Impact monitoring

of palm oil sustainability schemes



Forum Nachhaltiges Palmöl (FONAP) e.V. Bonn, April 2021

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Preface – German Federal Ministry of Food and Agriculture

The German Federal Ministry of Food and Agriculture (BMEL) initiated and co-founded the multi-stakeholder-initiative "Forum for Sustainable Palm Oil" (FONAP e.V.). The collaborative implementation of voluntary self-commitments from companies to source 100% certified sustainable and deforestation-free palm oil is a central goal of FONAP.

Increasing transparency in relation to globally recognised certification schemes for sustainable palm oil is among the main tasks of FONAP. FONAP considers certification schemes as a guarantor for the compliance with minimum standards. Processes that regularly assess the advancement of these schemes and reveal the potential for improvement are also a part of this. With the "Leitlinien zur Förderung von entwaldungsfreien Lieferketten von Agrarrohstoffen", which the German Government passed in 2020, an operational framework was created that leads the way for many actors involved in the implementation of sustainability standards. This emphasises the significance of commodity forums such as FONAP.

For BMEL, it is instrumental to work on improving internationally accepted standards and creating effective requirements for certification along the entire palm oil supply chain in order to, among others, further establish deforestation-free production practices. The present study is an important component of this. The results will certainly be considered in the professional debate among international experts in this field.

The study results describe the relevance of certification schemes for achieving sustainability targets. They enable us to derive a line of argument for potentially supporting certain certification schemes as well as possibly raising demands for improvements of their impact monitoring.

We want to highlight the contribution that the FONAP members make as changemakers towards creating transparency in the palm oil sector and improving the existing certification schemes. Through their activities they have significantly contributed to the developments that have taken place to date.



Dr. Eva Ursula Mueller

Head of the department "Forest, Sustainability, Renewable Resources" at the German Federal Ministry of Food and Agriculture (BMEL)

Preface – Board of FONAP e.V.

We are delighted to present this study conducted by Proforest. The present analysis spotlights the impact monitoring approaches of the four certification systems that are recognised by the FONAP: RSPO, RSB, RA, ISCC, as well as the multi-stakeholder-driven verification scheme POIG. Another focus of the study was to demonstrate the relevance of processes of change, such as the Theory of Change or the integration of interest groups into the constant improvement of monitoring and evaluation systems within these sustainability initiatives. The four recognised certification schemes acknowledged the need for a clear strategy to measure impact and have therefore developed own monitoring and evaluation systems. This enables them to determine where they stand in relation to their short-, medium- and long-term goals.

The potential efficacy of a certification is closely linked to the specific requirements within the individual production standards. We are aware of the fact that an analysis hereof can always only represent a snapshot and that the sources for it are solely available with delay. Consequently, there is currently very limited information on the impacts of and experiences with the revised version of the RSPO P&Cs that is being implemented since 2019 and the new Rainforest Alliance certification program from 2020.

Despite these limitations, we view the results of this literature review as a valuable contribution to our goal-oriented dialogue and discussions with national and international stakeholders. The results also present an additional value to the FONAP members, because the insights can be used in the future on an initiative- and member-level for the further development of the currently recognized certification schemes in specific, system-relevant aspects.

Bilge Daldeniz, Claire Reboah and Rebecca Smalley, the authors of the study, point out that the achievement of long-lasting positive impacts on the ground ultimately strongly depends on the purchase of certified products. Through its 100% goal, FONAP takes on the role of a changemaker, as its membership requirements have been found to generate an increase in demand for certified products.

We express our thanks to Proforest for carrying out this study and wish you an interesting read ahead. We appreciate a continued constructive exchange with all actors along the palm oil supply chain.



Armin Hodzic Board Member FONAP e.V. Head Working Group Certification Schemes

Executive Summary

Certification is internationally recognised as a key tool in raising standards and improving the sustainability of agricultural production around the world. But how well do we understand the ways in which certification is having a beneficial effect, and how do the certification schemes themselves measure their impact?

This report presents an analysis of the impact monitoring systems of certification and verification schemes that are recognised by the German Forum for Sustainable Palm Oil (FONAP), which commissioned this research as well as a summary of the current state of knowledge on the impacts of palm oil certification. The following schemes were reviewed: the Roundtable on Sustainable Palm Oil (RSPO), the Roundtable on Sustainable Biomaterials (RSB), Rainforest Alliance (RA), the International Sustainability and Carbon Certification (ISCC) and the Palm Oil Innovation Group (POIG). The study draws on desk-based research, benchmarking and interviews with 15 stakeholders and scheme representatives.

Impact monitoring systems

A detailed analysis of each scheme's system is provided. The four certification schemes all use a theory of change-based approach to monitoring and evaluation (M&E). This means that they develop a theory of change (ToC), which sets out how they expect certification to lead to long-term sustainability goals and base their M&E systems on that ToC. This approach follows best practice recommended by ISEAL, the membership organisation for sustainability systems, although the four schemes vary in how well elaborated their theories of change are. RA's ToC is not specific to palm oil but is one of the more successful examples of a logical and detailed pathway to sustainability.

Unlike the others, POIG is not a certification scheme but rather a multi-stakeholder-driven verification scheme which aims to build upon and improve the RSPO standard. POIG, which unlike the other evaluated initiatives does not currently have a sizeable Secretariat structure, has not yet developed a ToC or formal M&E system, but it would certainly be beneficial to do so in order to be able to highlight the contributions it makes.

RA and RSPO have progressed further with their M&E systems than ISCC and RSB. One of the ways in which they are evolving their systems is to widen their data sources from certification audit reports and samples of certified entities to specially commissioned deep-dive studies. However, there may still be potential to take advantage of the knowledge of certification auditors; this is where ISCC and RSB have been exploring. It is therefore important for the schemes to continue to invest in both audit quality and independent research.

The schemes use indicators for measuring the effects of certification. The selection of indicators is crucial for successfully tracking progress from short-term outputs to long-term impacts and for ensuring that all areas of the ToC are covered. Again, RA's recently published set of indicators provide a good example of best practice. As a scheme that is specific to palm oil, RSPO is able to tailor its indicators to the characteristics of palm oil production. However, it could improve its indicators in some areas, such as impacts on biodiversity, working conditions or gender relations, as could ISCC and RSB. All of the schemes may benefit from developing qualitative indicators and methods for capturing the intangible systemic changes that occur with real transformation to sustainable practices over time. They could also improve their ability to capture the positive and negative unintended consequences of certification highlighted by interviewees, such as supporting legal enforcement in Africa – a positive outcome – or smallholder dependence on RSPO credits – a negative outcome. For FONAP members and other stakeholders, it could be beneficial if M&E indicators were more standardised.

The schemes demonstrate engagement with stakeholders to better understand how they can progress towards their long-term goals. They have also used the findings from their M&E as input into the revisions of their certification standards, taking into account highlighted shortcomings – though a more systematic consideration of M&E data going forward could further aid this process.

The schemes are improving how they report on their M&E findings. RA produces an impacts dashboard, while RSPO recently committed to reporting every six months. While less frequent, the ISCC and RSB reporting scores well for transparency and simplicity.

Evidence for impacts of palm oil certification

Academic research on the impacts of palm oil certification is limited. The main focus, both academic and public, remains on RSPO and south-east Asia, particularly Indonesia and Malaysia. This accounts for the vast majority of the 27 studies assessed in this report. For the other schemes, evidence of impacts is largely drawn from the schemes' impact reports and additional evidence provided by the interviewees.

It is too early to assess the impacts that the 2018 review of the RSPO Principles and Criteria (P&C) and the new RA standard from 2020 have had on the ground. Audits against the RSPO P&C only began in November 2019 (though there have been delays due to COVID-19), and first audits for the RA standard are expected in July 2021. The existing literature therefore only covers the impacts of previous versions of the standards.

Based on the available studies, the evidence suggests that certification leads to a decreased rate of deforestation in primary forests. However, it may not decelerate clearance of secondary forest or other non-protected lands or prevent spillovers. On biodiversity, RSPO has promoted greater set-aside of areas containing High Conservation Values but academic studies disagree on the extent to which certification helps to sustain species richness. Beneficial impacts of certification on greenhouse gas emissions are more clearly demonstrated.

On socio-economic impacts of palm oil certification, researchers have found that becoming certified can increase farmers' incomes by providing them a market premium and helping them to improve yields. However, the costs of certification must be taken into account. In some cases, wages and working conditions on smallholdings and in company mills and plantations have been documented to be better when the employers are certified. But there is simply too little research available to assess the wider effectiveness of certification in improving labour rights and ending discrimination, and the schemes do not make the rates of compliance against labour criteria easily available. Land rights are slightly better researched, and the literature has found that while certification may provide mechanisms for grievances or for securing land tenure, it remains inadequate in preventing land rights abuses occurring during the establishment of oil-palm plantations, particularly in contexts of poor law enforcement, imperfect land titling systems and corruption. The schemes may be able to achieve positive socio-economic impacts through other avenues, beyond certification, such as the RSPO Smallholder Support Fund.

Recommendations

Further research

The schemes could further develop their relationships with the research community. Both parties could identify their strengths and weaknesses to collaborate on studies that address the research gaps. Researchers could be invited to stakeholder events, particularly relating to M&E. The industry would benefit from more independent meta-research. Initiatives such as the SEnSOR Programme (Socially and Environmentally Sustainable Oil Palm Research) can play a valuable role. Priorities for future research into the impacts of palm oil certification:

- Impacts of certification under the RA, ISCC and RSB standards in palm oil. For POIG, a palm oil verification scheme built upon the RSPO standard, research on how the additionality to RSPO achieves impacts should be considered.
- The socio-economic impacts of palm oil certification, including the conditions in which palm oil certification can improve conditions for workers.
- The systemic changes that can occur from certification, both among households and communities involved in certified entities and in the wider enabling environment.
- Palm oil certification in the emerging production areas in Latin America and Africa, shifting the focus of research away from south-east Asia, and Malaysia and Indonesia in particular.
- The transaction costs and opportunity costs of certification itself. It could be useful to compare individual certification with group-level certification, verification or another approach entirely.

Recommendations for FONAP

For the few standard content requirements on key topics of concern for FONAP that the schemes do not sufficiently cover as revealed by the benchmarking exercise, consider providing specific input in the next revision processes of the organisations' standards, so that they may address these gaps.

- Discuss with ISEAL the potential to add more guidance on gender, scope, methods and indicators in its Impacts Code and the advantages and disadvantages of standardizing M&E indicators and data.
- Discuss with ISEAL or the schemes if and how FONAP and its members could provide support for the continuous improvement of M&E systems for palm oil certification.
- Engage with POIG in particular to offer input and support for developing its own, adapted M&E system, to help showcase POIG's impacts.
- Support and promote jurisdictional or landscape approaches, such as LandScale by RA or the RSPO Jurisdictional Approach (JA) Framework with the aim of scaling up adoption of sustainable production across a wider production area and ultimately address palm oil-related sustainability issues more effectively.
- Engage with other national platforms and linked initiatives to jointly move retailers and brands to increase their uptake of CSPO – this is a critical pull-effect needed as shown in the schemes' theories of change.

Recommendations for FONAP members

Members of FONAP can help to close gaps in knowledge on the impacts of palm oil certification. One avenue is to explore opportunities to support independent research in some of the areas identified above. Another possibility is to discuss with suppliers and certification schemes if data-gathering that is undertaken by private-sector actors as part of their responsible sourcing strategies could complement the schemes' M&E work. Members should maintain ambitious commitments to source sustainable palm oil as detailed in the schemes' theories of change, and thus drive global demand for CSPO and improvements to certification standards. RA's and RSPO's Shared Responsibility would be key efforts to support in this context. Further activities should include:

- Encourage the schemes to provide more information, standardisation and transparency in their impact reporting. Demand more frequent and regular reporting if needed. Members may wish to request more detail on sustainability topics that they have identified as priority areas in their responsible sourcing strategies.
- Consider using some of the peer-reviewed research findings presented in this report in their public statements and communications with suppliers, to help support palm oil certification and international demand for CSPO.
- Draw on their experiences in using certification for the responsible sourcing of other commodities where M&E systems might be more developed and where the members may have generated more data themselves on the benefits and unintended consequences of certification.
- Improve their understanding of the policy and market barriers to certification and compliance with certification standards in the regions where they source palm oil; and of aspects of palm oil sustainability that may require a strategy beyond certification.
- Explore opportunities to support efforts in both these areas, such as jurisdictional or landscape approaches on workers' rights or forest burning, or smallholder support programmes to support farmers' participation in and compliance with certification schemes.
- Discuss with POIG how to support its efforts and develop an M&E system to better showcase their impacts.

Recommendations for the schemes' M&E systems

This report was written for the benefit of FONAP and its members, but it includes some recommendations for improving M&E systems which may be of interest to not only the FONAP membership but also the schemes themselves:

- All the elements of their M&E systems should be aligned with each other (e.g. M&E system and ToC). Where necessary, elaborate on M&E indicators or parts of their ToC where elements are missing or could be more specific. Incorporate gender mainstreaming and women's empowerment into their systems. One of the ways to achieve this is to design gender-sensitive M&E indicators and methods.
- The schemes should regularly review their ToC and ensure that systemic issues are addressed and confirm that their M&E systems are capable of capturing the diverse ways in which certification can lead to change.
- The schemes should continue to widen the scope of their M&E systems as they evolve, as guided by ISEAL's Impact Code.
- This may include to collaborate with researchers, market actors and other stakeholders. Schemes may also be able to leverage more knowledge from their internal departments or their certification body auditors.
- Schemes should continue to support quality standards and capacity-building among certification bodies. Explore ways to develop social auditing skills as a means not only to determine compliance with the social criteria in their standards, but also to assess progress towards the social goals laid out in their ToC.
- Schemes should improve their qualitative methods for measuring changes in attitudes, relationships and the operating environment that are so crucial to sustainable production in the long term. They should also investigate if and how impact evaluation metrics could be more standardised, at least across the ISEAL community and perhaps with a small set of key metrics.
- For not commodity-specific schemes, there may be scope to include greater consideration of the characteristics of palm oil production when measuring the effects of certifying entities in this sector.
- Just as in their data-gathering, schemes should ensure there is appropriate balance in their reporting between short-term outputs and long-term outcomes and impacts.
- Where possible, schemes should provide more transparency on challenges and non-compliances in their impact reporting. This may help to attract support of stakeholders in addressing the market and policy barriers that impede the effectiveness of certification as a tool for wider change.

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Acronyms:

ACOP	Annual Communication of Progress [from RSPO]
ASI	Assurance Service International
BCI	Better Cotton Initiative
BOPP	Benso Oil Palm Plantation
CAT	Certification Assessment Tool [from WWF]
СВ	Certification Body
CBA	Cost-Benefit Analysis
COSA	Committee on Sustainability Assessment
DLW	Decent Living Wage
FFB	Fresh Fruit Bunch
FPIC	Free, Prior and Informed Consent
FPP	Forest Peoples Programme
FONAP	Forum Nachhaltiges Palmöl e.V. [German Forum for Sustainable Palm Oil]
FORTASBI	Indonesian Sustainable Oil Palm Farmers Forum
FTEPR	Fairtrade, Employment and Poverty Reduction in Ethiopia and Uganda
GHG	Greenhouse Gas
GIZ	Deutsche Gesellschaft für Internationale Zusammenarbeit GmbH
	[German Agency for International Collaboration]
HCS	High Carbon Stock
HCV	High Conservation Value
ILO	International Labour Organization
ISCC	International Sustainability and Carbon Certification
ISCC ISH	ISCC Independent Smallholder programme
ISPO	Indonesian Sustainable Palm Oil
ISEAL Alliance	International Social and Environmental Accreditation and Labeling Alliance
JA	Jurisdictional Approach
LCA	Life Cycle Assessment
LCIA	Life Cycle Impact Assessment

M&E	Monitoring and Evaluation
MSC	Marine Stewardship Council
MSPO	Malaysian Sustainable Palm Oil
MPI	Multidimensional Poverty Index
NCLC	Non-Compliant Land Clearance
NI	National Interpretation
NPP	New Planting Procedures (RSPO)
P&C	Principles & Criteria [here refers to RSPO]
POIG	Palm Oil Innovation Group
POME	Palm Oil Mill Effluents
RA	Rainforest Alliance
RaCP	Remediation and Compensation Procedure [from RSPO]
RIF	RSPO Interpretation Forum
RISS	RSPO Independent Smallholder Standard
RSB	Roundtable on Sustainable Biomaterials
RSPO	Roundtable on Sustainable Palm Oil
RSPO JA	RSPO Jurisdictional Approach
RSSF	Smallholder Support Fund (RSPO)
SAS	Sustainable Agriculture Standard
SDG	Sustainable Development Goals [from United Nations]
SEnSOR	Socially and Environmentally Sustainable Oil Palm Research
SKTM	Surat Keterangan Tidak Mampu [Certificate of Inability]
SSTI-SSCT	Sustainability Standards Transparency Initiative's Sustainability Standards' Comparison Tool
STA	Smallholder Trainer Academy [from RSPO]
ТоС	Theory of Change
UNDP	United Nations Development Programme
WAGS	Wild Asia Group Scheme
WWF	World Wide Fund for Nature



Palm oil certification and verification schemes were established to address the serious environmental and socio-economic issues that have been associated with palm oil production around the world such as deforestation, biodiversity loss, land rights abuses and poor working conditions. They are designed to incentivise more sustainable practices among growers, workers and mills by offering a means of accrediting produce when minimum standards of sustainability are followed, and thereby providing global markets with the opportunity to purchase palm oil and other oil palm-derived products that have been independently verified as sustainable. International certification and verification schemes are administered and marketed internationally and publish internationally applicable standards, although they may adopt national derogations to recognise the specific circumstances of palm oil production in particular countries.

The administrators of a standards scheme typically develop a ToC which sets out how the process of a palm oil grower or mill becoming certified or verified against the scheme's standards is expected to lead to positive effects, or at least avoid negative effects. The international community is still learning how standards schemes contribute to sustainability and the complex ways in which the effects of certification or verification can interact with, or be impeded by, external factors, be they economic or ecological, political or personal, climatic or cultural. New initiatives such as Evidensia and Socially and Environmentally Sustainable Oil Palm Research (SEnSOR) are helping to bring together and instigate further academic research in this field. For those in the international community who wish to support certification and verification schemes, valuable information on their effectiveness comes from the procedures for impact monitoring that the schemes themselves have put in place. A certain amount of information is published online and, in the shape of the ISEAL Code of Good Practice for Assessing the Impacts of Social and Environmental Standards Systems, there are now clearly defined guidelines that can be used to assess and improve impact monitoring of standards schemes.

This report presents a study of the current state of knowledge on the impact of palm oil sustainability schemes and an assessment of their impact monitoring systems. It asks: what has been achieved? Where are there any gaps? And where is there potential for further development? Drawing upon academic literature and further publicly available information, the schemes' own impact reports and interviews with expert stakeholders, the study focuses on four international certification schemes: the Roundtable on Sustainable Palm Oil (RSPO), the Roundtable on Sustainable Biomaterials (RSB), the Rainforest Alliance (RA) and the International Sustainability and Carbon Certification (ISCC). A fifth initiative operated by the Palm Oil Innovation Group (POIG), which is better understood as a verification scheme rather than a certification scheme, is also reviewed.



2.1 Understanding impact

ISEAL defines impacts as "positive and negative long-term effects resulting from the implementation of a certification scheme, either directly or indirectly, intended or unintended" (ISEAL, 2014, p. 6). Impacts follow from direct outputs of the standards scheme's activities, such as products or services, which lead into shorter- to medium-term outcomes (ibid). These concepts are well established in the world of international development, where they are used for setting out the expected chain of results of an intervention in a logframe (Figure 1).



ISEAL uses the phrase *causal pathway* to describe "the logical and causal relationships between inputs, activities..., outputs, outcomes and impacts" (ISEAL, 2014, p. 6). The ways in which an intervention is expected to lead to positive change can be expressed in a ToC – a kind of roadmap which sets out how an intervention such as a certification standards scheme or a smallholder development programme will contribute to sustainability or poverty reduction goals (Vogel, I, 2012). Articulating a ToC forces those who design an intervention to explicitly state their assumptions, anticipate obstacles and take into account contextual factors. In this way, a ToC can be understood as both a product and a process (Komives, K, 2018). The ToC for a sustainability standards scheme may be highly complex, because standards promote change in multiple areas by multiple production actors (ISEAL Alliance, 2016).

While the word 'impact' has a specific meaning for development practitioners, it is often used more loosely by companies in the context of responsible sourcing to refer to any kind of result, even outputs or outcomes. This can create some ambiguity, but in this report we use the strict ISEAL definition of impact.

In recent years, interest has grown in impacts from development interventions that are wide-reaching, transformative and long-lasting. GIZ calls these 'broad impacts' (GIZ, 2016, p. 51). Some interventions are explicitly designed to achieve broad impacts. They include many market-system and private-sector development programmes, which are intended to promote, catalyse and facilitate systemic change in how markets operate for the long-term benefit of poor and marginalised economic actors (Ruffer, T; Wach, E, 2013). We can think of systemic change as "transformations in the structure or dynamics of a system that leads to impacts on the material conditions or behaviours of large numbers of people" (ibid., p.4). This is relevant to palm oil certification and verification, because sustainability standards have been put forward as a tool for market transformation (ISEAL Alliance, 2017; Ugarte, S; D'Hollander, D; Tregurtha, N; Haase, N, 2017). It has been argued that the adoption of sustainability standards can have systemic change in the environment in which market actors operate (Aidenvironment, 2018). Such changes may be tangible, such as new policies for the sector or greater stakeholder cooperation, or intangible, such as greater trust between parties or changing norms on topics such as environmental protection, worker welfare or gender equality (ibid.).

Although market-system programmes should still have a ToC, their impact pathways can be unpredictable because they are dealing with real market dynamics (ISEAL Alliance,

Figure 1 Impacts at the end of a results chain in a typical logframe (adapted from UK Aid Direct, 2017) 2017; Ruffer, T; Wach, E, 2013). A review by GIZ found certain factors which increase the likelihood that programmes will have a scaling-up effect and achieve broad impacts, such as working at multiple levels, selecting appropriate national partners or disseminating M&E results to others (GIZ, 2016).

At a high level, the ToC for a sustainability standards scheme is that the scheme incentivises the uptake of sustainable production practices, which lead to improved sustainability outcomes. Producers are incentivised to adopt the practices because the scheme provides a means of assurance, such as certification, which serves as a guarantee of minimum standards of sustainability that they can use to market their produce. Buyers are incentivised to purchase assured produce because it is a verified way for them to meet the sustainability requirements of customers, shareholders and stakeholders. Standards schemes may also provide traceability for buyers. It is hoped that adoption of the practices in the standard will generate positive impacts for producers and workers; for biodiversity and ecosystem services (Milder, JC; Newsom, D; Lambin, E; Rueda, X, 2016; Ugarte, S; D'Hollander, D; Tregurtha, N; Haase, N, 2017).

Over time, our understanding of how standards schemes affect change has become more sophisticated. Certification and assurance systems may help to raise standards by encouraging producers and processors to develop internal assurance systems, through capacity-building and awareness-raising, or by improving horizontal and vertical market relationships. The target unit for intervention is typically a single producer or a producer group. Efforts are intensifying to extend the potential of sustainability schemes to entire landscapes and jurisdictions, while acknowledging the challenges of doing so (Mallet, P; Maireles, M., Kennedy, E. and Devisscher, M, 2016). Efforts are also required to encourage a scaling up of effects from discrete certified entities to entire industries (Lambin, E; Leape, J; Kim, Hajim; Lee, K, 2020).

The uptake of certified product by buyers, i.e. by processors and traders who in turn respond to demand from brands and retailers, has been identified as a critical factor for success of a standards scheme. The uptake is however lagging the volumes that are available on the market. RSPO for instance therefore initiated an internal taskforce followed by a working group to develop the requirements and system for implementation of what was coined as 'Shared Responsibility', a series of obligation of increasing the volume of purchased palm oil products, implemented via an annual target percentage for uptake (RSPO Shared Responsibility Requirements and Implementation, October 2019).

2.2 Monitoring and measuring impact

ISEAL defines a monitoring and evaluation (M&E) system as "an ongoing process through which an organisation draws conclusions about its contribution to intended outcomes and impacts" (ISEAL, 2014, p. 7). It should include "systematic collection of monitoring data on specified indicators and the implementation of outcome and impact evaluations" (ibid). Organisations may conduct an evaluation to improve the implementation of an ongoing programme or intervention, and/or to demonstrate a programme or intervention's effectiveness (Ruffer, T; Wach, E, 2013). Typically, development evaluations have assessed the following aspects of a programme or intervention: its relevance, effectiveness, efficiency, sustainability and impact (UNDP, 2009). These may not all be appropriate for the M&E of an ongoing sustainability scheme.

To encourage best practice in M&E among its members, ISEAL developed the Code of Good Practice for Assessing the Impacts of Social and Environmental Standards Systems ('Impacts Code'), of which version 2.0 was published in January 2015 (ISEAL, 2014). The elements of the Impacts Code are summarised in Annex 1. The ISEAL Impacts Code encourages ISEAL members to set out the causal pathway by which their standards schemes are expected to achieve positive outcomes and impacts. ISEAL offers guidance to its members on this (ISEAL Alliance, 2017; Komives, K, 2018), and most members have published a ToC (ISEAL Alliance, 2016). This advice is included in the Impacts Code, because elaborating a ToC has come to be seen as a crucial element of a successful M&E system (ISEAL Alliance, 2017).

Many methods are available for conducting evaluations. To assess social impacts, a range of methods from the social sciences and specialist evaluation discipline are used. Experimental methods using randomised control trials were for a long time considered the 'gold standard' and may be used when comparison with a control or counter-factual group is appropriate; but practitioners now also debate the merits of quasi-experimental, qualitative and mixed methods approaches, depending on the nature and complexity of the intervention, and whether the main purpose is, as noted above, to evaluate the effectiveness or to find opportunities for improvements (Quinn Patton, M, 2010). The discipline of evaluation was largely developed in the field of public policy and international development, which means that it has focused on socio-economic impacts rather than ecological ones. This is significant for palm oil schemes, which need methods to evaluate environmental impacts alongside social impacts. Satellite data on land-use change and forest cover change are available at a high resolution over a considerable time series, although directly attributing these changes to an international palm oil sustainability scheme is challenging, as we discuss below. It is also possible to use environmental evidence collected from audit reports or follow-up fieldwork, both of which have been used by RA to assess biodiversity impacts, for example (Milder, JC; Newsom, D; Lambin, E; Rueda, X, 2016).

It is often appropriate to use multiple methods in an M&E system. Several ISEAL members that are grappling with the complexity and breadth of their systems' causal pathways have found it has been necessary to include highly granular, in-depth methods to identify and understand impacts in certain contexts. The Better Cotton Initiative (BCI), for example, uses a combination of monitoring of all certified entities to understand outputs and progress against annual targets; monitoring among a sample of certified farmers to assess environmental and socio-economic outcomes; and specially commissioned evaluations and studies to assess the programme's impacts (Better Cotton Initiative, 2020). There are trade-offs between broad but shallow methods and narrow but deep methods, in terms of resource allocation, stakeholder participation, data generation and geographical applicability. Fairtrade International, which also uses in-depth research, says that it has taken steps to ensure that findings from regional impact studies are made relevant to the organisation globally, and vice versa (Fairtrade International, 2020).

In recent years, M&E practitioners have begun using the programme's ToC as the basis for designing an evaluation. This is known as theory-based evaluation (Rogers, P; Hummelbrunner, R, 2012). GIZ has used a related method known as contribution analysis to assess how its programmes contributed to observed results, drawing on the ToC (GIZ, 2016). Reflecting the greater prominence of systems thinking, it is now advocated that organisations plan for M&E right at the start of any programme, including by agreeing indicators related to the ToC, and that they integrate impact monitoring into the implementation of activities (Komives, K, 2018). It is important for organisations to focus on whether their interventions are achieving the aimed-for impacts, rather than be overly concerned with whether they have delivered the promised activities and outputs (UNDP, 2009). When it comes to broad impacts and systemic change, these can be difficult to measure quantitatively (GIZ, 2016); they may include changes in attitudes or relationships, for example (Ruffer, T; Wach, E, 2013). Interventions that are intended to catalyse system market-based changes may also involve complex interactions and feedback loops. For these reasons, evaluation approaches which can capture qualitative and non-linear effects may be needed (ibid). Organisations should select indicators which allow for emerging and unexpected results to be identified (Rogers, P; Hummelbrunner, R, 2012), as well as indicators that can reveal tangible or intangible changes in the enabling environment which might be attributable to the intervention (Aidenvironment, 2018).

The ISEAL Impacts Code enjoins members to define the scope and boundaries of their M&E systems. This involves "identifying the standards system's intended and unintended effects ... and the strategies, standards and/or programmes that will be monitored and evaluated through the M&E system. It may also include defining geographic and time boundaries" (ISEAL, 2014, p. 10). The potential scope of a palm oil certification scheme can be very large – thematically and geographically. Some activities of a sustainability scheme may have defined start and end dates – such as a capacity-building programme – while others are continuous. Monitoring certain aspects of the system will be easier than others, and it may be necessary to conduct multiple or rolling evaluations to cover all impact areas (ISEAL Alliance, 2017).

Organisations must also decide if and how to broaden out their focus on certified entities (plantations, smallholdings and mills). Have certification and other activities had a positive or negative impact on the physical landscape in the watershed downstream, for instance? Have they affected attitudes and accepted practices among other producers in the area? Have they led to changes in employment patterns and remittances that have repercussions for the local labour market or in source regions that provide migrant workers? It would be easy to deliberately or unwittingly omit some part of the ecological or socio-economic system from scrutiny. In 2014, researchers established the Fairtrade, Employment and Poverty Reduction in Ethiopia and Uganda (FTEPR) research project to investigate the effects of Fairtrade certification on wage labour and rural poverty. They noted that wage workers had commonly been neglected by certification scheme evaluations and research studies (Cramer, C; Johnston, D; Oya, C; Sender, J, 2014). If so, this could suggest that sustainability schemes had failed to include wage employment in their theories of change, or that the scope of their monitoring and evaluation systems was too narrow. If the M&E system is based too heavily on the actual standard, this could lead to certain groups or issues being overlooked if they are not well represented in the standard to start with - hence the importance of being able to capture unexpected impacts.

One challenge for certification schemes is that they are usually designed to be implemented in multiple settings around the world. This differentiates them from many development interventions that are implemented in a single setting or sector and thus have fairly clear boundaries for evaluation. Even just within the palm oil industry, the diversity of contexts in which palm oil sustainability schemes operate will lead to a wide range of potential outcomes and impacts, causal pathways and contextual factors (ISEAL Alliance, 2017). It may be helpful for a scheme to develop specific theories of change for particular contexts, in addition to their overall ToC (ibid). The methods chosen and the resources available will affect the number of participants and respondents that are possible to include in an M&E system. That includes the size of the sample for certified and non-certified (counter-factual) groups. Numbers may also be limited by the absolute number of potential participants in a sustainability scheme, such as the total number of palm oil mills, plantations and smallholders (ISEAL Alliance, 2017). The sample size might be too small for statistical representativeness, but it should be large enough to capture variation in experiences and results.

It is important that an M&E system can capture heterogeneity of outcomes and impacts. This may include differential effects for men and women. There is no mention of gender in the ISEAL Impacts Code. However, it is widely recommended that sustainability initiatives should incorporate gender mainstreaming and women's empowerment into their systems, and one of the ways to achieve this is to design gender-sensitive M&E indicators and methods (Rogers, P; Hummelbrunner, R, 2012; UNDP, 2009).

Having a system that captures heterogeneity could help with an important issue in M&E for sustainability schemes, which is the potential for the intervention to have unintended or adverse consequences (Rogers, P; Hummelbrunner, R, 2012). The M&E system can be designed to maximise identification of such effects, by elaborating a detailed ToC and consulting key informants beforehand. However, even a well thought out ToC may not be able to predict every consequence (ISEAL Alliance, 2017). Therefore, it is important to ask open-ended questions and capture disaggregated data during the monitoring and evaluation stages (Rogers, P; Hummelbrunner, R, 2012; Better Evaluation, 2020a). The Marine Stewardship Council is an example of an ISEAL member which has begun to incorporate considerations of positive and negative unintended impacts into its M&E system, which it initiated through discussions with stakeholders (MSC, 2019).

Classic experimental evaluations are designed to attribute some or all of an observed effect to the intervention being evaluated (ISEAL Alliance, 2017). As the scope of an evaluation widens, so the causal pathways may become more complex and the task of attributing cause may become more difficult. The Fair Trade, Employment and Poverty Reduction (FTEPR) study gives an example of this. The project researchers found that wage workers employed in areas with Fairtrade-certified producers earned significantly less than equivalent workers employed in non-Fairtrade areas. However, they were unable to prove a causal relationship between Fairtrade certification and low wages. They argued that the difference in wages was probably attributable to other factors, such as that large-scale employers could pay higher wages and were under greater scrutiny than smaller producers, some of whom were Fairtrade-certified. ISEAL Alliance argues that it is particularly difficult for sustainability schemes to prove that they caused any of the observed changes (ISEAL Alliance, 2017). Indeed, it can happen that more than one sustainability scheme is operating in an area – for example, a palm oil mill may be certified against RSPO and ISPO – which makes it difficult to isolate the effects of a single scheme. Moreover, those producers who become certified or participate in other activities of a sustainability scheme may be self-selecting. They might differ in important ways from other producers, which could affect the outcomes that are observed.

ISEAL Alliance concludes: "The consensus from researchers on how to overcome this focuses on articulating clearer causal pathways in theories of change, asking different research questions (such as on the 'additionality' of standards rather than absolute impact) and finally on methods that focus not purely on attributing impact but rather verifying the role of an intervention" (ISEAL Alliance, 2017, p. 26). For example, the contribution analysis

used by GIZ does not attempt to measure what would have happened in the absence of the intervention, in the style of a randomised control trial. Rather, it is a method for empirically assessing whether the effects predicted in a ToC actually occurred, and if so, how the intervention contributed to those observed effects (GIZ, 2016).

2.2.1 The role of external factors

One reason why attributing cause is particularly difficult for sustainability schemes is that outcome pathways in certification and verification are long and complex, and there are many points at which external factors can affect outcomes (Aidenvironment, 2018). Standards that are used for agricultural commodities, such as palm oil, must contend with highly volatile growing conditions and markets, which often influence changes in yields or prices. Increased temperatures and more intense drought periods as a consequence of climate change, may impact the level of groundwater, to give one example.

Government decisions may also influence the behaviour of certified entities, for example if law enforcement is stepped up or when new legislation is put in place. Have worker incomes gone up because a company implemented a voluntary standard or because the government increased the minimum wage? A notable example for this is the development of the national palm oil standards in Malaysia (MSPO) and Indonesia (ISPO) and the associated obligation of growers implement these standards.

A well-designed M&E system should be capable of identifying possible alternative explanations for any observed impacts – or for the failure of hoped-for impacts to materialise (Better Evaluation, 2020b).

2.2.2 The role of baseline data

There is often a lack of baseline data available for certification evaluation, as typically the very first time a certification scheme collects data is with the first certification audit. Any future progress can therefore only be measured against the performance in that first audit. It is, however, ahead of the first certification audit, when substantial changes have been implemented in order to meet the standard requirements.

Some certification schemes might collect a few data points with the membership application, though it is not unusual for a company to only apply for membership when they are close to being ready to be certified, as this is often a pre-requisite for certification, e.g. for RSPO. So even where data collection during the membership application is carried out, companies are likely to have invested time and resources up front in order to meet the requirements of membership.

SECTION SUMMARY

- Certification and verification schemes pose several challenges for effective evaluation. They have a wide scope with fuzzy boundaries, they involve both environmental and socio-economic changes, and their interactions with market systems can be difficult to predict and capture.
- ISEAL provides a comprehensive framework for members' M&E systems. As well as adhering to the ISEAL guidance, standards schemes could take specific steps to address gender and to anticipate the complexity of market-system changes.
- A well-elaborated theory of change can be used to inform the M&E system. However, a generic theory of change might not apply in all of the contexts in which a palm oil standards scheme operates. Their M&E systems need to be flexible enough to respond to local factors.
- While capturing data on outputs is part of the process, M&E systems should ultimately be focused on the impacts that the scheme wishes to achieve.
- Certification schemes must be careful to define the scope of their M&E systems and ensure that key groups or issues are not overlooked.
- Lack of baseline data is proving a challenge for the evaluation of improvements made, as well as assessing the negative or positive impacts linked to certification or verification.
- Causal pathways also do not operate in a vacuum external factors impact on certified operators as well.



3.1 Scope

The study focuses on palm oil certification. This restricted the review of impacts in particular, since palm oil certification is less well studied than certification in several other commodities such as coffee and cocoa.

As mentioned above, four international certification schemes and one verification scheme were assessed:

- Roundtable on Sustainable Palm Oil (RSPO)
- Roundtable on Sustainable Biomaterials (RSB)
- Rainforest Alliance (RA)
- International Sustainability and Carbon Certification (ISCC)
- Palm Oil Innovation Group (POIG)

Domestic palm oil certification schemes such as Malaysian Sustainable Palm Oil (MSPO) and Indonesian Sustainable Palm Oil (ISPO) were not included.

Only RSPO and POIG are palm-specific schemes; the others also cover other commodities. RSPO, RSB, RA and ISCC are certification schemes; POIG is a verification scheme. The distinction is that both types involve third-party verification of producers against a standard, but verification schemes do not provide producers with a certificate (KPMG, 2013). Indeed, POIG's main aim is to support RSPO by driving innovations in the palm oil sector and in the implementation of the RSPO standards.

Certification is offered to those who grow oil-palm, typically plantation companies and individual planters or growers, and to those who produce palm oil from fresh-fruit bunches of oil-palm, largely palm oil mill companies. The certification schemes tend to offer a simplified certification process, and often a different set of standards, for groups of smallholder growers, who may find it difficult to comply with the main rules and criteria. The organisations also provide chain-of-custody systems of certification for other actors in the supply chain, such as chain of custody certification for traders, which are not considered in this study.

Improvements made to the RSPO P&C in 2018 :

- High conservation value (HCV) and high carbon stock (HCS) forests to be identified, maintained and enhanced.
- No new plantations established on peat
- Strengthening of human rights and labour rights criteria, including:
 - Evidence of compliance with legal requirements on working hours, leave and pay;
- Better representation of women and equal pay;
- Inclusion of Decent Living Wages (DLW)
- Strengthening of the requirements on pesticide use
- The inclusion of a new principle (Principle 5) on Smallholder inclusivity and improved livelihood, applicable to scheme smallholders

All of the organisations have a wider mission and remit than simply certification. As well as developing certification standards, they may, for example, convene industry events, facilitate stakeholder dialogue, provide training and capacity-building, and collaborate in landscape-scale initiatives. Such extra-certification activities may be included in the organisation's impact monitoring, as we discuss later.

For the benchmarking exercise to evaluate each scheme's impact monitoring system all relevant system documents of the schemes were reviewed.

We also looked at to what extend each of the standards covered the topics of interest for the German Forum for Sustainable Palm Oil (FONAP). For this the most recent version of the standard from ISCC, POIG and RSB were used.

The RA Sustainable Agriculture Standard version 1.2 from 2017 was assessed as well as the recently published 2020 version. Note that in 2020, Rainforest Alliance explored dual certification, of both Rainforest Alliance and RSPO certification, based on the 2017 Sustainable Agriculture Standard. However, Rainforest Alliance ultimately decided to transition their existing certificate holders to their new 2020 standard, in line with other crops (Rainforest Alliance, 2020a). At any rate, the existing academic literature and the experiences from the interviewees with Rainforest Alliance are based on the 2017 standard or even earlier versions.

Finally, for RSPO, both the 2013 and 2018 Principles and Criteria were included (see section 3.3).

It is important to note, that for the academic literature reviewed to identify evidence of impacts (see section 4.2), the researchers will have been assessing effects of the older versions of the standards as these were still valid at the time of research. Note that a standard's publication date cannot be equated with the start of evaluation against the standard, as typically phase-in periods are stipulated of one to two years, with, for example, the RA 2020 Sustainability Standard only fully coming into effect in July 2021 (Rainforest Alliance, 2020b).

Thus, it is likely that some of the limitations or unintended impacts of certification may have subsequently been addressed, as the standards, particularly the RSPO P&Cs 2018, have been substantially strengthened (RSPO, 2018a). This is one of the drawbacks of the academic evidence described here and we would recommend a further study to be done in a few years' time to evaluate progress.

Studies could therefore investigate the impact of the key improvements to the RSPO P&Cs in relation to some of this study's findings presented in Chapter 4.2.

3.2 Research questions

The study explored the following detailed research questions:

Understanding of impact

- Do the certification schemes offer a definition of their understanding of impact? Does this include concepts such as the 'theory of change'?
- Is there a universal definition of the term 'impact'? Does this imply convergence of the certification schemes' standard criteria to enable comparability in measuring impact?
- Does the understanding of impact refer to the certification scheme or to a certified entity or to other individual aspects? (e.g. is the number/volume of pesticides used decreasing? Is the income of workers increasing?)
- Which dimensions of sustainability do the certification schemes cover in the monitoring approach? Is there a focus on a particular dimension?
- Is the aim to obtain equal impact in all dimensions?

(Continuous) development of the impact monitoring approach

- What approaches exist for systematic impact monitoring by certification schemes or any other institutions?
- How and by whom was the monitoring approach developed?
- What are the underlying methodological approaches? For example, is a baseline recorded, e.g. if no numerical data on employee wages or on the use of pesticides per hectare are requested during audits? Does the use of pesticides have to decrease every year and wages have to increase every year or reach the level of a living income in order to have an impact? What significance does this have on sample-based audit approaches in group certifications?
- How is it further developed and adapted to changing requirements?
- Does the monitoring approach meet recognised guidelines/requirements (national/international)?
- What are the problems faced in development and adaptation?

Implementation experience

- What impacts of certification schemes can be empirically demonstrated so far for which topics is there no empirically demonstrated impact? How is this defined (independent third parties, sample size, cultivation/supply chain standards, etc.)?
- How is the availability of data ensured, e.g. in the form of databases containing records of audit reports?
- What findings have scientific accompanying programmes such as SENSOR produced?
- What are the weaknesses and strengths of the monitoring approach and the certification schemes themselves?
- What costs are associated with the impact monitoring measures?
- Which measures have been most effective so far?
- What conditions must be met for efficient impact monitoring?
- How can the impact be measured in the short to long term?
- How do the certification schemes evaluate and enable homogeneity of the auditors' audit findings?

Scope and area of application of the impact monitoring approach

- How is the scope of the monitoring approach defined? How was this definition developed?
- Are there aspects of certification whose effectiveness can be more easily recorded and proven? What are they and why is that?
- Are there any aspects that indicate limits to the effectiveness of certification schemes?
- What can be done to find a solution in this respect, e.g. through additions or supporting measures?
- Does the monitoring approach meet recognised guidelines/requirements (national/international)?
- What are the problems faced in development and adaptation?
- To what extent are the findings of the monitoring system fed back into the further development of the standards?
- Which measures are considered promising in this context?
- Is impact recorded beyond the certified entity? Compliance with FPIC processes, respect for land rights and community relations in a broader sense are very difficult to measure – how are these aspects determined?
- implementation)?
- How do all actors along the supply chain (from producer to final processor) contribute to impact monitoring? What roles do they play?
- Are there support measures for companies and small farmers to enable them to optimally play this role?
- In which way is the special situation of small farmers taken into account in the impact monitoring approach (definition for small farmers, adapted monitoring formats, advantages/disadvantages in implementation)?
- How do all actors along the supply chain (from producer to final processor) contribute to impact monitoring? What roles do they play?
- Are there support measures for companies and small farmers to enable them to optimally play this role?

Summary findings to these detailed questions are shown in the 'Discussion' section.

3.3 Benchmarking

To guide the analysis, a focused benchmarking exercise was carried out, in which the five schemes were assessed against a set of criteria. This included criteria on ToC and M&E, to help assess each scheme's impact monitoring system. The benchmarking also included more general criteria for assessing the scheme's long-term effectiveness and ability to achieve positive impact. The criteria were developed using the ISEAL Impacts Code as well as other internationally recognised benchmarking frameworks including the ISEAL-led and GIZ-funded Sustainability Standards Transparency Initiative's Sustainability Standards' Comparison Tool indicators (SSTI-SSCT) and the World Wildlife Fund for Nature Certification Assessment Tool (WWF CAT). The SSTI-SSCT framework already in fact shows the majority of ISEAL Impacts Code elements as criteria questions.

The benchmarking exercise looked at official systems documents of the five schemes available publicly on their websites and in their latest versions.

Where the information came from the actual standards, the following versions were used:

- RSPO Principles & Criteria 2013
- RSPO Principles & Criteria 2018
- RSB Principles and Criteria. Version 3.0 (2016)
- RA Sustainable Agriculture Standard for farms and producer groups involved in crop and cattle production. Version 1.2 (2017)
- RA Sustainable Agriculture Standard Farm Requirements (2020)
- ISCC Sustainability Requirements. Version 3.1 (2020)
- POIG Verification Indicators POIG Charter. Version 2.0 (2019)

Note that for the simple standards content benchmark we also looked at RSPO 2013, the impacts of which were the focus of much of the academic studies analysed here.

In 2020 RA explored dual certification, of both RA and RSPO certification, based on the 2017 Sustainable Agriculture Standard (SAS). However, RA has now decided to transition their existing certificate holders to their new 2020 standard, in line with other crops. At any rate, the existing academic literature and the experiences from the interviewees with RA are based on the 2017 standard or even earlier versions.

Subsequently, the individual benchmarks were sent to the standard owners for their input and to present any additional evidence and documentation. See Annex 8 for full benchmarking exercise.

3.4 Literature review

Categories of impact evidence:

Environmental topics

- Environmental managementWater use and impacts
- on water resources
- Soil quality
- Climate change and energy use
- Chemicals
- Biodiversity and ecosystems
- Deforestation

To identify evidence for impacts of palm oil certification, a literature review was conducted. The review included available current research using SEnSOR and Evidensia publications, and any other relevant academic papers available via public search engines such as Google Scholar. Only expert literature published within the last five years (2015-2020) was included. Articles published in English, Bahasa, Spanish, German and French were considered, though no conclusive studies were found in French, German and Spanish.

The review sought out academic studies that considered some aspect of the effects of certification schemes on the ground, and only in reference to palm oil. Although much of

the literature is focused on the main oil-palm growing region in South-East Asia, the scope of the review was global so that studies from other regions could be included. Again, only international certification schemes that are recognised by FONAP were taken into account and therefore not domestic schemes such as MSPO or ISPO. Accordingly, the review of the literature aimed to focus on the RSPO, RSB, RA and ISCC certification schemes as well as on POIG.

The selection (and review) of the literature also took into account the methodology used with regard to the empirical validity of certain impacts.

Using these selection criteria, a shortlist of 27 sources was identified and systematically reviewed. Additionally, several interviewees and in particular the scheme owners subsequently provided further reference studies to be considered.

Evidence for impacts was compiled in a number of categories. The categories were based on the breadth of impact areas identified in the literature, Proforest's expert knowledge and the key topics of interest to FONAP (see boxes in the margin).

3.5 Interviews

The literature review was used as a basis for shaping more concrete questions to explore via expert interviews in the final stage of the study. Remote video interviews with representatives from the sustainability schemes themselves as well as practitioners on the ground were conducted.

Interviews were conducted in English and Bahasa Indonesia. Interview guidelines were developed for consistency across the interviews. They were conducted by Proforest and the GIZ local expert in Indonesia.

A total of 15 interviews were conducted during October 2020 – January 2021. Annex 9 presents the list of interviewees included in this study.

Categories of impact evidence:

Socio-economic topics

- Socio-economic management and operations
- Human rights and community engagement
- Labour rights and working conditions



4.1 Evaluation of impact monitoring systems

4.1.1 Overview of schemes' impact monitoring systems

4.1.1.1 RSPO

The Roundtable on Sustainable Palm Oil was launched in 2004 with a vision to "transform markets to make sustainable palm oil the norm" by:

- Advancing the production, procurement, finance and use of sustainable palm oil products;
- Developing, implementing, verifying, assuring and periodically reviewing credible global standards for the entire supply chain of sustainable palm oil;
- Monitoring and evaluating the economic, environmental and social impacts of the uptake of sustainable palm oil in the market;
- Engaging and committing all stakeholders throughout the supply chain, including governments and consumers. (RSPO, 2020a).

Theory of Change

As a full ISEAL member, RSPO has developed its own ToC and M&E systems in compliance with ISEAL's Impacts Code.

As companies and consumers in the palm oil supply chain realise the importance of sustainable sourcing, the benefits attached to these outcomes become reciprocated. leading to increased market demand for sustainable palm oil.

Ultimately, "when the ToC is fully realised, it delivers change where it matters most - on the ground; a space where oil palm, the environment, and local communities can co-exist in harmony" (RSPO, 2017a).

M&E system

RSPO's Monitoring and Evaluation system, which uses its ToC as its guiding framework, is designed to assess progress, performance, and impact of the scheme's work. Additionally, it is designed to drive continuous improvement and inform their strategy through learning and adaptive management (RSPO, 2020b).

Stakeholder engagement has been, and continues to be, a key driver in the development and continuous improvement of the M&E system. Stakeholders of the RSPO are provided the opportunity to engage in M&E activities via, amongst other examples, public consultations, internal surveys, and access to Working Groups and Committees.

To support its monitoring and evaluation activities, RSPO launched a Research Agenda in 2018 in collaboration with its stakeholders to identify and, if necessary, commission independent research examining the impacts of the RSPO on key stakeholders and the outcomes it sets for itself (RSPO, 2020c). As such, RSPO has identified 6 main areas for research: Cost & Benefit Analysis; Certification, Assurance & Grievance; Demand Generation & Support System; Human Rights; Smallholders; and Ecosystem Conservation & Management (RSPO, 2018b). More recently, a consultation process was organised by RSPO to determine priority research topics in the M&E system for the period 2019/20 (c.f. RSPO

Long-term sustainable outcomes identified in RSPO's ToC:

- To improve the quality of life of oil palm farmers;
- To create a more prosperous palm oil industry, and;
- To enable us to better conserve our planet and its resources.

Priority research topics:

- Cost-benefit analysis for smallholders to attain and maintain RSPO certification
- To what extent and in what context does the adoption of RSPO's Principles and Criteria (P&C) contribute to the protection of biodiversity;
- How do the living and working conditions of workers on RSPO certified plantations compare to those who are employed on non-certified plantations?

Research Survey Results Document 2019), though the studies are yet to be published on the RSPO's website (RSPO, 2019b).

In the interest of answering the priority research topics promptly, research on these topics has been directly commissioned by RSPO. The RSPO Research Library (<u>https://rspo.org/impact/research-and-evidence/research-library</u>) provides access to both independent and RSPO-commissioned research on the impacts of the scheme in relation to the aforementioned topics of interest.

To measure impact, which RSPO define as "the positive and negative long-term effects on planet, people, markets, and systems resulting from strategies and interventions" (RSPO, 2017a, p. 11), the scheme has developed a set of 56 Core M&E Indicators against which it measures progress towards the outputs, outcomes and impacts presented in the ToC (RSPO, 2018c) (see table 3). The indicators are based on recommendations by the Committee on Sustainability Assessment (COSA), the annual RSPO Impact Reports, the ISEAL Common Core Indicators and the Sustainable Development Goals (SDG) indicators (RSPO, 2018d).

The indicators rely on a three-level structure for collecting and assessing data, in line with the ISEAL code of Good Practice for Impact Assessment (ISEAL, 2014):

- Level 1: Program wide monitoring
 - Reach and output indicators
 - Data collected from all certified units, membership, New Planting Procedures and Annual Communication of Progress (ACOP) and analysed annually
- Level 2: Sample monitoring
 - Case studies and outcome assessments
 - A sample or subset of data
- Level 3: Research
 - In-depth quantitative and qualitative scientific studies, focused on long-term outcomes and impacts

For an overview of RSPO's M&E Indicators, please refer to Annex 3.

The data related to each indicator is collected and assessed by different RSPO departments (e.g. assurance data is analysed by the Assurance Department; membership data by the Finance & Admin Dept.; complaints by the Complaints Unit; and GHG emissions by the Standard Development Dept.). The entirety of the raw data is stored and managed internally in a data management system, which each department having their own internal methods for data handling and processing. This includes data checking, analysis, verification and storage.

In terms of impacts evaluation, RSPO has been publishing an annual impact report since 2014 and recently committed to reporting every six months, with their most recent Impacts Report published in September 2020. As mentioned previously, for the 2019/20 period, the key priority research topics RSPO has identified are 1) Cost-Benefit Analysis (CBA) of RSPO Certification for Smallholders, 2) Impacts of RSPO on Working and Living Conditions of Oil Palm Plantation Workers, and 3) Contribution of RSPO to the Protection of Biodiversity (Especially Rare, Threatened and Endangered Species), though these have yet to be published. Overall, the results of the M&E system feed into improving strategies and management of RSPO. RSPO has its own internal systems to incorporate the learnings from M&E and have also incorporated learnings from research into their work although this is not published online. RSPO have identified this as an area which is still under work within RSPO, as they are trying to better incorporate results from their M&E into learning (RSPO, 2020c).

Standard

The RSPO standard – the RSPO Principles and Criteria (P&Cs) – has explicitly linked the sustainability outcomes presented in the scheme's ToC in the following ways: a) the RSPO ToC is directly integrated into the P&C document, b) the preamble explicitly states that the 2018 revision of the document accounted for a shift of focus on sustainability outcomes in the ToC, and c) each of the 7 principles are linked to sustainability impact areas and objectives.

While the RSPO P&Cs offers a global set of requirements, National Interpretations of the P&Cs are available for the larger producer nations, and those for smaller producer countries continue to be developed. Where, for various reasons, a National Interpretation is not available, an RSPO grower may seek a local interpretation for their production.

In line with ISEAL best practices, the P&Cs are revised on a 5-year basis so that the standard may remain relevant and reflect stakeholder understanding of good sustainability practices. Key changes made to the P&Cs following the 2018 review can be found in section 3.1 of this report.

Finally, RSPO requires audits of members' compliance to the P&Cs to be carried out by third-party independent, accredited certification schemes.

4.1.1.2 Rainforest Alliance

The Rainforest Alliance was founded in 1986. Over the years they have worked to "conserve biodiversity and ensure sustainable livelihoods by transforming land-use practices, business practices, and consumer behaviour" (Rainforest Alliance, 2020c).

Theory of Change

As a full ISEAL member, RA has developed its own ToC, in which they present the basic cause-and-effect logic by which their certification scheme's support strategies contribute to direct results in the form of more sustainable farming practices, farm management systems, farmer knowledge, and consumer and company purchasing decisions. These direct results aim to contribute to intermediate results in the form of improved farm sustainability for biodiversity, natural resources, farm productivity and profitability, and the well-being of farmers, workers and their families. Ultimately, as these benefits are replicated throughout their membership and operations, the system's intended broader impact of creating and maintaining sustainable, resilient rural landscapes is advanced. Changes in social, environmental, economic and farm productivity conditions on and around certified farms are the ultimate key outcomes RA seeks to achieve (Rainforest Alliance, 2019, 2015).

RSPO P&C Principles (2018):

- **Principle 1:** Behave ethically and transparently
- Principle 2: Operate legally and respect rights
- **Principle 3:** Optimise productivity, efficiency, positive impacts and resilience
- Principle 4: Respect community and human rights and deliver benefits
- Principle 5: Support smallholder inclusion
- Principle 6: Respect workers' rights and conditions
- **Principle 7:** Protect, conserve and enhance ecosystems and the environment

M&E system

Categorisation of RA's M&E Indicators:

- Indicator set (A) pertains to the size, location and characteristics of Rainforest Alliance Certified farms, crops and lands. These indicators are used to document the reach of the support strategies identified in the Theory of Change.
- Indicator set (B) pertains to market-related direct results.
- Indicator set (C)—the one most closely linked to social and environmental sustainability—tracks direct results, key outcomes and broader impacts.

RA has its own Evaluation and Research Unit/Program that provides support to develop indicators and accompanying data collection methodologies for technical assistance strategies focused on achieving discrete sustainability goals as opposed to, or in addition to, compliance to the SAS standard. However, the RA impact report does not include palm oil as it focuses on other commodities such as coffee, tea, cocoa and bananas, the main ones covered by the scheme.

The M&E System evaluates the effects of the Rainforest Alliance, certification system on farms, people, and the environment and defines the improvement areas. As such, continuous improvement of their systems is crucial as it provides information focusing on medium-term social, environmental, and economic outcomes, as well as track unintended effects of RA certification.

To achieve the key outcomes outlined in their ToC, RA has developed a series of 68 M&E indicators, which are divided into three categories (Rainforest Alliance, 2015). For an overview of RA's M&E indicators, please refer to Annex 4.

Similarly to RSPO's M&E system, RA's indicators rely on a three-level structure for collecting and assessing data, in line with the ISEAL code of Good Practice for Impact Assessment (ISEAL, 2014):

- Level 1: Program wide monitoring measured across all certificates and tabulated across commodities and geographies for high level reporting and to guide decision making. They focus on specific indicators of certification performance (see examples in table 4)
- Level 2: Sample monitoring provides more detailed and rigorous information about medium-term social, environmental, and economic outcomes. This level also allows the tracking of unintended effects of RA certification.
- Level 3: Focused Research i.e., individual studies usually conducted by third-party independent researchers. This level utilises rigorous research designs to test various hypothesized pathways from the ToC. The focus is therefore on the long-term and large-scaled impacts and outcomes of RA.

Ultimately, RA uses different indicators to RSPO, according to whether they will be used to monitor and evaluate short-term targets, medium-term outcomes or longer-term "key outcomes" or impacts. As the assessment moves up the ToC, so the sample or scope of the assessment gets smaller. This highlights some of the resource trade-offs involved in M&E in complex systems.

While some indicators are designed to be tracked across all certificates in the RA certification scheme, others require a more in-depth evaluation which typically cannot be measured through the audit process. Instead, these indicators are assessed through sampled monitoring efforts or as part of impact studies, which are published on a yearly basis on RA's website (<u>https://www.rainforest-alliance.org/impact/monitoring-evaluation</u>).

Stakeholder engagement is a key element of RA's M&E approach. Stakeholders have the opportunity to test new M&E indicators and the development of sustainability performance measures, take part in Working Groups and Committees and provide feedback during public consultations. Stakeholders involved in RA's M&E procedures include local NGOs and universities, for the collection and analysis of production unit data as well as analysis of certification audit reports; ISEAL for the creation of the monitoring indicators, Working
Group members for the development of the methodology to measure livelihoods and environmental performance, and academics to discuss knowledge gaps and new trends.

Standard

The standard-setting process is based on the ToC to ensure that all aspects of the standard contribute to key outcomes. RA Sustainable Agriculture Standard recognizes the challenges already being posed by climate change and seeks to address these challenges by actively promoting Climate Smart Agriculture and improving the resilience of farms and farming communities. This is accomplished by protecting native ecosystems and on-farm biodiversity, avoiding deforestation, maintaining healthy soils, sustaining water resources, and guiding farmers to select and adopt climate-smart planting materials and farming practices. Additionally, the Standard seeks to reduce the greenhouse gas emissions of agriculture associated with the use of energy, fertilizers, pesticides, and methane emissions – while maintaining or enhancing carbon stocks in soils, forests, and other on-farm vegetation. As such, the Standard ard promotes all three pillars of Climate Smart Agriculture (Rainforest Alliance, 2017):

- sustainably increasing agricultural productivity and incomes;
- adapting and building resilience to climate change; and
- reducing or removing greenhouse gas emissions, where possible.

The standard is revised at least every five years or before the next review of the standard, whichever is sooner (last revised in 2020) and relies on third-party independent CBs for auditing. These must be ASI accredited (Rainforest Alliance, 2017).

Note that in this study, the main focus is on the 2017 Rainforest Alliance Sustainable Agriculture Standard as the transition period to comply with the 2020 SAS (Rainforest Alliance, 2020c) will run into 2021. Consequently, the existing academic literature and understanding of impacts are based on the 2017 standard or even earlier versions.

4.1.1.3 RSB

The Roundtable on Sustainable Biomaterials was launched in 2011 with a vision for a "global sustainable production, conversion and use of biomass" (RSB, 2014, p. 7):

- providing and promoting the global standard for socially, environmentally, and economically sustainable production and conversion of biomass.
- providing a global platform for multi-stakeholder dialogue and consensus building.
- ensuring access to credible, practical, and affordable certification.
- supporting continuous improvement through application of the standard.

Theory of Change

Similarly to RSPO, as a full ISEAL member, RSB has developed its ToC and M&E systems in compliance with ISEAL's Impacts Code. In its ToC, RSB defines a long-term sustainable goal, each supported by a Supporting Strategy' to increase sustainable production and trade of biomaterial, namely:

RSB is currently undertaking a review of its ToC, which is expected to be made available at the end of 2020.

RSB's long-term sustainable goal presented in the ToC:

- 1. Increased respect for labour and human rights by certified operators
- 2. Improved food security in areas adjacent to certified feedstock producers
- 3. Improved quality of the environment in and around certified farms and facilities
- Reduced greenhouse gas emissions from certified operations
- 5. Improved management of certified operations

M&E system

The RSB Monitoring & Evaluation (M&E) System, which integrates their ToC as a key element, was developed to measure RSB's success in ensuring sustainable practices in biobased and circular supply chains, through data collection, analysis and adaptive measurement (RSB, 2014). The measured impacts from the M&E monitoring are compared with the expected outcomes and results presented in the ToC (RSB, 2020). RSB defines impacts as "Positive and negative long-term results from the implementation of a standards system, either directly or indirectly, intended or unintended" (RSB, 2014, p. 6), a definition which they have adapted from ISEAL's Impacts Code.

Stakeholder engagement in the RSB's M&E activities allows for transparency between the scheme, its members, and wider stakeholders. As the annual *Outcome Evaluation reports* are developed by the RSB Secretariat, they are circulated via email to RSB, RSB Members, RSB Participating Operators, RSB Certification Bodies and the RSB Accreditation Body for comments. These stakeholder comments are then integrated into the reviewing process of the *Outcome Evaluation reports* as well as the Public System Report, and which are published on a yearly basis on the RSB website (<u>https://rsb.org/about/what-we-do/measuring-our-im-pact/</u>) (RSB, 2020).

To measure its level of success against the long-, medium- and short-term outcomes identified in their ToC, RSB collects actual data on volumes produced, hectares covered, and workers protected in the scope of certification, as well as data about where non-conformities have been issued during the certification process. Data is collected from its certified operators and other stakeholders, via a set of indicators covering environmental, social, and economic issues (RSB, 2020). Overall, RSB has 30 M&E indicators which consist of data points to guide the data collection and analysis (see table 5). Each of RSB's Principles are covered by these indicators to help ensure that each aspect of their Standard is continuously measure and evaluated (RSB, 2019). However, unlike the other schemes, RSB does not explicitly link its M&E indicators to its ToC in terms of stating whether each indicator is measuring an input, outcome or impact. Please refer to Annex 5 for an overview of the RSB Core M&E Indicators.

With this information, RSB draws conclusions on the areas of change and the impacts of the RSB certification scheme. RSB is then able to use the results of their M&E reporting period for their internal organisational learning process and to analyse their evolving impact in the sector by answering the following questions (RSB, 2020, p. 7):

- What is the contribution of RSB certified operators to increasing the total number of responsibly managed areas, avoided tons of CO2 emissions, fairly treated employees etc?
- How do these numbers compare to the desired impacts and outcomes, as defined in the RSB ToC?
- What other factors may have influenced these numbers?
- Are there any observed negative impacts from RSB certified operations?
- What are the elements of the RSB M&E System, which could be improved?
- What are the elements of the RSB Standard and general RSB strategy, which could be improved?

Standard

The RSB Standard was developed alongside stakeholders from ranging sectors, regions, supply chains, including governments and NGOs. It is based on four major elements presented in the margin (RSB, 2017).

These four overarching elements are RSB's Principles and Criteria which introduces the set of requirements RSB operator members much comply with to achieve the long-term goals set by the scheme (RSB, 2016). All requirements are audited by accredited independent third-party Certification Bodies. Region specific interpretations are available to adapt to local contexts of production. Finally, the Standard is revised at a minimum every five years.

4.1.1.4 ISCC

The International Sustainability and Carbon Certification (ISCC) identifies its overarching objective as "contributing to the implementation of environmentally, socially and economically sustainable production and use of all kinds of biomass in global supply chains" (ISCC, 2020a).

Theory of Change

ISCC has developed its own ToC. While not a full member of ISEAL, ISCC states that they follow the requirements and guidance laid down in the ISEAL Impacts Code, in which they link their identified vision with a set of intended outcomes which are traced back through several long-term, intermediate, and immediate outcomes and associated strategies. They currently define three main long-term goals, designed to align with several key SDGs (ISCC, 2019).

Four elements of the RSB Standard:

- Legal: ensures legal compliance, including traditional land and water rights
- Social: ensures human and labour rights, rural and social development in regions of poverty, and local food security
- Environmental: ensures the preservation of conservation values, soil health, water quality and availability, mitigation of climate change, as well as control of air pollution
- Management: ensures the reduction of risks and continuous improvement through an effective management approach

ISCC's long-term sustainable goal presented in the ToC:

- Environmental Impact: Sustainable use of soil, water and air resources
- Social Impact: Securing human, labour and traditional land rights
- Economic Impact: Increasing efficiency and transparency along the supply chain

M&E system

ISCC's CB Survey questions:

- 1. Where do you see the greatest impact of ISCC certification on farms / plantations?
- Where do you see the greatest impact of ISCC certification for traders and processing units along the supply chain?
- 3. According to your experience, where do most non-conformities occur?
- 4. Which corrective measures are you demanding most frequently?
- According to your experience, how often are voluntary corrective measures being implemented?
- 6. What are the most common voluntary corrective measures that are being implemented?
- Are there major improvements recognizable over the time of certification? If yes, could you please specify which kind of improvements?
- To what extent could you observe reductions in GHG emissions?
- 9. According to your experiences, which are the most common measures to reduce GHG emissions?
- Based on your experience, what are your suggestions for improvement of ISCC?

To support the intended outcomes laid out in their ToC and assess their performance, ISCC has developed their own M&E System which is compliant with the ISEAL Impacts Code (ISCC, 2020b). ISCC's M&E systems were developed as part of a multi-stakeholder process, basing itself of transparency and continuous improvement. Stakeholders are encouraged to engage in the M&E activities through various channels. By becoming members, stakeholders have the opportunity to participate in Stakeholder Committees and Working Groups, as well as engage in regional and technical stakeholder dialogue. Members and non-members alike are also invited to provide feedback on the systems via public consultations, emails, in person interactions, and other such channels (ISCC, 2020b).

To assess their internal system performance and facilitate its continuous improvement, ISCC runs an Impact Assessment which includes inputs such as 'system coverage' (e.g. the number of issued certificates; the number of System Users and the countries in which they operate), as well as the number of withdrawn certificates, the performance of CBs and the number and results of ISCC Integrity Assessments performed (ISCC, 2016).

The ISCC Integrity Assessment was "launched as a tool to enable closer monitoring of the CBs' verification activities and companies' compliance and is based on an ongoing assessment process" (ISCC, 2020b). Presented as a tool to support quality and risk management at ISCC, it provides feedback on the implementation of the standard and its verification. It is therefore integral to supporting the continuous improvement of ISCC's M&E systems.

To gather data for their M&E system, ISCC acknowledge that "the most effective method to measure the impact on farms and plantations is to compare pre- and post-audit conditions" (ISCC, 2019, p. 39). The scheme utilises sample-based evaluations of audit reports and auditor surveys to measure their impacts. At the time of publication of the 2018 Impacts report, ISCC reported that they are also developing their Audit Procedure System, an electronic audit tool which facilitates digital data collection and evaluation.

In 2018, ISCC conducted a 10-question survey for all active CBs about the perceived impact of ISCC on farms and plantations and at traders and processing units along the supply chain (ISCC, 2019, pp. 42–43).

Using the survey results and audit results, impact was measured based on the amount of reported non-conformities and the consequent effects of corrective measures, which were then classified into direct and indirect effects (changes in procedures and documentation which will not have a measurable effect after implementation).

While not officially M&E Indicators, the monitoring tools presented above allow ISCC to assess their position in relation to the impacts and outcomes presented in their ToC. As such, Annex 6 presents the ways in which ISCC measures progress against their ToC.

The 2018 *Impacts Report* (ISCC, 2019) is the first publicly available impacts report from ISCC since it began operating in 2010 (available at: <u>https://www.iscc-system.org/about/impact/</u>). Going forward, ISCC has expressed its commitment to publishing impact reports "on a regular basis", and aims to publish the next iteration in 2021 based on data from the last two years (ISCC, 2020b).

Standard

The ISCC standard and the associated Sustainability Requirements (ISCC, 2020c) were designed to "induce positive long-term social, environmental and economic impacts" (ISCC, 2016, p. 32) and encompasses four main goals:

- Land with high biodiversity and high carbon stock is protected
- Good agricultural practices protecting soil, water and air are applied
- Human rights, labour and land rights are respected
- Emissions of greenhouse gases are reduced

While the ISCC standard is global, guidelines may be provided to support its application in different regions. Additionally, a specific approach to the certification of smallholders was developed in 2018 to address some of the challenges they might face with meeting the requirements (ISCC, 2020d).

ISCC Standards are revised every five years and adapted to reflect the latest scientific findings, stakeholder feedback and to incorporate practical experiences and best practices (ISCC, 2020b).

Compliance with the standard requirements is audited on a yearly basis by third party Certification Bodies (CB) who must be vetoed either by a competent national authority or hold ISO/IEC 17065 accreditation.

4.1.1.5 POIG

The Palm Oil Innovation Group (POIG) is not a certification scheme but rather a multi-stakeholder-driven verification scheme which aims to develop and share a credible and verifiable benchmark built upon the Roundtable on Sustainable Palm Oil (RSPO). It therefore supports RSPO by building on the scheme's standards and commitments and by promoting innovation around RSPO's existing standards. As such, their main objective is to strengthen RSPO rather than compete with them (POIG, 2020).

Theory of Change

POIG's vision is for "a responsible supply chain that has broken the link between palm oil production and the destruction of forests and peatlands, the exploitation of communities and workers, and climate change" (www.poig.org). They aim to achieve their vision by supporting key players in achieving the adoption of responsible practices in palm oil production via credible benchmarks and innovation. As such, one of POIG's key goals is to support RSPO's Theory of Change.

However, POIG does not have its own publicly available ToC, though they have done some internal ToC projects which, at the time, they did not feel were relevant for sharing to the wider public (POIG, 2020). Instead, they do identify some long-term impacts in their Charter, namely (POIG, 2019):

• promote and supports innovation and improvements in oil palm plantation and extraction mill management and throughout the supply chain on a range of environmental, social, supply chain and governance issues, and seeks to have the innovations rolled out across the palm oil industry and reflected in the RSPO standard.

ISCC Standard Principles :

- **Principle 1:** Protection of Land with High Biodiversity Value or High Carbon Stock
- Principle 2: Environmentally Responsible Production to Protect Soil, Water and Air
- Principle 3: Safe Working Conditions
- **Principle 4:** Compliance with Human, Labour and Land Rights
- **Principle 5:** Compliance with Laws and International Treaties
- **Principle 6:** Good Management Practices and Continuous Improvement

- create added value for innovative and progressive producers and supply chain partners through increased market recognition and demand for palm oil products from innovative and improved practices.
- act as a forum for open discussions and sharing of experience with innovations and improvements in: oil palm plantation practices, extraction mill management practices, responsible procurement, and product traceability and verification throughout the supply chain.
- act as a forum to collectively engage with governments towards achieving recognition and support for innovations and have them included in regulations and law.

M&E system

In the same way that POIG does not have a clear ToC in place, they do not have their own properly defined M&E system either. However, they are committed to improving their systems by focusing on creating innovations in the palm oil industry and the promotion of these innovations – as such, through collaborations with WWF, Greenpeace and the Rainforest Action Network for example, POIG seeks to innovate sustainability certification, including their own systems (e.g. Assurance and Labour rights). As a small membership organisation, POIG's members actively contribute to the scheme's continuous improvement by participating in Working Groups with technical experts, though it would certainly be beneficial for the scheme to develop its own M&E system and Theory of Change, allowing POIG to track its progress against the long-term impacts identified in the Charter.

Verification tool - POIG Charter

POIG's Charter uses the RSPO Principles and Criteria (currently the 2018 P&Cs) as its baseline. Extra criteria have been added by POIG with a focus on strengthening three specific areas in particular: environmental responsibility, partnerships with communities including workers' rights, and corporate and product integrity. As such, POIG-verified palm oil comes from members certified under RSPO rules for segregation (see RSPO Supply Chain Standard) and additionally verified by to their own Verification Indicators (POIG, 2019).

Below are some examples of POIG requirements which are designed to strengthen the 2018 RSPO Principle and Criteria (WWF, 2020):

Theme	POIG requirement
Pesticide use and integrated pest management	 Preference for natural weed and disease control No pesticides from the "FSC Highly Hazardous" and "SAN prohibited pesticides" lists
Peat	• Time-bound and mandatory renaturation of "critical" peat ecosystems accompanied by experts
HCV/HCS	 Cut-off date for the development of plantations of HCS Assessment is March 2014 (RSPO November 2018) HCS Assessment also available / mandatory for plantations before November 2018
Food Security	• If plantations are developed or enlarged: use of 0.5 haper person to grow food
Smallholders	 Mandatory programme and support for independent small holders and public reporting on progress (not mandatory in RSPO) Support for independent small holders through development / promotion of group certification
Protection of workers	 Employment of young workers only outside school hours Risk Assessment to identify and prevent forced and child labour and human trafficking in FFB supply chain
Working conditions	Pensions and social security compulsory for all workers

Table 1 Examples of additional POIG requirements compared to RSPO 2018 (adapted from WWF, 2020)

4.1.1.6 Summary

SUMMARY OF THE SCHEMES' M&E SYSTEMS

Theory of Change:

All four certification schemes [RSPO, RA, RSB, and ISCC] have their own Theory of Change (ToC) in place. Each ToC has been developed in compliance with ISEAL's Impacts Code, including ISCC's who are not a fullISEAL member.

In their ToC, the schemes identify key outputs, medium and long-term sustainability outcomes and impacts which are linked to the schemes' respective missions and visions. As a scheme entirely focused on palm oil as their target commodity, RSPO's ToC is the most geared towards driving positive outcomes within the palm oil sector specifically.

M&E systems:

All four of the certification schemes have their own M&E systems in place, once more in compliance with ISEAL's Impacts Code.

For all, stakeholder engagement has been a clear driver behind the development of their M&E systems and remains an important resource for the continuous improvement of the systems. Commonly to all four certification schemes, stakeholder engagement comes under the forms of access to working groups and committees, public consultations, internal and external surveys, emails, etc.

To measure progress against the outcomes set in their ToC, all four certification schemes have their own set of M&E indicators (c.f Annexes 3-6), although, unlike the RSPO, RSB and RA, ISCC has not formally identified them as such in their M&E systems (see Annex 3-6). RSPO, RA and RSB have clearly integrated a majority of ISEAL's Common Core Indicators as the basis for setting their own indicators.

Both RSPO and RA follow a stronger, three-tiered structure for data collecting and assessing, in line with the ISEAL code of Good Practice for Impact Assessment (ISEAL, 2014). The structure is as follows:

- Level 1: Program wide monitoring
- Level 2: Sample monitoring
- Level 3: Research

ISCC also follows a similar structure, however they are not yet participating in the third level, i.e., research but have identified research as an area of focus for the upcoming years. While a member of ISEAL, RSB does not seem to follow this structure.

Audit data remains the principal source of data for all four schemes. However, the schemes have also developed alternative data collection methods in order to address some of the gaps relating to their M&E systems.

For example, both RA and RSPO identify and commission independent third-party research, which offers better opportunities to capture indirect impacts and instances of systemic change. ISCC and RSB on the other hand collect additional information from their certification bodies to complement and contextualise the audit data.

However, overall, the schemes do not typically use a counter-factual in their mainstream M&E assessments, although specially commissioned studies might. It is also challenging to establish a baseline for assessing changes associated with certification over time.

The case of POIG:

Unlike the other schemes, POIG does not have its own ToC nor any M&E system. As mentioned previously, POIG is not a certification scheme but rather a multi-stakeholder-driven verification scheme which aims to develop and share a credible and verifiable benchmark built upon RSPO. Consequently, POIG may not have had the same needs and resources to justify having a well-developed M&E system in place. It is worth noting, however, that while they have not developed a ToC, POIG has conducted some internal ToC projects (which are not publicly available). Additionally, several long-term impacts have been identified and are presented in their Charter.

It would certainly be beneficial for POIG to develop both, a ToC and an M&E system, as it would help the scheme track its progress against the long-term impacts identified in the Charter as well as its overall mission to support key players in achieving the adoption of responsible practices in palm oil production via credible benchmarks and innovation.

4.1.2 Benchmarking results

4.1.2.1 Introduction

Relevant elements were analysed against the benchmarking criteria to help inform the strengths of the different schemes. The benchmarking exercise provided a structured way to evaluate each scheme's system against established norms of good practice.

Note that unlike the other four systems [RSPO, RA, RSB, ISCC], POIG is not a certification scheme but rather a multi-stakeholder-driven verification scheme which aims to develop and share a credible and verifiable benchmark built upon RSPO. Given this difference in status compared to the four certification schemes, POIG is not included in the System Elements benchmark.

The main headings of the benchmarking framework form a logical summary of the assessment results. We used a qualitative scoring method and visual shorthand to provide easily referenced tables of main headings. For the full benchmark, please refer to Annex 8.

4.1.2.2 Theory of Change and Impacts Monitoring

All four certification schemes score very highly here, showing that ToC projects and solid impact evaluation systems are in place.

To note is also that amongst the four certification schemes RSPO and RA achieve the highest scores overall. Both schemes have clearly defined budget lines specifically for their M&E activities, with the related information presented their systems documents and publicly available. Additionally, both schemes have identified several possible unintended consequences of their activities, as well as conduct a regular review of the external factors

most likely to influence the achievement of their intended impacts and outcomes. While ISCC and RSB also cover such activities, this is to a lesser extent than RSPO and Rainforest Alliance.

RSB and ISCC are not far behind. However, unlike the other three, ISCC does not have the same external validation of scheme information provided. RSB, RA and RSPO are all full 'Code Compliant' members of ISEAL and as such are checked for ISEAL Impacts Code compliance, which gives an additional assurance to users of this scheme with regards to all relevant standard setting, assurance and impacts aspects of the schemes meeting international best practice.

4.1.2.3 Standard-Setting

The four certification schemes perform highly in this area, with RSPO, RA and RSB scoring highest possible points on all aspects. ISCC is close behind, though does not score full points on the standard and guidance adaptability to local context and operational size of the certified enterprise (beyond having a special approach for independent smallholders).

4.1.2.4 Assurance

Documentary evidence for all evaluated schemes shows high standards of assurance across the board, with all three evaluated elements ranked at top score for all five schemes. Specifically, this means that an assurance methodology is clearly explained, that third party independent verification is carried out and that certification bodies are supervised by an accreditation body or similar oversight mechanism.

As much of the impact reporting the schemes do, relies on audit data, this is encouraging. However, it should be noted that this of course is purely based on documentary evidence. Cases brought to the schemes grievance mechanisms or that are portrayed in media show that despite these assurance systems being in place, auditors do not pick up on all non-conformities.

In a broader benchmarking study conducted by IUCN that looked at assurance, it was RSPO who scored highest for assurance elements, followed by RA. RSB and POIG were not evaluated there (IUCN, 2019).

4.1.2.5 Support Strategies

All schemes provide technical assistance for compliance with the standard. Financial support is more limited, but some is available, specifically for smallholders to help them achieve certification.

4.1.2.6 Summary

Overall, the sustainability schemes in the centre of this study by and large meet the benchmarking criteria, which reflect best practice thinking on the system elements relating to Impacts Monitoring.

Most elements are rated either good, i.e. the sustainability scheme meets all the points, or even strong, i.e. the sustainability scheme fully meets or exceeds all points.

While not assessed here, POIG does not currently have a well-defined M&E system, nor its own Theory of Change, in place. POIG is not a certification scheme but was rather set up to support RSPO through raising the bar and advancing issues in a continuous manner. However, we recommend that POIG consider designing and implementing its own, adapted, M&E approach to track progress over time, to promote continuous improvement and to be able to showcase the impacts it achieves.

4.2 Review of evidence for impacts of certification

This section of the report turns from M&E systems to actual impacts. It presents findings from a review of observed effects from palm oil standards schemes, drawing upon the academic literature and other references, the schemes' own impact reports and the expert interviews. The review considers environmental and socio-economic impacts of certification and verification in palm oil. Systemic market-based impacts are not considered at this stage.

4.2.1 Benchmarking of Relevant Standard Content

The following standard content criteria were selected to inform whether the standards sufficiently address the topics of interest to the FONAP. The academic literature however will have assessed impacts in a specific moment in time, i.e. when certification was based on earlier versions of the standards in most cases. Therefore the literature does not currently properly capture the impacts of the often significant changes made to both the RSPO P&C introduced in 2018 and the Rainforest Alliance Sustainable Agriculture Standard ard in 2020.

The below benchmarking results may therefore inform on the likelihood of an increased level of positive impacts to be found in future research for both these standards.

4.2.1.1. Legality & Land Use Rights

All five schemes (including POIG) have scored highly in terms of their coverage of legality and land use rights. However, RSB does stand out here as the only scheme that does not perform as well as the others with regards to explicitly including provisions for land rights.

4.2.1.2 Social Criteria

POIG here is the strongest performing scheme with all aspects achieving the highest rating, followed by RSPO (2018 P&C) who are close though not quite reaching the top score for assessing the impacts of operations on human rights. The benchmark also shows that the RSPO 2018 P&C have been strengthened compared to the previous standard version, scoring higher on criteria covering food security, housing and sanitation facilities.

Requirements for social impact assessments were marked as being weak in the 2017 Rainforest Alliance SAS, however the new standard shows a level of improvement. Likewise, food security was not mentioned at all in the 2017 RA standard but is in the new version, albeit still in a limited capacity. This is important to bear in mind as any positive impacts on these points therefore would not be due to implementation of the standards' requirements. ISCC scored well overall, with their standard being particularly strong compared to the other schemes by having a requirement around assessing the impacts of operations on human rights. The scheme scored lower on their requirements around housing, sanitation facilities, community investment and the inclusion of workers on piece rate quotas for access to a Decent Living Wage.

Finally, RSB is close behind RSPO and RA though fails to score full marks on Decent Living Wage and community investment opportunities.

4.2.1.3 Environmental Criteria

Overall, all schemes perform highly here. Notable exceptions are RA's 2017 standard with a low score on requirements for greenhouse gas emissions (which they cover more extensively in the 2020 standard), and RSB with regards to set asides. It remains encouraging to note that both RA and RSPO have strengthened their respective standards to better cover several environmental criteria such as the requirements for having set aside areas [RSPO and RA], impacts of operations on water levels and quality [RSPO], and conducting environmental risk assessments [RA].

Once more, POIG scores full marks on its environmental criteria.

Overall, we can conclude that the schemes by and large cover the topic areas of interest to FONAP, with some notable exceptions, where FONAP might consider providing further input to the schemes in their next rounds of standard revisions.

4.2.2 Important aspects to note concerning the available literature

The selected sources were reviewed to identify empirically demonstrated impacts of palm oil certification. We asked, what positive effects are achieved by compliance with certification criteria other than individual certification? Are any negative effects observed?

The focus of the academic literature is on RSPO, which is unsurprising as it is the most recognisable palm oil certification scheme. Interviewees pointed out that due to the attention RSPO is receiving internationally more research focuses on them (ISEAL Alliance, 2020; Proforest, 2020; RSPO, 2020c).

Historically, most of the research has been focused on Indonesia and Malaysia, with much less research available on Africa and Latin America. This is problematic as these two regions are expected to see the largest growth in palm production in the future. It is therefore crucial to understand what the impacts of palm oil production and certification in these regions are and will be in the future (Qaim et al., 2020).

Generally, different angles were taken by researchers in SEA compared to Africa and Latin America. The focus in SEA is generally to rectify the errors made in the past with regards to unsustainable production of palm oil. The focus of research in Africa and Latin America on the other hand is to evaluate whether lessons learnt from the SEA context were drawn upon to avoid their repetition (Daabon, 2020).

Additionally, even in Southeast Asia, the research that has been produced over the years has mostly been conducted at the micro level (i.e., individual plantations, estates, villages, etc.). This limits our current understanding of the larger scale impacts of certification and palm oil production in general (Qaim et al., 2020).

Research on the impacts of RA certification, generally did not focus on palm oil certification due to the small amount of RA certified palm oil. A large proportion of research on RA focused on different commodities covered by the same standard, such as coffee for example. Unsurprisingly, RA's own Impact Reports, as well as ISCC and RSB's, do not focus on palm oil but rather present insights on the impacts of RA in other commodities such as coffee, tea, cocoa and bananas, which are their biggest ones.

4.2.3 Environmental impacts

4.2.3.1 Forest protection and/or deforestation

Palm oil certification schemes differ markedly regarding their policies on deforestation. Before 2018 the RSPO Principles and Criteria (P&Cs) had less stringent requirements: forest clearance for oil palm is permitted apart from primary forest and High Conservation Value forests which are not to be converted (Cazzolla Gatti et al., 2019). The 2018 P&Cs however, have now included the High Carbon Stock Approach (HCSA) methodology as requirement. The ISCC prohibits the establishment of oil palm concessions in primary forests, forests of high biodiversity value, as well as degraded forest, grasslands and wetlands, placing the scheme in a stronger position when it comes to the protection of non-forest ecosystems (Meijaard et al., 2018). Additionally, degraded forest is defined conservatively by ISCC, with a high proportion of logged forest included in the restriction. The POIG also has more rigorous, outcome-focused requirements around deforestation than RSPO and is therefore more in line with a 'zero-deforestation' type of commitment. Finally, the 2017 RA standard which covers requirements such as wildlife protection and ecosystem conservation does not allow clearance of primary or secondary (logged or burned) natural forest. Additionally in the RA standard, if concession owners destroyed natural ecosystems during 1999–2005, then consequent impacts must be mitigated with set-asides on the concession (Publications Office of the European Union, 2018).

Evidence from the literature

While we were not able to identify any academic literature on the impacts of RA, ISCC, RSB or POIG on deforestation, there is a clear sense from the available literature that pre-RSPO 2018 P&C review certification has led to a decrease in deforestation rates in primary forests. The impact of certification on non-primary forests remains limited, though due to the recent inclusion of HCSA in the 2018 P&Cs, it is expected that future studies may find positive impacts also with regards to non-primary forests.

Meijaard et al. (2017) used LANDSAT-based datasets to assess deforestation rates in both certified and non-certified oil palm concessions in Borneo, Indonesia (2,771 concessions in total). **They found that RSPO certification did not entirely eliminate deforestation practices in intact and logged forests, as 9% of the total certified concession area studied was lost between 2000 and 2015, however this remains significantly lower compared to the 17.2% forest loss observed over the same period in non-certified concessions.** The authors were not able to determine the extent to which these forests were identified by the company as High Conservation Value (HCV) forest. Forest type classification was limited to either old-growth or selectively logged forests, as determined from medium-resolution satellite imagery, but likely contained conservation values (Meijaard et al., 2017).

Additionally, in the same study, Meijarrd et al. observed that **annual deforestation rates in the RSPO-certified areas had consistently decreased** from 13,417 ha per year between 2005 and 2007 to 1,839 ha per year after 2014, whereas the rates in non-RSPO areas remained considerably higher. As 2005 was set as the cut-off date for deforestation avoidance in RSPO-certified concessions (Meijaard et al., 2017), it seems reasonable to conclude that certification contributed to a reduction in deforestation. As stated by the authors, "these findings further support the notion that although compliance to RSPO standards are not fully met by companies, and improvements are required, in general estates under RSPO seem to have better practices regarding forest conservation" (Meijaard et al., 2017, p. 26).

Similarly, Carlson et al. (2018) provide evidence of the impacts of **RSPO certification on** forest and peat in Indonesia between 2001 and 2015. Their findings show that RSPO certification reduced deforestation in high tree cover areas and primary forests by 33% over this 2001-2015 period compared with similar non-certified plantations. This is mostly applicable to primary forests, which are areas directly targeted in the RSPO P&C requirements.

However, regarding deforestation of lower-tree areas and peatland which do not benefit from HCV classification before 2018, certification has been found to have no significant impact on the levels compared to non-certified plantations (Carlson et al., 2018).

While their findings highlight that RSPO certification helps to protect primary forests, Carlson et al. (2018) identify a key factor which might account for the lower rates of deforestation observed on the certified plantations overall compared to non-certified ones covered by the study. Indeed, they found that **most of those certified plantations contained little residual forest when they received certification**, with RSPO members preferentially certifying non-forested areas that had long since been cleared.

In 2017, Meijaard et al (2017) had also observed similar trends in Borneo. Their study found that active RSPO-certified concessions and estates included in the study contained less forest coverage on average (4.5% in 2015) than active non-RSPO areas (10.9% in 2015).

Finally, in 2016, Ruysschaert (2016) had suggested that large-scale producers tend to certify only long-established plantations as opposed to all their plantations because certification, in Malaysia and Indonesia, primary forests and peatland count for significant areas of land where biodiversity conservation measures must be in place, as most, if not all remaining lowland in both countries is of exceptional biodiversity value. In response to this, it should be noted that RSPO have introduced a timebound plan obligation for their certified growers, obliging them to gradually certify all their operations.

While not demonstrated, Carlson et al. (2018) went as far as to speculate that "companies seeking certification may have increased their precertification forest clearing with the understanding that such activity would be restricted after the initiation of the certification process" (ibid. p. 4).

In response to Carlson et al.'s study (2018), Cazzola Gatti et al. (2019, p. 49) point out two important trends observed in their own study:

- 1. "Before the decreasing trend started in 2007 in RSPO concessions, ... the highest percentage of tree loss was right in certified areas, confirming that the **current plantations of 'sustainable palm oil' are often associated with a previous significant forest degradation**.
- 2. Secondly, after 2007, the percentage of tree loss continued to be high even in certified areas (also with respect to that of the total area) and from 2013 to 2016 was comparable to, and sometimes higher (i.e. in 2015) than non-certified areas."

Looking at loss of tree cover in forests with >30% canopy cover in Indonesia, Malaysia and Papua New Guinea, Cazzolla Gatti et al (2019) quantified forest loss in RSPO-certified concessions through deforestation, fire or tree damage as being of about 40% over 15 years (2001-2016). They also found that **forest loss continued to occur on concessions after the establishment of RSPO in 2004 and POIG in 2013**. Decreasing rates of annual tree loss were observed between 2006 and 2010, which, as the authors suggest, might be a result of the launch of RSPO certification in 2007. However, an acceleration of forest loss on RSPO concessions was observed from 2010 onwards. This may have included land clearance or new plantings that was allowable under the RSPO P&C if the land were not HCV or HCS forest, or peat land.

In comparison, Meijaard et al. (2017) reported a **total loss of intact and logged forest of 9.0% of the total oil-palm license area in Borneo between 2000 and 2015**. Of this, only 0.6% was lost after November 2005. They have highlighted a declining trend in annual forest loss from RSPO concessions and estates after November 2005 from 13,417 ha per year between 2005 and 2007 to 1,839 ha per year for the same total oil-palm license area after May 2014, whereas Cazzolla Gatti et al (2019) observed an upward trend in annual loss after 2010.

While the literature above sheds light on the direct impacts of certification on deforestation rates, Heilmayr et al (2020) highlight the importance of considering the spillover effects of certification, whereby policies which impose restrictions in one area may have an impact (positive or negative) on other locations as actors, processes or knowledge move to other, non-certified, areas.

In their study, the authors quantified the forest loss and conservation spillovers associated with RSPO certification of palm plantations in Indonesian Borneo. The results from their study are two-fold:

1. Positive impacts: The **likelihood of deforestation occurring in government designated forested areas is reduced because of spillovers from certification**. Deforestation within RSPO members' non-certified concessions that were identified as being within a forest estate decreased as group certification rates increased. This is in line with the requirements of the RSPO P&Cs for members to identify and protect HCV and primary forests. As such, RSPO members with more certified properties seem more likely to conserve forests on recognised forest estates even on their non-certified properties. Additionally, as certified mills put pressure on their suppliers to meet RSPO's legal and responsible requirements and ask for proof that the fresh fruit bunches (FFB) they are supplying does not come from forest estates, the market price of FFB from such estates becomes significantly reduced in that area. This further enhances the positive impact of certification on forest conservation as the economic value of FFB is decreased if sourced from forest areas. 2. Negative impacts: The **likelihood of deforestation happening outside identified forest estates has increased as certification rates also increased**. In the Indonesian context, land zones which are outside recognised forested areas and which do not benefit from HCV classification are currently considered as political non-forests even though they often contain biophysical forests, thus limiting the total impact of RSPO certification on deforestation. It is therefore **estimated that the real impact of RSPO on the avoidance of deforestation at the wider scale remains low**.

Additionally, a study by the SEnSOR Programme which uses literature on a broad range of certification, conservation and sustainability initiatives and policies to draw lessons about how unintended impacts have manifested themselves, and how they may apply in the context of RSPO (Lucey, 2019) has identified a **strong risk of displacement of deforestation practices to non-certified members as a consequence of RSPO's no-deforestation requirements imposed on its members**. While the study presented above (Heilmayr et al., 2020) has found that the rates of deforestation within forest estates are reduced when plantations are certified, Lucey (2019) argues that because RSPO may be advertently encouraging members to certify long-established plantations rather than forested areas, forest frontiers are increasingly vulnerable to non-certified oil palm growers who do not follow RSPO's no-deforestation requirements. On the other hand, it is possible that certification may facilitate the adoption of environmental management practices by non-certified producers as they learn best practices from their certified neighbours (Meijaard et al., 2018).

It is clear from the literature **that certification does lead to decreased rates of deforestation in primary forests**. However, when considering deforestation rates across a wider scope of landscapes, certification does not seem lead to a conclusive decrease in deforestation. Secondary forests, peatland, and other forested areas which may not be recognised as containing HCVs or government designated forested estates remain vulnerable to forest loss even when certification is in place in the area.

Evidence from the standards schemes

Interestingly, in their last three Impacts Reports (2017-2019), RSPO reports that between 2016 and 2019, "the bulk of non-compliant clearance involved degraded or highly degraded vegetation (e.g. open grassland and scrub) and existing agroforestry plantations" and that "Less than 5% of land cleared without HCV assessments involved the loss of high-quality forest (VC 1)" (RSPO, 2020d, p. 47, 2019c, 2018e).

The RSPO's 2018 P&C review has led to some more stringent requirements being set prohibiting the conversion of HCV and HCS forests, now also including secondary and peat forests, for oil palm (RSPO, 2020b). The real impact of these changes is yet to be fully assessed; however they have the potential to address some of the issues surrounding deforestation rates outside of primary forests.

POIG, as an early adopter of the combined HCV-HCSA assessments as well as high standards on 'no deforestation, no peat, no exploitation' (NDPE), may well be ahead of RSPO in terms of deforestation practices, though this remains challenging to measure due to the lack of studies on the impacts of POIG on the ground (Greenpeace International, 2021). However, our respondent from Musim Mas, one of the three POIG producer members affirms that "being a POIG member, and having undergone POIG verification of our operations, we have implemented combined HCV-HCSA assessments earlier than our peers. This has meant a different, broader approach to protecting forests" (Musim Mas, 2021). The inclusion of HCV-HCSA approach as a pre-requisite for any new planting in the 2018 RSPO P&C represents, according to Musim Mas, on the of the most important improvements made to the standard in terms of achieving their intended impacts, resulting in stopping deforestation practices by growers committed to certification.

Authors such as Carlson et al. (2018) suggest that because many certified areas contained very little residual forest at the time they became certified, this may account for some of the lower absolute deforestation rates observed on certified land.

In response to these findings, our RSPO interviewee acknowledged that there are plantations seeking certification that had indeed already been cleared prior to seeking certification, especially when the first standard came into effect in 2004. However, RSPO have identified the need for more studies to be conducted to better reflect their stance which is that "at RSPO we are not here to absolve members of past deforestation but really to ensure that our members implement good practices and avoid recurrence of past problems including deforestation" (RSPO, 2020c) and, as such, should investigate the impacts RSPO's New Planting Procedures (NPP) (initiated in 2014) have had on promoting positive outcomes by ensuring that new oil palm development complies with the new planting criteria in the standards and does not negatively impact primary forest, HCV areas, HCS forests, fragile and marginal soils, or local people's land.

In their 2019 Impacts report (RSPO, 2020d), RSPO reports a 2% increase in HCV areas under NPP compared to the previous reporting year (2018). This brings the total area covered by NPP to 1,568,433 ha across 14 countries, 72% of which is located in Indonesia, 22% in Africa and 1% located in Malaysia and Latin American respectively.

RSPO is currently revising its NPP document to align with new Standard requirements. This will include prohibiting any new plantings to take place on peat and no clearance of any HCV-HCS areas (RSPO, 2020d).

Additionally, research has also failed to consider RSPO's Remediation and Compensation Procedure (RaCP) in relation to past deforestation occurring since November 2005 and without prior High Conservation Value (HCV) assessment. RaCP requires members to remediate forest loss at both on-site and off-site levels for the affected sites and parties as well as compensate liabilities which are determined using vegetation coefficients as proxies for HCVs, the land clearance period, membership status and areas requiring environmental remediation (RSPO, 2020c, 2015). As of 31 December 2019, a total of 874,216.85 ha of non-compliant land clearance (NCLC) have been disclosed by 546 management units. The increase in the number of management units with disclosed liabilities compared to previous years has been attributed to several factors such as new membership applications, consolidation of management units under Group Membership rules, and new acquisitions (RSPO, 2020d).

Finally, there is some level of concern of a risk of displacement of deforestation practices to non-certified members as a consequence of RSPO's no-deforestation requirements imposed on its members. Forest frontiers are becoming increasingly vulnerable to non-certified oil palm growers who do not follow RSPO's no-deforestation requirements.

As the research focus is currently on RSPO, it is difficult to assess whether other palm oil certification schemes have had the same impacts on deforestation as RSPO does (both positive and negative). More research is needed on the impacts of the other schemes.

In their impact report, ISCC highlight that ISCC certification contributes to increased knowledge and capacity building which feeds into enhanced agricultural practices. Writing about their impact on deforestation practices, they state that "the avoidance of LUC [Land Use Change] is one of the greatest impacts ISCC certification is achieving on farms and plantations, especially in Indonesia and Malaysia" (ISCC, 2019, p. 9). However, ISCC also recognises that while certification leads to positive outcomes in areas covered by the schemes, it has "only limited influence on unsustainable practices in non-certified areas" (ISCC, 2019, p. 11). Finally, only 5% of non-conformities reported in their Impact Survey for ISCC Certification Bodies were related to ISCC Principle 1 - Protection of Land with High Biodiversity Value or High Carbon Stock. This figure compares to 30% non-conformities being related to Principle 3 (Safe Working Conditions) or 15% for Principle 4 (Compliance with Human, Labour and Land Rights). As such, it would seem that the protection of land remains one of the most well implemented set of requirements followed by ISCC's operating members.

Furthermore, in 2019, the RA provided input for the EU's Communication on Stepping Up EU Action to Protect and Restore the World's Forests. RA therefore seeks to influence any resulting EU legislation to make sure that it encourages investment and due diligence by companies and governments while also protecting smallholder farmers. Engaging with the EU is particularly important as it represents 25% of palm oil imports in the world (Rainforest Alliance, 2019).

Another gap in the literature is that the near entire focus is on just two countries, Indonesia and Malaysia. As the largest palm oil producing area globally, SEA has been at the centre of attention in terms of the impacts of oil palm cultivation on the environment. It is currently unclear whether RSPO certification in other palm oil producing areas, for example in Africa and Latin America have similar impacts as those observed in SEA. It is worth considering that the context surrounding deforestation practices in Africa and South America are different to Asia's. Direct deforestation linked to the expansion of palm oil cultivation is only critical in Brazil, even though it is strictly regulated by the national law. The practice of growing oil palm on land that was deforested decades ago for cattle breeding, the production of cash crops such as banana, cocoa, rice or soy, or annual crops grown for self-consumption (e.g. cassava, beans, corn, peanuts, etc.) is much more widely spread. As such, the conversion of forested land for palm oil cultivation is much less of an issue in Africa and South America compared to SEA, where it has been, and remains, a key challenge in the palm oil sector (Bernet and van den Berge, 2019).

Finally, more research is still needed to understand the real impact of certification outside of the unit of certification. Heilmayr et al. (2020) and Lucey (2019) both suggest that certification can have significant unintended negatives impacts. As such, they highlight the potential impact of the displacement of deforestation practices towards non-certified areas and certified areas outside of RSPO protected forests and habitats. Broader landscape-level studies could therefore help gain a better understanding of the real impact of certification on deforestation.

Certification would benefit from a jurisdictional/landscape approach. The impact of certification would have been better and broader it is was jurisdictional, also helping with the broader land-use planning and implementation. Speaking of palm oil production in Africa, one of our respondents illustrates the importance of considering jurisdictional approaches to certification: "If you are in a landscape where ten companies are operating and four of them are certified and six are not, then the benefits of the four companies may not even balance or compensate for the damage caused by the other six companies. In Africa for it to work, governments need to be part of it because when it comes to land issues it is more of a national issue. Governments need to be part of the solution and understand what is at stake" (Proforest, 2020).

It is worth noting that in 2019, RSPO published the first draft of its new Jurisdictional Approach (JA) Framework and has since published a second draft (RSPO, 2020e). The JA aims to "address deforestation and environmental degradation, as well as strengthening social safeguarding, emerged from major public and private sector commitments as a means to scale positive results both for responsible production and conservation" (ibid, p.8) and strives to having no deforestation and no new planting on peat occurring at the entire landscape level. This is an encouraging development, especially considering the current trends and associated challenges on deforestation presented above.

Likewise, RA is involved in LandScale, a shared initiative of the Climate, Community and Biodiversity Alliance, RA and Verra. LandScale is an emerging tool to help drive landscape-scale sustainability with measurable indicators of the state and trajectory of sustainability at the landscape level across environmental, social, and economic dimensions (LandScale, 2020).

4.2.3.2 Biodiversity

Evidence from the literature

The negative impact of palm oil production on biodiversity is well documented and is in great part due to the fact that oil palm as a crop is grown in some of the most species-rich areas of the world (Publications Office of the European Union, 2018). However, there is little information available on the direct impacts of certification schemes on species conservation (Meijaard et al., 2018).

One of the findings presented in the EU commission's study on the environmental impact of palm oil consumption and on existing sustainability standards (2018) literature review is that RSPO **certified plantations present a higher abundance of rare bird species compared to non-certified plantations**. Specifically, they state that in certified plantations it is 60 times lower than in surrounding primary forests, whereas in non-certified plantations it is 200 times lower in comparison.

Focusing on the orangutan, a classic charismatic species oftentimes associated with palm oil production, Meijaard et al. (2017) compared the declines in orangutan populations in certified versus non-certified areas of Kalimantan, Indonesia. They found that between 1999 and 2014, orangutan populations in areas that are now RSPO-certified declined by 34%. In the same period, orangutan populations in non-certified concessions and estates declined by 31%. This suggests that the relative loss rates of orangutans are about the same in both types of concessions (Meijaard et al., 2017). In Borneo, RSPO certified growers remain a minority and most orangutans are located in concessions certified by the Indonesian Sustainable Palm Oil (ISPO) and Malaysian Sustainable Palm Oil (MSPO).

Another study, which investigates the effectiveness of RSPO in attaining conservation goals within the Indonesian context (Ruysschaert and Salles, 2014), has found that **RSPO certification has not been effective for conservation purposes**, and that charismatic species such as the Sumatran orangutan have not benefited from the shift to RSPO certi-

fied production in the area. At the time of the study (2014), there was an apparent conflict between NGOs pushing for the proper implementation of RSPO guidance on conservation and growers using various strategies to decrease the scope of recognised conservation areas in order to maximise profit. This was driven by low levels of compensation for the negative economic implications of habitat and species conservation on growers, the lack of clear criteria defining key species habitats and distribution, and the lack of involvement from the Indonesian state in terms of alignment with RSPO's conservation goals.

In a later study by Ruysschaert (2016) the **lack of clear guidance around the reduction of land set-asides for conservation** with the 2013 version of the RSPO P&Cs merely requesting that plantations on peat land are minimized and doesn't specifically mention relevant indicators of the importance of biodiversity conservation (e.g. threatened species such as orangutans). The study used a modelling of grower's economic loss associated with complying with the guidance documents, especially around fulfilling ecological needs in orangutan habitat, as well as by interviewing growers and following the evolution of RSPO growers' number, size, and relationship with downstream firms as available from the RSPO website and other public documents to assess the key drivers of orangutan loss on certified plantation.

Consequently, they have found that producers can continue to grow oil palm on peat and postpone improvements on the grounds of economic feasibility. The other factors mentioned in his earlier study (Ruysschaert and Salles, 2014), continue to be highlighted as the main causes for the **limited positive impact of RSPO certification on biodiversity conservation**, thus showing no significant improvement over time. However, it should be noted, that the 2018 RSPO P&Cs now have strict requirements around plantings on peat and generally stronger requirements around biodiversity management. We can therefore expect some of the limitations of RSPO highlighted by Ruysschaert to be alleviated by the new P&Cs, and the impact of these changes to soon become apparent.

In a study published by the SEnSOR Programme (Lucey, 2019), it was argued that RSPO certification could have some unintended consequences for biodiversity, both positive and negative. For example:

- 1. RSPO's no deforestation policy may encourage RSPO members to expand their plantations into grassland rather than forests. While forests do present the highest biodiversity levels, the consequences of a shift towards grassland, where RSPO guidance is less developed, could have severe impacts on the biodiversity of non-forest habitats.
- 2. **RSPO certification promotes the development of new scientific knowledge.** This brings opportunities for improvements to policies and guidelines for biodiversity conservation within and beyond the palm oil sector.

Note that the second unintended impact proposed by Lucey – greater knowledge and awareness – is actually an outcome that is anticipated by RSPO in its ToC.

Interestingly, in plantation areas of independent smallholders supported by the Indonesian Sustainable Oil Palm Farmers Forum (FORTASBI), most of the area of cultivation under RSPO certification is dominated by oil palm and shrubs, thus not qualifying for HCV classification. However, even though the diversity of fauna and flora remains limited in these plantations, FORTASBI has observed that "the absence of biodiversity has actually led to the ideas and desire of certified smallholders to enrich the diversity of species in their plantation areas. This includes enriching yards and rehabilitate the land along riverbanks by planting *various forest plants*" (FORTASBI, 2020). It would seem that some of the practices imposed by RSPO in plantations situated in areas of HCV may also be taken up on a voluntary basis by other smallholders.

The overall conclusion from the literature is that certification has **a limited positive impact on biodiversity and conservation**. No significant difference between species declines in certified and non-certified areas has been observed. However, research remains limited and largely focused on the Asian context. Trends in orangutan populations is often used as a proxy for biodiversity loss which is unsurprising given that the impact of palm oil production on their dwindling populations remains at the forefront of peoples mind internationally. More research is needed to assess the broader impact of certification on biodiversity conservation. Studies would benefit from considering wider landscapes as species distributions, including orangutans', go beyond single certification units and range across several other commodities.

Evidence from the standards schemes

In their latest impact report (RSPO, 2020b), highlights 'Biodiversity protected' as one of its key outcomes, thanks to key initiatives implemented in 2019 such as the New Planting Procedure (NPP) and their requirements on no planting on peat. RSPO uses the increase in HCV set-aside areas within certified concessions as a metric for biodiversity protection. In 2019, 230,195 ha were set-aside as HCV areas against 221,019 ha in 2018, showing an upward trend in the quantity of forests which are protected and enhanced through certification. In their 2018 impacts report (RSPO, 2019c), RSPO reported a 39% increase in HCV areas managed by certified members compared to the previous reporting period. Overall, "The RSPO welcomes this continued trend of positive growth, which builds on the overall HCV area increase (21%) noted and reported in 2017" (ibid. p.44).

Additionally, RSPO highlights the importance of their Remediation and Compensation Procedure (RaCP) in promoting biodiversity conservation. Since 2017, the following conservation projects were approved as part of the RaCP:

- Offsite avoided deforestation and/or avoided degradation of high-quality habitats
- Offsite restoration of degraded forest on land with clear ownership and legal status to high quality habitats
- Species-based conservation measures
- Community and livelihood development
- Onsite forest/high-quality habitat reestablishment.

These projects aim to compensate for some of the impacts on non-compliant land clearance since 2005.

Finally, as mentioned in the above section on deforestation, RSPO is currently developing its own Jurisdictional Approach Framework, a welcomed initiative which has the potential of addressing some of the challenges identified in terms of biodiversity loss.

4.2.3.3 Greenhouse gas emissions

Greenhouse gas (GHG) emissions from palm oil production are principally a consequence of two main sources (Publications Office of the European Union, 2018):

- a. Land-use changes, whereby forest clearance for oil palm cultivation significantly reduces carbon storage compared to primary forests. The widely used practice of fires for forest clearance adds another layer to the total emissions cause by land use changes.
- b. Mill and plantation activities, especially methane emissions from the treatment of palm oil mill effluents (POME), nitrous oxide release from fertilisers and CO₂ emissions from the use of fossil fuels.

In terms of requirements surrounding GHG emissions, the ISCC offers the most extensive coverage of the five certification schemes reviewed here. Its policies include restrictions on conversion of land with high carbon stock (HCS). RSPO presents the second most restrictive set of requirements on GHG emissions, with a focus on improving fossil fuel use and the use of renewable energy, as well as reducing GHG emissions in general (Publications Office of the European Union, 2018).

Evidence from the literature

We have identified only two conclusive study on the impact of palm oil certification schemes on GHG emissions.

In their study, Schmidt and De Rosa (2020) have quantified the impact of RSPO certification on GHG emissions in certified areas (Indonesia and Malaysia) by comparing them to non-certified areas, using the Life Cycle Impact Assessment (LCIA) method. They have found that **certified production of palm oil performs significantly better than non-certified productions in terms of GHG emissions**. These benefits can be attributed to four main factors:

- 1. Oil-palm yields are typically higher on RSPO-certified plantations, leading to lower use of GHG-intensive production inputs such as lower reliance on fossil fuels. It also leads to more efficient use of land resources, further driving down the rates of GHG emissions.
- 2. A lower share of RSPO-certified production involves peatland cultivation, which results in fewer CO_2 emissions being released from peat drainage.
- 3. The setting aside of High Conservation Value (HCV) land in RSPO certified production contributes to lower GHG emissions.
- 4. Palm Oil Mill Effluent treatment activity, a major contributor to GHG emissions, is crucially different in RSPO certified compared to non-certified palm oil production. The higher share of biogas capture observed in RSPO certified POME treatment facilities contributes to reduced methane emissions in comparison to non-certified POME treatment activities.

In another study, based in Thailand, certification was also found to significantly reduce emissions (Saswattecha et al., 2015). The main areas of production that were identified as lowering emissions rates are:

- 1. RSPO certified plantations use lower levels of fertilisers, glyphosates and gasoline than non-certified plantations. For example, a majority of certified farmers remove weeds manually instead of using weed cutters, reducing the gasoline use for this activity by 10 times.
- 2. The impact of FFB transportation from certified plantations was 17 times smaller than from non-certified plantations, mostly due to certified mills being located within a 10 km radius of the plantations. Non-certified plantations, on the other hand, often have to first deliver their FFB to a middleman who will then deliver the FFB to the mill, which is located much further away.
- 3. Certified concessions showed a 94% reduction in emissions from their POME treatment facilities compared to non-certified concessions
- 4. Also among certified mills, 95% of the electricity produced from POME treatment was re-invested in the grid and the rest was used internally in the mills, a practice not found in non-certified mills.

The authors estimate that the implementation of best practices attached to RSPO certification could account for a 21% reduction of emissions at the plantation level and 97% at the mill level.

Research suggests that RSPO certified production of palm oil does perform significantly better than non-certified productions in terms of GHG emissions compared to non-certified production. This is mostly due to higher yields leading to lower production inputs, lower CO_2 emissions being released from peat drainage, HCV set asides and more regulations for treatment facilities.

Evidence from the standards schemes

Interestingly, the Schmidt and De Rosa (2020) study was referenced in the RSPO 2019 Impact Report (2020) as a key result demonstrating the strengths of the scheme in reducing GHG emissions through certification. Directly quoting Jannick Schmidt, the co-author of the study, RSPO highlights that: "We hope that these results will help inform a wide group of stakeholders that we should be pushing for sustainability over a boycott of palm oil [...] In fact the improvement potentials (reduce peat, reduce peat drainage depth, use biogas capture in POME treatment, and maximise nature conservation) enable palm oil to become the best performing vegetable oil with regard to GHG emissions." (RSPO, 2020b, p. 49).

The ISCC also reports encouraging figures in terms of GHG emissions coming from their certified operations, though these are not limited to palm oil. Their 2018 impact report shows a 15% reduction in GHG emissions compared to 2014 (ISCC, 2019). ISCC draws a key lesson regarding their impact on GHG emissions in their members operation, namely:

"Through continuous training opportunities and high-profile certification requirements, ISCC has significantly increased awareness across countries and industries. As a consequence, many System Users have moved towards the use of actual values in determining their individual GHG balance and they are increasingly investing in GHG abatement technologies to meet the certification criteria of ISCC and to improve their contribution to GHG savings" (ibid, p.55). Similarly, RSB also reports a reduction of GHG emission associated with the full compliance of their members to RSB's Principle 3 on Greenhouse Gas Emissions. The total amount saved in 2019 equates to over 500 million metric tonnes of CO2 (RSB, 2020).

In recent years, RSPO has responded to developments around GHG emissions by initiating the Renewable Energy Directive (RSPO-RED) scheme, allowing palm oil producers and processors to comply with the EU Renewable Energy Directive requirements. Additionally, POIG has also paved the way in terms of innovations by looking into ways in which members may exceed the requirements of the RSPO P&C through voluntary policies or innovative actions. Finally, in 2017, RSPO integrated the High Carbon Stock approach in their P&C, further consolidating their requirements on GHG emissions (Meijaard et al., 2018).

4.2.3.4 Summary

KEY FINDINGS:

The focus of the available academic literature being on RSPO, the key finding presented below are mostly representative of the impact of RSPO on environmental issues.

Impact on deforestation:

It is clear that RSPO certification does lead to **decreased rates of deforestation in primary forests**. However:

- Literature suggests that RSPO certification may not lead to any significant decrease in deforestation of non-protected forests such as secondary forests, peatland, and other forested areas not recognised as containing HCVs or government designated forested estates.
- RSPO certified plantations contained little residual forest when they received certification.
- There is a concern that RSPO's no-deforestation requirements could lead to a higher risk of a displacement of deforestation practices towards non-certified members.
- Important to note that the new RSPO P&C 2018 has strengthened the no-deforestation requirements, including the ban of conversion of High Carbon Value (HCV) and High Carbon Stock (HCS) forests. Operators must therefore now conduct an evaluation of the conservation and carbon values of all types of forests. As such, it is hoped that research may come to different conclusions in a few years' time.

Impact on biodiversity and conservation:

There is currently only a limited amount of research investigating the impacts of palm oil certification on biodiversity.

From the available literature, it would seem that RSPO certification has a limited impact on biodiversity and conservation. For instance, academic literature found that in Malaysia and Indonesia, **certified and non-certified areas presented similar rates of species decline**.

It is worth noting that a key factor potentially influencing the impact certification may have on biodiversity conservation is that biodiversity goes beyond the boundaries of a single unit of certification. As such, the benefits provided by certification may be nullified by practices occurring outside of the certified area. RSPO's Jurisdictional Approach Framework (still in development) and RA's involvement in Landscale are encouraging and have the potential to mitigate biodiversity loss more efficiently.

Impact on greenhouse gas emissions:

The literature shows that RSPO certified production of palm oil **performs significantly better than non-certified productions in terms of GHG emissions**. The strengthening of the RSPO P&C (2018) in terms of further restrictions on the conversion of peatland for palm oil production provide another encouraging step forward in limiting the GHG emissions linked to peat drainage.

4.2.4 Socio-economic impacts

4.2.4.1 Agricultural productivity

Evidence from the literature

Several studies identified a correlation between certification and yields achieved by oil-palm growers. In their study of 91 RSPO-certified estates in Kalimantan, Indonesia, Morgans et al. (2018) found that while the impact of certification was limited against most sustainability metrics, there was **an increase in FFB yields over time on certified estates**, **while non-certified estates' yields stayed the same**. On average, RSPO-certified concessions produced three times more FFB per hectare than their non-certified counterparts.

Morgans et al. (2018) hypothesised that the higher yields could be attributable to **improved management practices** as encouraged in the RSPO standards, but they also proposed indirect effects of certification as likely reasons for these results. Firstly, they argued that since the RSPO P&Cs require new plantings to be avoided on marginal or fragile soils, the certified concessions may have been located on **more productive land**. Secondly, they suggested that the type of large growers or plantations companies that can afford the cost of certification also **have the capital to hire more workers** than their smaller competitors and could therefore invest more in production and harvesting. This is an important factor to consider as since 2010, the oil palm industry has been able to produce more fruit than available labour forces are able to harvest.

Schmidt and De Rosa (2020) drew on a larger sample of 634 RSPO-certified estates across Malaysia and Indonesia, including 111 smallholdings, using data submitted to RSPO by the certified entities in 2016. They also found **higher FFB yields on certified estates that non-certified estates**. The authors did not suggest a reason for this, but they did report higher average volumes of nitrogen fertiliser and other inputs on certified estates, which may have contributed to greater productivity.

Yield improvements can have a positive socio-economic impact if they provide higher net incomes for growers (after allowing for any increased input costs), which could lead to an increase in smallholder household income, higher wages for estate workers or expenditure linkages in the local economy. However, neither Schmidt and De Rosa nor Morgans et al. explored this particular question. Furthermore, the Morgans et al. study is likely to have excluded small and medium-sized growers from the scope of their research (ibid). However, there are other studies which have found a correlation between certification and smallholder yields specifically. In some cases, certification appears to have played a positive causal role. One study investigating the impacts of RSPO on smallholder welfare in the Indonesian province of Jambi (Napitupulu et al., 2018) found that most of the RSPO-certified farmers (86.5%) **increased the quantity and quality of their FFB over time** after intensively following the measures in the RSPO standard. Hidayat et al. (2015) also found that certification led **to increased volume and quality of FFBs produced by smallholders in Indonesia**, in great part driven by additional knowledge and understandings of Good Agricultural Practices associated with becoming certified.

Van Noordwijk et al. (2017) note that smallholders in general find it more difficult than larger growers to increase productivity because they are less able to access or afford inputs and high-yielding varieties. One factor that can facilitate productivity is that certified smallholders are often organised into cooperatives or outgrower schemes through which extension support or subsidised inputs may be provided. In their study on the impact of palm oil and cocoa certification on smallholders in Ghana, Brako et al. (2020) found that **average oil palm farm outputs and average yields were higher for certified growers than their non-certified counterparts**. However, only the total farm output was found to be statistically significant. They proposed that the observed yield gains could potentially be due to the extension and input support provided to scheme smallholders by the Benso Oil Palm Plantation (BOPP), under which they are contractually linked. If so, this is an example of an indirect effect of certification.

With a focus on Indonesian smallholder context, our respondent from the Indonesian Sustainable Oil Palm Farmers Forum (FORTASBI) highlighted three main factors observed by the organisation as affecting yield increase and productivity level (FORTASBI, 2020):

- Seed quality which is the main determining factor
- Efficiency of agricultural input versus output which results in decreased expenditure and increased savings
- Harvesting practices (selection of raw and mature fruit) and fruit sorting techniques. Harvesting higher quantities of raw fruit leads to lower incomes for the farmer.

Hutabarat et al. (2019) also considered the influence of production costs and the benefits that can accrue from group membership in their study of 829 scheme smallholders and independent smallholders in Riau, Indonesia, 297 of whom were RSPO-certified. After comparing data, the authors found that among the scheme smallholders, those who were RSPO-certified typically achieved higher FFB yields, but among the independent smallholders, the highest yields were not correlated with certification. Other influential factors unrelated to certification include tree age, soil type, group membership and initial wealth of the farmer. Given the absence of a counter-factual and the complexity of contributing variables, the authors concluded, "the data that were used in this study do not allow to assess whether certification of smallholders led to improvements in sustainability performance". Overall, Hutabarat et al. (2019) found that while certification generated a 21% increase in smallholder revenue, this was insufficient to cover the costs of certification, with smallholders reporting a 8% loss of net income per hectare compared to before becoming certified. To compensate, certification would have to provide a further increase in yields, a guaranteed premium price would have to be applied and would have to include the sales of GreenPalm certificates in order to provide additional incomes.

Similarly, Apriani et al. (2020), who also investigated and interviewed Indonesian smallholders, found that although most **smallholders have reported increased yields on their certified oil palm production, it was not enough to motivate smallholders to continue certification**. The authors cite the reasons provided by Hutabarat et al. (2019) as to the limitations of RSPO certification on increasing smallholders' yields.

One of the studies reviewed, from the Magdalena region in Colombia, found that certified producers had **significantly lower yields and fewer workers per hectare than non-certi-fied farmers** (annual median of 18 tonnes of fresh fruit bunches per hectare, compared to 22 tonnes by non-certified farmers). This was attributed to the restrictions on the use of inorganic fertilizers imposed by RSPO (Furumo et al., 2020; Furumo, 2019).

A majority of the research, therefore, suggests a correlation between RSPO certification and the quantity and quality of FFB produced. However, the actual benefits of increased yields on farmers' incomes, and particularly smallholder incomes, remain debated as some researchers suggest that the increase in productivity is insufficient to cover higher input costs or the costs of certification, especially for independent smallholders.

Evidence from the standards schemes

As part of our benchmark of the schemes' systems, we asked whether each scheme provides access to finance for enterprises seeking certification.

RSPO, through its Smallholder Support Fund (RSSF), financially supports smallholders with the costs linked to activities such as training, audits, project management, HCV and Social and Environmental Impact assessments (<u>https://rspo.org/smallholders/introduc-tion-rssf</u>). Since 2013, 28,542 individual smallholders have benefitted from the RSSF (RSPO, 2020b). Using "stories from the ground", RSPO highlights how smallholder certification, and the help of the RSSF, in Sierra Leone have led to up to 50% yield improvement as a result of Best Management Practices being implemented on the ground. Similar stories of success coming from other countries such as Nigeria, Ghana and Cote D'Ivoire, further showcase RSPO's alleged success in improving productivity levels in smallholdings.

However, talking about the cost of certification and the provision of a smallholder fund by RSPO, the respondent from FORTASBI, stated that "When properly managed and used, the funds obtained from RSPO credits as well as a premium price should be sufficient to cover the costs incurred in the certification process. Therefore, it is very important to ensure that the smallholders or cooperatives have been strengthened and have a system or mechanism for managing incentive funds before they receive them" (FORTASBI, 2020). The risk is that when there are no proper mechanisms in place to track these funds and manage their use, there is a real potential for these incentive funds to be "misused by irresponsible cooperative managers".

It remains challenging at this point to assess how much does certification directly contribute to increased yields. There can be difficulties attributing the higher yields directly to certification, as farmers' who enter certification might be more proficient farmers, more able to access knowledge and technology, have better quality land, and so on (Proforest, 2020). This would impact productivity rates in certified concessions compared to non-certified concessions as more skilled farmers seek to become certified. Studies using longitudinal methods rather than comparative experimental methods would be valuable to clear any uncertainty on this point.

4.2.4.2 Livelihoods

Evidence from the literature

There is evidence that certification is correlated with higher incomes for growers, and that this might be attributable to the higher yields or prices that they can achieve. In Colombia, certified farmers from 43 certified and non-certified farms were found to receive a 12-18% price premium on fresh fruit bunches (FFB) sales, with half of the smallholders surveyed stating that the **premium was their primary motivation for becoming certified** (Furumo, 2019). Research also found that **certified farmers tend to pay their workers more than non-certified farmers** (see below).

Within Ghana, Brako et al. (2020) investigated income levels amongst scheme smallholders attached to the Benso Oil Palm Plantation (BOPP), a large oil palm plantation, which has been RSPO-certified since 2014 and is one of the earliest certified plantations in the country. Income was estimated by combining the different income streams of oil palm farmers. These income streams include income related to oil palm production, own businesses, livestock sales, pensions, salaries, and remittances. They found that that **RSPO-certified scheme smallholders have higher total incomes per capita than non-certified growers**, although the difference is not always statistically significant.

Additionally, using the Multidimensional Poverty Index (MPI) – which estimates the number of people in each study group suffering deprivations across three dimensions, namely education, health and living standards, based on an established threshold – they found that **certified oil palm smallholders have lower rates of poverty and extreme poverty than their non-certified counterparts** (8% considered as multidimensionally poor compared to 25% for non-certified farmers).

On the other hand, Morgans et al. (2018) suggest that, at least within the Kalimantan context, certification is not enough to reduce poverty levels over time. The authors do however highlight a potential caveat regarding the findings which is that it is plausible that the overall increase in the number of SKTM letters (issued to families falling below a series of absolute poverty indicators to facilitate increased access to hospitals, scholarships and legal aid) distributed could be due to increased access to STKM related services, rather than an increase in poverty per se.

Using Malaysian oil palm smallholders as a case study for investigating the impact of sustainability standards and certification on the Right to Food, Schneider et al. (2019) found that **smallholders attribute better living and working conditions to certification**. However, **there were differential effects**. Some small farmers who have only one or two hectares of oil palm on their land were food insecure.

In Indonesia, Napitupulu et al. (2018) found that **oil palm smallholders received better income as a result of better prices of FFB**. As many as 71.4% of the study respondents reported gaining higher prices after their farmers' group became RSPO certified. Higher income levels were also observed in the study on the profitability of palm oil certification for Indonesian smallholders by Hidayat et al. (2016). They found that the **Net Present Value (NPV)** – the difference between the present value of cash inflows and the present value of cash outflows over a period of time – **of certified smallholders is significantly higher than their non-certified counterparts** (89% higher for certified independent smallholders, and 35% for certified scheme smallholders). The higher NPV of certified scheme smallholders is the result of higher productivity and FFB sales, price premiums, and lower operating costs associated with the establishment of new plantations and reduced chemical spraying. Independent smallholders additionally benefit from being able to directly sell their FFB to mills without needing middlemen.

As presented above, Hidayat et al (2019) note that while independent smallholders do benefit from a higher NPV compared to scheme smallholders, they are responsible for covering the certification costs themselves as opposed to affiliate mills covering those for scheme smallholders. **This cost often puts independent smallholders at a disadvantage compared to scheme smallholders and non-certified smallholders.**

In a previous study comparing scheme smallholders and independent smallholders in Indonesia, Hidayat et al. (2015) demonstrated that **certification is considered to potentially contribute to an increase of smallholders' financial capital** and consequently contribute positively to the livelihood outcomes. Within this context certification is particularly valued by the smallholders because participation increases the volume and quality of their production, which opens opportunities for a higher income. However, the authors do warn that **participation in the certification scheme does not only create benefits, but also new uncertainties that may hamper or counteract the positive effects of certification on livelihood outcomes**. These uncertainties regard the premium fee, price volatility, market access and access to credit.

It is also important to consider if and how certification affects working conditions for local people who are employed on nearby plantations and smallholdings. In their study from Kalimantan, Indonesia, Morgans et al. (2018) looked at the impact of RSPO certification of mostly large estates on poverty levels in surrounding communities. As they say, "sustainable oil palm concession development should deliver benefits to members of neighbouring villages through increased employment opportunities both in the concession and through supporting services and infrastructure." (ibid, p.4). The authors argued that although **certification did not lead to a reduction in poverty levels over time, it did slow down the rate of increase**. This was reflected in the proportion of families receiving SKTM poverty between 2000 and 2014. Although a similar number of families held SKTM letters prior to certification, more SKTM letters were held by families neighbouring non-RSPO concessions than RSPO concessions post certification.

Finally, in their 2020 study, Santika et al. investigated the impact of certification on village-level well-being in Indonesia, by comparing poverty across 36,311 villages between 2000 and 2018 and logging the changes from before oil palm plantations were first established to several years after plantations were certified. Overall, they found that certification only led to marginally positive impacts on wellbeing in villages with market-based livelihoods whereas those which depended on subsidence livelihoods before certification showed largely negative outcomes over time. The authors explain that "The latter was probably because certified plantations under single companies tend to be substantially larger than non-certified plantations and cover several neighbouring villages". Certified plantations typically cover 10% of village land area compared to 3% for non-certified plantations. As a result, "social and environmental externalities are difficult to remediate" (Santika et al., 2020, p. 7). These findings suggest that certification schemes such as RSPO can have significant indirect impacts on rural subsistence communities and their wellbeing. By pushing large-scale industrial palm oil production into frontier forest areas, certification risks negatively impacting the local communities which rely on environmental services to subside.

However, and as the authors clearly highlight in their conclusion, "RSPO's recent commitment to zero deforestation and avoidance of peatlands [...] should help steer the industry towards already-developed agricultural lands with primarily market-based livelihoods" (ibid, p.8).

From the literature, certification does mostly seem to lead to increased incomes and livelihoods, principally due to higher yields and market premiums.

Both the Mandiri Oil Palm Farmers Association and FORTASBI identify several key longterm impacts of RSPO certification on smallholders (FORTASBI, 2020; Mandiri Oil Palm Farmers Association, 2021):

- Increased smallholder independence. This can be interpreted as following the obtention of a sustainability certificate, smallholders should be able to continue sustainable plantation management and manage their organisation independently without relying so much on the support provided by the scheme and other parties, as they become financially stronger. This is driven by an enhanced seriousness in managing their plantations in a better way attached to being certified, especially in applying good agricultural practices, better financial and production planning and management.
- Increased smallholder welfare, which is measured by the income level of the smallholders which, as they have observed, is better than before certification.
- Increased human resources of the smallholders due to intensive training required by certification.
- Better relationship between workers and employers.

However, as seen previously, in some smallholder cases, these increased incomes are insufficient to compensate the high costs associated with certification (e.g. cost of certification, shifting to new agricultural practices, more expensive fertilisers). According to the Mandiri Oil Palm Farmers Association, which operates in Indonesia, the benefits of RSPO certification can be sufficient if the funds obtained from certification credit incentives are well managed, meaning that a certain percentage of the incentive funds must be allocated for certification financing. In the case of the association, their farmers have been able to save up to 25% of the total incentives earned in order to finance certification (e.g. surveillance audits, etc.). In addition to this, the Mandiri Association has also received support and assistance in the form of CSR funds from palm oil companies in the certification process (Mandiri Oil Palm Farmers Association, 2021).

The Wild Asia Group Scheme (WAGS) provides another example of the direct positive impact credit buyers have on smallholder livelihoods. According to the respondent at Wild Asia (Wild Asia, 2021), the WAGS benefits from a long list of buyers (including FONAP members) interested in purchasing credits for RSPO certified palm oil. These credits have allowed the smallholders from WAGS to save money they would not have had access to without RSPO credits, and ultimately allows them to explore new ways of producing palm oil. One example of this was the exploration of a new type of low-cost farming which they call 'Bio Farms'. As such, our respondent concluded that by purchasing RSPO credits from smallholder groups such as this one, buyers "helps us a lot because we can really try and do different things that otherwise we wouldn't be able to do" (Wild Asia, 2021).

However Wild Asia also gave a word of warning regarding the long-term impact of RSPO credits on smallholders. The extra income provided through credits often translates as a clear incentive for smallholders to maintain their oil palm crop and move away from

the more traditional model of mixed crops. This creates a risk for smallholders' economic resilience when dealing with fluctuations in palm oil prices, or unforeseen events such as COVID-19 where when it has been difficult for many smallholders to send their crops to the mills.

It is also important to consider the impact of certification on food security, an issue which particularly concerns migrant workers who stay on site. Schneider et al. (2019) documented **food insecurity** among illegal and casual workers on **certified concessions** in Malaysia, for example. However, the impact of certification on food security remains greatly under-studied (whether it be for palm oil or other commodities). In their systematic review of available literature, Schleifer and Sun (2020) report a positive, yet limited, positive correlation between certification, increased incomes and food security which may vary depending on the scheme, sector and type of producer. However, the authors conclude their review by highlighting that "while research on the socio-economic and environmental effects of sustainability certification has made important progress, the subject of food security remains a blind spot in the impacts literature" (Schleifer and Sun, 2020, p. 5).

Finally, in terms of access to healthcare, according to Morgans et al. (2018), in Borneo **RSPO** certification did not increase access to healthcare, but was associated with a reduced decline. Between 2000–2014 the number of health care facilities per capita declined, and although villages neighbouring non-RSPO concessions had slightly more health facilities per capita than RSPO concessions prior to certification, the number of facilities across treatment types post certification are more similar. The decline in the number of health facilities per capita may, therefore, reflect population growth in villages surrounding palm oil concessions and the continued tendency for health care facilities to be concentrated in large urban centres.

In their study investigating the certification trade-offs between environment and development in Sumatra and Kalimantan, Lee et al. (2020) found that while **RSPO certification did increase the number of private educational and health facilities there was no statistical difference between villages covered by certified and non-certified plantations**. This is supported by field visits made by the Forest Peoples Programme, who state that there is no evidence of certification leading to increased access to health and educational facilities (FPP, 2020). It may be true that some of the bigger companies have more CSR in place but this probably because they are wealthier companies in the first place. On balance though, the respondent was not sure that a gain can be shown.

Evidence from the standards schemes

Across all certification schemes, the proportion of certified smallholders remains lower overall compared to the number of certified large-scale growers. Meijaard et al (2018) identify social, economic, cultural and environmental complexities as the root cause of this. Evidence suggests that the lack of information, access to capital and the level of organisation required by certification schemes from smallholders all present barriers to smallholders becoming certified (Meijaard et al., 2018).

In their 2019 Impact Report (2020), RSPO highlights the work they have done to empower smallholders and help them transition to sustainable livelihoods. 2019 has shown a 39% increase in certified smallholders compared to the previous reporting period (2018). RSPO's ToC presents a roadmap towards smallholder inclusions, towards which, in 2019, RSPO

reached two main milestones. 2019 has seen the launch of their Smallholder Trainer Academy (STA) programme. The STA provides training guides and materials on a variety of topics including the RSPO's values of "People, Planet and Prosperity". In 2019, a total of 72 Master Trainers from 34 partners were trained across SEA, Latin America and Africa. The ISCC has also developed its own ISCC Smallholder Academy with similar aims to RSPO's (ISCC, 2019).

The endorsement of the RSPO Independent Smallholder Standard (RISS) presents the second milestone in supporting smallholder inclusion and improved livelihoods. The ISH Standard aims to "respond to the needs of independent smallholders with a simplified approach to certification that better considers the diversity and incentives of smallholders globally" (RSPO, 2020b, p. 20). While the actual impact of these advancements remains to be seen, RSPO has been able to show a commitment to the continual improvement of their systems in order to reach the desired outcomes stated in their ToC.

Ultimately, one of intended long-term impacts of certification is ensuring that all actors (upstream and downstream) in the palm oil sector are economically viable. For example, farmers who produce FFB are able to sell it to mills at a reasonable price which benefits them economically. From the mill side, they are guaranteed to receive FFB from farmers continuously, and can then sell oil products to manufacturers at a high price. In essence, with certification, the supply chain process continues to run without any obstacles (Mandiri Oil Palm Farmers Association, 2021).

4.2.4.3 Labour rights

Evidence from the literature

NGOs have found many instances of workers' rights abuses at certified palm oil mills and plantations. Their investigations are not considered peer-reviewed studies, but nevertheless offer important evidence that certification does not eradicate abuses of workers' rights. These include gendered impacts such as gender discrimination in the workplace. Extensive work on palm oil and many other commodities has highlighted that labour rights issues are often structurally embedded and difficult to address through certification alone (Proforest, 2019).

In their 2017 benchmark of palm oil sustainability schemes, the Forest Peoples Programme have found that the RSPO, RSB, RA and ISCC standards have all included strong provisions for workers rights in their standards. These include minimum wage requirements, fair contracts which much be in place, access to trade union and collective bargaining. However, at the time, all four standards only offered limited protection to migrant workers, a clear weakness in the standard given the heavy reliance on them as a workforce in the palm sector (FPP, 2017). Additionally, gender rights remain poorly included in the standards, though RSPO does have a requirement in place specifically for protecting women against sexual harassment in the workplace.

RSPOs 2018 PC review offers an encouraging perspective for future developments as it sought the "further strengthening of social elements as well as human and labour rights whereby topics such as Decent Living Wage (DLW), and gender inclusivity, as well as additional indicators to ensure food security, and comprehensive protection of local communities and indigenous peoples' wellbeing, through stronger Free, Prior and Informed Consent (FPIC) requirements" (RSPO, 2020b, p. 33) In Colombia, research has found that **certified farmers tend to pay their workers more than non-certified farmers**: the wage difference was found to be 50% higher in a 2019 study and 30% higher in a 2020 study (Furumo et al., 2020; Furumo, 2019). RSPO and organic standards (International Federation of Organic Agriculture Movement (IFOAM) standards) were considered for the studies, and as several of the criteria overlap and are in part complementary, the effects of the two certifications could not be separated.

Additionally, Ruysschaert (2016) noted that, as of 2016, **RSPO did not recognise trade unions as a stakeholder category**, so he concluded that workers had only a limited voice within RSPO, and that **RSPO still permitted certified entities to use hazardous chemicals** such as paraquat. This has subsequently been banned from use apart from in exceptional circumstances. The 2018 P&Cs also provides stronger rights of workers to associate, bargain collectively and be represented. Perhaps this is an example of how certification standards, and their impacts, can be improved over time.

In Africa, auditing associated to certification has a created a valuable positive impact on issues of workers' rights. Indeed, the respondent from Proforest, stated that:

"what we observe is that even in terms of the way companies treat their workers such as making sure they pay national minimum wage, provide protection to their staff, compliance with the law including payment of taxes, certified companies perform significantly better. This is because every year the auditors come and check that they are doing these things. If you look at community engagement and support, there is always a significant difference between certified and non-certified companies" (Proforest, 2020).

This was also seconded by Verité in the context of South East Asia: "in general we see that working conditions and labour conditions are slightly better in certified mills and plantations that are subjected to a lot of surveillance and a lot of inspection" (Verité, 2021).

If implemented correctly, the impact of certification goes far beyond just the plantation level. Looking at governments, which are not a stakeholder in certification schemes such as RSPO, it is clear that they significantly benefit from certification as they do not have to enforce the rules themselves and they do not have to chase companies to pay their taxes and fees, pay their workers minimum wage, etc. As such, "in effect, CBs [certification bodies] are doing the work that governments would normally do, at least in Africa" (Proforest, 2020).

As shown from the evidence presented above, clearly contextual factors are important. There are many different types of employer, and there are many dimensions of worker wellbeing. Much more academic research is needed to identify the conditions in which palm oil certification can improve conditions for workers.

Evidence from the standards schemes

In their publication, *Palm Oil Innovation on Labour Rights* (POIG, 2016), POIG presents ways in which their members (Agropalma, DAABON and Musim Mas) "have committed to raising the bar on labour standards by developing and implementing innovations to address common abuses and improve the conditions for workers on the ground" (ibid, p.3).

At the time of the report (2016), as a POIG member, the Brazilian palm oil producing company Agropalma had undergone two audits against the POIG Charter (in 2014 and 2016), with highly encouraging results such as (POIG, 2016):

- Successfully enforcing their zero-tolerance policy for child labour.
- becoming the first company in the palm oil sector to reach having 5% of their workforce being made up of people with a disability. This is a target that has also been mandated by the Brazilian government, however compliance with this requirement remains very low amongst Brazilian companies.
- Offering female employees 180 days of maternity leave, which is 60 days more than what is required under Brazilian law.
- Providing a range of benefits for employees, such as education opportunities for adults and workers' children, subsidised meals, sports facilities, subsidised health insurance plans, and transport between local towns and the plantations.
- Decreasing the rate of 'severe accidents' related to the manual collection of fruit, from 6 accidents in 2013 to 3.6 in 2015.

Agropalma is often considered to be a leader in the sustainable production of palm oil (Sheppe et al., 2012; WWF, 2013). Agropalma itself has expressed its aim to "not only meet global standards, but work towards their vision of being a global reference point in responsible palm oil" and be a "leader in responsible palm oil" (POIG, 2016, p. 14). Their positioning as a founding member of POIG reflects the company's commitment to improving the palm oil sector and addressing the many issues inherent to the sector.

POIG's contribution to advancing critical topics also directly benefit RSPO, who could draw on this work for their 2018 P&C revision, where many of these aspects were included in the new standard.

Another contributing factor was a 2018 external study commissioned by RSPO shows that labour compliance in four Indonesian RSPO certified plantations remained limited (Iwundu et al., 2018). As a first step, the authors reviewed the 2013 P&Cs' labour requirements and concluded that the standard only offers a limited coverage of labour issues. They concluded that the main weakness of the 2013 P&Cs is that "many of the requirements and indicators are not specific or nuanced enough, and as such, the P&C leaves too much room for interpretation by RSPO members" (Iwundu et al., 2018, p. 7). Indeed, this may be allowing or leading RSPO grower members to be in violation of the labour principles. As part of their methodology, the authors conducted field visits and a total of 169 interviews with workers, management staff and other stakeholders from four different RSPO certified companies, in order to mirror field verification of labour compliance typically conducted during the auditing of a plantation. The following labour issues were investigated:

- Child labour
- Forced labour
- Lack of Freedom of association and rights to collective bargaining
- Discrimination
- Wages and income security
- Hiring and contracting
- Targets and working hours
- Gender equality
- Occupational health and safety

Out of the four companies involved in this study, none were found as having a "high" level of compliance to the RSPO P&Cs' labour requirements (i.e., most key issues are complied with and concrete actions are in place to promote continuous improvement). 'Medium' compliance (i.e., several key issues are complied with, however there is a lack of action

towards continuous improvement), was only achieved by one company and only for one of the nine topics studied, namely child labour. The rest were all scored as 'very low' or 'low', showing a lack of compliance on social issues by all four companies.

These findings suggest that RSPO certification may have a limited impact on labour issues in Indonesia. The scale of non-compliances observed in this study may point to the a limited effectiveness of RSPO in reaching the desired outcomes laid out in their ToC (e.g. Intermediate Outcomes: 'Safe & decent work' and 'Human rights upheld'; Long-term Outcomes: "sustainable livelihoods & poverty reduction" and "Human rights protected, respected & remedied" (RSPO, 2017a)).

Interestingly, this study has also helped identify some unintended impacts of certification on workers. For example, in the context of child labour, the authors describe how imposing age restrictions, whereby children under the age of eighteen are not permitted to work on the plantation, has had a negative impact on the community. In this instance, the authors describe the increasingly occurring situation, where children under eighteen are married with children of their own. The restrictions on child labour imposed by RSPO mean that they are unable to work on the plantation, which is the primary employer in the community, and provide for their families.

Since then, the RSPO standard has been substantially strengthened with regards to labour rights and a specific RSPO Child Rights, indeed the 2018 P&Cs now make it mandatory for members to have a formal policy on the protection of children. Additionally, members must documented process of age screening as well as provide training for company staff on child protection in plantations and smallholder plots (RSPO, 2018f). Finally, RSPO has also developed several guidance documents specifically around child rights, which they published in 2020. These include documents such as 'Guidance on child rights for palm oil producers' and 'Guidance on Child Rights for Smallholders and Group Managers' (<u>https://rspo.org/resources/human-rights-and-social-standards</u>).

Overall, the improvements made to the RSPO P&C in 2018 are very encouraging, and now require companies to have their own management systems in place as well as having requirements around observing due diligence. As such, "it used to be that you only had standards and just had to comply with them. But now if you read the RSPO P&C carefully, it's actually training you [companies] to set up a system which will have a real impact on the ground" (Verité, 2021).

4.2.4.4 Land rights

Up to 2017, RSPO, RA, RSB and ISCC all require their members to demonstrate that they have a legal right to use land. RSPO and RSB also require companies to prove the absence of conflict over land rights/use, create a map of the area displaying legal use rights through participatory mapping, and implement FPIC prior to any conversion of land to oil palm. RSB has a slightly weaker approach whereby operations may not be certified if there are any disputes over land tenure agreements, however, this is more remedial rather than preventive. Additionally, ISCC is slightly behind in terms of including participatory mapping as part its land rights requirements, and all schemes remain weaker than RSPO in terms of including indigenous rights in their standards (FPP, 2017).

Evidence from the literature

Land rights abuses associated with the establishment of oil palm have been widely documented in the academic literature. The challenge is to identify whether the introduction of a certification or verification scheme can either prevent such abuses from happening or strengthen people's land rights.

On the first point, there is some evidence that RSPO certification processes have not safeguarded people's land rights, owing to external factors such as poor law enforcement, imperfect land titling systems and corruption, or to inadequacies of the RSPO rules themselves. In Indonesia, Li (2017) argues that "even for certified plantation[s], entrenched corruption and weak rule of law make verification [of FPIC requirements] very challenging"; but that even if RSPO rules are followed, certification is not capable of addressing structural inequalities and injustices in land ownership.

In a study on access to land in Colombia, Genoud (2020) goes further to argue that the RSPO certification process can reinforce land rights injustices by requiring certified entities to have a legal right to the land. In this way, Genoud argues, RSPO prioritises de jure land rights (i.e. as being regulated by law) over human rights to land, which are claimed in this instance by local people (campesinos) in contested palm oil areas. This is not an entirely fair critique, since the RSPO P&Cs do demand certified entities to respect customary rights that may be claimed to the land, but it supports the observation that while certification might not encourage more land rights abuses than would occur in the absence of certification, it can be inadequate to prevent land rights abuses occurring. In Colombia, of the establishment of oil palm plantations has been associated politically motivated and inefficient legal protection of land access, where landed elites and agro-export industries have often been favoured by the system, at the detriment of local communities.

As the author concludes, this study shows "that local contexts and practices are central to understand the impact of sustainability certifications and who really benefits from such labels" (Genoud, 2020, p. 12), since land distribution and related conflicts can be very location-dependent.

The importance of considering local context also reflects the need to understand the often-overlooked gender issues relating to land rights and palm oil production. Land issues in palm oil are not always about contestation and displacement. There can also occur dynamics within communities and within households, whereby the coming of oil palm triggers change in people's access to land and the benefits from it. Often there is a gendered dimension, with women gaining or losing access to forest resources or income from oil palm. Again, it can be a challenge to identify the specific impact of certification or verification in such changes.

Khatun et al (2020) investigated key drivers constraining smallholder access to export markets and the access to RSPO certification by Ghanaian smallholders. In their study, the authors report that smallholders benefit from varying levels of access to finance, markets, and land, with women being disproportionately overlooked by RSPO certification. As such, women are at more of a risk of losing access to the palm oil supply chain because of local cultural norms around land ownership and power relations. Indeed, "gender, power, and property are closely linked, since power is exercised differently by women and men in negotiating property relation" (Khatun et al., 2020, p. 3).

Evidence from the sustainability schemes

When we look at reports associated with standards schemes, as opposed to the wider academic literature, we find some evidence that while land rights abuses may occur, certification or verification scheme can in some cases have the positive impact of strengthening people's land rights.

In some cases, RSPO has been utilising its Smallholder Support Fund (RSSF) to support land tenure documentation process, with a lens of helping women and other marginalised groups. In a case study from Sierra Leone, RSPO, with the support of the government, the Women's Forum for Human Rights and Democracy Sierra Leone and the NGO Solidaridad West Africa facilitated dialogues between stakeholders in the region and provided training on land rights, land governance and land documentation and ensure that all citizens (including women) can exercise their tenure rights without discrimination (RSPO, 2019d).

Additionally, the access to grievance mechanisms was highlighted as one of the clear positive impact certification has had on land rights by the respondent from Forest Peoples Programme (FPP), a Human Rights NGO which advocates for forest and indigenous peoples. FPP has observed that communities that are in RSPO certified operations have clearly been making use of the grievance and complaints procedures to try and remedy violations of their rights. While not always successful, the access to grievance and complaints procedures offers a level of protection that non-certified areas do not provide.

Since starting to receive complaints by members in 2006, RSPO has logged an increasing number of complaints over time, mostly related to land disputes with Indigenous peoples. Indeed, out of the 56 complaints filed between 2010 and 2016, 41% were about violations of FPIC. RSPO's New Plantings Procedures, under which companies much divulge their Social and Environmental Impact Assessments as well as ongoing FPIC procedures, allows for communities to challenge new concessions before their land is cleared. In the cases where complaints were successful, communities were able to claim their land back, gain compensation for damages and losses. Areas have been set aside for conservation purposes and livelihoods including benefit-sharing and smallholdings have increased. Indirect benefits have also included increased visibility for community rights and company accountability for their actions (Colchester, 2016).

Our respondent from AgroPalma, which is RSPO certified, highlighted the importance that RSPO has had on them by providing a clear grievance and complaints procedure, something they did not have before joining the scheme. This procedure has allowed them to guarantee a formalisation of communication channels as well as protect the workers in a way which was not possible in the past. Overall, AgroPalma has benefited from this as they have been able to identify and solve issues before they became a problem (AgroPalma, 2020).

Overall, both and local governments have been motivated to bring up issues in these areas, with the presence of RSPO having changed the ways in which local governments approach issues at the jurisdictional level.

"We do see the that the complaints panel does bring a new measure of accountability in the sector so that it does make it possible for communities to challenge which they couldn't do before. Of the dozens of complaints we've filed, a few of them have led to
benefits for the communities and have led to more scrutiny of these particular companies. Overall the communities are saying that they rather the companies be within the RSPO than not because at least they can challenge them through a forum which can in some cases lead to positive outcomes." (FPP, 2020)

The impact of certification on land rights remains difficult to assess and it is important to acknowledge that even certified concessions do, ultimately, use land that may otherwise be available to local communities. Whether the presence of certified areas results in positive outcomes eventually depends on whether the higher wages, job opportunities and other benefits provided though certification outweigh the negative impacts associated with their presence in the area.

4.2.4.5 A note on Social Auditing

Connected to the above points, is a critical observation that was made by one of the interviewees with regards to the lack of social auditing skills in the palm oil sector (FPP, 2020). This is reflected in the caseload of the RSPO Complaints Panel, with many cases relating to social issues, such as conflicts around land rights. The poor quality of auditors had already been brought up in various investigative studies before (EIA, Grassroots, 2015). This specific question goes beyond the scope of this study. Nevertheless, we feel it is important to highlight, as assurance is a critical piece of an M&E system, as much of the schemes' impact reporting derives from audit data.

4.2.4.6 Summary

KEY FINDINGS:

The focus of the available academic literature being on RSPO, the key finding presented below are mostly representative of the impact of RSPO on socio-economic issues.

Impact on agricultural productivity:

Several studies find a correlation between **RSPO certification and increased yield and quality of FFB produced**. Growers who comply with good management practices encouraged in the standards may benefit. However:

- Attributing direct impact of certification on yields is difficult, as farmers who enter certification might be more proficient farmers, have better access to knowledge and technology, have higher quality land, etc.
- Even with certification, improving yields can be a challenge for smallholders.

Impact on livelihoods:

In some cases, researchers have found that RSPO certification leads to increased smallholder incomes, mostly due to higher yields and market premiums. In some cases, for workers, the provision of minimum wage or even of a decent living wage seem to be better respected by employers.

However:

- For some growers, these increased incomes are insufficient to compensate the high costs associated with certification (e.g. cost of certification, shifting to new agricultural practices, more expensive fertilisers)
- RSPO credits have been reported by interviewers as providing a useful source of income to smallholders. This additional income is often reinvested into their own agricultural practices, promoting the economic independence and resilience of smallholders over time.

Impact on labour rights:

Only patchy research exists on the effects of palm oil certification on workers, especially for schemes other than RSPO. The academic literature lags behind industry and NGO evidence for widespread labour rights issues even on certified plantations and smallholdings.

- RSPO certification has been associated with higher worker wages in Colombia and a slowdown in poverty in Indonesia. The type of employer and the local context are key.
- Overall, the improvements made in the 2018 RSPO P&C are very encouraging. Companies are now required to have their own management systems in place as well as having requirements around observing due diligence on labour issues.

Impact on land rights:

The literature has found that certification remains inadequate in preventing land rights abuses occurring during and after the establishment of oil-palm plantations, particularly in contexts of poor law enforcement, imperfect land titling systems and corruption.

- However, certification may place a check on land rights abuses.
- Furthermore, the grievance and complaints procedure of RSPO, an additional work supporting land tenure security of smallholders, have had positive impacts for recognition of land rights in some cases. The inclusion of FPIC in all of the schemes' respective standards is also crutial here as it provides a higher level of protection to indigenous and local communities compared to non-certified concessions seeking to expand their plantations.
- Landscape approaches such as LandScale are also encouraging as many land rights issues go beyond the boundaries of single certified units.

A note should be made here on concerns about quality of social auditing, which was raised during our interviews. As much of impacts reporting depends on audit reports, the area of social auditing would be worth investigating further.



5.1 Impact monitoring systems

5.1.1 Common understandings of key concepts

Research questions:

- Do the certification schemes offer a definition of their understanding of impact? Does this include concepts such as the 'theory of change'?
- Is there a universal definition of the term 'impact'?
- Does the understanding of impact refer to the certification scheme or to a certified entity or to other individual aspects? Does this imply convergence of the certification scheme' standard criteria to enable comparability in measuring impact?

The schemes all seem to share an understanding of common M&E concepts, including impact and ToC. To define 'impact', the three ISEAL members, RA, RSPO, RSB, refer to the ISEAL Impacts Code. ISCC also uses the ISEAL definition, whereas POIG do not propose its own definition. RSPO and ISCC both use the term "long-term outcomes" to describe what others might call impacts, such as "communities and companies in harmony", "biodiversity protected" and "reduced GHG emissions". Similarly, RA uses the term "key outcomes" for what might thought of as impacts, such as "Farms are more resilient to climate change and extreme events" or "Worker rights are protected, and the workplace is safe". However, this is largely a matter of terminology. Essentially, the schemes all differentiate short-term outcomes from long-term impacts or outcomes that go beyond adoption of the practices in their standards. All five schemes publish a vision of sustainable palm oil production, a set of long-term goals and, with the exception of POIG, a ToC to articulate how the long-term goals will be achieved.

A possible criticism of the RSPO ToC is that the distinction between outputs, intermediate outcomes and long-term outcomes is not clear-cut. Some of the outputs envisioned in the ToC, such as 'improved value chain traceability' or 'increased knowledge and capacity', might better be categorised as eventual outcomes that result from more direct activities. When it comes to the ToC of ISCC, it could be argued that the causal pathways between outputs, outcomes and impacts need more elaboration. For example, it would be helpful to set out how achieving 'sustainable and efficient small-scale production' as an intermediate outcome will lead to 'enhanced social and economic development in the country of operation'. as a long-term outcome.

The schemes imply that impact occurs at two levels, or in two dimensions. In their theories of change, the schemes present certification as a catalyst. In this way, it is the certification or verification scheme itself which creates impacts. Sometimes this is not just through certifying and verifying producers, but also through complementary activities – both planned and spontaneous – such as improved industry dialogue. But at the same time, the schemes explain that changes begin with the adoption of good agricultural and employment practices, and the decision to purchase certified or verified products. In this sense, it is through the certified production entities and chain-of-custody entities that impact occurs.

A nice example of this is found in the Rainforest Alliance ToC, which distinguishes 'field level', 'supply chain level' and 'enabling environment' as distinct areas where it aims to have impact.

All of the schemes have developed their own specific sets of M&E indicators to guide data collection. The majority of indicators are based on the ISEAL Common Core Indicators, which were designed to allow schemes to track their progress through their M&E and assurance, though of course, the exact set of indicators varies across schemes to align with the outcomes and impacts laid out in their respective theories of change, also taking into consideration the question of feasibility in terms of data collection. In the case of RSPO, they have also considered which indicators are most applicable to the palm oil sector, developing their indicators to reflect the specificities of the sector.

5.1.2 Scope

Scope of mission

While all the schemes strive for sustainable palm oil production, there is some variation among the schemes as to what they emphasise in their long-term goals and theories of change. For example, RSPO and POIG both include the palm oil industry as a future beneficiary of their interventions, whereas with RA there is perhaps more emphasis on farmers and landscapes. ISCC includes supply chain efficiency in its long-term goals while RSB highlights a reduction in greenhouse gas emissions.

All of the schemes' visions seem to balance production-level change and market-level change; that is, they recognise that a sustainable palm oil industry will require not only widespread adoption of sustainable production practices by growers and mills, but also marketplace innovations to stimulate and meet demand in the supply chain for sustainably produced palm oil products. Arguably, in practice there has not been enough concrete work undertaken by sustainability actors in that second area of marketplace innovation. RSPO's Shared Responsibility initiative discussed above is an example of efforts to rectify that.

Stimulating market demand is one way in standards schemes can try to improve the enabling environment for sustainable palm oil production (Aidenvironment, 2018). Most of the schemes do include efforts to change the enabling environment in their theories of change and long-term goals. They typically aim to achieve change either among companies and policymakers through greater stakeholder engagement (e.g. RSPO) or among farmers and workers by improving socio-economic conditions in rural communities (e.g. RA).

When projecting their visions for the future, the schemes tend to focus on change that will come about through certified entities, although some anticipate wider changes that may occur as spillover effects (e.g. RA). RSPO seems to be addressing this however, as they are now also looking at the impacts of their work in their member's uncertified units as well as on work that extends beyond both certification and membership. This includes building a whole new M&E system for their Smallholder Trainer Academy (STA). ISCC's CB survey has also been identified as a reasonable starting point for assessing impacts beyond the scale of certified entities alone. Finally, RA's effective operational grievance mechanism criteria which deals with complaints from workers and surrounding communities allows a level of monitoring which may go beyond the certified unit, for examples with topics such as FPIC. The exception is POIG, which seems to place more emphasis than the others on achieving systemic, industry-wide changes. This is perhaps not surprising since POIG does not focus on certification as its main tool of intervention.

Scope of impact monitoring systems

While the standards schemes' missions are wide-ranging, in practice their impact monitoring systems are often narrower in scope.

This can be a result of a lack of specificity at the planning stage. For example, RSPO has a comprehensive ToC but the wording is not as specific as it could be. Compare the wording of its intermediate outcome on labour – 'Safe and decent work' – with the much more detailed outcome in RA's ToC on the same topic – 'Child labour, forced labour, discrimination

Research questions:

- Which dimensions of sustainability do the certification systems cover in the monitoring approach? Is there a focus on a particular dimension?
- Is the aim to obtain equal impact in all dimensions?
- Is impact recorded beyond the certified entity? – how are these aspects determined?
- How is the scope of the monitoring approach defined?
 How was this definition developed?

and workplace violence and harassment are effectively assessed, prevented and remediated'. More detail is provided in an accompanying narrative document, but RSPO has only two labour-related entries in its core M&E indicators, one measuring time lost in workplace accidents and the other monitoring progress towards a living wage for workers. If clearer goals for safe and decent work were detailed in the ToC, it might ensure that the impact monitoring system covered a wider range of topics. There are similar gaps in coverage for other long-term social outcomes such as 'agency and voice' and 'inclusive access to benefits'.

Using predominantly internal sources of data, such as audits or membership information about certified entities can also limit the scope of the impact monitoring system. ISCC and RSB are less advanced than RSPO or RA in the field of M&E, and arguably this is visible in the narrower range of indicators and data that they are using. They are both reliant on audit reports and auditor feedback for understanding the impact of certification. This will make it more difficult to capture the intimate dynamics of what is happening in workplaces or farming communities in terms of wages, smallholder incomes or recruitment practices and working conditions at mills and plantations, and therefore to cover the social and economic areas of their ToCs. This is discussed in more detail in the 'Data sources and methods' section below. ISCC and RSB are both improving their systems to ensure more comprehensive coverage.

In comparison, RA is probably the most advanced of the organisations when it comes to M&E, and we can see this in the latest indicators, which include several indicators to capture potential unintended consequences, such as 'Exclusion of poor and remote farmers because of high costs of implementation'. This is a sophisticated way to widen the scope of an impact monitoring system and is recommended by practitioners.

Although impacts of certification on biodiversity are clearly within scope of all the standards' impact monitoring systems, in practice, they tend to rely on metrics of HCV hectarage or the area of land that is set aside for conservation, and the wide topic of biodiversity is generally not well covered. This is a drawback of standards that are not tailored to palm oil, but it could be argued that even RSPO, which is palm oil-specific, could improve its impact monitoring system by elaborating in more detail the causal pathways between certification and biodiversity benefits, and finding appropriate indicators of measurement.

Indeed, protection of biodiversity has been identified by RSPO as a priority area for research. Similar to ISEAL members in other sectors such as Fairtrade or Better Cotton Initiative, RSPO uses stakeholder input to select priorities for in-depth research or impact evaluations, which for the 2019/2020 period have been identified as: 1. Cost-benefit analysis; 2. Protection of biodiversity; and 3. Living and working conditions. RA has also identified priority research topics and uses the findings as part of their impacts monitoring approach.

5.1.3 Methodologies of impact monitoring

Development

Most schemes developed their M&E system in alignment with their ToC. In turn, the ToC is also usually aligned with the standard, thereby creating good potential for internal consistency and feedback loops.

The ISEAL Impacts Code seems to have been a useful yardstick or resource for the standard owners when developing their M&E systems, not only for the ISEAL members but also a non-member like ISCC. As full members of ISEAL, RSB, RA and RSPO must be in compliance with the ISEAL Impacts Code. This gives an additional layer of assurance to the users of these schemes that their performance monitoring systems meet international best practice as to become an ISEAL member, the schemes must regularly demonstrate that they are in compliance with the ISEAL Codes.

RSPO, RA, RSB and ISCC have involved stakeholders in their M&E system via data-gathering, discussions and/or inviting comments on M&E reports. RA seems to have incorporated stakeholders most deeply into its process by involving them in the development and testing of M&E indicators. RA's approach may enable it to involve more actors on the ground, such as farmers or mills. Often, the channels through which the schemes engage stakeholders in M&E – public consultations, workshops or emails – seem to favour institutional stakeholders such as NGOs or industry bodies.

Furthermore, all of the schemes comply with the ISEAL Code by revising their M&E systems and standards at least every five years, which allows them to readjust their systems to fit current trends and innovations. However, 'scheduled' revisions of standards and systems can also prove limiting. Our respondent from Wild Asia pointed out that this often leads to schemes (in this case RSPO) unnecessarily waiting until the next revision period before making any changes to their standard (Wild Asia, 2021).

Methodologies

The standards bodies all place the collection of information to measure M&E indicators at the heart of their impact monitoring systems. In this way, they are following the principles and practices recommended by ISEAL.

Nevertheless, the standards bodies are not always limited to using the structure of M&E indicators and ToC to assess and report on their impact. RSPO's 2019 Impact Report, for example, touches on several areas that are not covered by its core indicators, and presents case studies in addition to quantitative information. While the M&E indicators are typically more closely aligned with the ToC than with the standard itself, all of the bodies use audit data on compliance with their standards to assess progress. ISCC and RSB are transparent in reporting how they use non-compliances in their impact monitoring, and indeed RSB reports on some non-compliance statistics such as 'Number of farms using highly hazardous pesticides', but this not made so explicit by RSPO or RA.

Research questions:

- How and by whom was the monitoring approach developed?
- How is it further developed and adapted to changing requirements?
- Does the monitoring approach meet recognised guidelines/requirements (national/international)?
- What are the underlying methodological approaches? – What significance does this have on sample-based audit approaches in group certifications?
- How is the availability of data ensured, e.g. in the form of databases containing records of audit reports?
- How do the certification schemes evaluate and enable homogeneity of the auditors' audit findings?

Data sources and methods

RSPO, RA and ISCC all use a three-tiered structure based on the ISEAL Impacts code to collect data for their M&E systems, although ISCC's is slightly less advanced as the third level is not yet fully implemented. However, ISCC has stated that they are actively working on improving their systems, especially in terms of identifying key research topics for the future. The three levels are:

- Level 1: Program wide monitoring: i.e. output indicators, data collection from certified units and self-reporting systems (e.g. ACOP for RSPO) these are typically analysed on a yearly basis
- Level 2: Sample monitoring: i.e. case studies and sample data from certified units, questionnaires to Certification Bodies for ISCC
- Level 3: Research: In-depth quantitative and qualitative scientific studies, focused on long-term outcomes and impacts (especially for RSPO and RA)

Audit data is widely used by all of the schemes, including information on non-compliances. This is a highly valuable data source: information that is captured in a systematic way by trained auditors against a standard set of criteria or indicators. However, there are some limitations to audit data as a reference for assessing impact. There is an inherent difficulty in assessing the more complex or hidden areas of sustainability during an audit, especially given small samples of producers or workers to visit and short time frames. In some regions, more capacity-building of auditors may be needed, specifically on social auditing skills.

A further limitation of over-reliance on audit data is that it largely restricts the M&E scope to certified entities and may not capture spillover effects in the wider landscape or some of those systemic changes – the more intangible or relational changes that can occur in market-based interventions.

ISCC's auditor survey is an example of how standards bodies can leverage the knowledge of auditors to answer more of their Level 2 and Level 3 indicators. For example, if it is not doing so already, RSPO could gather information from auditors to help it assess progress towards ToC goals such as 'Are we progressing towards the norm?' or 'What is the predominant level of mechanisation among group members?'.

Going further, RA and RSPO are broadening their data sources by commissioning independent research, which assists in monitoring direct and indirect outcomes and impacts. To assess progress towards longer-term impacts, the schemes must interrogate their theories of change or gather additional data. Being able to collect data using the three levels presented above is critical in allowing schemes to gain a full and credible understanding of their impacts over time, as relying solely on audits is often limiting in terms of tracking systemic change and unintended effects.

(See also 'Involving others in evaluation', below.)

To drive effective data collection among certified entities both for auditing and for broader assessments, RSPO, POIG, RA and ISCC have all developed their own sampling approaches. RSPO for instance, includes a risk-based sampling methodology for cases where there are more than four estates or associated smallholders to audit. The design includes every mill and is based on a minimum sample of x estates, where $x = (0.8\sqrt{y}) x$ (z), where y is the number of estates and where z is the multiplier defined by the risk assessment (for more information c.f. RSPO Certifications Systems for Principles & Criteria, 2017b).

Similarly, RA also has a risk-based sampling methodology in place, whereby risk is calculated through a risk assessment conducted by the CB prior to the audit. Additionally, RA has developed extra sampling requirements specific to social topics for the auditing of housing, wages and labour provider (for more information c.f. 2020 certification and auditing rules, 2020d).

POIG also uses a risk-based methodology for selecting samples based on prioritising sites with the highest risks of non-conformance (examples: new planting, tenure or community disputes, HCV areas, traditional indigenous areas, labour or contract disputes, etc.).

Finally, ISCC's uses sampling methodology is relevant to farms and plantations which are under group certification.

The schemes do not typically use a counter-factual in their mainstream M&E assessments, although specially commissioned studies (see below) might. It is also challenging to establish a baseline for assessing changes associated with certification over time.

The standards bodies must exercise caution when using externally sourced data. In its early stages, ISCC reported counting the number of certified operations located in areas of poverty and food insecurity to measure the impact of certification on those issues, but care is needed before directly attributing changes in levels of poverty or food security to the effects of certification. Again, a more detailed ToC and set of indicators could prompt more nuanced and diverse sources of data-gathering.

Audit data and quality

To promote homogeneity of their audits, RA has a system in place to monitor the work of CBs, amongst others by reviewing and analysing all audit reports inputted into their own digital system. Through this they are able to perform regular non-conformity analyses, thus detecting which criteria are most prone to non-conformities. Additionally, it allows them to benchmark the capabilities of auditors in detecting non-conformities. Finally, to enable homogeneity, RA also provides training opportunities to its CBs and certificate holders as part of their internal CB-monitoring (Rainforest Alliance, 2020a).

To do this, RSPO has several mechanisms in place such as having an audit checklist in place (as does ISCC), providing auditor trainings and guidance via CB workshops. Finally, RSPO has developed the RSPO Interpretation Forum (RIF), a knowledge sharing and support hub by RSPO for CBs and members where they can ask questions, seek answers, and gain technical insights on topics related to RSPO certification (RSPO, 2020c).

ISCC's Integrity Assessment is an example of working with certification bodies to not only support the quality of certification audits but also to develop channels of feedback to improve the potential for audit data as a cornerstone of progress impact monitoring. ISCC has also developed its own Audit Procedure System (APS) as a tool to analyse data. The APS is an electronic audit tool which further enhances the audit and certification process under ISCC and facilitates and improves digital data collection and evaluation.

Performance management versus deep dives

The M&E systems are not only used to measure impact. It is also used to monitor and evaluate the performance of the standards body and its partners (e.g. certification bodies), and progress with shorter-term targets and output deliverables. ISCC's Integrity Assessment is an example of this. A large amount of the focus on M&E systems currently lays on performance management data, while the focus on 'deep-dive' studies – i.e. a thorough and external examination of the systems in practice – remains limited. In the interview with ISEAL, our respondent highlighted the importance of including both these M&E elements as they interact in a complementary way (ISEAL Alliance, 2020):

- 1. Performance monitoring draws data from internal M&E activities and sources. This allows the scheme to collate data from certified entities and directly involved stakeholders. Performance monitoring therefore aims at answering the question, WHAT has happened?
- 2. Deep-dive studies are usually commissioned by the scheme to third party independent researchers. The aim of these studies is to answer the questions, HOW has changed occurred, and WHY (or why not)?

Performance monitoring is certainly a large area of focus for the schemes assessed in this study, with maybe the exception of POIG, due to its nature/not being a certification scheme.

This suggests that the schemes' M&E systems might not yet be fully capable of capturing the dynamics and mechanisms by which changes are occurring and goals are being achieved. This could hinder their ability to attribute causality to certification or verification. It could also hinder their ability to anticipate stagnation or even negative outcomes over time, even though the schemes do study unintended consequences as discussed above. Finally, a focus on performance could lead to an over-emphasis on quantitative outputs and a neglect of less tangible, systemic changes – those important 'broad impacts' as coined by GIZ.

Nevertheless, as mentioned above, some of the schemes do include deep-dive studies to understand impacts. For example, RSPO commissions research from external organisations on priority topics identified by stakeholders, constituting a Research Agenda to examine the impacts of RSPO on its key stakeholders and the outcomes it sets for itself (RSPO, 2020c).

Involving others in evaluation

Unlike the other schemes, ISCC actively involves its certification bodies in its M&E activities by inviting them to complete a survey on the observation of impacts they have been able to make while auditing.

Some of the schemes gather data from their certified entities, including smallholders. Schemes such as RA try to perform their M&E activities without imposing additional data collection and reporting burdens directly on their certificate holders, as they already have a lot to report on as part of the regular auditing process. In principle, RA's M&E system relies on assurance-data for M&E purposes to the extent possible. However, when doing or commissioning focused thematic research and impact studies which typically involves additional data collection from certificate holder, a sample of certificate holders may be involved as respondents, though this remains on a voluntary basis. RA makes sure prior to any engagement of their members in a study that the goals, scope and method of the impacts research are explained and that initial findings are fed back into stakeholder validation workshops. RSPO, which has also always engaged with their stakeholders in the development and improvement of their M&E systems, is seeking to further involve their members in actual M&E data collection through the RSPO Metrics Template. The metrics template and guid-ance document, which have yet to be finalised, will allow members to provide M&E-related data through this mechanism, though little information is currently available on the exact content of this new Metrics Template. Aside from the M&E template, data is also collected from certified members' Annual Communication of Progress (ACOP), which is self-reported. Finally, and similarly to RA, RSPO also includes members in research work, engaging them to participate in the study which may also include assessing the data that is collected and managed by respective members.

All in all, the schemes, including POIG, hold discussions with stakeholders, for example in themed workshops. These provide an opportunity for the sustainability schemes to learn how certification and verification may or may not be working and could be more effective. It could also provide an opportunity to identify unintended impacts.

Smallholder inclusion has also been a significant area of focus for most of the schemes. In 2017, RSPO introduced its new 'Smallholder Strategy'. The strategy's goal is to secure measurable impacts by ensuring sustainable livelihoods and the inclusion of smallholder within the supply chain. Additionally, the creation of the Smallholder Support Fund (RSSF) in 2013 have also shown to be successful in supporting smallholders. The RSSF was initiated to further assist smallholders in getting certified by reducing the costs of certification via access to funds. Finally, following the 2018 P&C review, RSPO has developed a separate Independent Smallholder Standard (RISS) to provide a simplified approach for smallholders.

While RA does not directly provide financial help to smallholders, it has established its own Landscapes & Communities work which covers over 100 projects assisting local enterprises and communities in many ways. Furthermore, through partnering opportunities with donors, NGOs, governments and local implementers, RA is able to channel funding and services to assist users with the implementation of the standard (for an overview of Landscape & Communities projects c.f. the RA Impacts Dashboard).

ISCC on the other hand, supports smallholders via its ISCC Independent Smallholder programme (ISCC ISH) through which they provide training opportunities and reduce auditing costs to help achieve certification. Similarly, RSB smallholder members who are part of associations can join RSB without payments of membership fees or pay a reduced fee.

Costs

This information is not publicly available. Interviewees stated they have budget lines for their internal 'impacts' or 'M&E' units/departments but did not disclose further.

RA and RSPO have publicly available budgets where one can see how much money is dedicated to what activity, whereas while RSB and ISCC do have a budget for M&E, the specifics are not clearly stated in any of their documentation.

Research questions:

- In which way is the special situation of small farmers taken into account in the impact monitoring approach (definition for small farmers, adapted monitoring formats, advantages/disadvantages in implementation)?
- How do all actors along the supply chain (from producer to final processor) contribute to impact monitoring? What roles do they play?
- Are there support measures for companies and small farmers to enable them to optimally play this role?
- What costs are associated with the impact monitoring measures?

5.1.4 Using the findings

The schemes use the information from their M&E systems as input for revising their standards, which typically occurs every five years. This is one of the ways in which stakeholders can get involved. Since it does not yet have an M&E system, this is not yet possible for POIG.

More generally, the organisations say that M&E is used for continuous improvement in strategy. It is not possible to know exactly how much influence M&E findings have within organisational discussions and decision-making. As the RSPO interviewee noted, it can be challenging for any organisation to develop systems for sharing and acting on the results of an evaluation. One good sign comes from RSB, which has published a set of clear questions that its organisation uses to ensure that the findings of its M&E are internalised and acted upon. This may include responding to negative unintended consequences of certification, which is reportedly done by RA, RSPO and perhaps the other schemes too.

One potential use of M&E findings is to use them to review the ToC. A ToC is a useful tool which allows a scheme to gain clarity on what is their desired outcome, what change they want to aim for and should be used as the starting point for asking the question of what they are wanting to measure (ISEAL Alliance, 2020). However, ISEAL have observed that there is a risk of schemes relegating their Theories of Change to a one-off exercise, something the respondent articulated by stating that:

"when systems do their Theory of Change thinking, it can become this static pdf which is not working its way through their M&E systems. They are focused on improving their measurement and they forget to go back and sense check what they Theory of Change is actually asking them to do" (ISEAL Alliance, 2020).

Improvement is needed in terms of schemes making sure that all the elements of their M&E systems are speaking to each other. In general, from our analysis, RSPO, RSB, ISCC and RA have not followed this trend, in the sense that their M&E systems are well integrated with their theories of change and they have established processes for internalising M&E findings as a means of continuous improvement. However, if and how the schemes explicitly use M&E results to review their ToC is an open question which was not explored in the interviews.

Finally, POIG has proven beneficial to RSPO in terms of pushing ways to innovate practices in the palm sector (Verité, 2021). For instance, the RSPO P&C review conducted in 2018 relied in part on some of the innovations and practices implemented by all three of POIG members (Musim Mas, Daabon and Agropalma), especially in terms of human rights and deforestation.

5.1.5 Experiences, strengths and challenges

Standards schemes are fortunate in having a certification and verification infrastructure established which produces auditor data that can be used as information for M&E. The data provide a rich source of standardised information on observable changes in companies' management systems, working environments and ecological habitats. The schemes can then assess whether the changes observed by auditors can be attributable to the process of certification or verification, and overall how much certification is contributing to improvements in sustainability.

Research questions:

 To what extent are the findings of the monitoring system fed back into the further development of the standards? In supporting its members to become more efficient data managers, ISEAL places importance on guaranteeing that data is "reliable, relevant, clean and has analytical insight" (ISEAL Alliance, 2020). If all the insights about how a scheme performs are coming from the systems' own internal data sources, a credibility issue arises. The five schemes do recognise this and draw on additional sources of data. RSPO stands out by virtue of its high profile within the public realm and, consequently, within the academic world. By using the available research as a resource but also by commissioning additional research from external organisations on priority topics identified by stakeholders, RSPO is advancing its understanding of the 'how' and 'why' surrounding the scheme's impacts.

RA has less focus and expertise in palm oil than RSPO, but it has developed considerable capacity in impact monitoring for other commodities through its Evaluation and Research Team, and its ToC and M&E indicators are probably the most coherent and comprehensive of all those studied here. Like RSPO, RA has also invested in independent research to improve understanding of causal pathways and unintended consequences of certification.

RSPO and particularly RA are probably more advanced in their understanding of complex impacts than ISCC and RSB, which rely more on audits and surveys of auditors. However, ISCC has expressed that it is currently working on also including spillover effects, unintended consequences and causal relationships in more detail into their ToC, to capture systemic change in a more holistic way (ISCC, 2020b).

A limitation of audit data is that it restricts the scope to certified entities and may not capture wider outcomes, such as complex impacts on biodiversity or livelihoods, changes in the enabling environment or how producers benefit from being certified beyond simply complying or not complying with sustainable practices.

Another possible area of weakness is a lack of social auditing skills in the palm oil sector, which was a critical observation made by one of the interviewees (FPP,2020). This is reflected in the caseload of Complaints Panel, with many cases relating to social issues, such as conflicts around land rights. The challenges around quality of audits had already been brought up in various investigations before (EIA, Grassroots, 2015). This specific question goes beyond the scope of this study, since compliance auditing is different from impact monitoring and evaluation. Nevertheless, we feel it is important to highlight, as much of the schemes' impact reporting derives from audit data. It implies that M&E in social impacts of certification and verification may be weaker than in other areas of impact.

The benchmarking exercise highlighted that some schemes could improve how often they revise their M&E indicators and theories of change, and the way that they make this information publicly available.

The benchmarking exercise also revealed places where the ISEAL Impacts Code could go further, particularly by giving more guidance on the scope and boundaries of the M&E system, the selection of indicators and data-gathering methods, and the inclusion of gender considerations.

Research questions:

- What are the weaknesses and strengths of the monitoring approach and the certification schemes themselves?
- Are there aspects of certification whose effectiveness can be more easily recorded and proven? What are they and why is that?
- Which measures have been most effective so far?

Research questions:

- What conditions must be met for efficient impact monitoring?
- What are the problems faced in development and adaptation?
- How can the impact be measured in the short to long term?

5.2 Impact evidence

Sections 4.2.3 and 4.2.4 provide a summary of the evidence of environmental and socio-economic impacts of certification, respectively. On the environment, the literature suggests that the schemes are more likely to achieve their long-term goals on deforestation and greenhouse gas emissions than on biodiversity protection but that improvements are needed, both in terms of how standards are enforced and in measures that the schemes can take beyond certification, to increase positive impacts and avoid negative ones such as displacement effects.

Assessing the true impact of certification on the environment requires more investigation. Studies are limited in number and scope. The focus remains nearly exclusively on RSPO and SE Asia, thus omitting a significant part of the picture. It is still unclear what the real impact of certification might be at a landscape level. It is crucial to consider how certification may influence environmental protection outside of certified concessions and the importance of spill-over effects.

On socio-economic impacts, there are some positive findings regarding productivity, farmer incomes and opportunities for strengthening land tenure, but less evidence to suggest that certification can prevent labour rights abuses or land rights abuses from taking place. There currently is only a very limited amount of literature available on the impact of certification on social issues, with topics such as health and safety, forced labour, child labour, gender discrimination, workers' wages, food insecurity and access to education not fully understood. It would be interesting to know whether different certification schemes have different impacts on different social issues, as the focus remains on RSPO.

Additionally, most studies have been comparing certified and non-certified areas at one given time rather than studying the impact of certification over time using longitudinal methods. The socio-economic impact of certification might be hard to study as it is unclear whether observed impacts are the result of the type of people seeking certification (and their set of skills, beliefs, capital, etc.) which could largely impact their performance in terms of social and economic impacts, or whether it is directly due to becoming certified.

Despite the mixed results from the limited studies available, certification and verification are a powerful tool for stimulating more sustainable practices. The respondent from Proforest noted:

"In Africa at least, certification leads to companies implementing environmental and social best practices which are only suggested in the country's legal requirements. Without the incentive of certification, companies would rarely seek to improving these practices. Certification has great value" (Proforest, 2020).

This study did not consider in great depth the systemic outcomes and impacts which can occur in market-based intervention and which are crucial to many of the schemes' theories of change. Such changes have been witnessed in Proforest's own work but to date, academic research seems to have been more focused on direct and material impacts of certification such as deforestation or agronomic improvements. There is scope for much more research using qualitative methods to identify progress towards some of the systemic changes that the schemes are aiming for, such as RSPO's long-term outcome of "agency and voice". The schemes are in a good position to lead on such studies, since they have close access to actors in palm oil supply chains and markets.

Out of the 24 reports available on SEnSOR the authors only found a couple that fit the scope of this study. One of the issues is that a lot of the reports are 'quick reads' and therefore a lot of the study's context is missing from the report, such as detailed description of the methodology. A large proportion of their reports are also focused on HCV areas and biodiversity but does not link the research enough to what it means in terms of the impacts of certification beyond the implied basis that a certain area containing HCVs might only have been identified due to RSPO's corresponding requirement for HCV assessments.

It should be noted however, that both RSPO and RA commission research from external organisations on priority topics identified by stakeholders, constituting a Research Agenda to examine the impacts of the schemes and the intended outcomes it sets for itself (Rainforest Alliance, 2015; RSPO, 2020c).

The literature review and interviews suggest that a failure to progress towards long-term goals is often attributable to external factors. Examples include commercial logging pressures, insufficient demand for certified product, low producer prices stifling wages, poor law enforcement, or harmful attitudes towards indigenous peoples or practices such as child labour. Certification and verification might not by themselves have triggered enough change in the enabling environment to support and sustain either the adoption of sustainable practices among producers or the demand for sustainable products in the supply chain. Failures, blockages and unintended consequences also occur when people within or around a certified entity do not behave as they are predicted to in the schemes' models. In this line, the respondent from Musim Mas concluded that "ultimately, certification schemes are as valuable as their market recognition. RSPO is a good example of a strong scheme, which is not recognised enough by the market. Its positive sides are not used and recognised enough by the end users" (Musim Mas, 2021). The result is that the schemes' theories of change sometimes over-estimate the potential for a voluntary, market-based incentive such as certification to change behaviour without external support.

sustainability schemes could help to address this by ensuring that their theories of change encompass all of the mechanisms that are involved in sustainable models of production. This should acknowledge relational dynamics, be that within households and communities or between market actors; and necessary changes to the enabling environment. Understanding how people behave and why in different contexts is crucial.

Some of the standards bodies have done this already and are moving towards another way to address the issue, which is to take measures outside traditional certification. This can include support for smallholders, jurisdictional or landscape approaches, a focus on illegality (e.g. in Brazil), or demand-side approaches, such as RSPO's Shared Responsibility requirements targeting supply chain, NGO and bank membership.

Research questions:

- What impacts of certification schemes can be empirically demonstrated so far?
- For which topics is there no empirically demonstrated impact? How is this defined (independent third parties, sample size, cultivation/supply chain standards, etc.)?
- What findings have scientific accompanying programmes such as SENSOR produced?
- Are there any aspects that indicate limits to the effectiveness of certification schemes?
- What can be done to find a solution in this respect, e.g. through additions or supporting measures? Which measures are considered promising in this context?
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STRENGTHS AND WEAKNESSES OF IMPACT MONITORING SYSTEMS

Roundtable on Sustainable Palm Oil (RSPO):

Strengths

- Tailored to palm oil
- Considers the supply chain and the enabling environment, and acknowledges that transformational behavioural change is needed, even if indicators for capturing this could be improved
- Comprehensive impact reporting
- Involves stakeholders and internal departments in data collection and continuous improvement

Weakness

- Logical flow of ToC sometimes unclear or unspecific
- Gaps in coverage, particularly indicators for assessing progress along causal pathway to stated goals of 'agency and voice' and 'inclusive access to benefits' for all those involved in palm oil production
- Small number of M&E indicators on environment and labour
- Overly focused on outputs, although this is changing

Rainforest Alliance:

Strengths

- Exemplary ToC and indicators: coherent and detailed
- Includes qualitative indicators to help assess impacts on relationships and attitudes, and indicators of unintended consequences of certification
- Disaggregates some impact information by gender
- Investment in building M&E capacity and research networks

Weaknesses

- Measures of impacts on biodiversity and other environmental topics could be improved
- More active in other commodities
- Wide-ranging and detailed impact reports, using technical M&E terminology, could be overwhelming for some customers

International Sustainability & Carbon Certification (ISCC):

Strengths

- I High level of transparency over data sources and progress to date
- Is involving stakeholders as it develops its M&E approach
- Helping to ensure reliability of audit data and to build relationships with certification bodies through Integrity Program and auditor survey

Weaknesses

- Not a full member of ISEAL
- Assumptions and causal pathways could be made clearer in the ToC
- In early stages of broadening data sources from audit reports
- Very little information made available on its website

Roundtable on Sustainable Biomaterials (RSB):

Strengths

- I High level of transparency in reporting, including open information on non-conformities
- Methods of data capture and analysis to estimate GHG emissions and reduction from certified entities
- Good stakeholder involvement
- Recently revised its ToC, indicating continuous improvement

Weaknesses

- Small number of quantitative indicators are not explicitly linked to ToC and are unlikely to be capable of capturing complex impacts of certification in many areas
- Reliance on audit reports and non-compliances for assessing impacts of certification.

POIG, not a certification scheme and without comparable Secretariat resources, does not have a M&E system.



Over the past years, the demand for additional sustainability and market-based tools has increased. Consequently, the importance of effective M&E has also become a key element of a credible and efficient certification scheme. All four certification schemes have strong theories of change and M&E systems in place, with the three ISEAL members RSPO, RA and RSB leading the way.

ISCC, which is not a full member of ISEAL, does not benefit from the same external validation on additional assurance to users provided by ISEAL. It is also slightly behind in terms of frequency in conducting impact evaluations and publishing their reports. This could highlight the value of ISEAL membership.

All the schemes demonstrate engagement with stakeholders to better understand how they can progress towards their long-term goals. By developing their own M&E systems, the schemes have acknowledged the need to have a clear strategy in place to measure their impact and gain a sense of where they stand in relation to their identified short-, mediumand long-term goals. However, if and how the schemes explicitly use M&E results to review their ToC is an open question which was not explored in the interviews.

If implemented correctly, the impact of certification can go far beyond just the plantation level. Looking at governments, which are not a stakeholder in certification schemes such as RSPO, it is clear that they significantly benefit from certification as they do not have to enforce the rules themselves and they do not have to chase companies to pay their taxes and fees, pay their workers minimum wage, etc. As such, "in effect, CBs are doing the work that governments would normally do, at least in Africa" (Proforest, 2020).

6.1 Recommendations to support the continuous improvement of M&E systems and increase the knowledge on the impacts of palm oil certification

Recommendations for research

Future research into the impacts of palm oil certification could focus on the following areas that have been under-researched to date:

- Impacts of certification under the RA, ISCC and RSB standards in palm oil. For POIG, a palm oil verification scheme built upon the RSPO standard, research on how the additionality to RSPO achieves impacts should be considered.
- The socio-economic impacts of palm oil certification, including the conditions in which palm oil certification can improve conditions for workers.
- The systemic changes that can occur from certification, both among households and communities involved in certified entities and in the wider enabling environment.
- Palm oil certification in the emerging production areas in Latin America and Africa, shifting the focus of research away from south-east Asia, and Malaysia and Indonesia in particular.
- The transaction costs and opportunity costs of certification itself. It could be useful to compare individual certification with group-level certification, verification or another approach entirely.

The sustainability schemes could develop even closer relationships with the research community, building on existing initiatives. Both parties could identify their strengths and weaknesses to collaborate on insightful studies that help to fill some of the research gaps. For example, certification schemes are typically closer to market actors, may be better placed to commission studies to uncover systemic impacts, have access to confidential audit reports and can more easily involve certified entities in the data-gathering. Whereas, academic research is objective, may have the resources and motivation to include a counter-factual, and offers trained researchers and access to statistical models that schemes may not have to invest money in.

One way that the standards bodies could develop relationships could be to include academic researchers in their stakeholder events, particularly relating to M&E.

To improve research rigour and avoid any credibility issues from relying on the schemes' internal data sources for understanding how the schemes perform, the industry would benefit from more independent meta-research to be conducted by third parties. Initiatives such as the SEnSOR Programme (Socially and Environmentally Sustainable Oil Palm Research) can play a valuable role in monitoring the success of the schemes in achieving their desired outcomes and impacts.

Recommendations for FONAP

For the few standard content requirements on key topics of concern for FONAP that the schemes do not sufficiently cover as revealed by the benchmarking exercise, consider providing specific input in the next revision processes of the organisations' standards, so that they may address these gaps.

Discuss with ISEAL any plans to review its Impacts Code, including the potential to add more guidance on gender, scope, methods and indicators. Also discuss with ISEAL the advantages and disadvantages of standardizing M&E indicators and data.

Discuss with ISEAL or the schemes if and how FONAP and its members could provide support for the continuous improvement of M&E systems for palm oil certification. Engage with POIG in particular to offer input and support for developing its own, adapted M&E system to help showcase POIG's impacts.

Support and promote jurisdictional or landscape approaches. One example is LandScale, which RA is already involved with: an emerging tool to help drive landscape-scale sustainability using measurable indicators for environmental, social, and economic dimensions across a landscape. RSPO is also in the process of developing its own Jurisdictional Approach (JA) Framework with the aim of scaling up adoption of the RSPO P&Cs across a wider production area and ultimately address palm oil-related sustainability issues more effectively.

Engage with other national platforms and linked initiatives to jointly move retailers and brands to increase their uptake of CSPO – this is a critical pull-effect needed as shown in the schemes' theories of change.

Recommendations for FONAP members

Help to close gaps in knowledge on the impacts of palm oil certification. One avenue is to explore opportunities to support independent research in some of the areas identified

above. Another possibility is to discuss with suppliers and certification schemes if data-gathering that is undertaken by private-sector actors as part of their responsible sourcing strategies could complement the schemes' M&E work.

Encourage the schemes to provide more information, standardisation and transparency in their impact reporting. Members may wish to request more detail on sustainability topics that they have identified as priority areas in their responsible sourcing strategies. Demand more frequent and regular reporting if needed.

Consider using some of the peer-reviewed research findings presented in this report in their public statements and communications with suppliers, to help support palm oil certification and international demand for CSPO.

Draw on their experiences in using certification for the responsible sourcing of other commodities where M&E systems might be more developed and where the members may have generated more data themselves on the benefits and unintended consequences of certification.

Improve their understanding of the policy and market barriers to certification – and compliance with certification standards – in the regions where they source palm oil; and of aspects of palm oil sustainability that may require a strategy beyond certification. Explore opportunities to support efforts in both these areas, such as jurisdictional or landscape approaches on workers' rights or forest burning, or smallholder support programmes to support farmers' participation in and compliance with certification schemes.

Discuss with POIG how to support its efforts and develop an M&E system to better show-case their impacts.

Maintain ambitious commitments to source sustainable palm oil, as detailed in the schemes ToC, and thus drive global demand for CSPO and improvements to certification standards. RA's and RSPO's Shared Responsibility would be key efforts to support in this context.

Recommendations for the schemes' M&E systems

This report was written for the benefit of FONAP and its members, but it concludes with some recommendations for improving M&E systems which may be of interest to not only the FONAP membership but also the schemes themselves:

Make sure that all the elements of their M&E systems are aligned with each other (e.g. M&E system and ToC). The schemes should regularly review their ToC and ensure that systemic issues are addressed, and, if not already done,confirm that their M&E systems are capable of capturing the diverse ways in which certification can lead to change, particularly in the most salient areas of sustainability. Where necessary, elaborate on M&E indicators or parts of their ToC where elements are missing or could be more specific.

Continue to widen the scope of their M&E systems as they evolve, as guided by the ISEAL Impacts Code. For some schemes this may include broadening the focus from audit data to a wider range of information sources; from certified entities to effects in the wider community, landscape and industry; or from short-term outputs to transformational impacts. Others may consider adding indicators to capture negative unintended consequences of certification; or indicators on increasing the demand for CSPO, to encourage greater action from buyers where needed. To help widen the scope of their M&E, schemes are already finding ways to collaborate with researchers, market actors and other stakeholders, and hopefully more such initiatives will develop. Schemes may also be able to leverage more knowledge from their internal departments or their certification body auditors.

Continue to support quality standards and capacity-building among certification bodies. Explore ways to develop social auditing skills as a means not only to determine compliance with the social criteria in their standards, but also to assess progress towards the social goals laid out in their ToC.

Improve their qualitative methods for measuring changes in attitudes, relationships and the operating environment that are so crucial to sustainable production in the long term.

Incorporate gender mainstreaming and women's empowerment into their systems. One of the ways to achieve this is to design gender-sensitive M&E indicators and methods.

For the schemes that are not commodity-specific, there may be scope to include greater consideration of the characteristics of palm oil production when measuring the effects of certifying entities in this sector. Working with stakeholders and researchers in the palm oil industry could help to improve methods, indicators, or assessment of progress in such areas as biodiversity or labour rights.

Investigate if and how impact evaluation metrics could be more standardised, at least across the ISEAL community and perhaps with a small set of key metrics.

Just as in their data-gathering, ensure there is appropriate balance in their reporting between short-term outputs and long-term outcomes and impacts.

Where possible, provide more transparency on challenges and non-compliances in their impact reporting. This may help to attract support of stakeholders in addressing the market and policy barriers that impede the effectiveness of certification as a tool for wider change.



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Annex 2. ISEAL Impacts Code

Clause	Requirement		
5 M&E system			
5.1	Develop an M&E system		
5.2	Define the scope of the M&E system, ensure it covers key effects		
5.3	Plan for expansion		
5.4	Resources		
5.5	Roles and responsibilities		
5.6	Data management		
5.7	Data confidentiality and use		
(5.8)	(Integrate M&E within the organization)		
(5.9)	(Cooperation and coordination)		
6 Stakeholder engagement			
6.1	Identify stakeholders		
6.2	Consult stakeholders on the M&E system		
7 Defining the intended change			
7.1	Define intended outcomes and impacts		
7.2	Set out a causal pathway to reach outcomes and impacts		
7.3	Anticipate unintended effects		
7.4	Understanding external influencing factors		
8 Monitoring and evaluation			
8.1	Monitor progress and performance		
8.2	Define indicators		
8.3	Collect sufficient data		
8.4	Collect data accurately and consistently		
8.5	Conduct yearly evaluations, some of them independently		
8.6	Set quality assurance measures		
8.7	Provide detailed reports		
(8.8)	(Standardise indicators and units of measurement)		
(8.9)	(Share results with M&E participants and stakeholder groups)		
(8.10)	(Ensure that certified entities benefit from M&E system)		
(8.11)	(Adopt ethical guidelines to avoid harm to M&E subjects)		
9 Learning and improving			
9.1	Ensure M&E learnings are internalized within organisation		
9.2	Periodically review M&E system		
(9.3)	(Communicate responses to M&E findings)		
10 Transparency and public information			
10.1	Ensure stakeholders can contribute to M&E system		
10.2	Make M&E results publicly available		
10.3	Substantiate claims		
(10.4)	(Published detailed M&E information and invite scrutiny)		

Annex 3. Overview of the RSPO Core M&E Indicators

Торіс	ToC Impact area	ToC Level	N° of indicators	Example(s) of indicators	ISEAL Common Core Indicator?
Membership	 Increased membership Mobilised growers & actors 	Output	2	 No. of members by category, sector and country How many and type of members in our system? 	Yes
Certification / verification	 Increased P&Cs adoption Implemented BMPs Improved value chain traceability Mobilised growers & actors Smallholder participation 	Output	5	 No. of certificate holders – production (P&Cs) No. of certified members in a group certificate, by country or region 	Yes
Location information	 Increased P&Cs adoption; Effective standards & implemen- tation systems; Transparency; Implemented BMPs 	Output	6	 Countries where certified operations are located Detailed HCV area maps Where exactly are certified / verified operations located? 	Yes
Farm characteristics / sustainable agriculture	 Increased P&Cs adoption Smallholder participation Implemented BMPs 	Output	2	 Total certified area in hectares What is the profile of producers in our systems? How many smallholders are included in our system? 	Yes
Farm characteristics	 More growers, hectares and volumes Smallholder participation More growers, hectares and volumes 	Output	4	 Total certified production area in hectares, by P&C and group certificate holders What is the volume of production according to P&Cs? 	Yes
Supply and demand	 More growers, hectares and volumes Increased commitments, markets & uptake 	Output	9	 RSPO members share of world palm volumes in percentage Total trademark license issued by country and stakeholder groups Are we progressing towards the norm? 	
Capacity development	 Increased knowledge & capacity 	Output	2	 No. of people trained at the level of the group How many producer groups are trained through our system? 	Yes
Accreditation & CB oversight	 Effective standards & implemen- tation systems 	Output	1	 No. of CBs, new accreditations per region, suspensions 	
Grievance mechanism	• Effective standards & implementation systems	Output	2	 No. of complaints/disputes logged in the system, stratified by types of cases Duration for resolution of complaints in days 	Yes
Institutional support	 Platform & dialogues 	Output	1	No. of national commitments by country / region	

Торіс	ToC Impact area	ToC Level	N° of indicators	Example(s) of indicators	ISEAL Common Core Indicator?
Producer group strengthening	Group institutional strengthening	Mid-term outcome	3	 Predominant labour among group members No. of group members added to and exited an existing certified group 	Yes
Production	 Productivity optimised 	Mid-term outcome	1	 Land productivity (yield) in MT of FFB per ha 	Yes
Labour	 Safe & decent work 	Mid-term outcome	2	Lost time accidentsLiving wage	Yes
Shared responsibility	 Consistent accountability & enforcement 	Mid-term outcome	5	 Are all members sharing responsibility towards vision? No. of grower members currently assessing GHG as percentage of total, declared in ACOP No. of members currently supporting smallholders as percentage of total, declared in ACOP 	
Biodiversity	 Ecosystems better protected Biodiversity protected 	Mid-term outcome	2	 Hectares of identified HCV set aside as covered by the P&Cs How much land is HCV covered by P&Cs for pro- tection? SDG sustainable agriculture target 	Yes
Sustainable agriculture	 Ecosystems better protected; Reduced pollution & GHG emissions Communities and companies in harmony 	Mid-term outcome / Long-term outcome	4	 Net GHG emissions in tonnes CO₂ eq. per tonne CPO Total area of final liability in hectares, by country and region 	
Soil	 Ecosystem services enhanced 	Long-term outcome	1	 Rates of soil erosion (tonnes/ha) 	Yes
Revenue from focus crop	Sustainable & resilient businesses	Long-term outcome	1	 Farm profitability (net farm income economic model: gross revenue from sales of FFB minus total cost for FFB production) 	Yes
RSPO Smallholders Support Fund (RSSF)	 Sustainable & resilient businesses Inclusive access to benefits 	Long-term outcome	3	 Amount of funds granted and used, by RSSF objectives What are RSSF funds being used for? Total no. of beneficiaries 	
			Total: 56		

Annex 4. Overview of the Rainforest Alliance M&E Indicators

ToC Impact area	ToC Level	N° of indicators	Examples of Indicators	ISEAL Common Core Indicator?	
(A) Indicators to track supp	ort strategies (outputs):				
Farms and producers	Output	5	 Number of certificates, by crop, location and type (group vs. individual) Number of certified farms, by crop, location and type (group member vs. individual) Size distribution of certified farms, by crop and location 	Yes	
Workers	Output	1	 Number of workers on certified farms, by location, crop, employment status, worker origin and gender 	Yes	
Lands	Output	3	 Certified land area, by location & crop Certified production area, by location and crop Relation of certified lands to areas of high social or environmental risk (various spatial indicators) 	Yes	
Producer training and support	Output	2	 Number of producers trained in best practices, by location, crop, type (farmer vs. worker), gender, type of training provider, and training topics Farmer perception of training quality and utility 	Yes	
Other key characteristics of certificate-holders	Output	7	 Number and identity of other certifications held Level(s) of mechanization of farmers within certified groups Farmer age (group members only) Years of formal schooling completed (group members only) 	Yes	
(B) Indicators to track production- and market-related direct results and key outcomes					
Production	Key outcome	1	 Quantity of production, by product, variety, location and farm type (group vs. individual) 	Yes	
Sales	Key outcome	3	 Quantity of certified product sold as certified, by product type Amount of price premium to producers for certified sales 	Yes	
Public recognition, understanding, and use of the certification label	Key outcome	3	 Number of countries in which RA Certified products are sold Number of SKUs using the RA Certified seal Proportion of consumers recognizing and understanding the meaning of the seal in key consuming markets 		

ToC Impact area	ToC Level	N° of indicators	Examples of Indicators	ISEAL Common Core Indicator?
(C) Indicators to track field	l-level direct results, key outcon	nes, and broa	der impacts	
Biodiversity	Key outcome / broader impact	10	 Land area under conservation management, by location and management objective Quantity and diversity of on-farm vegetation Changes in landscape composition and structure following certification Presence, abundance, or survivorship of species in key taxa around certified farms 	Yes
Natural Resources	Key outcome / broader impact	10	 Fertilizer application rates relative to crop requirements Chemical and biological properties of receiving water bodies on or near certified farms Estimates of net GHG emissions based on existing calculator tools (e.g., Cool Farm Tool) 	Yes
Farmer, worker, and family well-being	Key outcome / broader impact	11	 Conformance with key SAS criteria, by crop, location, and characteristics of farmer or worker populations (as characterized by indicator set [A]) Number of school-aged children attending school full-time (compared to total number of school-aged children in household) Characteristics of the group management structure 	Yes
Farm productivity and prof- itability	Key outcome / broader impact	12	 Productivity (quantity produced per hectare) of certified crops, by crop and location Quantity of irrigation water used per unit crop produced (irrigated crops only) Gross income and net income for certified crops Rates of crop loss or income loss due to climate-related shocks, such as pest or disease outbreaks or drought 	Yes
<u></u>	·	Total: 68		

Annex 5. Overview of the RSB Core M&E Indicators

Торіс	Source of data	Responsible party	N° of indicators	Example(s) of indicators	ISEAL Common Core Indicator?
Uptake of the RSB Standard and Certification scheme	CB Reporting Tool	 Certification Body RSB Secretariat 	8	 Certificate holders (includes current applicants) Number of Smallholder Group Certifications Cultivation/extraction area covered by Standard Amount of RSB Certified Products sold 	Yes
Greenhouse Gases	CB Reporting Tool	 Certification Body RSB Secretariat (calculations) 	2	 CO₂ emissions % Savings when compared to fossil fuel alternative 	
Soil	CB Reporting Tool	Certification Body	2	 Ha. with applied soil erosion reduction and soil conservation practices Ha. with applied soil quality improvement practices 	Yes
Water	CB Reporting Tool	 Certification Body 	1	• Farmers with applied water conservation or water use reduction practices	Yes
Biodiversity	CB Reporting Tool	Certification Body	1	 Hectares set aside as "protected" or "conservation" area 	Yes
Health & Safety	CB Reporting Tool	Certification Body	1	 Farms using highly-hazardous pesticides 	Yes
Food Security	CB Reporting Tool	Certification Body		Operations located in areas of food insecurity	Yes
Poverty	CB Reporting Tool	Certification Body	1	• Operations located in areas of poverty (Operations located in countries with an IHDI value lower than 0.59 or an HDI value lower than 0.74)	Yes
Compliance	CB Reporting Tool	Certification Body	1	Number of Major and Minor Non-Conformities by Principle	Yes
Strategy: Multi- stakeholder dialogue and enabling environment	Website	• RSB Secretariat	2	 Number of Stakeholders consulted during the audit process RSB Members (including Associate Members) 	
Strategy: Procurement Preference	Annual Report	RSB Secretariat	1	 Organizations engaged with RSB to develop public commitments supporting RSB certification 	
Communications and Outreach	Annual Report	RSB Secretariat	1	Regional workshops and webinars completed	Yes
Strategy: Regulatory policy advocacy	Annual Report	• RSB Secretariat	2	 Instances of governments procuring RSB-certified biomaterials or regulations recognizing RSB certification Smallholder groups engaged in project development 	
Advisory Services	Advisory Services man- agement sheet and / or Sales Force reports	• RSB Secretariat	1	• Coverage (number of projects active in the year, sectors, geographic regions) and Impact (leading into certification, or sourcing of RSB certified material or improvement of sustaina- bility practices) of Advisory Services	
Partnerships	Partnership manage- ment sheet and / or Sales Force reports	• RSB Secretariat	1	• Coverage (number of formal partnerships in the year, sectors, geographic regions) and Impact (leading into certification, or sourcing of RSB certified material or improvement of sustainability practices or RSB membership)	
			Total		

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Annex 6. Overview of the ISCC M&E Indicators

ToC Impact area	ToC Level	Example(s) of indicators
Sustainable handling of soil, water and air resources	Intended Impact	Monitored based on the: • Implementation frequency and effects of corrective measures • Implementation of Voluntary Corrective Measures (in %) • Feedback from Certification Bodies
Secure human, labour and traditional land rights	Intended Impact	Monitored based on the: • Implementation frequency and effects of corrective measures • Implementation of Voluntary Corrective Measures (in %) • Feedback from Certification Bodies
Increased efficiency and transparency along the supply chain	Intended Impact	 Monitored based on the: Amount of non-conformities within the section "Mass Balance & Traceability" in the context of the ISCC Integrity Program Feedback from Certification Bodies
Enhanced social and economic development	Long-term outcome	Monitored based on the: • Implementation frequency and effects of corrective measures • Implementation of Voluntary Corrective Measures (in %)
Improved productivity and risk management	Long-term outcome	Monitored based on the: • Feedback from Certification Bodies
Increased resource use efficiency	Long-term outcome	Monitored based on the: • Implementation frequency and effects of corrective measures • Implementation of Voluntary Corrective Measures (in %)
Protection of HCV and HCS areas	Long-term outcome	Monitored based on the: • Ranges of certified area per First Gathering Point (Ha)
Reduced GHG emissions	Long-term outcome	Monitored based on the: • Trend of using "Actual Values" for GHG emission calculation
Enhanced knowledge and capacity	Medium-term outcome	Monitored based on the: • Amount of voluntary corrective measures implemented
Improved working and living conditions	Medium-term outcome	Monitored based on the: • Implementation frequency and effects of corrective measures • Implementation of Voluntary Corrective Measures (in %)
Sustainable management of natural resources and ecosystems.	Medium-term outcome	Monitored based on the: • Implementation frequency and effects of corrective measures • Implementation of Voluntary Corrective Measures (in %)
No land use change after January 2008	Medium-term outcome	Monitored based on the: • Ranges of certified area per First Gathering Point (Ha)
Smallholder integration	Output	Monitored based on the: • ISH Field App, developed by GRAS
Implementation of sus- tainable practices and clear distinction from unsustainable practices	Output	Monitored based on the: • Implementation frequency and effects of corrective measures • Implementation of Voluntary Corrective Measures (in %) • Feedback from Certification Bodies
Traceability of supply chains	Output	 Monitored based on the: Amount of non-conformities within the section "Mass Balance & Traceability" in the context of the ISCC Integrity Program
Awareness of GHG emissions	Output	Monitored based on the: • Number of participants in GHG trainings

Annex 7. Benchmark Criteria

Criteria	Criteria question
Theory of Change and Impacts Mor	nitoring
Sustainability mission and vision	Does the scheme owner have a sustainability-oriented mission and vision?
Theory of change	Does the scheme owner define long-term sustainability outcomes and a theory of change for reaching those outcomes?
Theory of change availability	Are the sustainability outcomes and theory of change available?
M&E budget	Does the scheme owner have a dedicated budget line and funding for M&E?
Sustainability M&E indicators	Does the scheme owner have a set of sustainability M&E indicators that are measured on a regular basis?
Sustainability M&E indicators avail- ability	Is the set of sustainability M&E indicators made available?
Impact evaluations	Are outcome and impact evaluations conducted periodically, as part of the M&E system, to measure medium and long- term sustainability results?
Internal audits of M&E Systems	Does the scheme owner require internal or external audits of its M&E system and operations at least annually?
Adaptive management	Does the scheme owner use the results of M&E for learning and improvements to its programme?
Reporting monitoring results	Does the scheme owner make sustainability results from M&E available?
Stakeholder engagement in M&E	Are stakeholders provided the opportunity to engage in M&E activities?
Unintended effects	Does the scheme owner identify possible unintended consequences of its activities?
Influencing factors	Does the scheme owner define and regularly review the external factors most likely to influence (both positively and negatively) the achievement of intended impacts and outcomes?
Improving M&E system effectiveness	Does the scheme owner regularly update and improve its monitoring and evaluation system?
Mission and Governance	
ISEAL membership	Is the scheme owner a (full or associate) member of ISEAL?
Code of Conduct	Are members and/or participants required to commit to scheme values and objectives through signing a Code of Conduct (or similar)?
Private-sector commitments	Are members from the private sector required to develop and adhere to a time-bound plan towards certification and/or procurement of certified products, and report annually on progress?
Standard-Setting	
Sustainability outcomes in standard	Do sustainability outcomes referred to in the standard include the social, environmental and economic changes that the scheme seeks to bring about through compliance with the standard?
Local interpretations of standards	Does the standard take account of the local ecological and social contexts in which it is applied?
Variable standard requirements	Do standard requirements differ based on the operational size of the enterprise?
Review and revision period for standards	Is the standard reviewed and, if necessary, revised at least every 5 years?
Compliance with ISEAL	Are certification standards developed and revised in full compliance with the ISEAL Impacts Code?
Assurance	
Assurance methodology	Is there an assurance methodology?
Level of conformity assessment required	What is the minimum level of conformity assessment allowed by the scheme?
Oversight mechanism	Does the scheme have an existing accreditation or oversight mechanism?
Supporting Strategies	
Technical assistance	Does the scheme provide access to technical assistance for compliance with the standard?
Access to finance	Does the scheme provide access to finance for enterprises seeking certification?
Annex 8. Benchmark Results

Legend:	Assessment:
3	Strong – the system fully meets or exceeds all points
2	Good – the system meets all points
1	Medium – partially covered by the system
0	Weak – not covered by the system
n.a.	Not applicable

Unlike the other four systems [RSPO, RA, RSB, ISCC], POIG is not a certification scheme but rather a multi-stakeholder-driven verification scheme which aims to develop and share a credible and verifiable benchmark built upon RSPO. Given this difference in status compared to the other four certification schemes, POIG was not included in the System Elements benchmark.

System Elements

Theory of Change and Impacts Monitoring

Benchmarking Criteria	RSPO	RA	ISCC	RSB
Does the scheme owner have a sustainability-oriented mission and vision ?	3	3	3	3
Does the scheme owner define long-term sustainability outcomes and a theory of change for reaching those outcomes?	3	3	3	3
Are the sustainability outcomes and theory of change available?	3	3	3	3
Does the scheme owner have a dedicated budget line and funding for monitoring and evaluation?	3	3	2	2
Does the scheme owner have a set of sustainability M&E indicators that are measured on a regular basis?	3	3	2	3
Is the set of sustainability M&E indicators made available ?	3	3	3	3
Are outcome and impact evaluations conducted periodically, as part of the M&E system, to measure medium and long-term sustainability results?	3	3	2	3
Does the scheme owner require internal or external audits of its management system and operations at least annually?	3	2	3	2
Does the scheme owner use the results of monitoring and evaluation for learning and improvements to its programme?	2	3	3	3
Does the scheme owner make sustainability results from M&E available ?	3	3	3	3
Are stakeholders provided the opportunity to engage in M&E activities?	3	3	3	3
Does the scheme owner identify possible unintended consequences of its activities?	3	3	2	1
Does the scheme owner define and regularly review the external factors most likely to influence (both positively and negatively) the achievement of intended impacts and outcomes?	3	3	2	2
Does the scheme owner regularly update and improve its monitoring and evaluation system?	3	3	2	3
Is the scheme a (full or associate) member of ISEAL ?	3	3	0	3

Standard Setting

Benchmarking Criteria	RSPO	RA	ISCC	RSB
Are sustainability outcomes for the standard explicitly stated in the standard?	3	3	3	3
Are there procedures and guidance for application or interpretation of the standard to local contexts ?	3	3	2	3
Do standard requirements differ based on the operational size of the enterprise?	3	3	2	3
Is the standard reviewed and, if necessary, revised at least every 5 years?	3	3	3	3
Are certification standards developed and revised in full compliance with the ISEAL Impacts Code?	3	3	3	3

Assurance

Benchmarking Criteria	RSPO	RA	ISCC	RSB
Is there an assurance methodology ?	3	3	3	3
What is the minimum level of conformity assessment allowed by the scheme?	3	3	3	3
Does the scheme have an existing accreditation or oversight mechanism?	3	3	3	3

Supporting Strategies

Benchmarking Criteria	RSPO	RA	ISCC	RSB
Does the scheme provide access to technical assistance for compliance with the standard?	3	3	3	3
Does the scheme provide access to finance for enterprises seeking certification?	2	2	2	2

Standard Content

Legality and Land Use Rights

Neutral Framework Criteria	RSPO 2013 P&C	RSPO 2018 P&C	RA 2017 SAS	RA 2020 SAS	ISCC	RSB	POIG
Does the standard include a general criterion on compliance with relevant local, regional and national laws and regulations?	3	3	3	3	3	3	3
Are producers required to have legal land tenure or title and valid rights to use the management unit.	3	3	3	3	3	2	3
Are producers required to identify legal and cus- tomary rights of tenure, access and use of other parties that apply on the management unit	3	3	3	3	3	3	3

Social Criteria

Neutral Framework Criteria	RSPO	RSPO	RA	RA	ISCC	RSB	POIG
	2013 P&C	2018 P&C	2017 SAS	2020 SAS			
Does the standard require a social impact assessment?	3	3	1	2	3	3	3
Does the standard include criteria on assessing the impacts of operations on human rights?	2	2	2	2	3	2	3
Does the standard include criteria on food security?	2	3	0	1	3	3	3
Does the standard include criteria on invest- ment in community development beyond the business' operations?	3	3	3	3	2	2	3
Does the standard include criteria on the rights of indigenous and tribal peoples?	3	3	3	3	3	3	3
Are producers required to respect the core ILO rights of workers as defined in the Declaration on Fundamental Principles and Rights at Work (1998).	3	3	3	3	3	3	3
Does the standard include criteria on the prohi bition of child labour as defined under ILO 138?	3	3	3	3	3	3	3
Does the standard include criteria on paying wages sufficient to meet basic needs of all work- ers including those on piece rate/quotas, and his or her family (Decent living wage)?	3	3	3	3	2	2	3
Does the standard include criteria on the volun- tariness of labour as defined in ILO 29 and 105?	3	3	3	3	3	3	3
Does the standard include criteria on workers' health and safety , as defined in ILO 184?	3	3	3	3	3	3	3
Does the standard include criteria on safe and appropriate housing for workers?	2	3	3	3	2	3	3
Does the standard address access to clean and improved sanitation facilities?	2	3	3	3	2	3	3

Environmental Criteria

Neutral Framework Criteria	RSPO	RSPO	RA	RA	ISCC	RSB	POIG
	2013 P&C	2018 P&C	2017 SAS	2020 SAS			
Does the standard include criteria on assessing the environmental risks and impacts of produc- tion/operations prior to any significant inten- sification or expansion of business operations/ cultivation and infrastructure?	3	3	2	3	3	3	3
Does the standard include criteria on water consumption?	3	3	3	3	3	3	3
Does the standard include criteria on impacts on the water levels of surface and/or ground water ?	2	3	3	3	3	3	3
Does the standard include criteria on the quality of surface and/or ground water ?	3	3	2	3	3	3	3
Does the standard include criteria on soil erosion ?	3	3	3	3	3	3	3
Does the standard include criteria on soil fertility ?	3	3	3	3	3	3	3
Does the standard include criteria on energy consumption in the production phase?	3	3	3	3	3	3	3
Does the standard include criteria on (non-energy) greenhouse gas emissions ?	3	3	1	2	2	3	3
Does the standard include criteria on chemical use (such as pesticides and synthetic fertilizers)?	3	3	3	3	3	3	3
Does the standard include criteria on hazardous chemicals, as referenced by (1) *Stockholm convention*, (2) *WHO class 1A and B*, (3) *Rotterdam convention* or (4) banned by the EU or (5) banned by the US EPA?	3	3	3	3	3	3	3
Does the standard have requirements to respect legally protected and internationally recog- nized areas?	3	3	3	3	3	3	3
Does the standard use the HCV terminology as intended by the HCV Resource Network?	3	3	3	3	3	3	3
Is there a requirement to develop Biodiversity Action Plan, Integrated Conservation and Land Use Plan (ICLUP) or equivalent management and monitoring plans?	3	3	3	3	2	3	3
Does the standard have requirements on mini- mum areas to " set aside " as conservation areas?	0	3	2	3	2	0	3
Does the standard include criteria on the applica- tion of fire or explosives for the clearing of land (e.g. slash & burn)?	2	3	3	3	3	2	3

Annex 9. Interviews conducted for the study

	Organisation	Туре	Position
1	RSPO	Cert. Scheme	Research & Advisory Manager
2	ISCC	Cert. Scheme	System Manager
3	RSB	Cert. Scheme	Certification Manager and Technical Adviser
4	POIG	Scheme	Executive Director
5	RA	Cert. Scheme	Palm Oil Lead
6	ISEAL	Organisation	Impacts Manager
7	Forest Peoples Programme	NGO	Senior Policy Advisor
8	Verité SEA	NGO	Manager of Research and Stakeholder Engagement Programs
9	Proforest	Organisation	Africa Regional Director
10	FORTASBI	Oil Palm Smallholder Forum	Senior Advisor
11	Wild Asia	Smallholder Group Scheme	Executive Director
12	Mandiri Palm Oil Farmer Association	Farmer Association – Indonesia	Chairman of the Mandiri Oil Palm Farmers Association
13	Daabon	Palm oil producing company – RSPO and POIG member	Sustainability Director
14	AgroPalma	Palm oil producing company – RSPO and POIG member	Sustainability Director
15	Musim Mas	Palm oil producing company – RSPO and POIG member	Sustainability Director



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