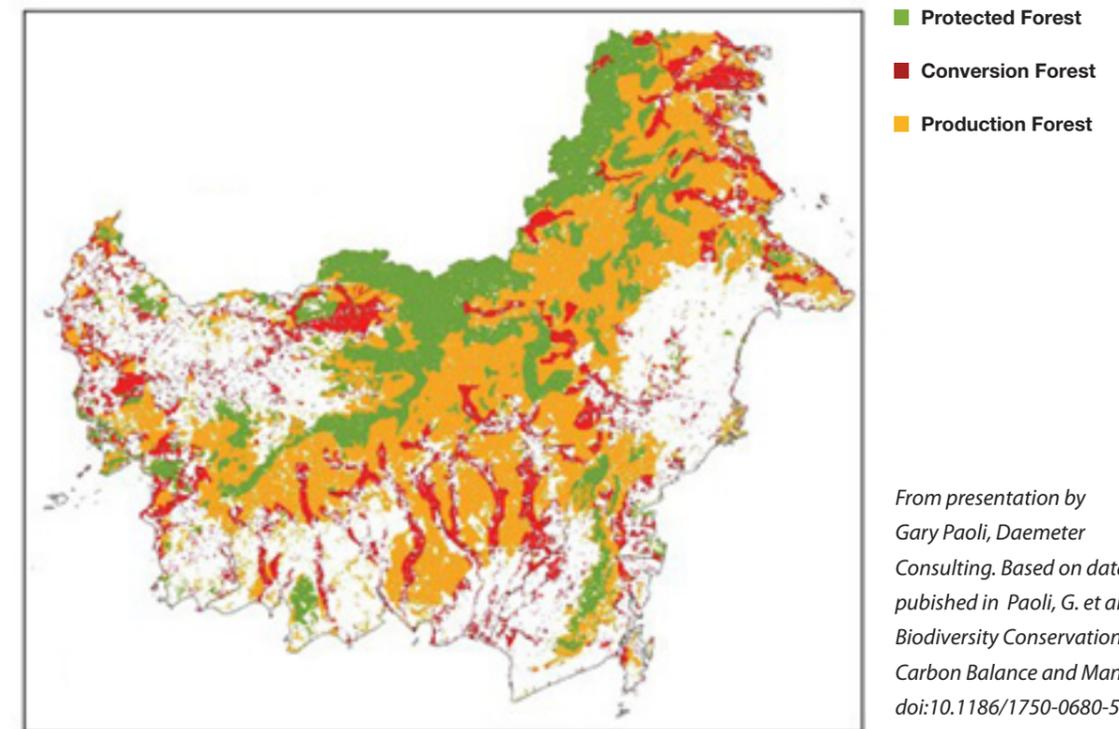
## 1. Land use planning

### Forest Areas at Risk for Conversion



*The process of land use planning is critical in determining the net environmental and social impact of oil palm expansion within a landscape. Several speakers stressed that it is therefore of concern that land use planning is currently inadequate in many of the major current and future regions of oil palm expansion. The ability of existing land use planning systems to support responsible production, as well as measures identified as having the potential to strengthen this approach, are discussed below.*

Area of forest at risk of conversion in Kalimantan, Indonesia (c. 55 million ha)



*From presentation by Gary Paoli, Daemeter Consulting. Based on data published in Paoli, G. et al. (2010). Biodiversity Conservation in the REDD. Carbon Balance and Management, 5:7. doi:10.1186/1750-0680-5-7*

Responsible oil palm expansion is dependent on identifying and utilising land which is appropriate for cultivation while protecting other areas to maintain biodiversity, ecological services or community rights. In most countries where oil palm is cultivated, the majority of land belongs to the government so the decision about which areas are prioritised for plantation expansion is primarily made by one or more government departments and local officials. Decisions by growers about which areas to plant and which to protect for environmental or social reasons are therefore restricted to some degree by government land use plans. This means it is essential to have a mechanism for allocating land for different uses within a particular landscape that is supported and adhered to by all of the stakeholders involved. If land use planning is done well it has the potential to be the foundation for responsible oil palm cultivation, but where it is absent or done badly it can make responsible expansion extremely challenging.

Several speakers described inadequacies in current land use planning in both Indonesia and West and Central Africa. Similar challenges are likely to exist in other major regions of current and future oil palm expansion, leading a wide variety of stakeholders to identify ineffective land use planning as one of the biggest barriers to progress towards more responsible palm oil production.

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A number of examples were given of weaknesses in the current land use planning process in Indonesia. One such example was that spatial plans in Indonesia categorise land into areas that are suitable for economic development and environmental protection, based on indicators such as topography, elevation and rainfall. Crucially, existing land cover is not routinely taken into account. Since it is the land status which determines where licenses for oil palm development will be allocated, but land cover that largely determines the ecological and social impact that this expansion will have, the current land use planning system has made large areas of forest available for oil palm development. Consequently, it has largely failed to prevent oil palm expansion from contributing to deforestation and social conflict.

A second weakness identified is that different government agencies, and even different departments within the same agency, are working from different land use maps. One speaker explained that as a consequence of this, there are millions of hectares of land that have more than one land use status, which has been highlighted by the Indonesian Ministry of Corruption Eradication as an opportunity for land to be exploited illegally. In theory, licenses for oil palm development should only be allocated within the appropriate land use categories. But at present this is weakly monitored or enforced, partly as a result of the fact that the authority to allocate these licenses has been devolved to the local government. Although this could put areas of high ecological and social value at risk of conversion to oil palm, it also presents local governments with the opportunity to limit expansion to areas that are suitable for responsible production.

Finally, it was reiterated by several speakers that once forested areas have been allocated within land use categories that are available for oil palm cultivation, the current regulatory framework makes it challenging to protect these areas. There is therefore a need for regulatory reforms that would make it easier for companies, local communities or NGOs to conserve forest that persists within production landscapes.

In regions that are the new frontiers for oil palm expansion, such as West and Central Africa and Latin America, it has yet to become clear whether land use planning processes will be effective at promoting responsible production. Several of the countries that are on the brink of large scale oil palm expansion currently lack systematic land use planning processes, which may result in large areas of forest being made available for conversion to oil palm. In Gabon, there have already been cases of large expanses of High Conservation Value (HCV) areas being included within concessions allocated for oil palm development. Although in this case the company has committed not to convert the HCV areas identified to oil palm, it cannot be assured that all companies would take the same approach. However, there is some evidence that the current interest in responsible oil palm expansion in this region could create the necessary stimulus for stakeholders to work together to improve existing land use plans. These will need to be robust and systematic if they are to ensure that economic development can occur with the minimum possible environmental and social impact.

The last few years have seen rapid advances in the quality and accessibility of the data that is available to assist in the land use planning process. Examples referred to during the symposium include regularly updated, freely downloadable and relatively high resolution data indicating forest cover based on satellite imagery, such as MODIS<sup>1</sup>, maps of peat distribution<sup>2</sup>, and landscape level HCV assessments in several regions<sup>3</sup>. Several analytical tools have also been developed to enable decision makers to assess the environmental and socio-economic impact of various scenarios of oil palm expansion in order to identify the best trade off. Examples discussed include the Spatially Explicit Trade off Analysis Model as well as Marxan with Zones<sup>4</sup>. The continual advancement of these data and tools provides enormous potential to strengthen existing land use planning processes by explicitly recognising the trade-offs involved and producing up-to-date land use plans.

For land use planning to be effective it is important that a range of stakeholders be involved representing all relevant interests, including governments, indigenous peoples, local communities, environmental groups and companies. This is for two reasons. Firstly, involving different stakeholders will help to produce a land use plan which addresses the pertinent economic, environmental and social issues. Secondly, it should ensure that it is accepted by all stakeholders as the basis for decision-making.

It was suggested by symposium participants that this could be achieved by establishing an independent mapping department that conducts thorough ground surveys and produces publicly available maps which highlight areas suitable for responsible cultivation. Separate agencies could then be responsible for producing spatial plans and allocating concession licenses respectively. For this process to be effective, a mechanism for sharing benefits between regions with larger and smaller areas suitable for responsible cultivation must be developed. In Indonesia, the recent bilateral agreement with the Government of Norway to reduce GHG emissions presents a valuable opportunity to revise and synergise land use plans and improve the process of allocating concessions. Measures designed to facilitate more responsible economic development include a two-year moratorium on the allocation of concessions in areas of peat and natural forest and the development of a degraded lands database. It remains to be seen whether this will be effective, but if successful this process could create a model that other regions undergoing oil palm expansion could replicate.

<sup>1</sup> <http://modis.gsfc.nasa.gov>

<sup>2</sup> [http://www.wetlands.or.id/publications\\_maps.php](http://www.wetlands.or.id/publications_maps.php)

<sup>3</sup> <http://www.daemeter.org/news/landscape-level-hcv-mapping-across-east-kalimantan-indonesia-is-now-published/>

<sup>4</sup> <http://www.uq.edu.au/marxan/index.html?page=77640&p=1.1.2.1>



Participatory mapping © BRINCC/ Andrea Höeing

**For land use planning to be effective it is important that a range of stakeholders be involved representing all relevant interests, including governments, indigenous peoples, local communities, environmental groups and companies.**

## 2. The Roundtable on Sustainable Palm Oil

*The establishment of the voluntary RSPO certification system has been integral in catalysing constructive stakeholder engagement and efforts to implement more responsible practice within the palm oil industry. In order to capitalise on this progress, further work is needed to improve the implementation of the RSPO standard and enhance its credibility, engage a larger number of growers, including smallholders, and expand the global reach of the RSPO to new frontiers for oil palm expansion.*

# RSPO

### VITAL STATISTICS: THE RSPO

- **Established:** 2004
- **Principles & Criteria finalised:** 2007
- **1st producer to obtain certification:** August 2008 (United Plantations, Malaysia)
- **Number of ordinary members:** 532
- **Number of producers certified:** 28 growers (123 palm oil mills)
- **Area of oil palm certified:** 1,023,435 Ha
- **Annual production capacity of certified producers:** 5,191,340 million tonnes of Crude Palm Oil

*All information sourced from RSPO website [www.rspo.org](http://www.rspo.org) (Accessed 8th November 2011)*

The RSPO Principles and Criteria (RSPO P&C) have defined a standard for more responsible palm oil production that has become widely accepted by a diverse range of stakeholders. Although there remains much criticism regarding the efficacy of this voluntary certification scheme as a means of reducing the environmental and social impacts associated with palm oil production, it has undoubtedly generated momentum for the implementation of more responsible practice within the palm oil industry. Perhaps even more importantly, the RSPO provides a forum for constructive engagement between groups of stakeholders with different priorities and perspectives, which is essential if the existing barriers to more responsible practice are to be overcome.

Whilst the RSPO has made significant progress over the last 7 years, there are several key areas where further work is still needed. Firstly, the credibility of the RSPO depends on its ability to ensure that the standard is implemented effectively. This could be achieved by providing more comprehensive guidance and training to those who are involved in implementing the standard, as well as improving the rigor with which this is audited and monitored. This could include ensuring that all RSPO members submit annual progress reports to the RSPO secretariat, which is not currently the case. The provision of evidence that compliance with the RSPO standard has a positive environmental and socio-economic impact would also help to strengthen the credibility of the RSPO. This is likely to be critical to increase the market share of Certified Sustainable Palm Oil (CSPO), which in turn is necessary to encourage more producers to improve their practices in order to obtain RSPO certification.

Several speakers pointed out that achieving RSPO certification is particularly challenging for smallholders, who often lack the knowledge and resources to implement best practice. Consequently there is a risk that increased demand for CSPO may disadvantage these producers by reducing market access. On the other hand, it was suggested that the requirement for all suppliers of RSPO certified palm oil mills to be in compliance with this standard within three years should create an incentive for larger producers to work with smallholders who supply their mills to raise awareness about what responsible production entails and assist them to improve their practices accordingly. If this happens, the RSPO has the potential to make a useful contribution to reducing the negative impact and maximizing the socio-economic benefit of palm oil production for smallholders. However, achieving widespread and continuous improvements in smallholder practices is likely to require additional support, both from local institutions and from initiatives focused specifically on smallholder support, such as the Palm Oil Producers Support Initiative (POPSI).

At present, the majority of growers actively involved in the RSPO are concentrated in South East Asia. Whilst this is currently the centre of global palm oil production, it is

clear that it is likely to expand rapidly into Africa and South America over the next decade. Therefore, it is very important that governments and growers becoming involved in large scale oil palm expansion in other regions, such as West Africa and Latin America, are quickly engaged in the RSPO in order to promote compliance with this standard from the outset. It was noted by speakers at the symposium that although the RSPO currently has limited resources to allocate to engaging governments and growers in these new frontiers for expansion, producers that are already engaged in the RSPO process through their operations in South East Asia can help by setting a precedent for directing expansion towards land that is suitable for responsible cultivation.

The RSPO has the potential to make a valuable contribution to reducing the palm oil industry's environmental and social footprint. However, it was emphasised that as a voluntary mechanism it cannot be expected to achieve this in isolation. It is therefore important to be realistic about what the RSPO is capable of achieving and to identify areas where other mechanisms are needed.

### 3. The High Conservation Value (HCV) Approach

*The requirement to identify, maintain and enhance High Conservation Values that may be affected by oil palm cultivation is one of the key provisions within the RSPO standard to reconcile production with the conservation of elements of the landscape that are of critical ecological and social importance. However, it was highlighted by several speakers that there are a number of challenges relating to the implementation of this approach which need to be addressed if this goal is to be achieved effectively. These include inadequacies in the identification and management of HCVs, the scale at which this approach is applied, and the opportunity costs associated with conserving HCVs for producers and governments.*

The HCV approach was developed as a tool to reconcile production with the conservation of ecological and social values of critical importance within the landscape. In the palm oil sector, it is used both to guide site level land use planning during oil palm expansion, as well as to integrate environmental and social considerations into the management of both existing and new concessions. The aim of this approach is to facilitate compromise between stakeholders with diverse interests in order to promote more environmentally and socially responsible management.

Although the HCV approach is now widely used in the oil palm sector a number of issues and concerns remain:

#### HCV identification

There is concern that the interpretation of the HCV Criteria and Toolkits, as well as the methodology used to conduct assessments within oil palm landscapes, is currently inconsistent. This results in the quality of HCV assessments being highly variable. Inadequate participation of local communities and the limited scientific basis for decisions have been highlighted as common weaknesses. A further contributing factor is that the number of assessors, auditors and producers with sufficient understanding and experience of implementing the HCV concept in the context of oil palm is currently too limited to ensure consistently high quality assessments, particularly in the new frontiers for large scale oil palm expansion. Participants of the symposium suggested that this could be addressed by developing publicly available maps and datasets, as well as standardising the methodology used. This should be accompanied by the provision of training in all key regions of palm oil production in order to increase the number and competency of practitioners.

#### HIGH CONSERVATION VALUES (HCV)

**Definition:** a biological, ecological, social or cultural value of outstanding significance or critical importance at the national, regional or global scale.

#### The Six High Conservation Values (I)



##### Biodiversity

**HCV 1** - Significant concentrations of biodiversity values (protected areas and RTE, endemic, migratory species).



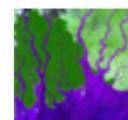
##### Landscapes

**HCV 2** - Large, landscape level ecosystems where most species exist in natural patterns of distribution and abundance.



##### Ecosystems

**HCV 3** - Rare, threatened or endangered ecosystems



##### Ecosystem services

**HCV 4** - Basic ecosystem services in critical situations.



##### Livelihoods

**HCV 5** - Basic needs of local populations in critical circumstances.



##### Cultural identity

**HCV 6** - Local communities' cultural identity.

#### HCV Management

In areas of oil palm expansion, land suitable for responsible cultivation and areas that must be managed in order to conserve HCVs are frequently delineated on the basis of a rapid assessment of the ecological and social values present. Several speakers highlighted that it is very challenging to determine the area and configuration of natural habitat that will be sufficient to maintain and enhance these values in the long term on the basis of such limited information. What is more, the body of scientific research to support this decision making process, such as the ability of patches of natural habitat of different sizes and degrees of isolation to support populations of various species in the long term, is currently very small. It was emphasised that there is a need for a holistic approach which recognises that areas of lower intrinsic value can be important for maintaining and restoring important environmental and social values within the landscape, as there is a danger that areas where HCV values are absent are automatically considered to be suitable for conversion. It was highlighted that there is a need for guidance on managing HCVs which is specifically designed for the oil palm sector, as the guidance currently available was developed with the forestry sector in mind and therefore doesn't address issues relating to land use change.

Ensuring that appropriate recommendations on areas suitable for responsible oil palm development are made on the basis of HCV assessments will be particularly critical in regions of 'Greenfield' oil palm expansion, such as West and Central Africa. In these areas, extensive overlap between HCV areas and oil palm licenses could be avoided if HCV assessments are integrated into companies' and investors' due diligence process. This is in the interest of RSPO members, as it should reduce the cost associated with maintaining HCV areas. However, this will not necessarily deliver any net benefits if it results in RSPO companies developing the most degraded areas and non-RSPO companies being allocated concessions retaining HCV areas, which they may have little incentive to conserve. This will only be avoided if HCV areas identified through due diligence are recognised as conservation areas within landscape level land use plans.



#### Scale and context of application

HCV assessments are generally undertaken within a single management or production unit, since this reflects the area for which a particular producer is responsible. Conversely, the conservation of species with large habitat requirements, contiguous areas of important ecosystems and ecosystem processes that operate at the landscape level (HCV 1-4) requires action that is beyond the sphere of influence of single producer, let alone an independent smallholder. Consequently, the success of site level efforts to conserve these HCVs and their persistence at the landscape level is highly dependent on supportive legal frameworks, responsible land use planning, appropriate concession allocation and trans-boundary collaborations with other producers. Several speakers expressed the need for the outcomes of HCV assessments to be used to inform and influence landscape level land use planning processes.

In Indonesia, the concept of companies setting aside areas for conservation within production landscapes (APL) is a relatively new phenomenon, for which it is felt there is currently limited government support or understanding. Land that is not being utilised for economic activities is frequently perceived as being 'idle', which is reflected by regulations that give government agencies the authority to excise such areas from the initial location permit (Izin Lokasi), and more recently even the final land use title (Hak Guna Usaha). This has resulted in situations where HCV areas have been excised from the land use titles belonging to RSPO member palm oil producers and re-allocated to other companies, which may not be committed to conserving these areas. Data presented by a palm oil producer showed that the extent of the HCV areas excised from the company's initial location permits totalled over 21,000ha, which is equivalent to the area of Singapore. They also mentioned that in Malaysia, national regulations are more supportive of efforts to conserve natural habitats within production landscapes.

If the increasing number of palm oil producers making commitments to set aside areas for conserving HCVs within their concessions is to have a net positive impact, there is an urgent need to create an enabling regulatory and political environment for these efforts in key regions of oil palm expansion. It was suggested that identifying areas where national regulations both support and hinder efforts to conserve HCVs within production landscapes could be a useful means of generating greater government support. In countries with devolved governance, it is essential that political support for conserving areas of natural habitat within production landscapes is reflected within national level policies, as local government representatives, whilst potentially a very powerful conduit for change, tend to change frequently.

## Opportunity costs to companies and government:

The conservation of HCVs within oil palm concessions frequently prohibits production within a larger proportion of the concession than would be necessary if only agricultural suitability and national regulations were taken into consideration. This can result in substantial opportunity costs to both the company and the government. For companies this is primarily due to reductions in profit, which information presented by a palm oil producer at the symposium conservatively estimated to be between US \$375 and \$1,866 per hectare annually. For governments, this is largely due to reduced tax revenues as a result of lower production and levels of employment. For companies operating in Indonesia, this is further increased by regulations that require a certain percentage of the area acquired from local communities to be allocated for smallholder production (plasma schemes), irrespective of whether this land is productive or set aside for conservation.

**The conservation of HCVs within oil palm concessions frequently prohibits production within a larger proportion of the concession than would be necessary if only agricultural suitability and national regulations were taken into consideration**

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## 4. Biodiversity offsets

*It was highlighted over the course of the symposium that even if every effort is made to avoid and minimise the impact of oil palm cultivation on biodiversity, the development of extensive monocultures in regions of the world that would naturally be occupied by biodiverse tropical forest ecosystems will have a significant residual impact on biodiversity. Biodiversity offsetting was discussed as a means of compensating for both residual impacts and insufficiencies in the measures taken to avoid and mitigate the negative impacts associated with oil palm development.*

Biodiversity offsets are measurable conservation outcomes resulting from actions designed to compensate for significant residual adverse biodiversity impacts arising from project development after appropriate prevention and mitigation measures have been taken. The goal of biodiversity offsets is to achieve no net loss and preferably a net gain of biodiversity on the ground with respect to species composition, habitat structure, ecosystem function and people's use and cultural values associated with biodiversity. To achieve this, the residual impacts of development on biodiversity once avoidance, mitigation and future restoration measures are taken into consideration are quantified. Positive actions which can be taken to readdress the balance, either in situ or ex situ, are then identified. Key Principles that guide the conservation actions to be taken include 'Like for Like or better', additionality and the need to ensure the longevity of biodiversity gains at the landscape level (<http://bbop.forest-trends.org/guidelines/>).

Where the biodiversity value prior to development is unknown, or perhaps insufficient measures were taken to avoid and mitigate impacts during development, it will not be possible to offset biodiversity loss completely. However, it may be possible to estimate the biodiversity loss retrospectively based on the area cleared and indicators of habitat quality. This loss can then be compensated for with actions that will result in an equivalent or greater conservation gain, in a similar way to biodiversity offsets. One example could be investing in a biodiversity bank, whereby the impacts of a development project in one place can be compensated for by conservation actions in another, but without the assurance and rigour of 'like for like' equivalence. Such a mechanism is currently being discussed as one means by which members of the Roundtable on Sustainable Palm Oil (RSPO) could compensate for areas of High Conservation Value (HCV) which were cleared after the date specified in the Principles and Criteria. If this mechanism is to be used to compensate for HCV areas cleared, either within the window of time currently allowed by the RSPO or even beyond the current cut off date, safeguards are needed to ensure that this does not create a perverse incentive to deliberately clear HCV areas.

To date, a true biodiversity offset, which accounts for residual impacts, has yet to be applied for an oil palm development. In relation to this, it was highlighted by symposium participants that there is a need for the lengths to which producers are expected to go to in order to avoid, mitigate and offset the impact of oil palm on biodiversity to be made more explicit.



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**The goal of biodiversity offsets is to achieve no net loss and preferably a net gain of biodiversity on the ground with respect to species composition, habitat structure, ecosystem function and people's use and cultural values associated with biodiversity.**

## 5. Free Prior and Informed Consent (FPIC)

*The requirement for free, prior, informed consent from Indigenous Peoples and local communities for any activity which takes place on their land is potentially a powerful mechanism for ensuring that legal and customary rights are respected. Discussions at the symposium highlighted that there are still many challenges in understanding how to implement FPIC and ensure that this safeguard is routinely applied.*



**Free prior and informed consent (FPIC), is the principle that a community has the right to give or withhold its consent to proposed projects that may affect the lands they customarily own, occupy or otherwise use**



FPIC is considered an important approach for ensuring greater recognition and respect for the land use rights of Indigenous Peoples and local communities, which is a critical pre-requisite for responsible palm oil production. Attempts to implement FPIC have shown that ensuring this mechanism has the desired outcome is challenging.

A key issue which was raised by several speakers is the decision-making process within communities.

Firstly, ensuring that the FPIC process is conducted in a culturally appropriate way can result in a very slow process which may delay development by the producer involved. It was pointed out that there have been cases where another company has acquired the land prior to the completion of the FPIC process by making deals directly with the community, thereby undermining the safeguards that FPIC intends to create.

It was suggested that implementation could be improved by developing legal mechanisms to support FPIC, such as the addition of consultation clauses as part of mandatory Environmental Impact Assessments. However, it was also pointed out that in some cases there may be inconsistency between legal systems and customary community mechanisms.

Secondly, traditional decision-making processes within communities vary and while they can be very effective in some cases, in others they result in large parts of the community (e.g. women, young people) being excluded from the process, allowing a small elite to make decisions. This in turn raises questions about whether the free, prior and informed consent of all relevant stakeholders has really been obtained.

Community mapping was presented by one of the speakers as a useful mechanism to facilitate the FPIC process as it provides a spatially explicit basis for discussions regarding community resource use. This should both aid the community to better understand the potential livelihood implications of planned agricultural development and assist them to reach a decision and participate in negotiations in a more structured manner. The competence and objectivity of the practitioner leading this process is crucial, as it is recognised that there is a fine line between ensuring consultations are fully transparent and advocating for oil palm.



Participatory mapping planning session

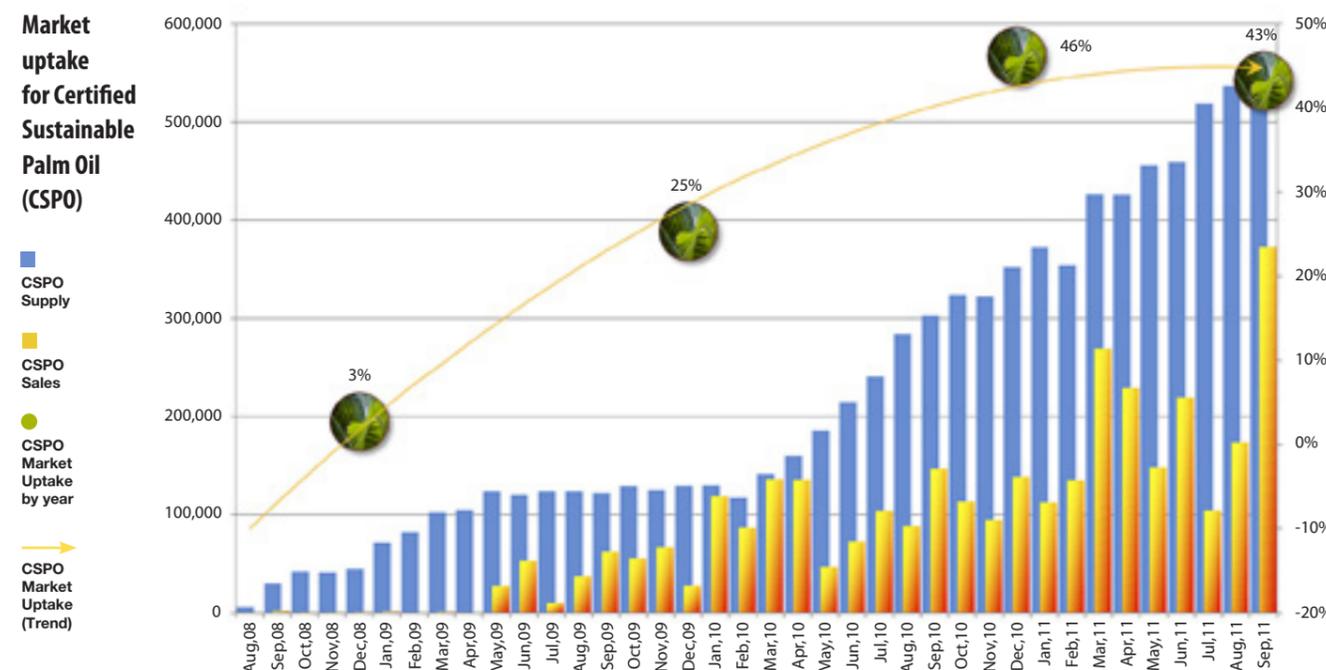
## SECTION 4:

### Transforming the market to sustainable palm oil

*The development of the market for Certified Sustainable Palm Oil (CSPO), which is currently the best proxy for environmentally and socially responsible palm oil production, is likely to be an important driver of efforts to mitigate the environmental and social impact of palm oil production at the global scale. The current state of and prospects for the market for CSPO was referred to by a number of speakers over the course of the symposium, and points of leverage to increase market uptake identified.*

Although it is widely recognised that RSPO certification alone will not be sufficient to mitigate the environmental and social impact of the palm oil industry, it is currently the best proxy available for more environmentally and socially responsible palm oil production. Since the first producer obtained RSPO certification in late 2008, the volume of Certified Sustainable Palm Oil (CSPO) available has increased rapidly, with the estimated annual production capacity now standing at around 4.7 million tonnes, which is approximately 10% of global annual production. Data presented at the symposium estimated that this will reach 10 million tonnes by 2015. Whilst this represents significant progress, around 13 million hectares of over 14 million hectares of oil palm cultivation globally have yet to be certified, highlighting the scale of the challenge ahead.

Given that the RSPO is a market driven mechanism, demand for the CSPO produced is likely to be critical in encouraging producers that have yet to obtain RSPO certification to improve their practices in order to do so. However, to date, demand for CSPO has been relatively weak, with market uptake in 2010 averaging 48% of the CSPO produced. There are a number of possible reasons for this. Technical barriers include the challenges of certifying complex supply chains, particularly for derivatives, and the cost of establishing segregated supply chains. However, perhaps a more significant barrier is the lack of widespread and ambitious commitments by processors, manufacturers and retailers to exclude uncertified palm oil from their supply chains. This may in part be due to reluctance to be dependent on the relatively small number of producers (28 growers globally) that are currently in a position to supply CSPO.



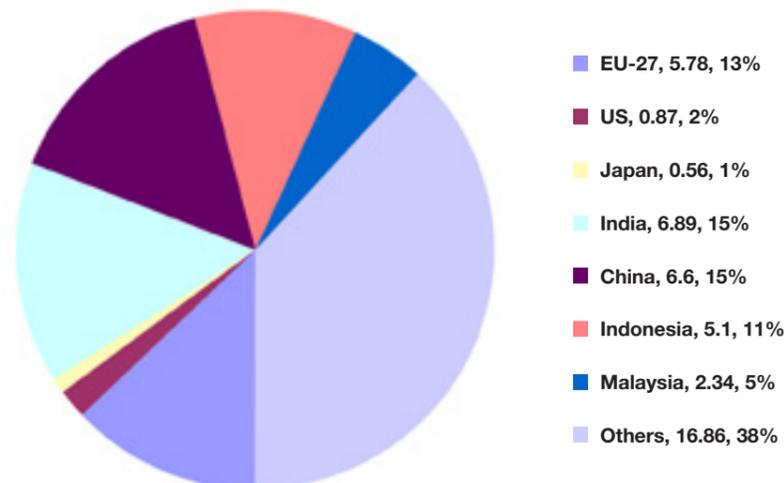
Despite these obstacles, the number of public commitments by manufacturers and retailers to source 100% CSPO by 2015 is beginning to grow, signaling that demand for CSPO is set to increase. This is reinforced by actions at the national level in several European countries, such as the Dutch commitment to source 100% CSPO by 2015 and a recent study by the UK government to map and understand the country's palm oil supply chain.<sup>1</sup>

However, although demand for CSPO within the European market and from multi-national companies is gradually increasing, to date there have been very few commitments to source 100% CSPO from palm oil users within the major markets of China, India and Indonesia. In recognition of the need to stimulate demand for CSPO in these regions, governments, civil society organizations and the RSPO have initiated a variety of actions to engage these markets. An important example of this, which was presented at the symposium, is the work by the Chinese Chamber of Commerce and the UK Government to develop the business case for sustainable palm oil in China. In 2011, the RSPO unveiled a consumer facing trademark, which is in the process of being registered in 60 countries, as one means of promoting the RSPO brand. This will be accompanied by a communications campaign designed to engage different stakeholder groups and raise awareness about the RSPO, with the ultimate aim of increasing procurement of CSPO, particularly in China and India.

In order to achieve the goal of transforming the market to sustainable palm oil, it is necessary to find levers to engage actors who have yet to play a significant role in creating demand for CSPO. Priority stakeholder groups to target are those that are highly influential but largely 'invisible', including traders and intermediate processors, major importers to Asian markets, domestic buyers in producer countries and financial institutions.

<sup>1</sup> <http://www.proforest.net/proforest-news/defra-palm-oil-report/defra-report-on-uk-palm-oil-consumption-and-sustainable-policy-options-published>

## Palm Oil Consumption by Country (2010)



**In 2011, the RSPO unveiled a consumer facing trademark, which is in the process of being registered in 60 countries, as one means of promoting the RSPO brand**

## SECTION 5:

# A framework for action: realising the production & consumption of more responsible palm oil

To date, efforts to reduce the environmental and social impact of palm oil production have largely focused on encouraging and assisting growers to implement more responsible practices. However, discussions which took place over the course of the symposium emphasised that all stakeholders, particular members of the value chain that have yet to strongly engage in promoting responsible practice, have an important role to play in reducing the net environmental and social impact of this industry. This section summarises how each key stakeholder groups can contribute to realising the production and consumption of more sustainable palm oil, with reference to the section of this publication where these actions are discussed in greater detail. The stakeholder groups discussed are:

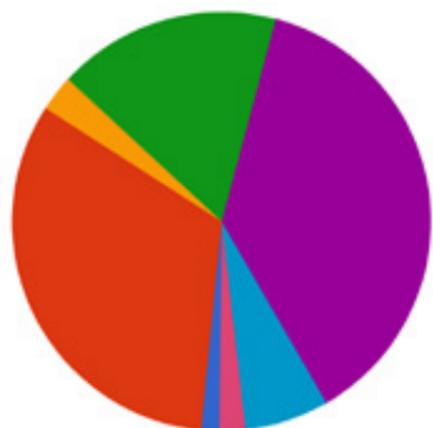
- **Producer governments**
- **Consumer governments**
- **Investors**
- **Growers**
- **Traders and processors**
- **Consumer goods manufacturers and retailers**
- **The RSPO**
- **NGOs**



A number of the measures required are applicable to all stakeholder groups:

- **More collaboration and engagement between different stakeholder groups, particularly government**
- **Improve and better utilise the science, data and tools we have available** – instead of developing new initiatives attention should be focused on developing better guidance to improve the implementation of existing tools and approaches. To ensure this translates into better practice this should be accompanied by training and capacity building for practitioners, including smallholders, HCV assessors and auditors. To ensure that these tools and approaches are applied effectively, more rigorous monitoring and quality control of their application is required. Both the RSPO and civil society organisations have a role to play in this.
- **Greater participation in the RSPO** - particularly within stakeholder groups and regions of production and regions of production and consumption consumption that are currently under-represented. This includes NGOs, financial institutions, producers outside of South East Asia and supply chain members operating in major regions of palm oil consumption, notably China, India and Indonesia.

## RSPO Members By Category



- Retailers 35 (6.5%)
- Social or Development Orgs 10 (1.8%)
- Banks and Investors 9 (1.7%)
- Consumer Goods Manufacturers 176 (32.5%)
- Environmental or Nature Conservation Orgs 15 (2.8%)
- Oil Palm Growers 94 (17.3%)
- Palm Oil Processors and Traders 203 (37.5%)

Source: www.rspo.org - Accessed on 13th November 2011

### Producer governments:

- **Create an enabling legal & policy framework to promote expansion on areas suitable for responsible production**
- **Maximise the potential for national level certification schemes to promote more responsible production** – the recent emergence of the Indonesian Sustainable Palm Oil (ISPO) and Malaysian Sustainable Palm Oil (MSPO) certification schemes has the potential to either help or hinder efforts to improve the standard and reach of responsible palm oil production. If these schemes are positioned as rival standards to RSPO certification but with lower requirements this could create confusion around what 'sustainable' palm oil production entails and undermine efforts to realise this at an industry wide level. Alternatively, if these national level schemes set a standard that is complementary to achieving this ultimate goal of environmentally and socially responsible palm oil production then they could play an important role in engaging a wider spectrum of palm oil producers and encouraging them to improve their practices. As both of these certification schemes are still in their infancy, it remains to be seen how they will evolve.
- **Promote demand for CSPO within domestic markets** – this is particularly important in Indonesia, as well as countries in West and Central Africa where a large proportion of planned large scale oil palm expansion will supply domestic markets.

### Consumer governments:

- **National level commitments to procure CSPO** – consumer governments should explore the potential for introducing national level commitments to source only CSPO. It was suggested that one way of achieving this could be to ensure that all palm oil imports comply with the relevant regulations in producer countries, as well as the RSPO P&C wherever possible, perhaps through a mechanism similar to the voluntary partnership agreements on Forest Law Enforcement, Government and Trade (FLEG-T).
- **Introduce regulations that require the source of vegetable oil in food to be explicitly labeled** – recently NGOs in both Australia and the EU have campaigned for regulations that would require palm oil to be included in the ingredients list of food products, suggesting the current lack of such labeling is a barrier to greater market uptake of CSPO. The palm oil industry has opposed this approach amid concerns that it may result in palm oil being boycotted. Given that this would do little to reduce global demand for palm oil (See discussion in introduction) this would not resolve the negative impacts associated with irresponsible palm oil production. It has therefore been suggested that any revisions in food labeling regulations should require all vegetable oil to be explicitly labeled and not single out palm oil.

### Investors:

- **Create a policy for responsible investment in the palm oil sector** – adoption of the Equator Principles is recognised as a good starting point for managing the environmental and social risks associated with investment. However, since this standard is only applied where the capital cost of the project exceeds US\$10 million, additional policies are required to mitigate risks associated with the standard loans given to palm oil producers. Such policies should also promote responsible practice within the palm oil supply chain, which is not encompassed by the Equator Principles
- **Support customers to implement responsible practices** - Exiting customers who don't immediately comply with policies on responsible investment may not be a solution. At present, very few financial institutions have joined the RSPO or have specific policies to ensure responsible investment in the palm oil sector. Consequently, producers employing irresponsible practices are likely to have many alternative options for financing their activities if they are exited by one of the few financial institutions that do have a policy for responsible investment in the palm oil sector. As a first step, it may be more beneficial for the financial institution to assist customers who don't initially comply with meet their standards to improve their practices, for example by giving them ambitious time bound targets for obtaining RSPO certification. If such targets are not achieved, exiting the customer may then be the best course of action.
- **Greater transparency regarding the standards applied for different types of investment** – Information presented over the course of the symposium showed that financial institutions have differing levels of control over the decisions and practices employed by customers, depending on the type of investment. For example, financial institutions may have little influence over asset management, but there may be the potential to exclude certain sectors or companies employing irresponsible practices from investment funds that the institution has control over.

*Greenpeace activists climb down from the ceiling at the Nestlé annual shareholders meeting to display banners. © Greenpeace*



### Growers

- **Confine expansion to land that is suitable for responsible cultivation**
- **Implement challenging time bound commitments to obtain RSPO certification for all operations** – although joining the RSPO is a step in the right direction, this is not sufficient to demonstrate responsible practices are being employed. Given the weaknesses highlighted in the RSPO certification system at present, growers should ideally take a holistic approach to mitigating the net environmental and social impact of their operations, which may go beyond the requirements of the RSPO P&C. For example, at present the requirement by the RSPO for certified producers to have a time bound plan for obtaining certification for all of their operations does not extend to supply chain activities or joint ventures in which they are not a majority shareholder. However, if a producer is committed to reducing their environmental and social impact effort should be made to apply this standard throughout all palm oil related operations that the company or group is involved in.

- **Empower and engage equitably with smallholders**

### Traders & processors

- **Make commitments to trade 100% CSPO** - traders and processors that control large volumes of palm oil should use their influence to encourage suppliers to implement responsible practices. This could involve making a time bound commitment to trade 100% CSPO and working to assist suppliers that have yet to meet acceptable standards to improve their practices in order to do so.

### Consumer goods manufacturers and retailers

- **Substituting palm oil with other vegetable oils is not a solution**
- **Take immediate action to progress towards achieving time bound commitments to source 100% CSPO** – although it may take time to ensure that the total palm oil supply base is in compliance with a policy on responsible purchasing, it is essential that producers who are identified as employing irresponsible practices are quickly excluded from the supply chain. The current challenges in creating segregated supply chains for CSPO should not be used as an excuse by buyers to delay purchasing CSPO as the Green Palm Book and Claim certification scheme can be used to fulfill commitments in the interim.
- **Retailers should extend commitments to use 100% CSPO beyond own brand products** – this has the potential to create a strong incentive for less well known brands to procure CSPO.

## RSPO

- **Engage governments** – the RSPO has the potential to be a useful platform for engaging both producer and consumer governments in order to stimulate and facilitate efforts to mitigate the environmental and social impacts associated with palm oil production. Particular opportunities exist in West and Central Africa where government structures for managing the expansion of oil palm plantations are not yet well established.
- **Raise awareness about the RSPO and encourage broader engagement** – this should focus on identifying levers to engage small and medium sized producers, as well as stakeholders in key regions of palm oil production and consumption that currently have limited involvement in the RSPO.
- **Improve the standard of implementation, auditing and monitoring of compliance with the RSPO P&C** (see section on the RSPO)
- **Explore synergies with other certification schemes** – this could involve aligning the RSPO P&C with other standards, such as the EU Renewable Energy Directive, in order to make it easier and less costly for producers to comply with these standards and enable the RSPO to access new markets. There may also be the potential for certification schemes that incorporate similar requirements, such as the requirement to conserve HCVs, to share experience or collaborate on training.

## NGOs

- **Act as a watchdog but pick targets for campaigns carefully** – it was noted that the companies who ‘put their head above the parapet’ by being amongst the first to try and improve their practices or obtain RSPO certification are frequently the ones that attract the attention of NGO campaigns. Recent examples of this were the Greenpeace campaigns against HSBC and Nestle. It is widely recognised that NGO scrutiny of the behaviour of both companies involved in the palm oil sector and the RSPO has a valuable role to play in motivating continuous improvements in practice. However, there is a risk that unless targets for campaigns are chosen with care this could discourage organisations who have yet to taken any steps to improve their practices to do so, for fear that this will make them more vulnerable to NGO campaigns. Similarly, care should be taken to ensure that public criticism of the RSPO will serve to strengthen this certification system, rather than simply undermining its credibility, as this could reduce its potential to mitigate the adverse impacts of palm oil production. It was suggested that it would also be beneficial for NGOs to occasionally ‘reward the innovators’ within the palm oil sector by publicising positive actions that have been taken to implement responsible practices, rather than always ‘criticising the laggards’. This could help to encourage a wider proportion of the palm oil sector to undertake similar actions. However, it is recognised that the delicate balance between the positive and negative impacts of palm oil production is a complicated message to convey to the public.
- **Constructive engagement with industry and the RSPO** – in addition to exposing irresponsible practices within the palm oil sector in order to trigger behaviour change, NGOs also have an important role to play in assisting companies to improve their practices if this change is to be realised. There is also a need for a wider range of NGOs to engage more actively in the RSPO Working Groups and decision making process.
- **Conduct objective research to demonstrate whether or not the RSPO certification scheme delivers for people, profits and the planet**

## Greenpeace: turning up the heat on Golden Agri Resources.....

## The Forest Trust:

## Shedding some light on a solution

**April 2008** – Greenpeace launch campaign against Unilever, the single biggest user of palm oil in the world and the chair of the RSPO, calling them to ensure that none of their suppliers are contributing to rainforest destruction.... 5 days later, Unilever agree.

**December 2009** – Unilever drops €30 million contract with Sinar Mas’ palm oil arm Golden Agri-Resources (GAR) following a new Greenpeace report showing GAR’s involvement in the destruction of peatland, rainforests and orang-utan habitat.

**March 2010** – Greenpeace launch the ‘Killer Kit Kat’ campaign against Nestle for buying from GAR. Nestle, Kraft and Mars drop GAR contracts.

**April 2010** – Nestle announces partnership with an environmental NGO called TFT to ensure that all their palm oil suppliers meet their new ‘no deforestation footprint’ policy.

**May 2010** – Greenpeace reveals that HSBC’s Global Climate Change Fund invests in GAR, based on the rationale that the palm oil they produce could be turned into biodiesel. As a result, HSBC sold its shares in GAR.

**August 2010** – GAR publish audit of own practises.

**February 2011** – GAR commit to a “Forest Conservation” Plan, which includes a pledge not to clear forest with a time averaged carbon stock above 35 tonnes per hectare. This is being implemented with the assistance of TFT and Greenpeace.

**September/October 2011** – After Golden Agri-Resources begins to implement its new forest policy Nestle and Unilever announce that they will resume buying palm oil from Golden Agri-Resources.

See: <http://www.ethicalcorp.com/supply-chains/sustainable-palm-oil-nestl%C3%A9-supply-deal-may-be-game-changer>

## A RECIPE FOR FOREST DESTRUCTION



Greenpeace activists dressed as orangutans swing by Nestlé headquarters and urge the company to stop using palm oil from rainforest destruction © Greenpeace



# CONCLUSION

Increasing recognition that the adverse environmental and social impacts associated with palm oil production are not sustainable, coupled with the initiation of efforts by a broad spectrum of stakeholders to address this over the last decade signifies an important turning point for the palm oil sector. Nevertheless, discussions over the course of the symposium highlighted many areas where further work is needed if environmentally and socially responsible production and consumption is to become synonymous with business as usual for the palm oil industry. For these issues to be addressed effectively, it is necessary for the stakeholders required to act to be convinced of the benefits of more sustainable production and consumption. Conviction of this must be nurtured by the governments, civil society organisations and businesses operating in each of the key regions of palm oil production and consumption, as this will be a much more powerful means of stimulating change than external pressure.

The journey towards more sustainable palm oil has so far largely been characterised by reactions to NGO criticism, social conflict and environmental destruction. But as awareness increases about the negative impacts of irresponsible oil palm expansion and the measures needed for this to be avoided, it is essential that a more proactive and constructive approach is taken moving forwards. This will involve recognising the lessons learnt and applying the improved approaches developed. This is particularly critical in the African and Latin American countries that are on the brink of large scale oil palm expansion, where priorities for action include:

- Identifying land which is suitable for responsible oil palm cultivation and ensuring that decision makers, particularly the relevant government departments and investors and growers looking to expand, have access to this information.
- Developing systematic and participatory land use planning and concession allocation processes which are sufficiently robust to ensure that oil palm expansion only occurs in areas suitable for responsible cultivation.
- Ensuring that growers comply with the RSPO P&C from the outset.

The full spectrum of palm oil stakeholders around the world, from investors in Europe to processors in China and consumers in Indonesia, have both the ability and a responsibility to play a role in promoting more responsible palm oil production. This includes creating policies, making decisions and establishing practices which provide sufficient incentive for palm oil to be produced with the minimum possible environmental and social footprint. At present, the most obvious first step for many stakeholders is to commit to using 100% Certified Sustainable Palm Oil.

Whether you are directly or indirectly involved in the production and consumption of palm oil, ultimately, the net environmental and social impact of this industry is everyone's business.

