Background Paper for *State of the Apes: Industrial Agriculture and Ape Conservation*
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Conservation in an Agriculture Landscape: Wilmar's Experience

Wilmar International

Introduction

Wilmar International Limited (Wilmar International) was founded in 1991 and has since risen to be Asia's leading agribusiness group, with business activities encompassing the entire value chain of agricultural commodity processing, from the field to branding, marketing and distribution of a wide range of agricultural products. As of December 2013, Wilmar and its joint venture plantations had a total of 2,860 km^2 (286,048 ha) of planted area in Malaysia, Indonesia and Africa (see Table 1). In addition, we also manage approximately 410 km^2 (41,037 ha) of schemed smallholders in Indonesia under the Indonesia Plasma Scheme and 1,370 km^2 (137,000 ha) of smallholders and outgrowers under a joint venture arrangement in Uganda and Ivory Coast (see Table 2).

Table 1 Total Planted Areas in Malaysia, Indonesia and Africa, as of December 2013

No.	Region	Planted area (ha)	Planted area (km^2)	Percentage of total planted area
1.	East Malaysia	57,852	579	24.0%
2.	Indonesia	171,144	1,711	71.0%
3.	Nigeria/Ghana	12,052	121	5.0%
Subtotal		*241,048*	*2,410*	*100.0%*
Joint venture areas				
4.	Uganda	6,000	60	13.3%
5.	Ivory Coast	39,000	390	86.7%
Subtotal		*45,000*	*450*	*100.0%*
Total		**286,048**	**2,860**	

Table 2 Total Planted Area by Smallholders, as of December 2013

No.	Region	Planted area (ha)	Planted area (km^2)	Percentage of total planted area
1.	Indonesia (plasma scheme)	41,037	410	23.0%
2.	Uganda (joint venture)	3,900	39	2.2%
3.	Ivory Coast (joint venture)	133,100	1,331	74.8%
Total		**178,037**	**1,780**	**100.0%**

High Conservation Value (HCV) Areas

In 2005, in recognizing the need to balance economic growth with sustainable development and corporate responsibility, Wilmar International became a member of the Roundtable on Sustainable Palm Oil (RSPO). One of the requirements for RSPO certification is that companies complete an assessment of high conservation value (HCV) areas within their production landscapes. The companies are then required to manage these areas to ensure that these values are maintained and/or enhanced (RSPO, 2013a). The concept and definition of HCV was first set by the Forest Stewardship Council (FSC), as a means to identify and manage environmental and social values in forest production landscapes; it has since been used as a tool in other production landscapes (Brown *et al.*, 2013). There are six high conservation values, which have been defined as follows:

- **HCV 1** **Species diversity**—concentrations of biological diversity, including endemic species and rare, threatened or endangered species that are significant at the global, regional or national levels;
- **HCV 2** **Landscape-level ecosystems and mosaics**—large, landscape-level ecosystems and ecosystem mosaics that are significant at the global, regional or national levels, and that contain viable populations of the great majority of the naturally occurring species in natural patterns of distribution and abundance;
- **HCV 3** **Ecosystems and habitats**—rare, threatened or endangered ecosystems, habitats or refugia;
- **HCV 4** **Critical ecosystem services**—basic ecosystem services in critical situations, including protection of water catchments and control of erosion of vulnerable soils and slopes;
- **HCV 5** **Community needs**—sites and resources fundamental for satisfying the basic necessities of local communities or indigenous peoples (for livelihoods, health, nutrition, water, etc.), identified through engagement with these communities or indigenous peoples; and
- **HCV 6** **Cultural values**—sites, resources, habitats and landscapes of global or national cultural, archaeological or historical significance, and/or of critical cultural, ecological, economic or religious/sacred importance for the traditional cultures of local communities (Brown *et al*., 2013).

The HCV approach requires both technical assessments and stakeholder consultations. A total of 297.2 km^2 (29,720 ha) of HCV was identified within our production landscapes, which is divided between our operations in Indonesia (72%), East Malaysia (25%) and Nigeria (3%) (see Figure 1). Our HCV areas consist of a variety of ecosystems found within our tropical region, such as lowland and hill dipterocarp, peat and mangrove forests, with varying degrees of density and quality, depending on the period of logging and disturbance. Overall, Wilmar's total conservation area is approximately 12% of its total planted area (See Figure 2).

Examples of different values which have been identified and protected as HCV areas

Community meeting

Figure 1 Total High Conservation Value Area (km^2), 2013

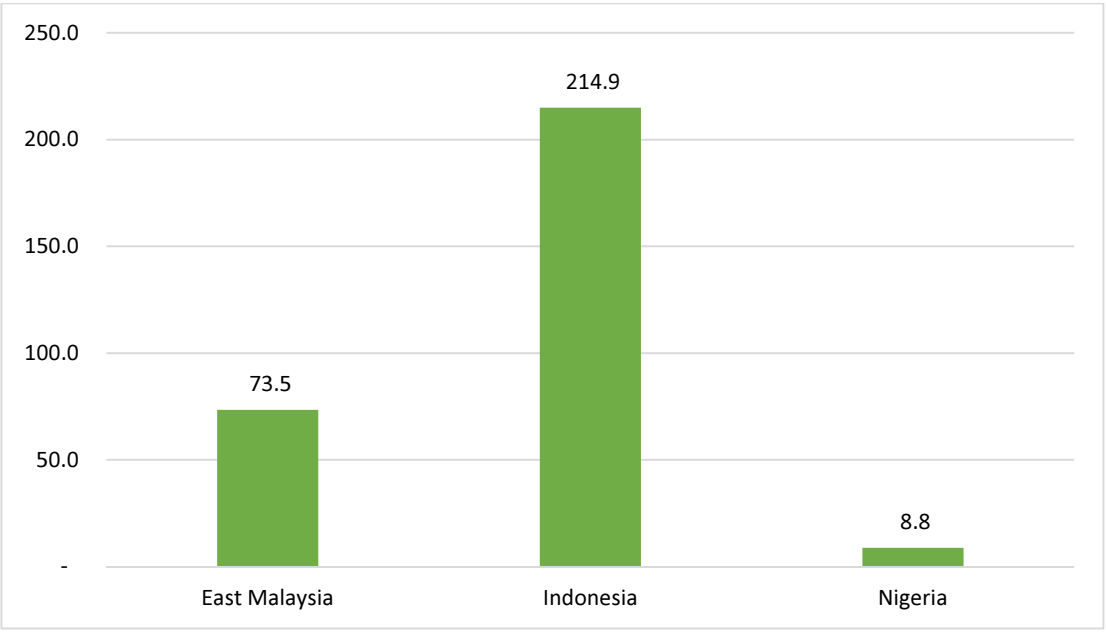
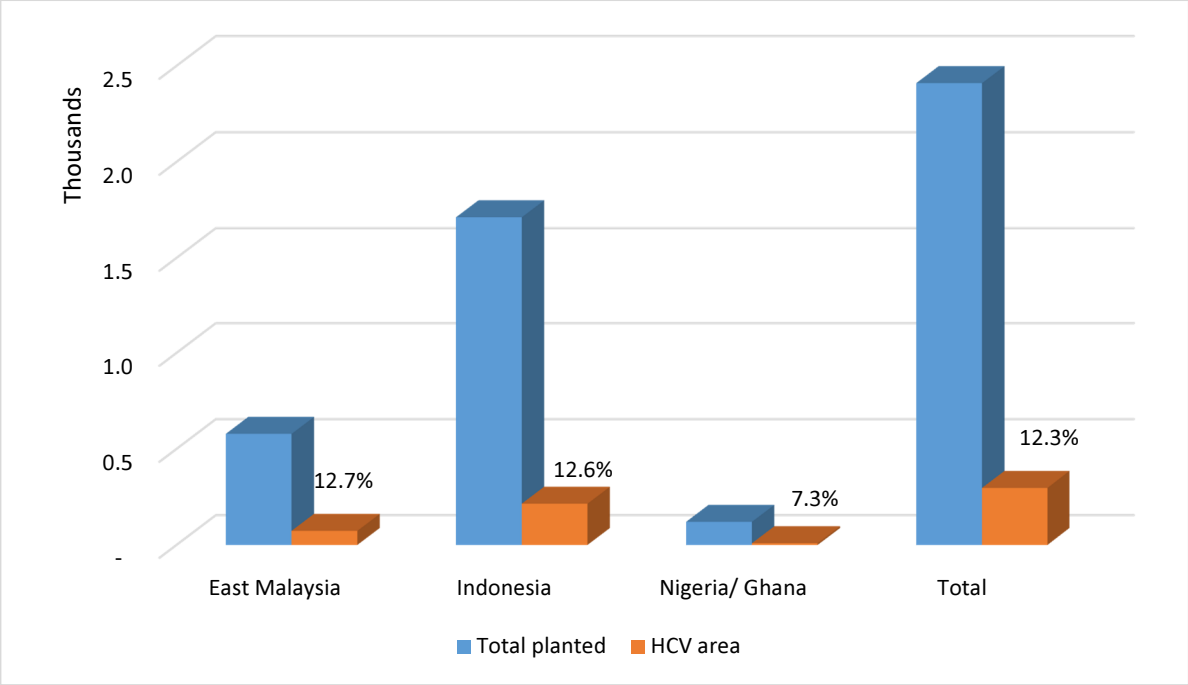


Figure 2 Percentage of HCV Area Compared to Total Planted Area (km^2)



Managing HCV Areas

Upon identification of the HCV areas, a management plan is developed, setting out the management objectives and prescribed activities, which may include biodiversity surveys and regular monitoring and patrols to reduce threats such as encroachment, illegal harvesting, mining and/or poaching. Other activities that are usually prescribed include the installation of signage and boundary marking to clearly demarcate the HCV areas. In addition, regular discussions and socialization meetings with local stakeholders and workers are included in the management plan to build a better understanding of the HCV concept. Socialization is a process that aims to create awareness and greater understanding of the issue (in this case, in relation to HCV) among larger stakeholders such as local communities. Where possible, training is conducted annually for HCV staff and plantation managers as part of the requirement to continuously improve on the management of the HCV areas. For the socialization sessions with the local communities and workers in the field, a standard presentation of HCVs is used, with pictures describing what HCVs are, and why it is important to conserve them.

Most of the HCV areas are found to be *refugia* for the floral and faunal species due to their isolation and fragmentation within an oil palm landscape. The isolation may also result in a concentration of key wildlife species within a small area, which means that our HCV teams have to be constantly vigilant against illegal activities and encroachment into our HCV areas.

In East Malaysia, our enforcement units are empowered by appointment as Honorary Game Wardens or Honorary Wild Life Rangers, which gives them the authority to prevent and stop any illegal wildlife harvesting and transportation in and adjacent to our plantation areas. These appointments were made possible through the Sarawak Wildlife Protection Ordinance, 1998, and Sabah's Wildlife Conservation Enactment 1997, under the jurisdictions of the Sarawak Forestry Corporation and the Wildlife Department of Sabah, respectively.

Our involvement in the Honorary Game Wardens in Sarawak marks a first for the Game Warden program, which previously only involved appointments from local communities living around

protected areas in Sarawak. Meanwhile, our team of Honorary Wild Life Rangers in Sabah was set up in 2008 and is focused in Sabahmas Plantations Sdn. Bhd. conservation area (see Case Study 1).

Wilmar engages in the management of HCV areas in a number of ways, such as providing managed sites for the reintroduction of captive apes. 'No hunting' signs written in both Bahasa Malaysia and Iban.

Case Study 1: Honorary Wild Life Rangers in Sabahmas Plantations

The Honorary Wild Life Rangers initiative in Sabah was viewed as necessary and important as the western border of the plantation is adjacent to Tabin Forest Reserve (FR), a 1,200 km^2 (120,000 ha) Class 1 (totally protected) forest reserve that is home to the critically endangered Sumatran rhinoceros (*Dicerorhorinus sumatrensis*) and other endangered species, such as the Bornean pygmy elephants (*Elephas maximus borneensis*), banteng (*Bos javanicus*), Bornean orangutan (*Pongo pygmaeus morio*), Malayan sun bear (*Helarctos malayanus*) and the clouded leopard (*Neofelis diardi borneensis*).

In 2001, Sabahmas Plantations Sdn. Bhd. (Sabahmas) established its own conservation area of 5.27 km^2 (527 ha), consisting of a contiguous secondary forest ridge and adjacent flat areas that extend into Tabin FR. The conservation area was subsequently named Sabahmas Conservation Area (SCA) and planting was deferred as it was observed that the area was used by several herbivore species for grazing, such as the banteng, sambar deer (*Rusa unicolor*) and bearded pig (*Sus barbatus*).

The establishment of the SCA has provided a safe haven for wildlife and the challenge is to ensure the continued security of this area. This is a critical issue as Lahad Datu, where Tabin FR and SCA are located, is known as a source of illegal wildlife in the trade route that links to the Philippines and Indonesia. The discovery of a Sumatran rhinoceros carcass by the side of a highway in 2006 caused great alarm and the realization that stronger enforcement is needed

around SCA and Tabin FR. This gave rise to the collaboration between Wilmar International and the government of Sabah.

The Sabah Wildlife Enactment 1997 gives the Sabah Wildlife Department (SWD) authority to appoint members of the public as Honorary Wild Life Rangers. A unit of 16 Honorary Wild Life Rangers was established in September 2008 for SCA; they were equipped with two vehicles and two 20-foot speedboats, as entry to both Tabin FR and SCA is via the Segama River and surrounding plantations. The unit was established with the following objectives:

- to supplement the SWD with additional manpower and resources to patrol and enforce the boundaries between SCA and the Tabin FR; and
- to establish an enforcement network around Tabin FR in an effort to deter wildlife poaching.

The Wild Life Rangers in Sabahmas plantations focus on two tasks:

- the patrol and enforcement of the Sabahmas Conservation Area (SCA); and
- educating the staff and workers within the plantations on the laws against poaching.

The unit conducts daily patrols on the road and the waterways that lead into and out of the Tabin FR. In addition, the unit has also set up roadblocks on the access roads, in an effort to reduce the removal of prohibited forest products, particularly poached wildlife, from the FR and the conservation area. Honorary Wildlife Rangers have the authority to stop, examine, seize and detain any offenders during the course of their activities. These offenders are then handed over to the Wildlife Department, for them to press charges. To ensure the success of this initiative, background checks were conducted and stringent criteria were used in the selection process for these Rangers. Candidates were made aware that they would have to remain steadfast when faced with aggressive individuals.

The final selection of Honorary Wild Life Rangers was made by the SWD and the Sabahmas management team, and these individuals then underwent a four-day training program conducted by the SWD. Within the first four months of operation, about 20 arrests were made and the integrity of the unit was further established by the Rangers' involvement in special sting operations conducted by the SWD. There has since been a reduction in the number of arrests, possibly linked to a reduction in poaching incidents. Between 2012 and 2014, no arrests were made.


Honorary Wildlife Rangers man roadblocks and patrol the river

Illegal bushmeat

Road blocks to check for illegal weapons and bushmeat

Confiscated weapons

Wilmar has also partnered with a number of local and international NGOs in support of its conservation initiatives, such as the Zoological Society of London (ZSL), Borneo Orangutan Survival Foundation (BOSF) and Kelawait Foundation in various capacities. Examples of these partnerships are described in case studies 2, 3 and 4 below.

Case Study 2: SMART for HCV

A core HCV management activity is the regular monitoring and patrolling of the relevant areas by specially designated teams. A large amount of data is collected during each monitoring session and we have had to introduce a system to analyze and manage this information. To do so, Wilmar International partnered with the Zoological Society of London (ZSL) to develop and field test the use of the Spatial Monitoring and Reporting Tool (SMART) in Central Kalimantan in 2013. SMART is designed as a tool to measure, evaluate and improve the effectiveness of wildlife enforcement patrols and site-based conservation activities. Once again, Wilmar International is a pioneer with the use of SMART in a production landscape.

Currently, the monitoring data is recorded into the SMART system and can then be displayed in a spatial format, enabling our teams to analyse and determine potential vulnerabilities within our HCV sites. At one of the global SMART pilot sites, we are currently evaluating the effectiveness of the tool and reviewing its potential for replication of use in other plantations with HCV areas.

Training in habitat monitoring


ZSL giving HCV training

Challenges for HCV Conservation

In many countries, land use is usually designated at the macro level, with different land uses identified for development, human habitation and biodiversity protection and conservation. Areas designated for conservation are usually gazetted as protected areas, and Indonesia and Malaysia, along with many other countries, have established a network of protected areas for the protection of key species and ecosystems. As part of their commitment to the United Nations Convention of Biological Diversity, both countries have designated approximately 10% of their terrestrial land areas as nature reserves, national parks, wildlife sanctuaries and state parks (Ministry of Forestry, 2011; UNCBD, 2014).

Many key species are also found outside of these protected areas, which makes HCV assessment and identification important prior to any new development. However, there is one challenge that is specific to Indonesia. It relates to the government's regulation on 'neglected lands' as defined in Regulation No. 11/2010 on the Use and Control of Neglected Lands. Currently, the government of Indonesia does not recognize HCV areas and their value but classifies them as 'neglected' if they are not being developed within a concession. This regulation empowers the government to remove these 'neglected lands' from the permits issued to companies and then reallocate them to another entity. In this case the government's policy is contrary to sustainable practice.

In recognising the need to find solutions to this conundrum, the RSPO has established an Indonesian Task Force, of which Wilmar is a member. The Task Force had two objectives, namely:

- to explore the means of effectively securing HCV areas in oil palm development areas in Indonesia, in line with the RSPO Principles and Criteria, especially those HCV areas identified in location permits (*ijin lokasi*) during HCV assessments, through legal and procedural reforms and by taking into account the recommendations; and
- to explore options to reform local and national laws and procedures to secure HCV areas and accommodate the RSPO Principles and Criteria (RSPO, 2013b).

While large, intact forest areas are required for biodiversity conservation, some studies have shown that retaining and maintaining forest fragments within the oil palm landscape potentially provides ecological benefits to the plantations, such as biological control and pollination (Foster *et al.*, 2011); fragments may also contribute to the survival of wildlife by better enabling them to roam, thereby helping to maintain genetic diversity between isolated populations (Struebig *et al.*,

2011). In our observations, these HCV areas have in effect turned into critical *refugia* for the conservation of large mammals.

Case Study 3: Gibbon Conservation in Sumatra

On 22 April 2014, the gibbon conservation programme Yayasan Kalaweit Indonesia (known as Kalaweit) and PT Kencana Sawit Indonesia, a subsidiary of Wilmar International, signed a partnership to reintroduce a population of siamangs (*Symphalangus syndactylus*) into the HCV area within the HCV management areas of PT Kencana Sawit Indonesia. This HCV area is located at Bukit Tengah Pulau, West Sumatra, and is roughly 3.6 km^2 (360 ha). Classified as lesser apes and endangered species under the International Union for Conservation of Nature's Red List of Threatened Species, siamangs are found in Indonesia, Malaysia and a small area of southern Thailand. In 2004 there was an estimated total population of 22,390 individuals, although numbers are decreasing (Nijman and Geissman, 2008).

In 2008, Kalaweit approached Wilmar International with a request to reintroduce gibbons into our HCV areas. This HCV was selected based on two criteria: the forest is a suitable habitat for the siamangs and there is no existing siamang population in the area, hence no possibility of conflict with other gibbons. In addition, Kalaweit is confident that the HCV areas in our plantations provide adequate protection from illegal activities due to our constant monitoring and patrols. At the time of writing this report, the siamangs were in pre-release cages on site to enable them to familarise themselves with the new environment. Once sufficiently adjusted (which individuals indicate by producing calls to mark territory), the siamangs will be released. There will be a total of six individuals or three pairs.



Signing agreement with Kalaweit

Research in HCV Areas

In addition to monitoring and routine management of HCV areas, we are also collaborating with a number of local and international universities in conducting studies in our plantation areas. Many of these studies are related to the effects on biodiversity of HCV areas within a production landscape, which will help to inform us on the management effectiveness of these HCV areas. In Sarawak, we have just partnered with University Malaysia Sarawak to undertake initial baseline assessments of the biodiversity of our HCV areas in Sarawak. We have also had other collaborations, such as with Cambridge University, York University, the University of Cumbria, the Malaysian University of Sabah and Andalas University, which has resulted in at least two papers being published in peer-reviewed international journals, such as *Biotropica* and the

Philosophical Transactions of the Royal Society. Such collaborations provide the universities with access to field sites in which they are able to study the impacts and effects on biodiversity of oil palm plantations that are adjacent to our set-aside areas; for us, the information from the studies forms part of our long-term monitoring and feeds into the management plans for our HCV.

Most of our partnerships with universities and non-governmental organisations begin with short-term research or pilot studies. This initial relationship is important to build trust between the partners. Our partnership with Andalas University is currently expanding, as we are looking to develop a three-year research program for our site in Sumatra. The longer-term arrangement will benefit both parties, allowing for greater planning and use of resources and the ability to produce outcomes from the longer-term research. Similarly, we are also looking at extending our partnership with ZSL, with the possibility of expanding the use of the SMART software to our other sites. A formal agreement is usually established between parties to outline the roles and responsibilities of each party as well as the expected outcomes from the collaboration. This is important in any partnership as it helps to manage the expectations and provide clarity on the outcomes for both parties.

Case Study 4: Tripartite Collaboration on Best Management Practices for Orangutan Conservation in Central Kalimantan

Wilmar International's Central Kalimantan Project (CKP) is a contiguous plantation area separated into seven land-holding companies. Three of our seven plantations have large HCV areas totalling approximately 107 km^2 (10,700 ha), where populations of orangutans are present. As part of managing these orangutan populations, in 2011 we collaborated with the Central Kalimantan provincial government and the Borneo Orangutan Survival Foundation (BOSF) to develop best management practices (BMPs) for orangutans in oil palm plantation landscapes, especially our plantation. The BMP initiative had two key objectives:

- to obtain agreement with local communities on HCV management; and
- to obtain legal status for the HCV area as an orangutan habitat.

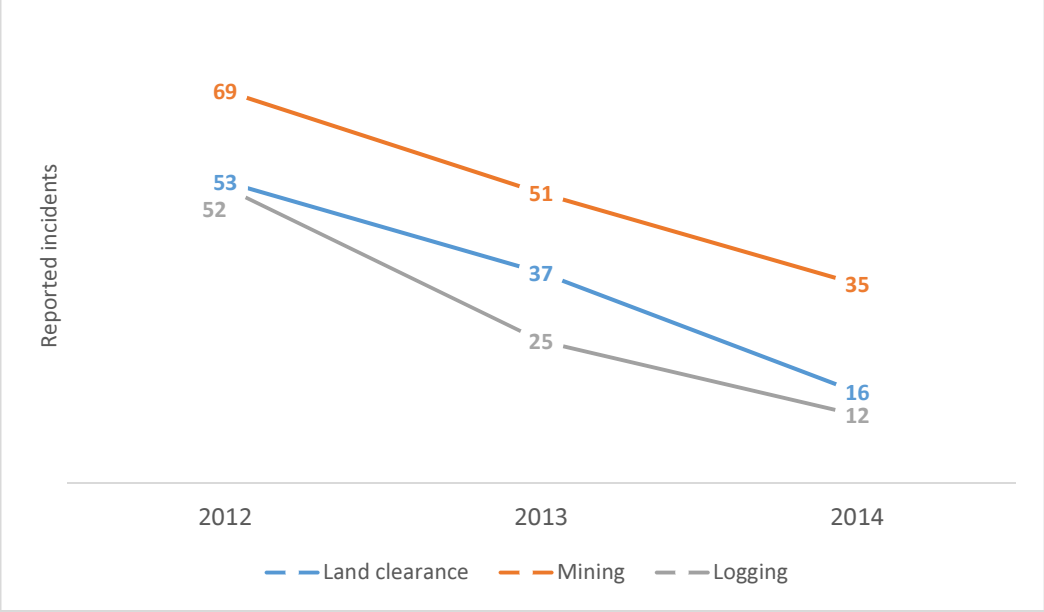
One of the plantations in CKP was selected as a pilot project and four activities were conducted to reach the objectives. These were:

- socialization (information awareness sessions) of the local communities to increase their knowledge and understanding of HCVs and orangutans;
- development of partnerships with local communities on HCV area management;
- publications on HCVs and orangutan conservation; and
- program monitoring and evaluation.

Signing MOU with the Central Kalimantan provincial government and BOSF

In addition to the BMPs, biodiversity surveys and nest censuses are currently being conducted to obtain baseline information that will then be used as biological indicators of habitat quality and change. There is also a standard operating procedure in place in CKP on the management of orangutan areas and wherever orangutans are spotted. Our plantations have also implemented a 25-metre HCV buffer zone demarcation, orangutan habitat enrichment planting, and education and social awareness for the workers and local communities. These actions have been effective in reducing the incidence of land clearance, mining and logging in the HCV areas (see Figure 3). Using the SMART software, we were able to monitor and identify these prohibited activities in HCV areas. In 2012, there were more than 50 incidents each of land clearance, mining and logging. By 2013, the number of logging incidents had dropped by just over half, while the number of land clearance events had decreased by about 30%; however, the number of mining cases remained above 50. By the following year, logging and land clearance cases had dropped to 12 and 16, respectively, and while the number of mining events had also fallen, it remained relatively high at 35.

Figure 3 Land Clearance, Mining and Logging in HCV Areas, January 2012–August 2014



Wilmar's Policy and Commitment

In December 2013, Wilmar International announced its new policy of "No Deforestation, No Peat and No Exploitation." This Integrated Policy is aimed at protecting forests, peatlands and human and community rights. The implementation of this policy requires assessments to be conducted for high conservation value forest (HCVF) areas as well as for high carbon stock (HCS) areas prior to any opening of land and the requirement to implement the Free, Prior and Informed Consent (FPIC) process. The Policy also states that there will be no further development on peatlands, regardless of depth; in addition, BMPs are to be implemented on existing plantations established on peat. The Policy underlines Wilmar's commitment to the Universal Declaration of Human Rights, ensuring respect and recognition of the rights of workers and indigenous and local communities, and a commitment to resolve complaints and conflicts through an open, transparent and consultative process.

This Policy strengthens our commitment to the RSPO's Principles and Criteria and to sustainable development, with the inclusion of HCS in our analysis and decision-making process. It is also intended to lead the industry, using our influence to transform it towards greater transparency and sustainability.

"We believe that the palm oil industry can provide a sustainable and affordable source of vegetable oil to meet rising global demand for responsible products," said Wilmar Chairman and Chief Executive Officer Kuok Khoon Hong at the launch of the policy.

The Policy was developed in anticipation of the demand for more sustainable oil palm in the market, in which an increasing number of retailers, manufacturers, food service companies and consumer goods companies are making commitments to the use of certified sustainable palm oil (CSPO). The latest World Wildlife Fund Palm Oil Buyer's Scorecard, a report produced annually to track the progress of buyers' commitment to sustainable palm oil, highlights that 36 out of 52 European retailers have made commitments to use CSPO by 2015 (WWF, 2013). The same report identifies several key retailers that are already using 100% CSPO, including IKEA, Tesco, Marks & Spencer, Migros and Sainsbury's. Meanwhile, other retailers, such as Lindt & Sprünglii, Unilever, Premier Foods and Johnson & Johnson, are well on their way to achieving 100% CSPO in their supply chain. For the first time, the Scorecard also reviews Asian markets such as India and Japan, which are also moving into CSPO, at 2% of the total oil palm used. This report demonstrates that the demand for CSPO and sustainable palm oil continues to increase.

About 12% of our sites in both Indonesia and Malaysia are defined as HCV; meanwhile, in Africa, our conservation area is only about 7% of the total planted area. Our policy has led us to reduce our impact on biodiversity proactively, by applying our ability to avoid areas with high biodiversity or carbon stock. In addition to initial satellite reconnaissance, we seek out areas that have been previously developed. Such is the case in our plantations in Cross River state of Nigeria, where the plantations that were selected are concessions that were earmarked by the government in the early 1960s for agricultural activity; they had previously been planted with oil palm, with remnants of scrub, farm and degraded woodlands. We also conducted HCV and HCS assessments on the site to identify areas for conservation and protection.

Our approach in Africa is based on the developments in policy and practice over recent years and has included, from the start, the added dimension of HCS assessment and HCV and FPIC processes, as described in our Integrated Policy. The outcome of the HCS assessment is a stratification table that identifies the different levels of carbon value, enabling us to further refine

the areas for development. The assessment processes, which include stakeholder consultations, allow us to minimise the impact of our operations on local communities and biodiversity in the area.

Areas that have previously been developed, earmarked for concessions

Conclusion

Palm oil is currently the most widely used vegetable oil and demand is expected to continue to increase due to the growth in the global population, improved standards of living and the growing demand for non-food uses and renewable energy (Vis *et al.*, 2012). Oil palm is recognized as one of the most efficient crops, as it thrives well in tropical climates, which is also where some of the most biologically diverse ecosystems on earth are found (Fitzherbert *et al.*, 2008).

Wilmar's landmark No Deforestation, No Peat and No Exploitation policy—which was announced on 5 December 2013—aims to accelerate the palm oil industry's sustainable transformation. With this pledge, Wilmar will work towards ensuring that the Group's own plantations and the companies from which it sources products provide sustainable products that reduce and mitigate environmental and social impacts.

Abbreviations

BMP	Best management practice
BOSF	Borneo Orangutan Survival Foundation
CKP	Central Kalimantan Project
CSPO	Certified sustainable palm oil
FPIC	Free, Prior and Informed Consent
FR	Forest reserve
HCS	High carbon stock
HCV	High conservation value
RSPO	Roundtable on Sustainable Palm Oil
SCA	Sabahmas Conservation Area
SMART	Spatial Monitoring and Reporting Tool
SWD	Sabah Wildlife Department
ZSL	Zoological Society of London

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