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An Inquiry into Social Acceptability of Maize Farming in the Southeast Dry Zone of Sri Lanka

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Abstract

Social acceptability (SA) towards farming in Sri Lanka remains low as an occupation, a shared but untested hypothesis within the agriculture sector. The perceptions of an ageing farming population and youth departing from agriculture contribute to this notion. More specifically, farming areas are severely affected by seasonal labour scarcity, regardless of the crops grown or the scale of cultivation. The factors prompted an examination of whether and why this is the case. This analysis utilized cross-sectional data from the large-scale Chena-maize system (CMS) and the small-scale maize system (SMS) in the Southeast Dry Zone of Sri Lanka. The qualitative assessment was based on 26 social indicators associated with diverse stakeholders surrounding the maize value chain. The findings provide a nuanced understanding of the social dynamics affecting the acceptability and sustainability of maize farming in the region. Of the 26 social indicators, 11 (42%) have positive effects, while 7 (27%) have very positive effects, all contributing positively to the social acceptability of maize systems. Six indicators (23%) are found to have negative effects, and the remaining two indicators (8%) have very negative effects. Overall, most social indicators positively affect the social acceptability of maize systems. The study concludes that while the social acceptability of maize systems remains above a moderate level, there is room for improvement. It suggests that alternative measures are needed to sustainably enhance their social performance and thereby contribute to the overall sustainability of maize systems.

Key Words: Maize, Rain-fed farming, Social Acceptability, Southeast Dry Zone

1. Introduction

Social acceptability (SA) is an abstract concept (Bolognesi & Vernillo, 2019) subject to constant debate and interpretation from various perspectives. In simpler terms, *social* pertains to society or its organization, while *acceptability* refers to the quality of being accepted. In the Sri Lankan context, the notion of youth alienation from farming is widely socialized as an indication of the social unacceptability of farming (Gunasekara, 2017), a sentiment supported by global evidence (Leavy & Hossain, 2014; Nag, et al., 2018).

In Sri Lanka, youth reluctance to choose farming as a full-time occupation is attributed to factors such as lack of social and industrial recognition, limited access to information, inadequate social security systems, and weak production and marketing infrastructure (Damayanthi & Rambodagedera, 2013). Despite these challenges, state agencies attempt programs aimed at attracting and retaining youth in farming (Ministry of Agriculture, 2022). Thus, the question of whether farming in Sri Lanka is socially acceptable remains pertinent, particularly in the context of tensions between traditional farming practices and contemporary social expectations.

The farming sector in Sri Lanka consists of a wide range of crop production systems operating within diverse socioeconomic and ago-ecological conditions (Ranathunga et al., 2018; Rosairo, 2023). These contextual differences can significantly influence the social acceptability of farming systems. In particular, the Southeast Dry Zone of Sri Lanka (SEDZSL) represents one of the country's major rain-fed farming regions, characterized by upland food crop production systems, climatic variability, and strong dependance on agriculture-based livelihoods. Within this region, maize cultivation has become one of the most prominent food crop production

systems (FCPSs) due to its contribution to rural income, employment generation, livestock feed supply, and environmental concerns, with labour shortages, long working hours, human wildlife conflicts, land use pressures, and sustainability challenges. These conditions make maize cultivation systems in the SEDSL suitable for examining the broader dimensions of social acceptability of farming.

It is a well-known fact that farming is a multi-stakeholder process involving farmers, the local community, society, value circle actors and consumers. Therefore, SA cannot be judged solely based on youth participation criteria. Furthermore, focusing only on farmers may overlook the perspective of other key actors affected by farming activities. Addressing these contextual and stakeholder-related factors is crucial for achieving a more nuanced understanding of the social acceptability of farming.

Accordingly, this study is guided by questions: (1) How do different stakeholders perceive the social acceptability of maize cultivation systems in the Southeast Dry Zone of Sri Lanka? (2) What positive and negative social impacts influence the social acceptability of these farming systems? and (3) How do contextual characteristics of maize cultivation systems shape their social acceptability?

Therefore, the main objective of this research is to analyze the social acceptability of farming based on maize cultivation systems in the Southeast Dry Zone of Sri Lanka, emphasizing for policymakers the importance and contribution of social aspects in ensuring the sustainability of the farming sector.

This paper is organized into five main sections. Following the introduction, the second section presents a review of the relevant literature. The third section describes the methodology adopted for research. The fourth section presents the results and analysis, highlighting the key findings and their implications. The final section provides the conclusion of the study.

2. Literature Review

2.1 Social Acceptability

The varied perspectives on social acceptability highlight its complexity and multifaceted nature. Brunson (1996) conceptualizes SA as the aggregate form of public consent, wherein judgments are collectively shared and expressed among socially and politically relevant groups within society. Expanding beyond this conventional understanding, later studies have interpreted SA in relation to broader concepts such as social sustainability (SS). Kelly (2018), for example, discusses SA within the context of SS, which refers to the ability of a community to develop processes that satisfy the present needs of its current members while safeguarding the ability of future generations to maintain a healthy community (Padilla-Rivera et al., 2020).

These diverse perspectives underscore the importance of considering different dimensions and interpretations of SA in various contexts, whether in public policy, business practice, or community development. By recognizing the multifaceted nature of SA, stakeholders can better understand and address the social impacts of their actions, ultimately contributing to more inclusive and sustainable outcomes for the entire society.

Although slight conceptual differences exist between SA and SS, both concepts fundamentally concern human well-being, social equity, livability,

health equity, community development, social capital, human rights, social justice, cultural competence, community resilience and human adaptation (United Nations Environment Programme[UNEP] & Society of Environmental Toxicology and Chemistry[SETAC], 2013). These perspectives demonstrate that SA is not a single-dimensional concept but rather a socially constructed and context-dependent phenomenon shaped by multiple social, economic, cultural, and institutional factors. Shindler et al. (2002) further emphasizes the importance of SA by highlighting its role in addressing public concerns and values, enhancing citizen participation, promoting informed public understanding, and supporting inclusive decision-making processes. Collectively, these insights suggest that social acceptability should be understood through a multidimensional framework that captures the diverse factors influencing human well-being and social acceptance. Within the farming sector, the social dimension of farming is particularly significant because farming is fundamentally a human-centered activity. Hence, the essence of farming lies in its human-centric nature, emphasizing the importance of the social aspect alongside agronomic, economic, and ecological factors. SA revolves around human well-being, and the favourable social outcome of farming are pivotal in determining SA. Unsustainable farming practices have led to food quality deterioration, environmental degradation, and compromised human well-being (Ministry of Agriculture, 2019). Sources show that 1.3 billion people globally lack regular access to sufficient and nutrient-rich food. Hence, increasing food production, particularly of nutrient-rich food commodities, is a precondition to overcoming this problem. Addressing social concerns like food safety, environmental sustainability, and access to nutritious food, is crucial for enhancing SA in farming and ultimately contributing to human well-being.

The social dynamics of farming are further shaped by cultural features passed down through generations. They are influenced by unique beliefs and attitudes, reflecting historical, social and environmental contexts. Human dynamics in farming encompasses the intricate interplay between farmers' attitudes towards and adoption of sustainable practices, as well as social impacts. Several authors highlight the interconnectedness of farmers' behaviours, attitudes, and social implications in farming (Munaweera & Jayasinghe, 2017; Musyoki et al., 2022). Understanding these cultural and human dynamics is crucial for promoting sustainable practices, preserving cultural heritage, and addressing environmental challenges in farming.

Labour relations in farming involve family labour, the reciprocal '*Attam*' system, and hired labour. The *Attam* system promotes community cooperation through mutual assistance, while the whole family engaged in traditional farming facilitating knowledge transfer (Weerakkody, 2019). Hired labour offers local employment but can lead to disruptions due to migration. Therefore, a multifaceted approach is needed, considering cultural traditions, labour market conditions, and the broader socio-economic context.

In recognition of this diversity, UNEP and SETAC (2013) identifies a broad range of stakeholder categories and social indicators relevant to Social Life Cycle Assessment (S-LCA), including workers, consumers, local communities, society, and value chain actors. These indicators encompass labour rights, social security, health and safety, access to resources, cultural heritage, community engagement, fair competition, and social responsibility (Table 1). Therefore, SA in farming cannot be adequately understood through a single indicator or stakeholder perspective. Instead, it requires a

comprehensive assessment of the multiple social indicators and impacts generated across different stakeholder groups and farming contexts.

Table 1: Stakeholder Categories and Subcategories/ Social Indicators

Stakeholder Categories	Social Indicators
Worker	Freedom of Association and Collective Bargaining; Child Labour; Fair Salary; Working Hours; Forced Labour; Equal Opportunities/Discrimination; Health and Safety; Social Benefits/Social Security.
Consumer	Health and Safety; Feedback Mechanism; Consumer Privacy; Transparency; End of Life Responsibility.
Local community	Access to Material R0esource; Access to Immaterial Resources; Delocalization and Migration; Cultural Heritage; Safe and Healthy Living Conditions; Respect of Indigenous Rights; Community Engagement; Local Employment; Secure Living Conditions.
Society	Public Commitments to Sustainability Issues; Contribution to Economic Development, Prevention and Mitigation of Armed Conflicts; Technology Development; Corruption.
Value chain actors	Fair Competition; Promoting Social Responsibility; Supplier Relationships; Respect for Intellectual Property Rights.

Source: UNEP & SETAC, 2013.

Despite the growing scholarly attention given to social dimensions in farming, significant conceptual and methodological gaps remain in assessing SA in farming systems. Existing studies focus on limited dimensions such as labour conditions or youth participation, while insufficient attention has been paid to the broader interactions among stakeholders, environmental externalities, and contextual differences across food crop production systems (FCPSs). Moreover, because SA is abstract and context specific (Bolognesi & Vernillo,

2019; Leknoi et al., 2023), its assessment requires approaches capable of capturing variations across farming systems, agro-ecological settings and stages of the crop life cycle.

Several authors have suggested different social indicators for evaluating SA in farming. Mills et al., (2021) identifies 20 farm-level social indicators, while Robling et al. (2023) focus on labour conditions, community engagement and welfare. Kelly (2018) applied the WEAR scale to assess social acceptability in a different context. However, these approaches demonstrate the absence of a universally accepted framework for assessing SA in farming. In this regard, Social Life Cycle Analysis (S_LCA) provides a useful analytical framework because it systematically evaluates the positive and negative social impacts of production systems throughout their life cycles from a stakeholder perspective (Benoit et al., 2010; UNEP & SETAC,2013).

Since farming operates as a socially embedded and context-dependent activity involving diverse stakeholders, the assessment of SA requires consideration of both stakeholder diversity and farming system diversity. Accordingly, there remains a significant research gap in developing comprehensive and context-sensitive approaches capable of capturing multidimensional social impacts, stakeholder perspectives, and contextual characteristics associated with different food crop production systems. Hence, it is essential to consider their social interests and the impact created by farming on them. Further, SA varies depending on the agronomic and contextual differences in FCPSs. Therefore, two key points to consider when analyzing SA in farming are the diversity of both the stakeholders and farming systems.

Given the above context, there exists a significant research gap in the absence of a comprehensive and context-sensitive method for assessing social acceptability in farming that adequately captures the diversity of stakeholders, farming systems and the multidimensional social impacts occurring across diverse food crop production systems.

3. Data and Methodology

In compliance with the above requirements, this study is designed to assess the social acceptability of selected food crop production systems using the stakeholder approach as the analytical tool.

3.1 The Selection of Study Location and Food Crop Production Systems

The assessment focused on rain-fed maize monocultures in the Southeast Dry Zone of Sri Lanka (SEDZSL), the country's largest maize-producing sub-zone. The SEDZ was chosen as the study location for four significant reasons: historical context and development challenges (Agrarian Research and Training Institute, 1993), diverse agricultural production, rain-fed upland farming and the prominence of maize cultivation. Within SEDZ, maize cultivation is the most prominent FCPS providing livelihood and income. This research addresses contextual and methodological gaps that previous studies have often overlooked in assessing SA by focusing on rain-fed upland maize cultivation in this specific geographical location. The study location is characterized by two distinct farm typologies; the Chena-based maize cultivation system (CMS) that involves slash-and-burn cultivation on a larger scale, predominantly practiced on encroached forest lands during the rainy *maha* season. The small-scale maize cultivation system (SMS) is typically

operated around the homestead or nearby areas, making it more accessible to a broader range of farmers.

The study focuses solely on the pre-harvest stage of two maize cultivation systems - CMS and SMS - due to minimal differences in their post-harvest practices. The Data collection involves two random samples: 212 farmers from SMS and 76 farmers from CMS. Data was gathered through structured questionnaires, supplemented by Key Informant Interviews (KIIs) and Focus Group Discussions (FGDs). Supplementary information was collected from focused farmer groups and key informants.

3.2 Assessment Approach

The assessment focused on four pre-harvest stakeholder groups: workers, the local community, society, and value chain actors. Consumers were excluded from this study because only a small proportion of maize production in Sri Lanka is directly used for human consumption, while the majority is utilized in the animal feed industry, particularly for poultry feed production. The impacts on these stakeholders were qualitatively evaluated using 26 social indicators using a decision matrix adapted from Social Life Cycle Assessment (S-LCA) guidelines. Each indicator was evaluated based on its observed effects on three social impact categories: health and safety, socio-economic effects, and national development, as detailed in Table 2.

The effects were interpreted using qualitative judgements such as positive, negative, indifferent, or very positive/very negative, depending on the

prevalence and intensity of the observed impacts within the maize cultivation systems.

Table 2: Decision Matrix for Interpretation of the Effect of Social Indicators on Social Impact Categories

Indicators are prevalent and positively affect impact category	√
Indicators are prevalent and negatively affect impact category	**X**
Indicator is prevalent and has an indifferent effect on impact category	•
Indicator is not relevant	º
Very Negative Effect	
Negative Effect	
Indifferent Effect	
Positive Effect	
Very Positive Effect	

Source: Adopted from Franze and Ciroth, 2011.

The assessment integrated information collected through structured questionnaires, Focus Group Discussions (FGDs), and Key Informants Interviews (KIIs). Questionnaire data provided the primary empirical evidence on farming practices, and stakeholder experiences, while FGDs and KIIs were used to validate, triangulate, and contextualize the findings.

In the context of farming, environmental externalities often translate into social consequences that influence how different stakeholders perceive and accept a farming system. For instance, deforestation and biodiversity degradation reduce access to such natural resources and intensify human-wildlife conflicts, which directly affect the living conditions and livelihood security of local communities. Similarly soil degradation threatens the long-term productivity and economic stability of farming households, while wildlife conflicts create

risks to human safety and property. Therefore, this study considers such environmental issues as deforestation, biodiversity degradation, wildlife conflicts, and soil degradation within the framework of social acceptability assessment for their direct implications for human well-being, livelihoods, safety, and community sustainability.

The final assessment of each indicator was therefore on the combined interpretation of quantitative field observations and qualitative stakeholder insights.

4. Results and Analysis

4.1 Findings

Table 3 presents a summary of the qualitative assessment of the social acceptability of maize cultivation systems in the SEDZ of Sri Lanka. The Table evaluates 26 social indicators across four major stakeholder categories: workers, local communities, society, and value chain actors. Each indicator was assessed based on its current status and its effects on three categories: socioeconomic conditions, health and safety, and national development.

The findings show that both maize systems have similar effects on the social impact categories either positively or negatively. Positive impacts are observed in areas such as employment generation, community engagement, cultural preservation, technology development, and fair competition as illustrated in Table 3.

Table 3: The Summary of Qualitative Assessment on Social Acceptability of Maize Cultivation

Stakeholder category	Social Indicator	Status at Present	Effects on Social Impact Categories			Effect on Social Acceptability of Maize Production Systems
			Socio-economic	Health and Safety	Country's Development	
Worker	1. Child Labour	Hardly ever	√	√	√	Very Positive
	2. Forced Labour	Not prevalent	√	√	√	Very Positive
	3. Fair Salary	Prevalent	√	•	•	Positive
	4. Freedom of Association	Ineffective	x	•	•	Negative
	5. Social Benefits/Security	Unavailable	x	x	•	Negative
	6. Equal Opportunities	Constrained	x	•	x	Negative
	7. Working Hours	Extended	x	x	x	Very Negative
	8. Health and Safety	At risk	x	x	x	Very Negative
Local Community	9. Community Engagement	Promoted	√	•	√	Positive
	10. Local Employment	Created	√	•	√	Positive
	11. Delocalization and Migration	Not occurred	√	•	•	Positive
	12. Access to Immaterial Resources	Ensured	√	•	•	Positive
	13. Respect for Indigenous Rights	Protected	√	•	•	Positive
	14. Secure Living Conditions	Unaffected	√	•	•	Positive
	15. Cultural Heritage	Preserved	√	•	•	Positive
	16. Access to Material Resources	Constrained	x	•	•	Negative
	17. Safe and Healthy Living	Affected	x	•	•	Negative
Society	18. Contribution to Development	Extensive	√	•	√	Very Positive
	19. Technology Development	Substantial	√	•	√	Very Positive
	20. Armed Conflicts	Not occurred	√	√	√	Very Positive
	21. Corruption	Not occurred	√	•	•	Positive
	22. Sustainability Issues	Go against	•	x	•	Negative
Value Chain Actors	23. Social Responsibility	Substantial	√	•	√	Positive
	24. Supplier Relationships	Promoted	√	•	√	Very Positive
	25. Fair Competition	Well-prevalent	√	•	√	Very Positive
	26. Intellectual Property Rights	Unrelated	√	•	•	Positive

Source: Adopted from Franze and Ciroth, 2011.

4.2 Discussion

4.2.1 Social Acceptability of Maize Cultivation: The Farmers' Perspectives

The 'worker' stakeholder category refers to the farmer or farm family. SA in maize cultivation was assessed using eight social indicators that reflect the interests of the farm family. This discussion follows the results in Table 3.

Child labour is a critical social indicator in farming, defined by the International Labour Organization (ILO) as work that harms children's development and dignity (ILO, 1999). Sources indicate that 112 million children are involved in agriculture globally and therefore addressing child labour remains a significant challenge. In the studied systems, child labour was minimal, with only 0.3 man-days/acre and percentages ranging from 0.5% in SMS to 0.9% in CMS. There is no evidence of child rights violations or adverse health effects. The minimal use of child labour in maize cultivation, a major local agricultural activity, positively impacts its social acceptability.

The ILO Forced Labour Convention, 1930 (No. 29) defines "forced or compulsory labour" as work demanded under threat of penalty and not volunteered by the individual (ILO, 2024). The absence of such practices in maize cultivation is a positive factor that enhances its social acceptability.

A fair wage is defined as one that is reasonably commensurate with the value of the service provided (UNEP & SETAC, 2013). The social indicator 'fair salary' in maize cultivation was measured by the net return to family labour per acre, showing financial benefits of Rs. 3366/man-day in CMS and Rs. 1426/man-day in SMS, with 8.3 and 18.7 man-days required, respectively. Youth participation is high in CMS due to the substantial income generated speedily. The income supports the further education of young farmers. This includes 26% of farmers in SMS and 23% in CMS. While positive financial benefits enhance SA in maize cultivation, they are insufficient to cover health expenses and ensure safety beyond basic household needs, as noted in focus group discussions (FGDs). In

contrast, other social indicators related to the farming family displayed negative or very negative effects on the social acceptance (SA) of maize cultivation.

Freedom of association (FA) allows workers to form representative organizations, while collective bargaining (CB) involves negotiations between these organizations and employers (Charles & Ann, 2018). Together, they represent fundamental labour rights and reflect individual or group autonomy within the profession. In Sri Lanka, Farmers' Organizations (FOs) serve this purpose, with 16,970 FOs established as of March 28, 2022 (Department of Agrarian Development [DAD], 2022). Studies show that the Sri Lankan farming community is well-organized into various groups addressing farming-related needs, indicating substantial opportunities for FOs and exercising the right to FA without discrimination (Rifana et al., 2019). Maize farmers have access to diverse maize varieties, inputs, markets, and scales of operation, which enable them to advocate for their interests and rights. However, the effectiveness of these groups in exercising their right to CB remains uncertain.

Studies indicate that tenure arrangements for upland maize cultivation are inadequate, with ongoing calls for sustainable solutions to address wildlife threats (Disanayaka et al., 2019). Long-standing farmer demands include better producer prices and fair and timely distribution of fertilizers. This situation does not enhance the socio-economic status of farming families, ensure health security, or contribute to national development. The perceived ineffectiveness of CB negatively impacts the SA in maize cultivation.

The social indicator ‘Social Security/Benefits’includes non-monetary employment compensation (UNEP & SETAC, 2013), with insurance being a component that significantly impacts the financial situation of farming families. In Sri Lanka, the ageing agricultural workforce and the displacement of young

workers are the key challenges, leading to a greater emphasis on farmer pension schemes.

Studies indicate that social security systems in agriculture can enhance land productivity, technical efficiency and land reallocation, as evidenced by China's New Rural Pension Scheme (NRPS) (Ji et al., 2022). However, farming systems remain highly vulnerable to climatic and economic challenges. In Sri Lanka, significant maize yield losses have been reported due to drought and untimely rains (9.8% and 5.4% respectively) and persistent pest outbreaks such as fall worm since 2018 (Weerakkody, 2019). These findings highlight the need for effective and sustainable social security systems in farming to mitigate climatic and financial challenges in FCPSs.

The lack of social protection mechanisms exacerbates the socio-financial vulnerability of maize farmers, contributing to poor youth participation in farming (Damayanthi & Rambodagedara, 2013). This absence of social security negatively impacts both the socio-economic status of farmers and the country's development, leading to lower SA in farming in general. Despite the organization of the Sri Lankan farming community into diverse groups addressing farming needs, and the wide options available to maize farmers, the effectiveness of their CB rights remains unclear.

Low-skilled women face significant barriers when joining the labour market in less-developed, traditional societies (Seneviratna, 2020). Deprivation of opportunities not only violates women's rights to technical skills and thus income-earning opportunities but also hinders the capacity building of the labour force, especially in situations where farming areas experience seasonal labour scarcity. The development of human resources in every aspect is essential for a country's development. Therefore, the discrimination of women in the manner mentioned above has a negative effect on SA in maize cultivation.

The principle of 'Equal Opportunities (EQ)/Non-discrimination' asserts that education, employment, and advancement should be accessible to all citizens regardless of age, race, or other unrelated characteristics (UNEP and SETAC, 2013). In maize cultivation, while manual farming operations are open to all individuals regardless of gender or age, mechanized tasks like ploughing and agro-chemical spraying are predominantly performed by men. This gender stereotyping persists under the pretext of safety concerns for women, limiting their access to technical skills and income-earning opportunities. According to Seneviratna (2020), such barriers hinder women's participation in the labour market, affecting the overall capacity building of the workforce. This discrimination negatively impacts the SA in maize cultivation.

'Extended working hours' in maize cultivation pose a significant challenge. The study found that total labour use is 58.5 man-days/acre in SMS and 32.2 man-days/acre in CMS, with 31.8 and 14.7 man-days/acre respectively dedicated to crop care. These labour hours are not fully reflected in the Department of Agriculture's cost estimates for crop cultivation. Farmers often exceed the standard 8-hour workday, spending long hours, sometimes overnight, in watching huts. This extended labour increases the risk of injury and illness, negatively impacting their health and safety and hindering long-term national development.

The local community, particularly Chena farmers, faces significant 'health and safety' challenges due to harsh working conditions. These include poor road access, threats from wild animals, and communication barriers. As a result, older farmers are often excluded from the CMS, with over 70% of Chena farmers being under 50 years old. The usage of agrochemicals may contribute to Non-Communicable Diseases (NCDs), although this has not been specifically studied in Sri Lanka. Poor health and safety conditions, along with inadequate income,

negatively impact the well-being of farm households and hinder the country's development. These issues very negatively affect SA in maize cultivation.

4.2.2 Social Acceptability of Maize Cultivation: Local Community Perspective

This discussion expands on the results indicated in Table 3.

Economic development often leads to large-scale migration and involuntary resettlement, creating new challenges for those affected. According to Dissanayaka et. al. (2019), traditional farmlands in the SEDZ are being allocated for development projects and multinational corporations for emerging agricultural markets, such as fruit exports, has sparked debate. However, there is no evidence of risks related to 'delocalization and migration' specifically associated with maize cultivation.

The employment rate is a key indicator of economic growth, making the creation of 'local employment' opportunities essential. The study highlights that maize cultivation in the SEDZ significantly contributes to employment, offering various jobs including farm labourers, input sellers, machinery producers, sellers and repairers, food suppliers, and transporters.

The CMS generates numerous indirect job opportunities, with youth working as tractor operators to meet transportation needs during the cultivation season. In the *Kotiyagala* Grama *Niladharee* division alone, around 2000 tractors are utilized, covering 8,789 hectares of Chena lands. The farmers in SMS also maintains traditional labuor practices like *Attam* labour. This employment generation not only aids the country's development but also benefits agrarian communities, positively influencing SA in maize cultivation.

Community Engagement (CE) involves including community stakeholders in decision-making processes (UNEP & SETAC, 2013). Ethical Community

Engagement (ECE) aims to integrate vulnerable groups into mainstream development. Maize cultivation as a vital cash crop benefits the entire community, not just those directly involved in farming. For instance, it engages machinery manufacturers and tractor operators. CE positively affects various agricultural activities, such as agro-tourism, community gardening, biotechnologies, and civic agriculture. Similarly, maize cultivation promotes CE and positively impacts SA within the community.

The SEDZ is a historical landscape rich in cultural heritage, including ancient ruins and monuments. *Cultural heritage* includes language, social and religious practices, knowledge, and traditional craftsmanship, as well as cultural spaces and objects such as burial grounds (UNEP & SETAC, 2013). Lohrberg, et al. (2022) recognize traditional agricultural systems as an aspect of cultural heritage. Traditional agricultural systems, such as the *Chena* cultivation system, are part of this heritage. The maize farming community in the SEDZ respects and preserves these cultural aspects. For example, they respect the *Siyambalawa Devalaya*, a sacred site believed to be miraculous and follow rituals and norms before working in the Chena. This respect for cultural heritage aligns with maize cultivation, creating a positive effect on SA.

Respect for Indigenous Rights includes the rights to lands, resources, cultural integrity, self-determination, and self-government (UNEP & SETAC, 2013). Many initiatives worldwide have violated these rights such as in Costa Rica (Sylvester et al., 2016) where protected area management policies have harmed the health, nutrition, cultural identity, and social cohesion of indigenous people. The socio-cultural context of maize cultivation in the SEDZ does not violate these rights. This respect for indigenous rights has a positive effect on SA in maize cultivation.

Access to Immaterial Resources includes community services, intellectual property rights, freedom of expression, and access to information (UNEP and SETAC, 2013). Mhango (2008) shows that women often face barriers to accessing these resources due to inadequate services, low education levels, gender bias and issues like literacy and languages. However, maize cultivation in the SEDZ does not restrict access to these resources. It does not lead to antisocial behaviour, disrupt community services, infringe on intellectual property rights, or suppress information. This favourable situation positively impacts SA in maize cultivation. The issue of *Access to Material Resources* such as water, land, forests, and homesteads involve shared community interests in preserving and enhancing these resources. However, expanding maize cultivation, particularly into reserved forests, raises concerns about the depletion and potential conflict over these resources. The community has noticed environmental issues like the drying up of springs linked to deforestation for maize cultivation (UNEP & SETAC, 2013).

Maize is often grown on encroached forest lands without secure land rights for farmers, leading to poor soil conservation and land development practices. Undesirable farming practices, such as burning debris and soil erosion from mono-cropping, harm water, land, and biodiversity. Additionally, maize attracts wild animals such as elephants, thus aggravating human-animal conflicts. These issues adversely affect the socio-economic status and health and safety of the local community, negatively impacting SA in maize cultivation.

Safe and Healthy Living Conditions are crucial social interests impacted by equipment accidents, land use changes, disease spread, and exposure to hazardous materials. In maize cultivation, local workers, particularly those applying pesticides, face high risks of pesticide contamination. The community also experiences a high prevalence of non-communicable diseases (NCDs). Moreover, maize attracts elephants, whose invasions threaten village security. These adverse effects on living conditions also negatively impact SA in maize cultivation.

UNEP and SETAC (2013) define *Secure Living Conditions* as being free from communal tensions and regional conflicts. There were communal tensions in SEDZ a decade ago, however they do not exist and thus affect maize cultivation. This absence of conflict is beneficial for SA in maize cultivation.

4.2.3 Social Acceptability of Maize Cultivation: Viewpoint of the Society

This discussion follows the results in Table 3.

The Ampara and Moneragala districts within the SEDZ produce about 46% of the country's maize. Maize cultivation benefits the country by saving foreign exchange, creating jobs, and supplying industrial raw materials (Esham, 2014; Champika & Abeywickrama, 2015). It also fosters *Technology Development*, as evidenced by the creation of affordable machinery and advanced equipment for farming (Kumara et al., 2016), which supports socioeconomic and national development. Importantly, maize cultivation is not associated with the social indicator of *Prevention and Mitigation of armed Conflict* in the area. These positive aspects contribute significantly to SA in maize cultivation from a societal perspective.

Corruption involves the misuse of power for personal gain, but there is no evidence of such misconduct related to maize cultivation. This absence of corruption positively impacts SA in maize cultivation. *Public Commitment to Sustainability Issues* refers to promises made by organizations to their stakeholders, which should be fulfilled transparently (UNEP & SETAC, 2013). It is a positive societal aspect that farming, including maize cultivation, supports national food security. However, environmental externalities related to maize cultivation negatively affect societal interests, such as degrading the quality of the environment which in turn impacts SA negatively.

4.2.4 Social Acceptability of Maize Cultivation: Value Chain Actors' Viewpoint

This discussion follows the results in Table 3.

Maize cultivation in the SEDZ meets several social needs by improving the socio-economic status of farm households (Esham, 2014; Champika & Abeywickrama, 2015). It fulfils the *Social Responsibility* to consider the interests of all stakeholders involved, including producers, input suppliers, machinery renters, produce collectors, and buyers. This inclusive approach enhances social value throughout the maize value cycle and positively impacts SA by contributing to the country's development and generating favourable socio-economic effects for various value-chain actors.

Respect for Intellectual Property Rights involves safeguarding and valuing patents, copyrights, and trademarks (UNEP & SETAC, 2013). According to FGDs, there have been no reported violations of these rights in maize cultivation. This respect positively impacts SA in maize cultivation.

In maize cultivation, *Supplier Relationships* are crucial for efficiently delivering quality inputs like seeds, planting materials, and agrochemicals at affordable prices (Champika & Abeywickrama, 2015; Kiriveldeniya & Rosairo, 2020). The availability of high-quality inputs is key to successful maize farming. Most maize farmers (93%) have access to good quality seeds resistant to pests, diseases, and climate variability positively impacting SA in maize cultivation.

Moreover, fair competition encourages individuals to undertake business. Maize cultivation is evident in every nook and cranny of the SEDZ uplands. It is the most competitive cereal crop in the area. This competitiveness increases as unit production costs decrease and product prices increase. Higher competitiveness

enhances the SA in maize cultivation from the perspective of value chain actors as it opens up more opportunities for them within the maize value chain.

5. Conclusions and Policy Implications

This qualitative analysis examined the social acceptability (SA) of small-scale (SMS) and large-scale (CMS) maize farming in SEDZ. It found that both maize systems improve working conditions and adhere to ILO standards by eliminating child and forced labour, which enhances SA in maize cultivation.

Despite only modest increases in family labour returns, farmers continue with maize cultivation due to its substantial overall income benefits. This behaviour aligns with past research findings (Champika & Abeywickrama, 2015; Esham, 2014), showing farmers favour maize cultivation despite labour challenges. However, farmers often lack bargaining power, indicating a need for a platform to advocate for their interests. Providing more opportunities for women could address seasonal labour shortages and offer broader social benefits. Including women in farming enhances social sustainability, productivity, and resilience. However, ongoing issues such as crop protection from wild animals and agrochemical pollution lead to significant stress and health problems for farming households. These challenges, coupled with the lack of social security, make farmers socio-financially vulnerable, weakening the labour force and impeding the country's development.

From the local community's perspective, maize farming is beneficial as it avoids problems like displacement, cultural conflict or disrespect for indigenous rights. It provides access to intangible resources, creates jobs, and encourages community involvement. This involvement strengthens community empowerment by integrating maize production into local and broader economies. Although there are challenges such as limited material resources and impacts on living conditions, maize farming is crucial for the rural economy. It improves

living standards without altering traditional lifestyles, highlighting its role in supporting and enhancing rural communities' well-being.

From society's viewpoint, maize systems are seen as socially responsible business. They support economic development and advancement in technology. They are free from corruption, helping to prevent armed conflict. However, they are criticized for their public sustainability claims, a common issue in industrial farming. To improve, maize systems should implement soil regeneration practices and target net zero CO_2 emissions (IPCC, 2023).

From the perspective of value chain actors, maize cultivation is viewed positively. It promotes social responsibility, respects intellectual property rights, and maintains competitiveness through strong relationships between suppliers and farmers, leading to high social acceptability. However, price regulations like import taxes that once supported this acceptability are no longer effective. As the industry evolves, new strategies are necessary to sustain and improve social acceptability among these stakeholders. Prioritizing the well-being and satisfaction of all stakeholders can lead to a more resilient and inclusive agricultural system that supports present and future generations.

In summary, of the 26 social indicators used to assess SA in maize cultivation, 11 (42%) have positive effects, and 7 (27%) have very positive effects whereas 6 (23%) have negative effects, and 2 (8%) have very negative effects. Overall, most indicators positively impact on the social acceptability of maize farming. However, the negative issues such as poor health and safety conditions, extended working hours, lack of social security, and gender inequalities indicate that the social acceptability of maize cultivation is not very high.

The findings suggest a moderate and context-dependent level of social acceptability, where positive contributions such as employment generation,

income opportunities, and community engagement coexist with substantial social and environmental challenges. To sustainably improve social performance, actions such as increasing yields, reducing production costs, addressing land tenure issues, and minimizing wildlife-related crop destruction are needed. Priorities should include soil regeneration and achieving net zero carbon emissions, as recommended by IPCC (2023), to enhance both social acceptability and overall sustainability of maize systems.

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