

Review

Social Issues and Challenges among Oil Palm Smallholder Farmers in Malaysia: Systematic Literature Review

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Abstract: Oil palm smallholder farmers are among the key players and are mostly affected by social challenges to the sustainability of the oil palm sector in Malaysia. Previous literature reviews showed a lack of social studies compared to studies of the economy and environment regarding the sustainability of the oil palm industry. Therefore, a systematic literature review focused on the context of social issues and challenges reported by Malaysian oil palm smallholder farmers is presented. The PRISMA standard is applied as the foundation for the systematic literature review writing procedure. A total of 12 papers were chosen out of 340 from Web of Science, Scopus, and Google Scholar. They covered three themes, including (i) attitudes, (ii) education, and (iii) the welfare of oil palm smallholder farmers. This systematic literature review has revealed that the social issues and challenges are closely related to the respondents' demographics, such as the study location, the level of education, and the size of the plantations managed by smallholder farmers. This paper provides an up-to-date review of the social issues and challenges that oil palm smallholder farmers in Malaysia have encountered, as well as insights into future research on critical societal issues and challenges that demand attention and efforts towards improvement.

Keywords: oil palm smallholder farmers (OPSF); PRISMA; oil palm industry; systematic literature review (SLR)



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1. Introduction

The oil palm industry remains Malaysia's primary commodity, contributing to the Gross Domestic Product (GDP) at RM 48.31 billion or representing 56.8% of the total GDP contribution in 2020 [1]. In the first quarter of 2022, the oil palm industry contributed RM 9.5 billion, or 51.8% of the agro commodity sector's contribution to the GDP [2]. Malaysia remains the second-largest global palm oil producer after Indonesia, with crude palm oil production of 18.12 million tons in 2021 [3]. The crude palm oil production chain involves various operation types and size structures involving large, medium, and small plantations, crude palm oil production factories, and the management of the by-products. There are also numerous stakeholders throughout the entire production chain, including oil palm smallholder farmers (OPSF). OPSF grow oil palm as their primary source of income, with less than 50 hectares of oil palm plantation [4]. The global oil palm sector has brought employment and economic prosperity to 3 million smallholders and small oil palm growers [4]. OPSF and other small producers account for around 40% of palm oil production in Indonesia and Malaysia, the world's top palm oil producing countries. It demonstrates the significance of these clusters in advancing the overall palm oil industry [4,5].

OPSF in Malaysia are classified into two categories, namely (i) independent OPSF, who own less than 40.46 hectares of oil palm plantations, and (ii) organized smallholders. These are smallholders under the auspices of government bodies such as the Federal Land Development Authority (FELDA), Federal Land Consolidation and Rehabilitation Authority (FELCRA), Rubber Industries Smallholders Development Authority (RISDA),

Sarawak Land Consolidation and Rehabilitation Authority (SALCRA), Sabah Land Development Board (SLDB), and other related agencies under the state government [6]. In 2021, the total oil palm plantation area was 5,737,731 hectares, with 73.2% monopolized by government/state government/private estates, 15.1% by independent OPSF, and 11.7% by organized OPSF [6]. In 2020, a total of 249,652 OPSF were recorded, with a total palm oil plantation area of 955,811 hectares or 16.3% of the total palm plantation in Malaysia [7]. Nevertheless, with the increase in the oil palm plantation managed by OPSF, issues have been raised regarding the sustainability of the oil palm industry [8,9]. Therefore, Malaysia has implemented Malaysia Sustainable Palm Oil (MSPO) certification to strengthen the global market's confidence in the sustainability of the country's palm oil industry and actively promote good agricultural practices among palm industry players, especially for OPSF [10]. This approach is essential in the sustainable management of the oil palm industry, particularly small oil palm farmers, to meet the global certification requirements established by the Roundtable on Sustainable Palm Oil (RSPO) [5].

Economic, environmental, and social wellbeing are the three primary pillars of the oil palm industry's sustainability management, as stated in the Brundtland Report of 1987 [9,11]. Previous review papers on OPSF combine all aspects of sustainability, namely economic, environmental, and social, to comprehensively analyze the difficulties and effects of OPSF [9,12,13]. However, review studies conducted by Ngan et al. [14] and Zaifalaila et al. [15] emphasize that the social aspects of the oil palm sustainability component have received less attention than the economy and the environment. The success of the sustainability components, especially the economy and the environment, depends partly on how OPSF respond to social concerns and challenges. It is also critical to examine the Malaysian context's societal aspect, as this provides input to the relevant authorities to implement effective measures to resolve the sustainability issue.

Recent research discussed the value of certification for OPSF [16–18]. Zaifalaila et al. [15] have conducted SLR and emphasized the sustainability of OPSF through a socio-economic approach. According to Zaifalaila et al. [15], four primary criteria need to be improved, including the OPSF's capacity for certification, agricultural strategies and policies, the variety of smallholder classifications following the economic and production levels, and land ownership schemes. There is also an article that serves as a scoping review and examines the global wellbeing implications of OPSF, not merely the situation in Malaysia [13,19]. Therefore, to our knowledge, SLR research examining the social issues and difficulties faced by OPSF in Malaysia is considerably lacking in the field. As such, the primary goal of this present SLR is to undertake an organized, comprehensive, and systematic review of previous research on the social issues and challenges only among OPSF in Malaysia. Social sustainability indicators focus on welfare, living conditions, health, education, job possibilities, equality rights, fundamental rights, and social justice. The findings of this SLR are expected to provide comprehensive and up-to-date information to the relevant agencies in forming strategies to resolve the issues faced by OPSF in Malaysia, and ideas to advance in future research on social concerns and challenges among OPSF in Malaysia, and eventually the overall wellbeing of society.

2. Materials and Methods

2.1. Review Protocol

This section discusses the method applied in obtaining previous research articles on social issues and challenges faced by OPSF in Malaysia. This SLR adheres to the Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) writing guidelines, which is suitable for various SLR analysis types, including integrative, qualitative, and quantitative research [20]. The identification process included a search for similar publications in two key databases, Web of Science and Scopus, and an additional database, Google Scholar. Google Scholar was used to snowball previous studies, particularly those conducted in Malaysia. The screening, verification, and quality appraisal processes followed the PRISMA guidelines [21].

PRISMA is undoubtedly well applied for research in the medical field; however, this present study uses PRISMA as the primary approach as it is appropriate to be used in the context of social sciences and is able to specify the inclusion and exclusion criteria for a specific study [22,23]. The checklist items are also pertinent to mixed-methods systematic reviews that take into account methodologies from both quantitative and qualitative studies [23]. There are recent social science studies that apply PRISMA in SLRs, to address sustainability and policy concerns regarding the advancement of technology in the palm oil sector [24,25].

2.2. Formulation of Research Questions

This SLR contains only one principal theme: the social issues and challenges faced by OPSF in the oil palm industry in Malaysia. The research question formulation is based on population, interest, and context (PICO), which is one of the tools that helps authors to develop research questions, in which P is the population or people, the group or person in focus; “I” is the interest, which is what is to be studied; and Co is the study’s context [21]. Therefore, P represents the SLR (oil palm smallholder farmers), I (social issues and challenges), and Co (the context in Malaysia). This formulation makes the research question “*What are the social issues and challenges faced by the oil palm smallholder farmers in Malaysia?*”

2.3. Systematic Search Strategy

The systematic search strategy consists of five major steps: identification, screening, qualification, quality appraisal, and data analysis (refer to Figure 1).

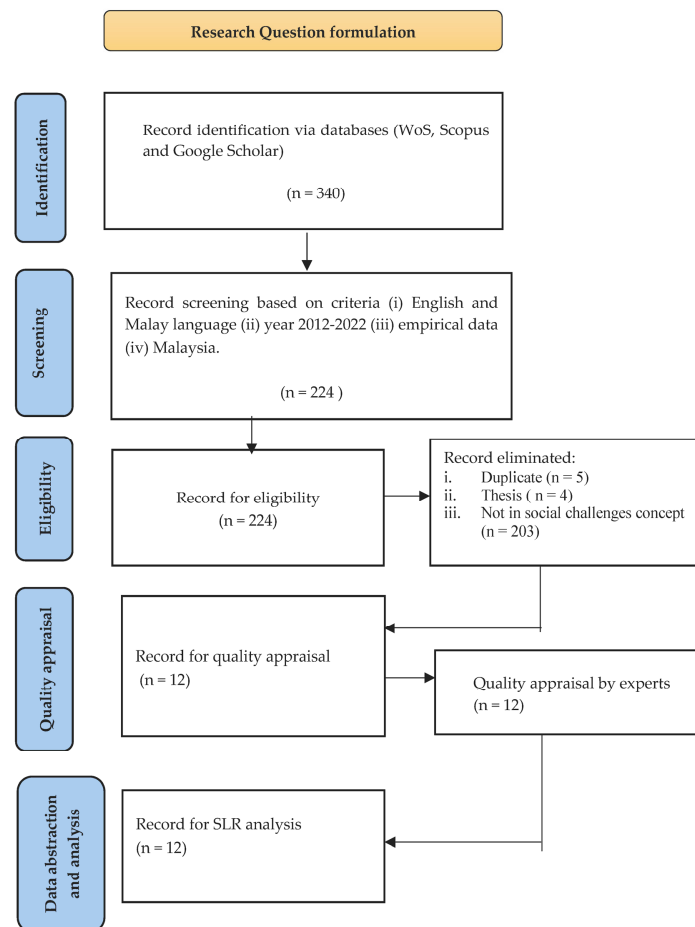


Figure 1. Flow diagram of the systematic literature review (SLR) process (adapted from Shaffril et al. [21] and Page [23]).

2.3.1. Identification

The search technique used to find articles/references in the Web of Science and Scopus databases is advanced searching using basic functions such as Boolean Operators (AND, OR) and related specific phrases. The formation of the search string is based on the social context by Axelsson et al. [26] and uses the method suggested by Shaffril et al. [27]. They suggested searching for similar, related keywords and variations that might include English and Malay concepts, as in Table 1.

Table 1. Search string to search articles/references in WOS, Scopus, and Google Scholar databases.

Database	Search String
WoS	TS (("isu" OR "cabaran" OR "impak" OR "kesan" OR "krisis" OR "issue*" OR "challenge*" OR "impacts*" OR "effect*" OR "crisis") AND ("sosial" OR "komuniti" OR "kebijakan" OR "tempat tinggal" OR "kesihatan" OR "pendidikan" OR "hak kesamaan" OR "hak asasi" OR "peluang pekerjaan" OR "penilaian impak sosial" OR "penilaian kitar hayat sosial" OR "social" OR "society*" OR "societal" OR "community*" OR "welfare*" OR "health" OR "equality*" OR "education*" OR "human right*" OR "social impact assessment*" OR "social life cycle assessment*") AND ("pekebun kecil sawit" OR "pekebun kecil" OR "smallholder oil palm farmer*" OR "smallholder farmer*") AND ("oil palm*" OR "palm oil" OR "minyak sawit" OR "kelapa sawit" OR "sawit"))
Scopus	TITLE-ABS-KEY (("isu" OR "cabaran" OR "impak" OR "kesan" OR "krisis" OR "issue*" OR "challenge*" OR "impacts*" OR "effect*" OR "crisis") AND ("sosial" OR "komuniti" OR "kebijakan" OR "tempat tinggal" OR "kesihatan" OR "pendidikan" OR "hak kesamaan" OR "hak asasi" OR "peluang pekerjaan" OR "penilaian impak sosial" OR "penilaian kitar hayat sosial" OR "social" OR "society*" OR "societal" OR "community*" OR "welfare*" OR "health" OR "equality*" OR "education*" OR "human right*" OR "social impact assessment*" OR "social life cycle assessment*") AND ("pekebun kecil sawit" OR "pekebun kecil" OR "smallholder oil palm farmer*" OR "smallholder farmer*") AND ("oil palm*" OR "palm oil" OR "minyak sawit" OR "kelapa sawit" OR "sawit"))
Google Scholar	social OR sosial AND pekebun kecil sawit OR smallholder oil palm farmers AND Malaysia

Using Google Scholar as an additional database will broaden the search [20,28]. Access to local publications on research in Malaysia is made available in this SLR by Google Scholar. As a result, the researchers successfully shortlisted 340 articles using the keywords, databases, and search strategies, including 32 articles from WOS, 30 from Scopus, and 278 from Google Scholar. The systematic search strategy's second step, screening, was applied to each of these articles.

2.3.2. Screening

The researchers screened a total of 340 articles, with the selection and removal criteria defined as shown in Table 2. The first criterion is defined only for journal papers published in English and Malay, for quality control purposes. The second set of criteria include papers published between 2012 and 2022. The 10-year period is appropriate as OSPF's societal concerns are dynamic and diverse in the current decade and have reached maturity saturation within the timeframe specified [29]. These associated articles were only discovered in 2014 by the identification processes in WOS and Scopus. For the following criterion, all 228 papers are still available.

Table 2. Screening criteria used.

Screening Criterion	Details
Publication type	Articles (review articles were not selected)
Language type	English and Malay
Timeframe	Ten years
Type of findings	Empirical data
Focus findings	Data related to the social challenges faced by oil palm smallholder farmers in Malaysia

As the researchers carried out this SLR to analyze the studies' findings, which included 280 papers according to the following criterion, the third criterion was to select any studies that were not in the form of a review. The final requirement was to take studies performed in Malaysia into consideration exclusively. A total of 116 items were eliminated during the screening phase, leaving 224 articles available for eligibility screening.

2.3.3. Eligibility

At this point, 224 articles were qualified, and each went through another round of eligibility screening. Two reviewers performed eligibility checks to ensure that they focused only on relevant papers for the SLR process. They reviewed each article's title and abstract for validation. If the title and abstract were insufficient to reach a decision, the reviewers could conduct a thorough study on the methodology, findings, and discussion of the publication. They confirmed the content with empirical facts and social components at this stage. They further emphasized that the social theme adopted was based on Axelsson et al. [26] and was related to welfare, housing conditions, health, education, job opportunities, equality rights, and social justice. This process eliminated 212 articles, leaving only 12 for the quality appraisal process.

2.3.4. Quality Appraisal

Two reviewers implemented the Mixed-Method Appraisal Tool (MMAT) developed by Hong et al. [30] to evaluate the quality of the articles. MMAT provides a guide for reviewers to both analyze articles and construct criteria for evaluating the quality of the obtained papers covering quantitative and qualitative approaches. The criteria for implementing this quality appraisal process are as in Table 3.

Table 3. Criteria used for quality appraisal based on the MMAT method.

Study Form	Evaluation Criteria
Qualitative	QA1—Does the qualitative approach answer the research question? QA2—Is the qualitative data collection method sufficient to answer the research question? QA3—Are the study data sufficient for the study results? QA4—Is the interpretation of the study results sufficient with the data obtained? QA5—Is there coherence (relationship) between sources, collection, analysis, and interpretation of data?
Quantitative (descriptive)	QA1—Is the sampling strategy relevant to answering the research question? QA2—Are the respondents representative of the target population? QA3—Are measurements sufficient? QA4—Is there a low probability of non-response bias? QA5—Do the results of the statistical analysis adequately address the research question?
Quantitative (non-random)	QA1—Are the respondents representative of the intended population? QA2—Are measurements adequate for both the result and the exposure (or intervention)? QA3—Do complete outcome data exist? QA4—Are confounders taken into account in the design and analysis? QA5—Is the intervention (or exposure) delivered as intended during the research period?

Table 3. *Cont.*

Study Form	Evaluation Criteria
Mixed mode	QA1—Is it sufficient and rational to use mixed modes to answer research questions?
	QA2—Does the difference in the components of this study lead to an answer to the research question?
	QA3—Are the results of integrating qualitative and quantitative components properly interpreted?
	QA4—Is it properly addressed when there are discrepancies and inconsistencies between quantitative and qualitative results?
	QA5—Do the various components of the study meet the quality requirements of each method's tradition?

Reference: Hong et al. [30]; Shaffril et al. [31].

2.3.5. Data Abstraction and Analysis

Data abstraction and analysis were carried out using the approach developed by Shaffril et al. [21], which provides a thorough approach to analyzing quantitative, qualitative, or mixed mode publications, as shown in Table 4.

Table 4. Results of articles' quality appraisal.

Research	Type of Study	QA1	QA2	QA3	QA4	QA5	Number of Criteria Met	Accepted for Review
Basaruddin et al. [7]	QN(D)	/	/	/	/	/	5/5	Yes
Isah et al. [32]	QN (D)	/	/	/	/	/	5/5	Yes
Azima et al. [33]	QL	/	/	/	/	/	5/5	Yes
Azima et al. [34]	QN (D)	/	/	/	/	/	5/5	Yes
Yew et al. [35]	QL	/	/	/	/	/	5/5	Yes
Sarmila et al. [36]	QN(D)	/	/	/	/	/	5/5	Yes
Tenge et al. [37]	QN(D)	/	/	/	/	X	4/5	Yes
Ab Rahman et al. [38]	QN(D)	/	/	/	/	/	5/5	Yes
Ibrahim et al. [39]	QN(D)	/	/	/	/	/	5/5	Yes
Adnan et al. [40]	QN(D)	/	/	/	/	/	5/5	Yes
Sahidan et al. [41]	QN(D)	/	/	/	/	/	5/5	Yes
Zaimah et al. [42]	QN (D)	/	/	/	/	/	5/5	Yes

QA = Quality Appraisal QL = Qualitative; QN(D) = Quantitative (Descriptive).

A total of ten descriptive quantitative studies examined the basic information of the variables [34,36,37,39], as well as the relationship between the variables [7,32,38,40–42]. Another two studies [33,35] used a qualitative approach with in-depth interviews. Following this, these papers were appraised using the criteria outlined in Table 3. Studies that received an appraisal on at least three of the five criteria were chosen for further review.

Figure 1 depicts an overview of the stages performed in the implementation of the SLR, encompassing the main steps according to the PRISMA protocol, which begins with research question development and is followed by identification, screening, eligibility, quality appraisal, and finally the selected journals for data abstraction and analysis, in which 12 articles have been selected for this review's purpose.

3. Results

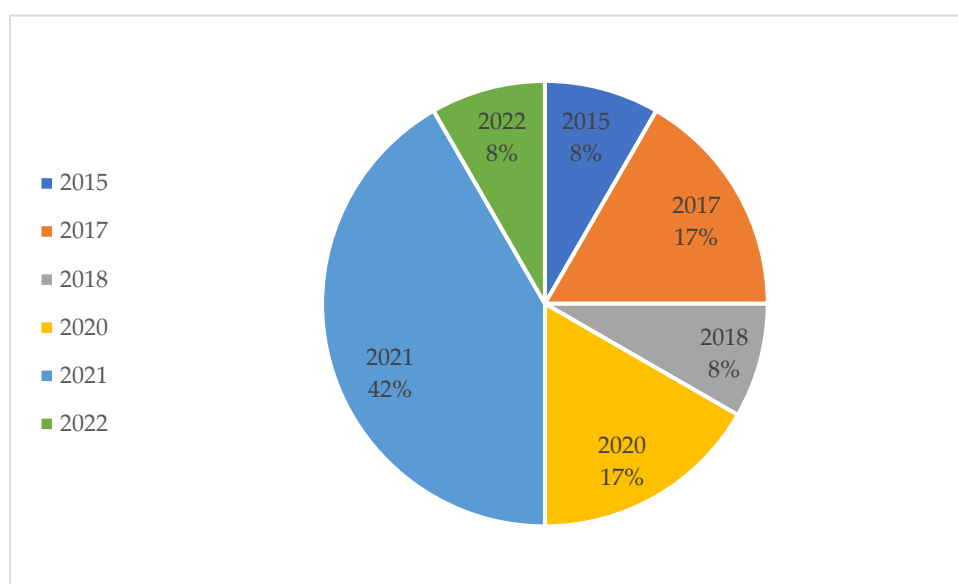
3.1. Background of the Selected Studies

There were, altogether, 12 studies chosen, with two involving random populations from Peninsular Malaysia [7,32], three in Sabah [33,34,41], two from Sarawak [36,38] and one study each from Pahang [35], Selangor [37], Kedah [40], and Johor [42], as shown in Table 5. At the same time, Ibrahim et al.'s [39] study included respondents from two states, which were Perak and Sarawak. Two studies applied qualitative methods, namely in-depth interviews with informants [33,35], while the remaining nine used quantitative methods. Quantitative studies are divided into studies that use basic descriptive analysis [34,35,37,39] and also in-depth statistical analysis to study the relationship between variables [7,32,38,40–42].

Table 5. Background of the selected studies.

Research	Study Area	Methods	Year of Publication
Basaruddin et al. [7]	Random	Quantitative (in-depth statistical analysis)	2021
Isah et al. [32]	Random	Quantitative (in-depth statistical analysis)	2020
Azima et al. [33]	Sabah	Qualitative (in-depth interview)	2015
Azima et al. [34]	Sabah	Quantitative (descriptive analysis)	2018
Yew et al. [35]	Pahang	Qualitative (in-depth interview)	2020
Sarmila et al. [36]	Sarawak	Quantitative (descriptive analysis)	2017
Tenge et al. [37]	Selangor	Quantitative (descriptive analysis)	2021
Ab Rahman et al. [38]	Sarawak	Quantitative (in-depth statistical analysis)	2021
Ibrahim et al. [39]	Perak and Sarawak	Quantitative (descriptive analysis)	2021
Adnan et al. [40]	Kedah	Quantitative (in-depth statistical analysis)	2022
Sahidan et al. [41]	Sabah	Quantitative (in-depth statistical analysis)	2021
Zaimah et al. [42]	Johor	Quantitative (in-depth statistical analysis)	2017

As for the year of publication, as in Figure 2, one study was published in 2015 [33], two studies in 2017 [36,42], one study in 2018 [34], two studies in 2020 [32,35], five studies in 2021 [7,37–39,41], and one study in 2022 [40].

**Figure 2.** Selected studies based on years of publication.

Of these 12 selected studies, one article is from a journal in the WoS and Scopus databases: *Climate and Development* [32]. The rest were from the Google Scholar database, primarily focused on articles studying the social issues and challenges of OPSF in Malaysia, namely two each from the *International Journal of Modern Science in Social Sciences* [7,41], *Malaysian Journal of Society and Space* [33,34,36,42], *Journal of Social Science and Humanities* [35,37], *IOP Conference Series: Earth and Environmental Science* [40], *Sustainability* [38], and book chapters [39].

3.2. Theme Formation—Attitude, Education, and Welfare

Theme formation was carried out on the 12 selected articles using the thematic analysis method [15]. Three themes were identified in answering the following SLR research question: “What are the social issues and challenges among OPSF in Malaysia?”. The themes were attitude, education, and welfare.

3.2.1. OPSF Attitudes toward Technology Adoption, Cooperative Involvement, and Farm Productivity

The first theme is attitude, in which previous research has discussed how the attitude of OPSF determines their views on new technology adoption, joining cooperatives, and engaging in productive farming activities [32,33,35–37,41]. All of these studies have in common the idea that an individual’s initial assessment of a particular topic shapes their attitude towards it.

According to Azima et al. [33], OPSF in Sabah do not wish to invest a great deal of effort in oil palm cultivation because they are concerned about taxes and uncertainties in the event that the landowner’s heirs recover the estate land. The property sale and purchase agreement between the landowner and the OPSF were not fully protected by legislation favoring the OPSF, which is how this issue came about. As a result, this mentality also widens the chasm between the OPSF and landowners and generates dissatisfaction. Additionally, OPSF have some unfavorable attitudes, including carelessness, immediate satisfaction, and a lack of focus due to allowing others to manage the estate. Further, selling produce to third parties for a quick income, rather than sending it to oil palm mills, requires time and incurs transportation costs. If they can obtain financial support in cash form for these farm clearing operations, OPSF are willing to carry out farm clearing projects without applying to the MPOB.

Isah et al. [32] investigated the OPSF’s attitudes towards implementing adaptation and mitigation strategies to deal with the adverse effects of climate change. It is well known that, during this time of year, Malaysia experiences regular alternating floods and hot seasons, negatively impacting oil palm production. The recommended mitigation measures are ecosystem protection, water and soil management, soil degradation reduction, and soil pressure reduction. All of these indicators have caused changes in OPSF’s crop management practices. Nonetheless, some OPSF do not take climate change seriously and instead reject mitigation attempts for the problem of climate change due to the high expenses incurred [32].

Cooperatives provide OPSF and family members, including women and children, with effective training and educational opportunities [36,41]. However, OPSF family members shared unfavorable views, particularly women, who chose not to participate in these events as their spouses had already joined [41]. Furthermore, young people are not interested in joining cooperatives since they prefer to work in other industries, such as manufacturing, services, and hospitality.

Regarding OPSF’s positive attitudes towards adopting technological advancements and innovations, the researchers discovered that OPSF had a favorable opinion of how this technology streamlines the process of growing oil palms [37]. A positive perception is predicted to spark positivity and lead OPSF to accept the newly presented technical improvement. The idea of “family farming” was used in a study by Yew et al. [35] for OPSF from the indigenous community to develop a perception of the building of family structures. By cooperating in the same plots, these native OPSF desire to enhance their

sense of brotherhood in managing their plantations. This study also examines family farming from a sociological perspective. It can be connected that family values such as dedication, unity, and inheritance represent a way of life based on conventional views and traditions regarding work and life [35].

3.2.2. OPSF Education towards Adaptation of Related Extension Programs

The second theme is education. Previous research has examined the role of education in adapting OPSF to development programs [7], training provided by related organizations [34,41], adapting oil palm integration techniques [42], the value of fundamental education for the younger generation [35], and the acceptance of information technology [40].

Demographic profiles influenced the OPSF's opinions on the value of development activities organized by linked organizations, with highly educated and high-income OPSF reported to be more likely to grasp the importance of extension activities [7]. However, the role of extension officers is equally crucial in ensuring that OPSF are enthusiastic about taking part in extension activities [41]. OPSF are more interested in joining programs trained by extension officers as innovative teaching strategies could capture the farmers' attention, and the Q&A sessions are fruitful [7]. According to a study by Ibrahim et al. [39], most OPSF believe that extension officers are equipped with essential leadership qualities and practical communication abilities to effectively impart technical knowledge to OPSF.

Azima et al. [34] discovered a misunderstanding among OPSF regarding the training provided by the MPOB to develop skilled laborers in oil palm production. In total, 72% of survey participants said that they had never received assistance from MPOB. It is obvious that OPSF believed that this training was being conducted solely under MPOB's auspices. Most OPSF also reported not being interested in completing the basic certification training due to their age. Another influencing factor is the lack of interest in this skill training, as most OPSF had a low level of formal education. These OPSF are more likely to gain technical expertise from the fertilizer retailer that they have always dealt with than from MPOB representatives [34]. OPSF among the indigenous community are concerned about the successor problem, as the youth are generally reluctant to make oil palm production their profession [35]. However, the indigenous community acknowledge education's importance and allow their children to attend school [35].

Having in-depth insights into palm oil integration techniques can help OPSF to become more productive and less reliant on one source of income. On average, OPSF that execute oil palm integration operations are satisfied with the outcomes. However, the level of satisfaction varies depending on the category, the implementation cost, and the revenue from integration activity [42]. OPSF also face various hurdles, such as wild animals, inadequate seedling support, pests, theft, marketing, workforce shortages, weather and disease issues, rising input prices, stunted palm trees, and land problems [42].

One of the fundamental benefits of education is exposure to information technology knowledge, and OPSF should not fall behind in developing this skill. With the advancement of information technology, the agricultural supply chain can grow, and the most recent information can be promptly acquired. OPSF groups with higher incomes and larger farm areas are more likely to be competent in information technology [40]. Meanwhile, when it comes to social media, 78.9% of OPSF use it to connect with family and friends, 46.1% to acquire the latest news, and 35.3% to share their opinions [39].

3.2.3. OPSF Welfare

The cooperatives' effectiveness and the land ownership issue were covered in the welfare context of the present SLR. The Malaysian government founded the Sustainable Oil Palm Growers Cooperative to assist in improving the livelihoods of OPSF by fostering job opportunities, facilitating marketing, boosting incomes, and reducing the disparity in poverty [41]. OPSF's participation in cooperative organizations has benefited them regarding financial advantages and opportunities for cooperative social activities [36].

Due to the inadequacy of the current legal protections, the problem of OPSF's property ownership in Sabah is considered to have negatively impacted their welfare. According to Azima et al. [33], the problem of land ownership is one of the reasons that OPSF in Sabah are less motivated to dedicate efforts to their crops. This problem further widens the gap between organizations and OPSF, forcing the latter to rely on middlemen [34]. This problem has also resulted in direct and indirect effects on the economic and social components of OPSF [34]. OPSF among the indigenous community are entitled to the land that they occupy and farm under customary law [35]. Tok Batin recognizes the MPOB holding license as a legal document for land ownership rights. These indigenous people also work in agriculture, a form of land ownership and a requirement of the MSPO [35].

4. Discussions

Oil palm was first introduced to Malaysia by the British as an ornamental plant in 1875, and its commercial production did not begin until 1917 in Tennamaran Estate, Selangor [43]. Nonetheless, large-scale oil palm farming did not begin until the 1960s, after the Malaysian government's intention to diversify its agricultural lands rather than rely solely on rubber and tin. Oil palm replaced rubber as Malaysia's primary commodity crop in 1989 [44]. As a result of this transformation, the palm oil business expanded and rose to prominence, becoming one of the major sources of income for the country. The palm oil industry is expanding as large corporations are established to meet the commodity's global challenges. The government has implemented numerous strategies to incorporate smallholder oil palm farmers into the modernization of this industry. Palm oil entrepreneurs have faced a variety of challenges, particularly OPSF, that have been extensively discussed in earlier studies, such as a readiness to adopt new technology and a lack of financial resources to comply with RSPO certification (5,12,17,18). Recognizing this conflict, Malaysia is making an effort to ensure that these OPSF comply with the MSPO certification requirements, and guidance has still been frequently implemented. By adhering to the MSPO, OPSF are required to subject themselves to the sustainability principles that cover the social, economic, and environmental dimensions and continue to play their crucial roles in the oil palm supply chain.

The empowerment of social components among OPSF is critical to the oil palm industry's long-term viability. Numerous recent studies have focused on the oil palm industry's sustainability, through the three primary pillars of social, economic, and environmental [9,11–13]. All these aspects are required for the oil palm industry to achieve the Sustainable Development Goals by 2030 [45]. The view on social sustainability has also begun by investigating how these three components contribute toward improving all the social elements [14,15]. However, in the context of local governance, understanding the social aspect is still essential in deciding how to deal with these social issues.

Previous research presented in this SLR demonstrated that these OPSF's social challenges are closely related to the demographics of the respondents, such as the study location, education levels, and the size of the plantations under OPSF's management. OPSF with better education, a higher income, and a larger farm size are more likely to accept program proposals or new technologies. Other criteria, such as age, have not received as much attention previously and are essential to consider. A study by Parthiban et al. [46] found that OPSF's age affected how well they adapted to new technology. In addition to examining social issues and challenges, previous research has also highlighted the positive social effects of OPSF's access to physical facilities, welfare programs, and educational opportunities, as well as the benefits attained to improve their quality of life [43,47].

Legislative factors in the state governments play an essential role in regulating matters about the welfare of OPSF, such as the management of land conflicts that have long plagued the OPSF in a particular state [33,48]. In order to offer the appropriate agencies more information on how to handle strategies to maintain the welfare of OPSF in Malaysia, in-depth studies to cover specific demographic factors of OPSF are required.

The oil palm industry has substantially contributed to raising the standard of living and quality of life for OPSF in social sustainability [9]. The involvement of large planta-

tion businesses, their direct or indirect social impacts on OPSF, and their effects on local communities, particularly indigenous people, must also be considered [9,45]. All parties involved must comprehend that the sustainability of the oil palm industry must consider social factors that are strongly tied to the welfare of all workers, including OPSF, which are affecting the economy and the environment [49,50].

There is currently a lack of social impact studies on the local communities that are directly and indirectly impacted by the oil palm industry, such as job opportunities, community involvement in the industry, safe and healthy living conditions, and community access to local resources [50,51]. In this framework, the local community are viewed as members of the OPSF family. Manik et al. [51] defined local communities as residents living within a 10-km radius of any oil palm area. The social impact on the local community also determines the oil palm industry's sustainability [50,51]. According to a social impact study by Muhammad et al. [50], local communities were less satisfied with cultural heritage management, such as not being involved in water and air pollution incidents.

To measure the social impact on local communities, one of the main criteria for implementing MSPO is the use of social impact assessment (SIA), which has specified particular requirements for organized OPSF and independent OPSF [52]. MPOCC [49] has listed many benefits for OPSF to adopt MSPO, including financial support, technical support, ongoing advice, safer working conditions, more assured OPSF rights, income potential, and profit generation. However, a thorough social studies methodology approach is required to address the issues and challenges in a broader context, such as human rights, health and safety at work, cultural heritage, poverty levels, disease, political conflict, indigenous rights, and others [53]. For this aim, the methodological tool of Social Life Cycle Assessment can be performed to measure social concerns and challenges among OPSF in Malaysia. This SLR recommends that further social science studies be conducted on OPFS from varied demographic backgrounds, but with the same goal: to improve their attitudes, knowledge, and wellbeing in this industry.

5. Conclusions

OPSF in Malaysia are facing social issues and challenges, ranging from broader societal issues to specific social issues depending on OPSF demographics. These issues and challenges should be recognized continuously to assist in implementing relevant programs and policies to ensure the social wellbeing and livelihood of the OPSF in Malaysia. Social issues and challenges should be identified at all supply chain stages to support improved policies and ensure that the OPSF's contribution to the country's oil palm industry stays relevant. In the future, it is possible to look into the social scope's growth concerning topics such as OPSF rights and social justice, as well as issues such as health and safety, local community effects, and other related topics.

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