People and Palm Oil

Social Impacts for Smallholder Farmers

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Briefing Note

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Table of Contents

1. Introduction 1

1.1 Key Findings 1

2. Understanding the oil palm boom 2

2.1 Smallholders and oil palm 2

2.1.1 Increase in smallholder plantations in Indonesia – a case in point 3

2.2 The economic attraction of oil palm 3

2.2.1 Case study – oil palm adoption and poverty alleviation in Indonesia 4

3. Smallholders and sustainable palm oil 4

3.1 Lack of Good Agricultural Practice amongst smallholders 4

3.2 The certification gap 5

3.2.1 Cost barriers 5

3.2.2 Legal and administrative barriers 6

3.2.3 Independent smallholders 6

4. Improving smallholder sustainability 7

4.1 Certifying smallholders 7

4.1.1 Case study - 2019 RSPO standards and policies 8

4.2 Private sector support for smallholders 8

5. The benefits of sustainable palm oil 9

5.1 Good Agricultural Practice (GAP) 9

5.1.1 Case study – Unilever and Daemeter in Riau, Indonesia 9

5.1.2 Case study – Musim Mas IPODS in Sumatra, Indonesia 10

5.1.3 Community wellbeing 10

5.2 Improving equal access 10

5.2.1 Case study – Community lease projects, P4F/Unilever/Government of Ghana, Ghana 11

5.2.2 Case study – Supporting independent smallholders, RSPO, Nigeria 11

5.3 Education and information 11

5.3.1 Case study – Financial Literacy Course, Solidaridad, West Kalimantan 12

6. Conclusions 12

1. Introduction

Palm oil is not just produced in extensive plantations by large companies – a significant proportion of production is accounted for by smallholder farmers, with millions of people worldwide reliant on the commodity for their livelihoods. This briefing brings together information from scientific research to summarise how and why smallholder production of palm oil has developed to become a crucial part of the industry. It explores the challenges and barriers faced by many smallholder farmers in engaging in sustainable production practices and summarises the benefits of sustainable palm oil production for smallholders, using case studies to showcase ongoing progress.

1.1 Key Findings

With three-million smallholders being responsible for 41% of palm oil production worldwide,[1] smallholders play an important role in the sustainability of the industry. For farmers, there is evidence that adopting Good Agricultural Practice (GAP) and growing sustainable palm oil (SPO) can bring positive impacts on wellbeing at the individual, household, and village level. Certification has been linked to improved livelihoods,[2] increases in gender parity,[3] and enhanced off-farm opportunities.[4]

However, these benefits are currently unevenly distributed across region and demographic, with economic, political, and cultural barriers preventing many farmers from adopting GAP and from accessing certification.[5] Independent smallholders in particular are vulnerable to a 'Certification Gap' and are less likely to experience the benefits of growing palm oil sustainably.[6]

To address these barriers, governments, the private sector and NGOs are increasingly working – often collaboratively - to improve smallholder inclusion in certification schemes and extend the social benefits of sustainable palm oil to previously marginalised oil palm growers.[7]

1. Apriani, E. et al. (2020). Non-state certification of smallholders for sustainable palm oil in Sumatra, Indonesia. Land Use Policy. 99.
2. UNILEVER (2021). The importance of smallholders. Available at: https://www.unilever.com/sustainable-living/reducing-environmentalimpact/sustainable-sourcing/transforming-the-palm-oil-industry/the-importance-of-smallholders/
3. P4F. (2020). Palms up for gender equality: the women leading the way in Ghana's palm oil sector. Available at: https://partnershipsforforests.com/2020/03/06/palms-up-for-gender-equality-the-women-leading-the-way-in-ghanas-palm-oil-sector/
4. Qaim, M. et al. (2020). Environmental, Economic, and Social Consequences of the Oil Palm Boom. Annu. Rev. Resour. Econ. 12, 321–44.
5. Hutabarat, S. et al. (2019). Explaining the "Certification Gap" for Different Types of Oil Palm Smallholders in Riau Province, Indonesia. The Journal of Environment & Development. June.
6. Hutabarat, A. et al. (2019). Explaining the "Certification Gap" for Different Types of Oil Palm Smallholders in Riau Province, Indonesia. The Journal of Environment & Development. 28 (3).
7. RSPO. (2021). Smallholders. Available at: https://www.rspo.org/smallholders/

2. Understanding the oil palm boom

2.1 Smallholders and oil palm

The Roundtable on Sustainable Palm Oil (RSPO) defines oil palm smallholders as "farmers who grow oil palm, alongside subsistence crops, where the family provides the majority of labour and the farm provides the principal source of income, and the planted oil palm area is less than 50 hectares".[8]

Worldwide, approximately three-million smallholders make a living from palm oil – in Indonesia and Malaysia alone, they are responsible for 40% of palm oil production.[9] Nonetheless, global smallholder production is not evenly distributed.

For example:

- Within S.E. Asia, a region that produces 80% of global palm oil, smallholders account for 41% of palm oil acreage in Indonesia,[10] 40% in Malaysia, and 70% in Thailand.11
- Within Latin America, a region that produces 6% of global palm oil, smallholders account for 87% of plantation area in Ecuador, 95% in Honduras, and 60% in Peru.[12]
- In West and Central Africa, a region that produces 5% of global palm oil, smallholders account for approximately 90% of production.[13]

The adoption of oil palm by smallholders played a significant role in the ten-fold increase in palm oil production between 1984 and 2018,[14] and continues to play a key role in the growth of the industry. Research shows that:

- Smallholders constitute the majority of new oil palm plantations in S.E. Asia.[15]
- Smallholder production in Latin America has doubled since 2001.[16]
- Smallholders have been the target of recent oil palm expansion policy in Nigeria and Ghana, with 1 million Hectares (Ha) attributed to smallholders for palm oil growth in the past decade.[17]

8. RSPO (2020). An Overview: Oil Palm Smallholders. Available at: https://www.rspo.org/file/Annex2%20%20An%20Overview%20of%20Palm%20Oil%20Smallholders.pdf
9. RSPO (2021). Smallholders. Available at: https://rspo.org/smallholders
10. Apriani, E. et al. (2020). Non-state certification of smallholders for sustainable palm oil in Sumatra, Indonesia. Land Use Policy. 99.
11. RSPO. An Overview: Oil Palm Smallholders. Available at: https://www.rspo.org/file/Annex2%20%20An%20Overview%20of%20Palm%20Oil%20Smallholders.pdf
12. Proforest. Smallholder Oil Palm Growers In Latin America. Available at: https://www.rspo.org/publications/download/4108b98b039fca5.
13. Khatun, K. et al (2020). From Agroforesty to Agroindustry. Frontiers in Sustainable Food Systems. March 2020.
14. Our World in Data. (2021). Palm Oil. Available at: https://ourworldindata.org/palm-oil
15. GIZ. (2021). Promoting sustainable oil palm production by independent smallholders in Indonesia.
16. CORE. (2019). Improving smallholder inclusiveness in palm oil production — a global review.
17. Proforest. (2014). Characterizing the Oil Palm Smallholder in Africa.

2.1.1 Increase in smallholder plantations in Indonesia – a case in point

In Indonesia, the world's top producer and exporter of palm oil, smallholders currently account for 41% of total oil palm acreage.[18] Since the 1970s, 900,000 smallholders have been incorporated into the palm oil value chain via Perkebunan Inti Rakyat/Nucleus Estate Smallholder (PIR/NES) programs.[19] Nonetheless, today most smallholders in Indonesia operate independently from state schemes, having developed partnerships with larger palm oil plantations who own the neighbouring concession. Between 2001 and 2018, the total area of oil palm grown by smallholders in Indonesia rose from 1.6 million to 5.8 million Ha. [20] Smallholders are expected to double their production capacity over the next decade, managing a 60% share of Indonesia's total oil palm plantation area by 2030.[21]

2.2 The economic attraction of oil palm

Following the increase in global price and demand for palm oil in the last three decades22, the profitability of growing oil palm has been the main attraction for smallholder farmers.23 Financial benefits of growing oil palm include factors such as:

- Revenue and labour intensity – per Ha, oil palm generates more revenue than both cocoa24 and rubber25 and is less labour intensive.
- Price stability – Palm oil prices also do not fall with oversupply peaks, as occurs with cocoa and other crops harvested once or twice a year.26
- Off-farm benefits – Labour saved when switching to oil palm is frequently used for additional off-farm economic activities.27

The growing of oil palm has also been associated with poverty alleviation and economic development. At the household level, oil palm cultivation has been linked to lower poverty rates and higher levels of food security in both Indonesia28 and Colombia.29 Studies in Indonesia have found villages where oil palm is the dominant crop tend to have better infrastructure than those where alternative commodities are grown.

18. Global Yield Gap Atlas. (2020). https://www.yieldgap.org/indonesia-oil-palm
19. Jelsma, I. et al. (2017). Unpacking Indonesia's independent oil palm smallholders: An actor-disaggregated approach to identifying environmental and social performance challenges. Unpacking Land Use Policy, 69, 281-297
20. https://merid.org/smallholder-palm-oil-farmers-in-indonesia/
21. WRI. (2020). Smallholder Farmers Are Key to Making the Palm Oil Industry Sustainable. Available at: https://www.wri.org/insights/smallholderfarmers-are-key-making-palm-oil-industry-sustainable
22. Trading Economics. (2021). Palm Oil. Available at: https://tradingeconomics.com/commodity/palm-oil
23. CIFOR. (2010). Why do farmers prefer oil palm? Lessons learnt from Bungo district, Indonesia. Small-scale Forestry. 9. 379–396
24. Nasution, S.K.H. et al. (2019). Comparing farming income prospects for cocoa and oil palm in Asahan District of North Sumatera. IOP Conf. Ser.: Earth Environ. Sci. 260
25. Qaim, M. et al. (2020). Environmental, Economic, and Social Consequences of the Oil Palm Boom. Annu. Rev. Resour. Econ. 12, 321–44.
26. Nasution, S.K.H. et al. (2019). Comparing farming income prospects for cocoa and oil palm in Asahan District of North Sumatera. IOP Conf. Ser.: Earth Environ. Sci. 260
27. Qaim, M. et al. (2020). Environmental, Economic, and Social Consequences of the Oil Palm Boom. Annu. Rev. Resour. Econ. 12, 321–44.
28. Qaim, M. et al (2020). Environmental, Economic, and Social Consequences of the Oil Palm Boom. Annu. Rev. Resour. Econ. 12. 321–44.
29. Castiblanco C, Etter A, Ramirez A. 2015. Impacts of oil palm expansion in Colombia: What do socioeconomic indicators show? Land Use Policy 44:31–43

Similarly, in comparison to villages where rubber was the dominant cash crop, Santika et al found improved access to energy, road and market infrastructure, and healthcare and educational facilities, in villages growing oil palm.[30]

2.2.1 Case study – oil palm adoption and poverty alleviation in Indonesia

In a study based in the Jambi Provine of Indonesia, Qaim et al found a positive correlation between the adoption of oil palm and reductions in poverty.[31] Around 3% of farm households in palm-dominant villages in the region experience poverty, compared to around 7% in rubber dominant villages, and almost 19% in villages with few cash crops. The same study found oil palm adoption to increase household consumption expenditure - a common indicator of living standard – by up to 22%. This was linked to increased calorie consumption and dietary quality, via a phenomenon coined as the 'positive income effect'.

3. Smallholders and sustainable palm oil

3.1 Lack of Good Agricultural Practice amongst smallholders

Owing to a deficit of technical knowledge, smallholder producers generally do not comply with accepted Good Agricultural Practice (GAP) for growing oil palm.

In a survey of independent smallholders in Selangor, Malaysia, 97.5% demonstrated a lack of understanding of sustainable production techniques, with 86.7% being unaware of available certification options.[32] Further research shows that, in Indonesia, 89% of smallholders depend on a low-input, low-output crop technique which limits crop productivity.[32]

Smallholders growing oil palm, without consideration of GAP or sustainable growing techniques, can have serious social, environmental, and economic impacts. For example:

- Smallholder plantations currently contribute to forest fires, biodiversity loss and soil degradation.[33]
- Smallholder expansion into primary forest and other ecosystems can lead to community tensions (including violent conflict) and the erosion of indigenous rights.[34]
- Reductions in productivity increase the vulnerability of smallholders to food insecurity and economic uncertainty in the face of crop failure or price shocks.[35]

30. Santika, T. et al. (2019). Does oil palm agriculture help alleviate poverty? A multidimensional counterfactual assessment of oil palm development in Indonesia. World Development. April 2019.
31. Qaim, M. et al (2020). Environmental, Economic, and Social Consequences of the Oil Palm Boom. Annu. Rev. Resour. Econ. 12. 321–44.
32. Lee Xin, N. et al. (2016). Factors Influencing the Implementation of Malaysia Sustainable Palm Oil (MSPO) Among Oil Palm Smallholders in Malaysia. International Journal of Academic Research in Business and Social Sciences. 6(12)
33. WRI. (2020). Smallholder Farmers Are Key to Making the Palm Oil Industry Sustainable. Available at: https://www.wri.org/insights/smallholderfarmers-are-key-making-palm-oil-industry-sustainable
34. ICCT. (2016). Ecological Impacts of Palm Oil Expansion in Indonesia. White Paper. July 2016.
35. Azhar et al. (2017). The global palm oil sector must change to save biodiversity and improve food security in the tropics. Journal of Environmental Management. 203. 457-466

- Unsafe or unregulated on-farm practices can present serious health hazards. For example, the incorrect application of fertilizers can be particularly harmful for pregnant women.[36]

Furthermore, with many smallholders lacking technical knowledge relating to replanting, declining yields associated with the end-of-life cycle of oil palm (25 years) represents a major emerging issue for smallholder farmers.[37] The expansion of smallholder plantations to compensate declining yields has been cited as key driver of current peatland loss in Borneo,[38] and by 2030, it is anticipated that the majority of smallholder oil palm expansion in Indonesia will occur on peat soils.[39] This is problematic considering that the carbon footprint of palm grown on converted peat soils is more than six times greater than the average for oil palm.[40]

3.2 The certification gap

Improving the sustainability of smallholder agriculture has been posited as the key to increasing the sustainability of global palm oil supply chains.[41] Nonetheless, the rate of certification amongst smallholders remains low, with current data indicating that:

- Approximately 163,000 smallholder farmers, or little over 5% of oil palm smallholders, are certified by the RSPO. This is low, considering that smallholders are responsible for 40% of global production.[42]
- Only 25% of Malaysian smallholders are covered by the MSPO, Malaysia's state palm oil certification scheme.[43]

The gap between the management practices frequently deployed by smallholders and those required by the RSPO is described by Hutabarat et al[44] as the 'Certification Gap'. It can be explained by various interlinked barriers which prevent smallholders from accessing more sustainable production systems.

3.2.1 Cost barriers

The costly inputs required to grow oil palm according to RSPO specification, including good quality planting material, fertilizers, and equipment, are frequently identified as the main barrier to certification for smallholders. Often the costs of certification for oil palm smallholders are greater than the financial benefits, reducing the incentive for sustainable production.[44]

36. ICCT. (2016). Ecological Impacts of Palm Oil Expansion in Indonesia. White Paper. July 2016.
37. ICCT. (2016). Ecological Impacts of Palm Oil Expansion in Indonesia. White Paper. July 2016.
38. Chain Reaction. (2019). Future Smallholder Deforestation: Possible Palm Oil Risk.
39. Schoneveld, G.C. et al. (2019). Modeling peat- and forestland conversion by oil palm smallholders in Indonesian Borneo. Environmental Researhc Letters. 14(1).
40. Danielsen, F. et al (2008). Biofuel Plantations on Forested Lands: Double Jeopardy for Biodiversity and Climate. Conservation Biology.
41. WRI. (2018). Intensification by Smallholder Farmers Is Key To Achieving Indonesia's Palm Oil Targets. Available at: https://www.wri.org/insights/intensification-smallholder-farmers-key-achieving-indonesias-palm-oil-targets
42. RSPO. (2021). Smallholders. Available at: https://www.rspo.org/smallholders/
43. The Sun Daily. (2020). Palm oil board: Only 25.5% of smallholders have MPSO cert. Available at: https://www.thesundaily.my/business/palm-oil-board-only-255-of-smallholders-have-mpso-cert-IY4515208
44. Hutabarat, S. et al. (2019). Explaining the "Certification Gap" for Different Types of Oil Palm Smallholders in Riau Province, Indonesia. The Journal of Environment & Development. June.

3.2.2 Legal and administrative barriers

Either due to a lack of administrative skills, the legality of their plantation, or both, many smallholders remain illegible for the loans and technical assistance provided by governments and certification schemes.

Smallholders must legally register their land to become certified. Many smallholders do not have the appropriate title to their land, do not register their oil palm business, or do not have a statement of environmental monitoring and management, leaving them ineligible for certification.[45] Poor literacy skills and weak understanding of relevant processes make formalising their businesses, and meeting RSPO requirements, difficult for many smallholders.[46]

Surveying and mapping oil palm concessions – another requirement of RSPO certification – is costly and can be complicated by the weak monitoring capacities in remote areas.[47]

3.2.3 Independent smallholders

Independent smallholders are small-scale farmers who are not linked to any particular company or mill.[48] In addition to not receiving any training or support from mills, independent farmers are less likely to receive government support, possess formal land rights, or carry formal documentation relating to their plantation.[49]

Despite managing around ¼ of Indonesia's palm oil plantations, only 0.21% of Indonesia's independent smallholders are certified by the ISPO, the country's palm oil certification standard.[50] Meanwhile, independent smallholders constitute less than 1% of the total acreage certified by the RSPO smallholders.[51]

45. Hutabarat, S. et al. (2019). Explaining the "Certification Gap" for Different Types of Oil Palm Smallholders in Riau Province, Indonesia. The Journal of Environment & Development. June.
46. Jakarta Globe. (2021). ISPO, Smallholders, and Sustainable Development. Available at: https://jakartaglobe.id/opinion/ispo-smallholders-andsustainable-development
47. GIZ. (2021). Promoting sustainable oil palm production by independent smallholders in Indonesia.
48. WRI. (2018). Smallholder Farmers Are Key to Making the Palm Oil Industry Sustainable. Available at: https://www.wri.org/insights/smallholderfarmers-are-key-making-palm-oil-industry-sustainable
49. Hutabarat, S. et al. (2019). Explaining the "Certification Gap" for Different Types of Oil Palm Smallholders in Riau Province, Indonesia. The Journal of Environment & Development. June.
50. Mongabay. (2020). Indonesia aims for sustainability certification for oil palm smallholders. Available at: https://news.mongabay.com/2020/04/indonesia-aims-for-sustainability-certification-for-oil-palm-smallholders/
51. RSPO. (2021). Smallholders. Available at: https://www.rspo.org/smallholders/

4. Improving smallholder sustainability

4.1 Certifying smallholders

In 2017, the RSPO acknowledged its failure to include smallholders in its sustainability schemes and released the following statement:

"The current RSPO system does not provide equal opportunities for smallholders. The standard is designed for large growers and does not necessarily account for the smallholder context, capacity and resources"[52]

In the years following there has been an increased effort to include smallholders in both state and third-party certification schemes:

- In 2018, the ISCC awarded its first Independent Smallholder certificate.[53]
- In 2019, the RSPO introduced the Independent Smallholder Standard, the Smallholder Support Fund (RSSF) and the Smallholder Trainer Academy (STA).[54]
- In 2020, it was announced that both the ISPO[55] and MSPO[56] standards would be mandatory for smallholders after a specified date.

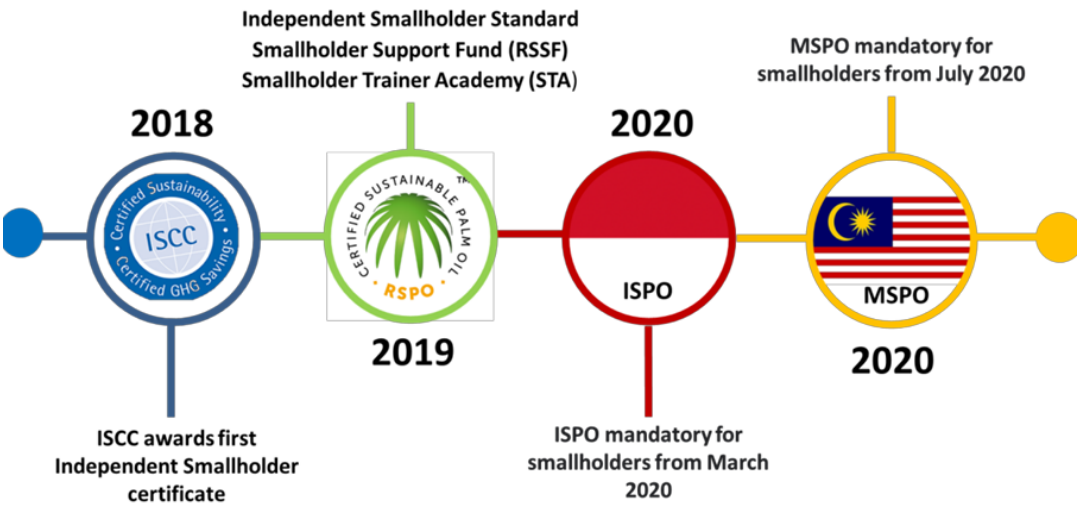

Figure 1 Timeline of Smallholder Inclusion in Certification

52. Hutabarat, S. et al. (2019). Explaining the "Certification Gap" for Different Types of Oil Palm Smallholders in Riau Province, RSPO (2017). RSPO SMALLHOLDER STRATEGY JUNE 2017. Available at: https://rspo.org/smallholders/rspo-smallholder-strategy
53. ISCC. (2018). ISCC World's First Independent Smallholder Certificate. Available at: https://www.iscc-system.org/event/world-first-isccindependent-smallholder-certificate/
54. RSPO. (2021). Smallholders. Available at: https://www.rspo.org/smallholders/
55. Mongabay (2020). Indonesia aims for sustainability certification for oil palm smallholders. Available at: https://news.mongabay.com/2020/04/indonesia-aims-for-sustainability-certification-for-oil-palm-smallholders/
56. Free Malaysia Today (2019). Obtain certification or be left out. Available at: https://www.freemalaysiatoday.com/category/nation/2019/03/13/obtain-certification-or-be-left-out-oil-palm-smallholders-told/#

4.1.1 Case study - 2019 RSPO standards and policies

In 2019, the RSPO introduced a series of new polices and standards to help facilitate the certification of smallholders. The RSPO Independent Smallholder Standard (ISH Standard) includes simplified conditions for certification, including a new Free Prior Informed Consent Approach, combined High Carbon Value-High Carbon Stock approach, and new guidance to help smallholders become certified via farmer groups.[57]

The RSPO also introduced the RSPO Smallholder Support Fund (RSSF).[58] This is a mechanism to finance cost of certification for Smallholders, using 10% of the revenue generated from the trade of Certified Sustainable Palm Oil (CSPO). The funds are used to support smallholders with the costs incurred for training, project management, impact assessments, audit costs, inputs, and equipment. In November 2019, the RSPO also launched the Smallholder Trainer Academy, the goal of which is to build a pool of Master Trainers across sectors and organisations to promote sustainable oil palm practices amongst smallholders.[59]

4.2 Private sector support for smallholders

The agendas of private, public, and third-party bodies are increasingly aligning to facilitate sustainable palm oil production amongst smallholders. There are various ways that companies and organisations can, and have, supported smallholders.

The RSPO credit system offers various options, specific to palm oil, palm kernel oil and palm kernel expeller, (IS-CSPO, IS-CSPKO and IS-CSPKE respectively) for companies looking to trade credits specifically produced by independent producers.[60] This option allows companies, despite not directly purchasing from them, to support smallholders that produce palm oil sustainably.

Companies are also increasingly addressing smallholders in their sustainability and responsible sourcing policies. For example, Unilever include a Smallholder Strategy within their People and Nature Policy,[61] whilst the Nestle Responsible Sourcing Progress Report[62] contains a section on Smallholder Inclusion.

As explored in the following section, many palm oil producers and refiners, including Cargill,[63] Wilmar[64] and Musim Mas,[65] coordinate smallholder sustainability projects in collaboration with certification schemes, NGOs, and other third-party bodies.

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57. RSPO. (2019). RSPO ISS. Available at: https://rspo.org/certification/rspo-independent-smallholder-standard
58. RSPO. (2019). RSPO RSSF. Available at: https://rspo.org/news-and-events/news/rspo-smallholder-support-fund-supporting-smallholders-aroundthe-world
59. RSPO. (2020). RSPO Smallholder Trainer Academy https://rspo.org/news-and-events/news/rspo-smallholder-trainer-academy-aims-to-improvesmallholders-livelihoods
60. RSPO. (2016). Improved RSPO IT system PalmTrace will feature RSPO Credits trade. Available at: https://rspo.org/news-andevents/news/improved-rspo-it-system-palmtrace-will-feature-rspo-credits-trade
61. Unilever (2021). The importance of smallholders. Available at: https://www.unilever.com/sustainable-living/reducing-environmentalimpact/sustainable-sourcing/transforming-the-palm-oil-industry/the-importance-of-smallholders/
62. Nestle (2021). Responsible Palm Oil Sourcing 2020. Available at: https://www.nestle.com/sites/default/files/2021-03/responsible-palm-oilsourcing-2020.pdf
63. Cargill (2021). Smallholder Programs. Available at: https://www.cargill.com/sustainability/palm-oil/palm-smallholder-program
64. Wilmar (2021). Smallholder Programmes. Available at: https://www.wilmar-international.com/sustainability/smallholder-programmes
65. Musim Mas (2021). Key Lessons from Indonesia's Largest Palm Oil Independent Smallholders Project. Online Webinar.

5. The benefits of sustainable palm oil

5.1 Good Agricultural Practice (GAP)

Certification schemes such as the RSPO involve numerous criteria to facilitate the adoption and continual improvement of best management strategies. In a survey of oil palm smallholders in Sumatra carried out by Apriani et al, 97% claimed that RSPO certification improved their capacity to implement Good Agricultural Practice.[2]

The adoption of GAP has been linked to diverse benefits for smallholder farmers, including:

- Increased yields[66], increased incomes, and improvements in farmer safety[67] have all been cited as benefits of GAP achieved through the process of certification.
- Improved equipment, protective gear, storage and sanitary facilities create healthy and safe working conditions, as does the correct application of herbicides and pesticides.[68]
- Adherence to GAP reduces air pollution and freshwater toxicity, which can prevent harmful downstream impacts of oil palm plantations on the wellbeing and livelihoods local and indigenous communities.[69]

5.1.1 Case study – Unilever and Daemeter in Riau, Indonesia

Unilever, in collaboration with Daemeter, and World Education International, has facilitated GAP and NDPE training for independent smallholders in Riau province, Indonesia.72 The project aimed to increase awareness of the benefits of high-yield, low impact farming. Of the 1,864 farmers who attended the Farmer Field Schools, 95% recorded overall improvements in productivity, 93% reported improvements to plant growth, 87% reported improvements to fruit quality, and 85% reported improvements in total yield.

66. Musim Mas (2021). Key Lessons from Indonesia's Largest Palm Oil Independent Smallholders Project. Online Webinar.
67. UNILEVER (2021). The importance of smallholders. Available at: https://www.unilever.com/sustainable-living/reducing-environmentalimpact/sustainable-sourcing/transforming-the-palm-oil-industry/the-importance-of-smallholders/
68. ICCT. (2016). Ecological Impacts of Palm Oil Expansion in Indonesia. White Paper. July 2016.
69. Saswattecha, K. et al (2016). Options to reduce environmental impacts of palm oil production in Thailand. Journal of Cleaner Production, 137.
70. UNILEVER (2021). The importance of smallholders. Available at: https://www.unilever.com/sustainable-living/reducing-environmentalimpact/sustainable-sourcing/transforming-the-palm-oil-industry/the-importance-of-smallholders/

5.1.2 Case study – Musim Mas IPODS in Sumatra, Indonesia

Facilitated by Musim Mas, IPODS is Indonesia's largest independent smallholder project. The project aims to improve smallholder access to finance, markets, and certification.[71] 43,000 farmers have been trained on GAP/NDPE, with 2,093 farmers achieving certification. As a result of the project 5,229 Ha of land is now sustainably managed and certified, and land replanting schemes have begun.

Smallholders certified as a result of IPODS have experienced a 30% increase in yields, whilst eligibility for the sale of certified sustainable palm oil (CSPO) and certified sustainable palm kernel oil (CSPKO) credits has brought additional economic benefits to smallholders.

5.1.3 Community wellbeing

Certification schemes such as the RSPO have developed various mechanisms to ensure that oil palm plantations have positive, rather than negative, impacts on community wellbeing. For example, RSPO certified farmers must respect the right to Free, Prior and Informed Consent (FPIC), ensuring that certified sustainable palm oil comes from smallholder plantations without land conflicts or 'land grabs'.[72]

In addition, the RSPO, ISCC, ISPO and MSPO all have established complaints procedures, which work to mitigate inter-community conflicts and tensions with local or indigenous communities. The RSPO and ISCC offer appeals procedures for mediation, whilst MSPO and ISPO rely on national laws and bodies to deliver redress and compensation.[73]

The adoption of Good Agricultural Practice (GAP) can also improve farmer and community wellbeing in different ways. Improved equipment, protective gear, storage and sanitary facilities create healthy and safe working conditions, as does knowledge of the correct application of herbicides and pesticides.[74] Growing oil palm sustainably is also linked to reduced air pollution and freshwater toxicity. This can improve the wellbeing and livelihoods of local people, particularly indigenous communities who depend closely on natural water resources.[75]

Furthermore, smallholder training programs delivered by certification schemes or by supply chain companies frequently address the health and wellbeing of farmers and their families. For example, 4,000 families received Health and Nutrition training via the IPODS program.[76]

5.2 Improving equal access

The efforts to improve smallholder inclusion in certification schemes and to expand the adoption of GAP to marginalized farmers are having additional benefits on farmer wellbeing.

71. Musim Mas (2021). Key Lessons from Indonesia's Largest Palm Oil Independent Smallholders Project. Online Webinar.
72. RSPO. (2015). FREE, PRIOR AND INFORMED CONSENT GUIDE FOR RSPO MEMBERS.
73. Forest Peoples. A COMPARISON OF LEADING PALM OIL CERTIFICATION STANDARDS. Available at: https://www.forestpeoples.org/sites/default/files/documents/Palm%20Oil%20Certification%20Standards_lowres_spreads.pdf
74. ICCT. (2016). Ecological Impacts of Palm Oil Expansion in Indonesia. White Paper. July 2016.
75. Saswattecha, K. et al (2016). Options to reduce environmental impacts of palm oil production in Thailand. Journal of Cleaner Production, 137.
76. Musim Mas (2021). Key Lessons from Indonesia's Largest Palm Oil Independent Smallholders Project. Online Webinar.

For independent smallholder, certified farmer groups (e.g: RSPO ISS) represent a platform for decision making which can strengthen control over land and agricultural production.[77] Independent producers who become certified through farmer groups also become eligible for credit and training, the benefits of which have been described above.

Similarly, training and credit schemes focusing on providing support to women have been linked to empowerment and financial independence[20], whilst involvement in oil palm agriculture has been shown to boost women's decision-making powers at the household and community level.[78]

5.2.1 Case study – Community lease projects, P4F/Unilever/Government of Ghana, Ghana

As part of a joint venture between Partnership for Forests,[79] Unilever and the Ghanian government, the Benso Oil Palm Plantation has secured land entitlement for 438 smallholders across a period of 25 years.[80] In addition to control over the management of four Ha plots, participants benefit from technical support regarding the monitoring of pests and diseases. In West Africa, land rights are often controlled patriarchally, meaning women have limited control over plantations. In this project, 40% of plots have been allocated to women, with many benefitting from business and enterprise training. Smallholders now also participate in collective decision making, including on pricing committees. The project has led to increased incomes and better access to healthcare and education amongst participants.

5.2.2 Case study – Supporting independent smallholders, RSPO, Nigeria

A collaboration between the RSPO and the Nalda Multipurpose Cooperative/Opgan has certified 1,091 independent smallholders in Nigeria.[81] By organising farmers into 20 certified independent smallholder groups, the project aimed to facilitate smallholder access to the inputs and equipment required for improved productivity and efficiency. Far exceeding the original target of 75%, yields have increased by almost 500%, rising from 2.7 Ha to 11.4 Ha.

5.3 Education and information

Just as projects aimed at sharing GAP can help farmers to adopt sustainable oil palm practices, smallholders often require additional education and training to overcome the technical, legal, and administrative barriers to becoming eligible for certification.

77. RSPO. (2021). Nalda Multipurpose Cooperative. Available at: http://www.rsep.rspo.org/index.php/oil-palm-smallholder-initiativesworldwide/item/nalda-multipurpose-cooperative-opgan
78. P4F. (2020). Palms up for gender equality: the women leading the way in Ghana's palm oil sector. Available at: https://partnershipsforforests.com/2020/03/06/palms-up-for-gender-equality-the-women-leading-the-way-in-ghanas-palm-oil-sector/
79. Partnerships For Forests
80. Proforest. (2014). Characterizing the Oil Palm Smallholder in Africa.
81. RSPO. (2019). RSEP Nalda Co-op. http://www.rsep.rspo.org/index.php/oil-palm-smallholder-initiatives-worldwide/item/nalda-multipurposecooperative-opgan

Efforts to help smallholders adopt better agriculture practices are challenged by limited information regarding the distribution of smallholder oil palm plantation, crop age and condition.[82] To become RSPO certified, smallholders must provide information on their plantation including its location and evidence of their right to use the land.[83] In turn, mapping activities can help smallholders to overcome this data deficit and become eligible for certification. For example, the IPODS project in Indonesia helped to define plantation boundaries for 1,000 remote smallholder plots.[84]

In order to increase eligibility for certification, the RSPO has sponsored financial literacy courses delivering workshops on responsible saving, spending, lending and investments to smallholders.[85] This training helps marginalised smallholders to formalise their business, in turn increasing their eligibility for certification and government credit.

Such training can also have secondary benefits, with financial literacy and other professional skills boosting off-farm empowerment and opportunity. Farmers have also reported that the increased incomes received by growing and selling sustainable palm oil has improved the educational opportunities of their families.[86]

5.3.1 Case study – Financial Literacy Course, Solidaridad, West Kalimantan

Facilitated by the RSPO, a collaborative project between Solidaridad and credit union Keling Kumang is helping to improve financial literacy and RSPO-uptake amongst smallholders in West Kalimantan, Indonesia.[87] 1,000 farmers have benefitted from technical training on GAP, with a further 5,500 graduating from the Financial Literacy Course. Sharing the benefits of responsible savings, spending, lending and investments, the course has equipped smallholders with the vital administrative skills and knowledge required for certification and legal recognition. 65% of the 7,350 farmers benefitting from the project were female smallholders.

6. Conclusions

Smallholder sustainability cannot be ignored

As the fastest growing group of producers, improving the sustainability of smallholder agriculture has been posited as the key to increasing the sustainability of global palm oil supply chains.[88] Despite an increased effort to include smallholders in both state and third-party certification schemes, most notably since 2019, the majority of smallholders are still not certified or have not adopted sustainable practices on their oil palm concessions.[89]

82. Okarda, B et al. (2018). IOP Conf. Ser Earth Environ. Sci. 169.
83. RSPO(2019). INDEPENDENT SMALLHOLDER STANDARD 86 Musim Mas (2021). Key Lessons from Indonesia's Largest Palm Oil Independent Smallholders Project. Online Webinar.
84. Musim Mas (2021). Key Lessons from Indonesia's Largest Palm Oil Independent Smallholders Project. Online Webinar.
85. RSPO (2019). Solidaridad. Available at: https://www.rsep.rspo.org/index.php/oil-palm-smallholder-initiatives-worldwide/item/solidaridad
86. UNILEVER (2021). The importance of smallholders. Available at: https://www.unilever.com/sustainable-living/reducing-environmentalimpact/sustainable-sourcing/transforming-the-palm-oil-industry/the-importance-of-smallholders/
87. RSPO. (2019). RESP Solidaridad. http://www.rsep.rspo.org/index.php/oil-palm-smallholder-initiatives-worldwide/item/solidaridad
88. WRI. (2018). Intensification by Smallholder Farmers Is Key To Achieving Indonesia's Palm Oil Targets. Available at: https://www.wri.org/insights/intensification-smallholder-farmers-key-achieving-indonesias-palm-oil-targets
89. Hutabarat, S. et al. (2019). Explaining the "Certification Gap" for Different Types of Oil Palm Smallholders in Riau Province, Indonesia. The Journal of Environment & Development. June.

Palm oil projects play a key role in encouraging SPO amongst smallholders

Smallholder projects, often delivered in partnership between supply chain companies and nonprofit or non-governmental organisations, play a key role in facilitating the uptake of sustainable oil palm production. GAP training can improve stallholders' knowledge of suitable, safe, and sustainable techniques for oil palm agriculture,[90] whilst financial and administrative support may help marginalised smallholders to formalise their business, in turn increasing their eligibility for certification.[91]

GAP brings diverse benefits to smallholders and the livelihoods of people in general

The adoption of GAP has been linked to increased yields and improved incomes amongst smallholders.[92] Additionally, knowledge of the proper application of herbicides and pesticides, as well as the correct equipment, protective gear, storage and sanitary facilities, have been found to create safer working conditions for smallholder farmers.[93] Adherence to GAP reduces air pollution and freshwater toxicity, which can prevent harmful downstream impacts of oil palm plantations on the wellbeing and livelihoods of local and indigenous communities.[94]

Certification schemes bring additional benefits to smallholders and local communities

For marginalised farmers, including independent smallholders, certified farmer groups strengthen control over land and agricultural production, facilitate access to credit and training, and increase communal resilience to market shocks.[95]

The RSPO, ISCC, ISPO and MSPO certification schemes all have established complaints procedures,[96] whilst certified RSPO plantations must be developed with Free, Prior and Informed Consent (FPIC)[97], allowing the voices of indigenous people and local communities to be heard. Benefits from SPO, including increased in incomes, have been linked to enhanced educational and off-farm opportunities for smallholders and their families.[98]

90. UNILEVER (2021). The importance of smallholders. Available at: https://www.unilever.com/sustainable-living/reducing-environmentalimpact/sustainable-sourcing/transforming-the-palm-oil-industry/the-importance-of-smallholders/
91. RSPO (2019). Solidaridad. Available at: https://www.rsep.rspo.org/index.php/oil-palm-smallholder-initiatives-worldwide/item/solidaridad
92. Musim Mas (2021). Key Lessons from Indonesia's Largest Palm Oil Independent Smallholders Project. Online Webinar.
93. ICCT. (2016). Ecological Impacts of Palm Oil Expansion in Indonesia. White Paper. July 2016.
94. Saswattecha, K. et al (2016). Options to reduce environmental impacts of palm oil production in Thailand. Journal of Cleaner Production, 137.
95. RSPO. (2021). Nalda Multipurpose Cooperative. Available at: http://www.rsep.rspo.org/index.php/oil-palm-smallholder-initiativesworldwide/item/nalda-multipurpose-cooperative-opgan
96. Forest Peoples. A COMPARISON OF LEADING PALM OIL CERTIFICATION STANDARDS. Available at: https://www.forestpeoples.org/sites/default/files/documents/Palm%20Oil%20Certification%20Standards_lowres_spreads.pdf
97. RSPO. (2015). FREE, PRIOR AND INFORMED CONSENT GUIDE FOR RSPO MEMBERS.
98. Qaim, M. et al. (2020). Environmental, Economic, and Social Consequences of the Oil Palm Boom. Annu. Rev. Resour. Econ. 12, 321–44.