

A Review of Smallholder Oil Palm Production

Challenges and Opportunities for Enhancing
Sustainability. A Malaysian Perspective.

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A social enterprise dedicated to promoting sustainability in Asia
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Technical Advisory Programme

1 Advisory 2 Training 3 Assurance



About Wild Asia Group Scheme

Wild Asia's Group Scheme for (WAGS) intends to provide a platform for providing support to smaller independent producers. It aims to address the current gaps in the sustainable palm oil supply chain by strengthening relationships between , CPO mills, traders, and large corporations. WAGS will provide the necessary technical assistance, training and capacity building for small farmer groups. WAGS has been developed by Wild Asia's Technical Support Programme.

About our Technical Advisory Programme

Wild Asia's professional experience is directed towards an advisory programme to assist the business community to understand, implement and support sustainability initiatives that meet International environmental and social performance standards. We work with producers, people on the ground, working on implementing environmental or social programmes. We also work with buyers, financiers, trade networks, to develop a combined assurance and support programme to be able to risk assess and support improvements in the supply. These are strategies we feel that will create incentives to improve the environmental and social performance of the supply chain, and ultimately, improve working environments on the ground. Wild Asia has developed its experience in forestry, tourism, and agriculture sectors.

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1. Abstract

In the last decade, concern about the negative impacts of large scale agricultural expansion has led to increasing efforts to promote sustainability across a range of agricultural supply chains, including oil palm. Often improvements in sustainability are implemented through the establishment of an international certification system that sets voluntary standards for producers and provides assurances to consumers, such as the Roundtable on Sustainable Palm Oil (RSPO).

Small farmers are a vital part of the global palm oil supply chain. It is estimated that there are 3 million small oil palm farmers worldwide, producing approximately 4 million tonnes of palm oil, around 9% of total global production. In Indonesia and Malaysia, which together produce around 85% of the world's oil palm, smallholders account for up to 40% of the planted area. However a range of factors, such as limited awareness of new technologies and best practices and lack of financial resources, make it difficult for these small farmers to meet the requirements of the RSPO, placing them at a considerable disadvantage compared to other large-scale producers. As global demand for certified sustainable palm oil (CSPO) increases, these small farmers could find themselves excluded from the global CSPO supply chain.

Recently, new models are starting to emerge to help smallholders overcome these challenges. This paper describes the existing structures for smallholder oil palm production, examines their strengths and weaknesses, and explores the developing models that are supporting small farmers to increase production, enhance sustainability, achieve certification and access global markets.

2. Introduction

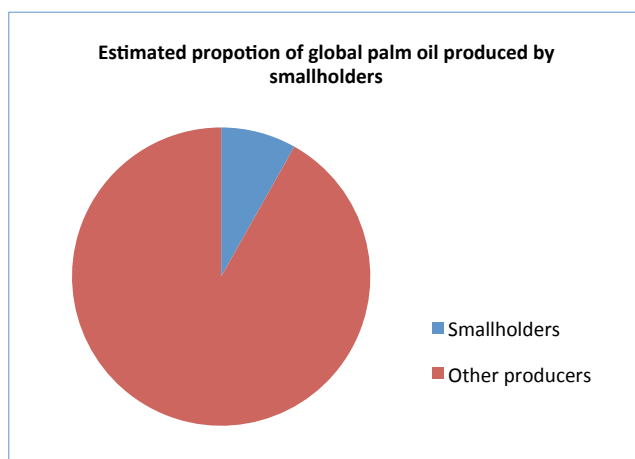
In recent years there has been growing awareness of the need for more sustainable production across many agricultural commodity supply chains, including palm oil. Per hectare, oil palm is more productive than any other edible oil. It is now the most commonly used vegetable oil, with around 45.3 million tonnes produced annually worldwide (Dallinger 2011) for use in thousands of products such as processed foods, cosmetics and cleaning products. Global demand is increasing, leading to large-scale expansion of oil palm plantations, not only in South East Asia but in Latin America and Africa as well. Often this expansion takes place at the expense of forest areas, peatlands, and local peoples' customary lands, contributing to loss of natural forests, loss of biodiversity, ecosystem degradation, anthropogenic climate change, loss of traditional livelihoods and increasing land conflicts (WWF 2008, Colchester et al 2006). As a result there is growing public concern regarding the harmful environmental and social impacts of large scale oil palm production and demand for greater sustainability and accountability within the sector.

The Roundtable on Sustainable Palm Oil (RSPO) was set up in 2004 as a multi-stakeholder organisation consisting of oil palm producers, processors, manufacturers, traders, retailers, investors and concerned NGOs, with the objective of promoting sustainable palm oil through stakeholder engagement and credible global standards. Producers achieve certification by complying with a set of Principles and Criteria on transparency, legal compliance, and environmental, agricultural, labour and social best practices. Major companies including Unilever and Carrefour, as well as countries such as Holland and Belgium, have committed to purchase all their palm oil from sustainable sources by 2015. As a result RSPO certification is likely to become a basic entry requirement for major international supply chains, rather than an incentive that allows access to higher value markets (Dallinger 2011), as in the case of schemes such as FairTrade or organic certification standards.

3. Smallholders in the Global Palm Oil Supply Chain

Smallholders¹ produce a substantial amount of the world's palm oil, around 4 million tonnes per year². In Malaysia, Indonesia and Papua New Guinea (PNG), around 40% of the total palm oil production area is managed by smallholders, while in Thailand the figure is even higher at 75% (Teoh 2010). In West Africa, where palm oil is produced predominantly for domestic and regional markets, smallholders produce up to 90% of the total output (Vermeulen and Goad 2006) although large-scale plantations are starting to develop. Smallholders are therefore a key component in palm oil supply chains.

Graph 1: Estimated Proportion of Global Palm Oil Produced by Smallholders



Smallholders in the palm oil supply chain fall broadly into two main categories (as recognised by the RSPO), depending on the extent of external support they receive:

Supported or “scheme” smallholders are structurally bound by contract, credit agreement or planning, to a particular mill. They often have limited autonomy to choose which crop they develop and are supervised in planting and crop management techniques, organised, and managed by the mill, estate or scheme to which they are linked (RSPO 2009). Supported smallholders may receive support in the form of seedlings, fertilisers, pesticides, and access to technical assistance or credit (Teoh 2010, Vermeulen and Goad 2006). Examples include public land development schemes, such as those under the Federal Land Development Authority (FELDA) and the Federal Land Consolidation and Rehabilitation Authority (FELCRA) in Malaysia, and extension services provided by private enterprises, such as New Britain Palm Oil Limited in PNG or through government agencies in Malaysia. Supported smallholders are often contractually bound to sell their crop to their local mill, and therefore may not always be able to obtain the best price for their crop (Verburg 2009). Furthermore in cases where mills provide technical assistance, they may not possess the necessary experience, skills, time and resources to effectively support their smallholders.

Independent smallholders tend to be self-organized, self-managed and self-financed, and have more autonomy to choose how to use their lands, which crops to plant, and how to manage them. They are not contractually bound to any particular mill or any particular association, although they may receive support or extension services from government agencies (RSPO 2009). They tend to sell their crop to traders or directly to local mills and are free to negotiate to obtain the best price for their crop. They may therefore

¹ The RSPO defines smallholders as family-based enterprises producing palm oil on less than 50 ha of land.

² RSPO figures cited in Verburg 2009

have greater bargaining power, particularly where they make up a well-organised group, although in reality the number of potential buyers may be limited (FSG 2010). Field experience also reveals that some small farmers may not necessarily be getting a fair deal.

A recent study comparing several different models of community involvement in the oil palm industry in Sabah and Sarawak found that independent smallholders performed better in terms of financial performance and more effective and inclusive participation in the oil palm industry compared to the government-led joint-ventures and schemes studied (Majid Cooke et al 2011). The study also highlighted a further benefit relating to farmers maintaining or having greater decision-making power regarding their own land.

Table 1: Characteristics of Independent Smallholder Crop

Establishment	<ul style="list-style-type: none"> - seedlings sourced directly from private-nurseries - development costs, e.g. land preparation, are self-funded
Maintenance	<ul style="list-style-type: none"> - self harvested and maintained - maintained by casual workers or contractors - organised via dealership who maintains and harvests crop
Transport	<ul style="list-style-type: none"> - direct transport using own vehicle - dealer organises transportation of FFB
Point of sale	<ul style="list-style-type: none"> - dealership - direct to mill or mill appointed dealer

4. Known Issues Facing Independent Smallholders in Malaysia

Independent oil palm farmers face a number of challenges. Since they are not part of an extension scheme they receive limited institutional, technical and financial support and lack knowledge regarding best practices and new technologies. In general³, they receive limited external assistance in the form of training, credit services, seedlings or fertilizer, and are likely to be less productive and produce a lower quality crop. Independent smallholders are unlikely to benefit from direct relationships with local mills. Often they rely on traders to purchase and transport their FFB to the mill and have no guarantees regarding the price that will be paid for their crop.

Box 1: Oil Palm Smallholders in Malaysia

Small farmers cultivate 41% of the 4.5 million hectares of oil palms planted in Malaysia by 2008, with around 30% managed by supported smallholders and 11% by independent farmers (Teoh 2010). The average farm size is just less than 4 hectares per family (Rahman et al 2008). 30% of the national output is produced by smallholders under schemes such as those under FELDA and FELCRA, with 11% produced by independent smallholders (Rao, cited in PalmOilHQ.com November 2009).

Smallholder yields are generally much lower than industrial plantations. For example Malaysian smallholders produce on average 17 tonnes of FFB per hectare per year, compared with the national average of 21 tonnes (GoM no date). In 2008 Indonesian smallholders produced 2.52 tonnes of oil per hectare, 35% less than private plantations and 40% less than government plantations (cited in Teoh 2010). A 2008 study demonstrated that independent smallholders in Malaysia are less efficient than other producers, due to their smaller plot size⁴, poor agricultural practices (such as using poor quality seedlings, maintaining old palms, applying insufficient fertilizer and harvesting unripe FFBS) and poor data management practices (Rahman et al 2008).

³ Some Malaysian independent smallholders may be eligible for replanting grants and seedling subsidies.

⁴ Average plot size in Malaysia was 3.92ha in 2007 (Rahman et al, 2007)

5. Independent Smallholders and Certification

Although smallholder certification can bring a range of benefits for smallholders in terms of wider market access and premium prices (see Box 2) it presents an additional set of challenges for independent farmers. Achieving certification requires skills in management, administration, quality control, marketing and service delivery that are difficult for smallholders to develop without support (Molenaar et al 2011). Furthermore, the high costs associated with RSPO membership, training and certification assessments⁵ are beyond the means of most small producers, and may prevent their participation in RSPO. In recognition of these challenges the RSPO established a Smallholder Task Force in 2005 to work towards the inclusion of small producers in the RSPO. Smallholders wishing to obtain RSPO certification are not obliged to comply with the same level of requirements as plantation companies. However smallholder participation in RSPO remains limited and a number of issues are yet to be addressed. These include aspects of the certification system itself, such as the standards, supply chain systems and incentives, as well as wider issues including access to finance, farmer organizations and technical assistance (RSPO 2012⁶).

The most common approach to responding to these challenges is to encourage small-scale producers to organise themselves into groups, such as producer groups or cooperatives. Different kinds of groups may exist depending on local circumstances, management arrangements, land ownership or legal status. Common group types include producer-based groups such as cooperatives or farmers associations, supply chain-based groups such as contract farmers, out-grower schemes and trader networks, and groups based around an extension service provider that may be public, private or non-profit driven (Molenaar et al 2011). Organising large numbers of smallholders brings its own challenges however, including effective administration, communication and ensuring fair representation of all members.

Box 2: Certification Benefits for Smallholders in other Commodity Supply Chains

Group certification can create a range of benefits for smallholders, across various commodity supply chains. These include improved market access, higher incomes, and environmental and social benefits. It can help to empower smallholders and strengthen their bargaining power and negotiation skills. A 2008 Committee on Sustainability Assessment study of the coffee sector found that certification under schemes such as Fair Trade and Rainforest Alliance brought better market access and economic improvements to a majority of smallholders (Giovannucci 2008). The study also found that certified farms were more likely to have better health and safety practices, labour and social conditions, and employee relations.

Similarly in sustainable timber, a group of smallholders in Vietnam achieved Forest Stewardship Council (FSC) certification in 2010. Farmers have seen their incomes rise by around 50% as a result of certification. Training in plantation management and environmental best practices has helped farmers reduce pests and diseases, soil erosion and sedimentation, and maintain areas of biodiversity. There are also benefits for the supply chain, as furniture manufacturers now have a local source of FSC certified timber and no longer need to import certified raw materials from abroad. In this way smallholder group certification under FSC is proving an effective solution for Vietnam's forest communities, the environment and the country's burgeoning furniture industry (WWF 2010).

⁵ The cost of certification can range from US\$1.19 to \$34.66 per hectare (WWF 2012).

⁶ http://www.rspo.org/en/smallholders_task_force Accessed 10th August 2012.

6. Emerging Models for Independent Smallholders

New approaches are starting to develop to test alternative mechanisms for organising and supporting groups of independent oil palm farmers. These projects are demonstrating that, with the right support, farmers can successfully improve their agricultural practices, increase the quality and quantity of their yields, enhance the sustainability of their operations and achieve certification. For example, a project supported by the German development organisation, GIZ, provided training and advice on improving sustainability in oil palm cultivation to approximately 1,000 smallholders supplying four mills in Thailand. The group successfully received RSPO certification in July 2012. Benefits to the smallholders included access to technical advice and support, increased productivity and higher quality crops, increased incomes and various agro-ecological benefits such as improved soil and water resources (May 2011). Benefits for the participating mills include a more secure supply of FFB, an increase of 1-2% OER, and the ability to meet rising demand for certified sustainable palm oil (CSPO) (May 2011, Kukeawkasem 2011). It is hoped that the group will become a model for other oil palm smallholders in Asia and further afield.

Table 2: Benefits of GIZ Project on Sustainable Palm Oil Production in Thailand

Impact	10–15% reduction in fertilizer costs Yield increased 3 ton/ha 0.1 THB/kg FFB
Economic Value Added	Average farm size of 7 ha ~3,000 USD/year to smallholder; 1-2 % OER increased for mill

Source: RT9 presentation by Dr. Y. Kukeawkasem, GIZ Project on Sustainable Palm Oil Production in Thailand, November 2011.

7. Wild Asia Group Scheme (WAGS)

In Malaysia since 2010, Wild Asia (see Box 3) has been researching and field testing a new group scheme approach that provides a platform for supporting smaller independent producers. Known as the **Wild Asia Group Scheme (WAGS)** the aim is to develop new ways to organise, support and market small farmers in the global palm oil supply chain. It aims to address the current gaps in the sustainable palm oil supply chain by building and strengthening relationships between smallholders, CPO mills, traders, and large corporations. The scheme functions by providing technical advice, management support, training and capacity building to help small producer groups comply with certification standards and access international markets for CSPO. Ultimately the focus will be to support independent smallholders improve their management practices, increase FFB yields, and help them to achieve compliance with RSPO standards. By helping smallholders to increase their production levels, the scheme will also enable farmers to improve their level of income.

A key strength of the scheme is its flexibility. WAGS is able to incorporate a variety of different group models, such as cooperatives, mill dealers and village communities, depending on the local circumstances and support available. Since the scheme started, a number of field projects have been directly supported by WAGS:

- in Sarawak a private mill and estate are supporting a WAGS developed group scheme including smallholders grouped around individual longhouses (village unit). The group was certified in 2010;

- in Sabah WAGS is researching the development of other village-centred producer groups. This project will include a number of “producer groups”;
- in Peninsular Malaysia WAGS is working with a refinery to guide independent CPO mills towards certification, and exploring the potential of dealerships or the mill as the formally recognised “producer group”.

8. Conclusion and Ways Forward

The palm oil industry has been more progressive than many others in initiating environmentally sustainable and socially responsible standards across its supply chain, particularly in regards to the larger growers and producers. However more needs to be done in regards to small producers. Greater research, support and scaling up of effective models are required to ensure that smallholders are not left behind. The current low yields achieved by independent small farmers provide an exceptional opportunity to significantly increase the production of CSPO from the existing planted area. With appropriate technical support, training, extension support and management, smallholder production has the potential to reach similar levels of production as the larger estates (Teoh 2010). The pilot projects described above are demonstrating that smallholders can successfully enhance the sustainability of their operations, achieve certification, and contribute to increased production of sustainable certified palm oil.

Box 3: About Wild Asia

Wild Asia is an independent social enterprise working on sustainability issues in the agriculture, forestry and tourism sectors. We work with businesses that have a direct impact on our natural environment, wildlife, people and communities to improve their social and environmental practices and comply with international standards. We use our knowledge to advise, train, build capacity, and inspire change from within the industry itself.

Wild Asia has been working to promote sustainability in the palm oil sector since 2005, conducting biodiversity, social and supply chain assessments and providing training in various aspects of RSPO. We have supported producers in Malaysia, Indonesia, Thailand, PNG, The Solomon Islands, Cameroon and Ghana to prepare to meet the requirements of RSPO. For more information visit <http://oilpalm.wildasia.org/>

9. Wild Asia Authors

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