ajfand SCHOLARLY, PEER REVIEWED AFRICAN JOURNAL OF FOOD, AGRICULTURE, NUTRITION AND DEVELOPMENT
Volume 23 No. 3 March 2023
PUBLISHED BY AFRICAN SCHOLARLY SCIENCE COMMUNICATIONS TRUST
ISSN 1684 5374

Afr. J. Food Agric. Nutr. Dev. 2023; 23(3):22893-22917 https://doi.org/10.18697/ajfand.118.22205

HARNESSING LARGE-SCALE AGRO-BASED INVESTMENTS IN THE SAGCOT AREA FOR INCLUSIVE AGRICULTURAL TRANSFORMATION IN TANZANIA

Makundi H[1]* and B Mongula[1]

Hezron Makundi

*Corresponding author email: hmakundi@udsm.ac.tz

[1]Institute of Development Studies, University of Dar es Salaam, Tanzania

ajfand SCHOLARLY, PEER REVIEWED
AFRICAN JOURNAL OF FOOD, AGRICULTURE, NUTRITION AND DEVELOPMENT
Volume 23 No. 3
March 2023
PUBLISHED BY AFRICAN SCHOLARLY SCIENCE COMMUNICATIONS TRUST
ISSN 1684 5374

ABSTRACT

The colonial and post-colonial large-scale agriculture has brought the far-ranging implications on the local population in Tanzania. These include dispossession of land, dislocation of migrant labourers who are also subjected to poor work conditions and induced imbalances in terms of gender and ethnic relations. The government and other actors in Tanzania have strived to reduce the effects by fostering inclusive large-scale agriculture that benefit the small-scale farmers. This includes the move to initiate a 20-year public-private partnership on large-scale agribusiness namely Southern Agricultural Growth Corridor of Tanzania (SACGOT) in 2010. Serious concerns were raised against SAGCOT especially on the extent to which it entails uprooting and taking away lands from poor rural dwellers and turning them into poorly paid casual labourers thus increasing poverty and food insecurity. Consequently, the coordinating unit of SAGCOT vowed to improve food security to hundreds of thousands of poor farmers. The primary research was designed to examine the inclusivity aspects of the six selected large-scale investment schemes under the SAGCOT partnership. The Responsible Agriculture Investment (RAI) Framework was employed to assess sustainable labour practices, community engagements and fairness in out-grower arrangements. While the investment schemes demonstrated a fairly positive outlook pertaining to social sustainability under the RAI framework, a notable variation was observed across the six schemes in relation to specific RAI indicators. For instance, a company that demonstrated the outstanding performance in corporate social responsibility also performed poorly in the domain of wages and employee relations. A set of sustainability benchmarks developed jointly by the SAGCOT Center and civil society organizations and implemented on voluntary basis by a few member investors need to be harmonized and monitored across all investment schemes. This is especially important for the small-scale sub-contracted firms which lacked the requisite skills and capacity to engage in a more sustainable manner.

Key words: Inclusion, agriculture, Tanzania, growth corridor, investments, sustainability, out-grower schemes, decent work

INTRODUCTION

The poor investment in agriculture was among the main causes of the 2008 global food crisis, which consequently constrained the developing economies' efforts to deal with food security challenges. For developing countries to meet their food needs in 2050, FAO estimates that an additional agricultural investment of $83 billion is needed annually [1]. The likelihood of reaching such targets is undermined by the limited share of public spending on agriculture in these countries which falls around 7% [2]. At the same time the share of official development assistance going to agriculture has dropped from around 10% to 5%. Agriculture has attracted less than 10% of the overall bank lending figures in sub-Saharan Africa, leaving the sector in the hands of microfinance facilities which proved to be too small and ill-suited means of capital formation in agriculture [3]. This situation has triggered the efforts to mobilize agricultural investments from both local and foreign financial modalities including foreign direct investment (FDI). The urge to attract more investments, is coupled by another challenge of maximizing the benefits and minimizing the inherent risks associated with investment schemes.

In Tanzania, agriculture supports more than two thirds of the population, thus the growth and productivity of the sector contributes remarkably on sustainable economic growth and poverty reduction. As it recorded an average growth below 4% per annum during the last two decades, the agriculture sector experienced a relatively low performance against the economy's overall 6.4% during the same period [4]. Despite its importance in terms of employment creation, agricultural sector failed to attract FDI inflows beyond 2% in Tanzania since the 1990s. For instance, in 2014, Tanzania was listed among the top five global FDI recipients, with US $2.1 billion [5]. But most of these investments were concentrated in other sectors such as mining, manufacturing and tourism. The failure to attract investment along with a low public spending in agriculture has induced a set of policy measures to boost agriculture sector financing in Tanzania, including the national level agriculture development programs.

The Southern Agricultural Growth Corridor (SAGCOT) is among the leading agricultural sector development programs in Tanzania. The programme claims to be hinged on the 'Kilimo Kwanza' policy (translated as Agriculture First policy). The novelty and potential of SAGCOT in terms of inclusive development and potentials for financial constraints have attracted inquiries on its relevance, effectiveness and sustainability. This, arguably, has led to increased poverty and food insecurity.

ajfand SCHOLARLY, PEER REVIEWED
AFRICAN JOURNAL OF FOOD, AGRICULTURE, NUTRITION AND DEVELOPMENT
Volume 23 No. 3
March 2023
PUBLISHED BY AFRICAN SCHOLARLY SCIENCE COMMUNICATIONS TRUST
ISSN 1684 5374

Amidst a sworn pro-poor and anti-imperialist Government of President Magufuli, that was apparently also not quite friendly to big businesses, SAGCOT's key players found it expedient to divert their rhetoric away from the early mission of promoting large-scale agri-business as depicted in the SAGCOT Blueprint, to an emphasis on small-holder farmers. Thus, SAGCOT's main coordinating entities, namely, the SAGCOT Center Ltd. and SAGCOT Catalytic Fund have been show-casing a number of success stories on empowered smallholder farmers, commendable out-grower schemes and community engagements along with large-scale investments.

A sustained pressure exerted towards the SAGCOT agri-business model to become more inclusive and socially sustainable stems from regulatory requirements, voices of civil society organizations and researchers. In addition to that, sustainability measures are also driven by large investors in adherence to the internationally agreed responsible agricultural investment (RAI) principles, and pressure from their consumers in rich nations. In its blueprint of 2011, SAGCOT vowed to provide employment opportunities, raise productivity and incomes while reducing poverty and improving food security to hundreds of thousands of people, thus contributing to the rapid economic growth. In 2012 SACGOT released a Green-print document, which was intended to guide the environmental and social sustainability aspects of investments among the partners. Several researches and evaluation studies have been conducted to examine sustainability across the various investment schemes under the SAGCOT partnership, revealing some mixed results. While SAGCOT operates under a set of principles and guidelines to be adhered to by all members, the lack of thorough academic analyses and indications of inconsistencies and controversies across the media reports triggered this focused study with twin objectives, namely:

- To establish the extent at which SAGCOT initiatives and ASDP-related programs promote inclusiveness
- To devise innovative models of inclusive agricultural transformations across the large- scale agriculture investment schemes.

To deepen the understanding of SAGCOT support inclusive development, the study analyses the related policy documents, along with perspective of stakeholders and local communities. The analysis is thus, focused on three domains: the investor-employee engagements, out-grower arrangements and the broader community engagement across selected large-scale investment schemes. Given the colonial and socialist past experiences of Tanzania, the historical

ajfand SCHOLARLY, PEER REVIEWED AFRICAN JOURNAL OF FOOD, AGRICULTURE, NUTRITION AND DEVELOPMENT Volume 23 No. 3 March 2023 PUBLISHED BY AFRICAN SCHOLARLY SCIENCE COMMUNICATIONS TRUST ISSN 1684 5374

account of large-scale agricultural investment becomes a requisite for the analysis of contemporary practices.

LITERATURE REVIEW

A Historical Perspective of Large-scale Agriculture and Inclusive Development in Tanzania

Tanganyika (renamed mainland Tanzania since the 1964's union with Zanzibar) was governed by the Germans from 1890s to end of the First World War in 1918 when it was turned into a British protectorate [6]. Under German rule White Settlers established plantation agriculture in several parts of the country including coffee farms on the slopes of the Usambaras and Kilimanjaro and sisal farms in Tanga[1]. Workers for such plantations were taken from distant places like Usukuma and Unyamwezi areas and Kilwabut some workers were also acquired from among the surrounding populations [7]. The German administration imposed hut tax which forced the people to work for the plantations in order to secure the cash to pay taxes. The literature and oral traditions have also revealed the various coercive measures including corporal punishments which were imposed within the settlers' farms to maximize the size and productivity of labour. Measures to accelerate the supply of industrial raw materials in Europe clearly violated the rights based inclusive agriculture as defined today. Alongside the Settler farms, the colonial administration promoted the small-scale local farming of cash crops such as coffee, cotton and tobacco, which were also subjected to a captive system of involving overpriced inputs and low pay on local farmers' produce. During German period, areas with arable volcanic soil including the slopes of Usambara and Kilimanjaro and Tanga were taken away under this approach [8].

After the First World War, German estates were transferred to new European owners under the British control. During this transition there were very few cases where the land was given to their original local owners and in areas of land shortage, the estates were returned back to tribal ownership arrangements. Moreover, freehold estates were converted to leasehold and Rights of occupancy were issued [9]. British, Greek, Asians and Afrikaans were the majority of Settlers. After Second World War (WWII), estate agriculture had become an attractive proposition, an idea that was supported by the Royal Commission and World Bank Mission. As a result, within a period of ten years between 1946 and 1956, Rights of occupancy increased from 1,053 to 1,572 involving 788,038 acres and 2,376,123 acres, respectively [9].

[1] Elsewhere cotton and rubber farms were also established

Instead of a 33- year lease exercised by the Germans, the British Empire extended the lease to perpetual freehold lease [10]. Large-scale farming in the form of plantations, ranches and forest estates were spread across many parts of the territory. A variety of institutions were created in order to attract and safeguard foreign investors. These included the Rights of Occupancy Agency, Land Board to govern land, Land bank to provide loans to investors, Colonial Development Corporation, Tanganyika Agricultural Corporation and Settlement Boards. By the 1950s only a few investors of a Tanzanian origin had evolved [11].

As the past literature reveals, large-scale agriculture had far ranging implications on the local population in Tanzania [12]. Such impact includes dispossession of land, land shortage, dislocated migrant labour under poor work conditions and imbalanced gender relations. The fear that dispossessions of land could erupt revolts influenced the regular halts of dispossession practices [9]. Consequently, establishment of estates or plantations without dispossession were more favoured, which meant unoccupied marginal lands, but no investors could be attracted to such lands. The climax of protest against British colonial alienation of land was the Meru Land Case when Japhet Kirilo, supported by local population protesting against a Bill in the Legislative Council to evict them followed by burning of their huts, took the matter to the United Nations in New York [13].

In the period leading to independence, the foreign settler community was quite fearful of events after independence and some of them fled the country. However, the independence government leaders of whom some had European and Asian backgrounds accommodated the existing situation up until 1967 Arusha Declaration of Socialism and Self Reliance and subsequent nationalization of private property [14].

The performance of the nationalized farms left much to be desired. They faced serious challenges on labour and capital, especially after the structural adjustment programme when government failed to provide subsidies, those farms collapsed one after another. As a result, the government considered privatization of the farms towards the 1990s. The new era of private sector-led and public-private partnership has created a space for productivity, profit orientation and other outcomes as explained in the following section.

SAGCOT and the rise of public-private partnership in agriculture

The SAGCOT initiative is a large-scale, 20-year public-private partnership intended to foster inclusive, commercially successful agribusinesses that will benefit the region's small-scale farmers. Being the only agricultural growth corridor in the country, SAGCOT was set with ambitious goals of improving food security, reducing rural poverty and ensuring environmental sustainability [15]. The initiative which was launched at a World Economic Forum meeting held in Dar es Salaam, was driven largely by agri-business multinationals but over time became owned by diverse partners coordinated by the SAGCOT Centre Ltd. The corridor runs along infrastructure 'backbone' between Tanzania's eastern and southern borders, covering nearly one-third of the county. The initiative had a bold ambition of raising USD $3.4 billion of investments, grants and loans, to triple agricultural output and increase the income of millions of Tanzanians [16].

Such large-scale agricultural Public Private Partnerships are increasingly being adopted in Africa, for example, Oxfam 2014. Through SAGCOT, Agri-business would bring hundreds of thousands of hectares under cultivation and carry out agro-processing that would create new jobs, create market to out-grower small-holder farmers and contribute toward increased employment, increased incomes, food security and poverty reduction. Since its launch, SAGCOT has generated widespread interest as a glossy model for African agricultural development that aims to produce successful, inclusive and commercial agribusinesses that benefit small-scale farmers [17].

As the name suggests, SAGCOT activities are concentrated in the southern part of Tanzania to be implemented in value-chain clusters of Rufiji, Ihemi, Kilombero, Mbarali, Ludewa, Sumbawanga. Only Ihemi, Mbarali and Kilombero have been operational in ten years since the partnership was commenced in 2011. Partner organizations for the SAGCOT initiative are drawn from Agri-business, Non-State Actors, Central and Local Governments, Farmers Organizations and Development Partners. Partnership members must abide with SAGCOT principles, basically to agree to the twin objectives of SAGCOT, namely commercial growth and poverty reduction and to cooperate with other members, to engage small-holder farmers, maintain communication, and be prepared to resolve policy and infrastructure complaints. The SAGCOT Catalytic Fund (CTF) oversees financing of SAGCOT activities and projects to be supported by Development partners with matching funds from Government. The government's role on the CTF is more pronounced than on the SCL which is registered as non-governmental player [15, 18].

ajfand SCHOLARLY, PEER REVIEWED AFRICAN JOURNAL OF FOOD, AGRICULTURE, NUTRITION AND DEVELOPMENT Volume 23 No. 3 March 2023 PUBLISHED BY AFRICAN SCHOLARLY SCIENCE COMMUNICATIONS TRUST ISSN 1684 5374

The Responsible Agricultural Investments Principles (RAI)

This paper uses the Responsible Agricultural Investment principles in examining the role played by SAGCOT investors in promoting inclusive development. These principles which were endorsed by the UN General Assembly in 2012 cover the following pillars: Recognition and respect to existing rights to land and natural resources, not jeopardizing food security, transparency and monitoring of processes relating to investment, people affected materially to be consulted and agreed upon decisions to be recorded, and investors to ensure respect to rule of law, reflect best practices and pursue economically viable projects that result in durable shared value. The RAI approach is applied in examining the six case study investment schemes with a focus on the labour practices, relationships with smallholder farmers in terms of out-grower arrangement, and also the broader aspects of community engagement.

The labour question is central to any inclusive development -oriented investment and this covers the issues of wage rates and general working conditions. The International Labour Organization (ILO) has contributed remarkably in the area of Decent Work in agriculture, covering the categories of workers on permanent terms, temporary workers, seasonal and casual labourers, piece rate workers, workers under in-kind payment [19]. The ILO denotes, agricultural workers as having the highest incidence of poverty while raising issues on their social protection, including social security provisions, support in health services and occupational health and safety [20]. The question of Occupational Health and Safety has apparently been most explicitly addressed and advocated in RAI, especially in terms of access to Personal Protective Equipment (PPE), respective training and monitoring, and upholding international standards to the effect [21]. Trade Unions have usually been the mechanism to advance labourers' concerns and negotiate with investors, thus national and international support systems for unions become imperative. Inclusive large-scale investments in agriculture should at least observe a living wage, (apparently not always coinciding with defined minimum wage levels of a country), social protection mechanisms and occupational health and safety standards, and provisions for freedom to join Trade Unions.

Under the out-grower farmers' agribusiness model, the investor buys the crops of small-holder farmers under agreed terms of prices, quantities and quality and thereon process and sell them both inside and outside the country [22]. The investor in most cases is also involved in farming the same crop, which together with the out-growers produce, is taken to the factory for processing. In such cases

ajfand SCHOLARLY, PEER REVIEWED AFRICAN JOURNAL OF FOOD, AGRICULTURE, NUTRITION AND DEVELOPMENT Volume 23 No. 3 March 2023 PUBLISHED BY AFRICAN SCHOLARLY SCIENCE COMMUNICATIONS TRUST ISSN 1684 5374

investors have not only provided market to the produce of the out-growers but they have invariably also been offering a variety of services, like training and extension, financing, infrastructure improvements, quality monitoring, assistance with occupational and health safety. Investments that are inclined to inclusive development in this case not only entail fair prices to the out-growers judged by existing market prices, but also reliable collection of their crops, timely payment and above all transparent contracts that are clearly understood by the out-growers, government agencies and other stakeholders. Out-growers associations and the support of the government and civil society organizations have been helpful to protect the farmers in such arrangements. The Responsible Agriculture Investment has called for price determination mechanism of the produce that ensures out-growers perceive the prices as fair and transparent, but also grievance redressing mechanisms and dispute resolution procedures are provided [22]. Large-scale agriculture inclined on inclusive development would avoid the exploitation of out-growers through unfair low prices of farm produce or debt bonding them in such a way that out-growers perceive themselves to be working for the investors rather than their own wellbeing. In order for out-growers to be able to increase their incomes, they must be independent and free to sell the surplus over contracted amounts to other buyers.

The rise of a new largescale agricultural investment in an area is usually accompanied by a combination of relief and dissatisfactions among the local communities bordering the investment. This is because investment usually strains available resources, namely land, water and forest, it causes economic, social, cultural and security threats, and threatens roads and other physical infrastructure. For example, trucks to and from the investment site would cause considerable damage to roads, farming practices would result in water and air pollution and mishandled investments are also likely to distract children from education dragging them into child labour. On the contrary, large=scale investors might engage in improving social services and other socio-economic conditions, bring about employment opportunities and facilitate technology transfer and many other forms of empowerment. Furthermore, the acquisition of land in the case of land-intensive investments ought to be transparent and consultative with local communities, and in case smallholder farmers lost their land, compensation should be fair and resettlement processes transparent, participatory and assisted. Responsible Agriculture Investments (RAI) principles on resources advises on the need for grievance redress mechanisms, consideration to be made of the land where they are resettled in case of displacement with respect to rain, water, access to roads and social services [23]. This principle takes care of smallholder farmers and

ajfand SCHOLARLY, PEER REVIEWED
AFRICAN JOURNAL OF FOOD, AGRICULTURE, NUTRITION AND DEVELOPMENT
Volume 23 No. 3
March 2023
PUBLISHED BY AFRICAN SCHOLARLY SCIENCE COMMUNICATIONS TRUST
ISSN 1684 5374

pastoralists alike whose livelihoods would have been destroyed by ruthless profit maximizing large investors.

The RAI principles were particularly selected in this paper given their contribution to a diverse set of goals, including poverty eradication, support to local communities, rural development, enhancement of social and economic sustainable development, creation of employment, diversification of livelihoods and other benefits especially to the poor and most vulnerable. Furthermore, the RAI principles are considered to be a reference point for States and other stakeholders to apply voluntarily. The principles have informed the design of research questions that examine the role of large-scale investors in advocating application of the Principles for their operations, monitoring implementation of normative provisions in the areas covered by the Principles, and where possible to build the capacity of other actors to translate the Principles into action.

MATERIALS AND METHODS

The study was focused on the six selected large-scale agricultural investment schemes drawn from the three functional SAGCOT clusters namely: Mbarali, Kilombero and Ihemi. The scheme selection process ensured that both farm and non-farm investment schemes were included. The study engaged only six investors from the list of 52 organizations availed in the database in order to enhance the depth and comprehensiveness of analysis. The selection also ensured representation of investment schemes undertaking the farm and non-farm activities, crop cultivation as well as animal husbandry, local and foreign-owned investment schemes and also between land intensive and investments using small tracts of land. One investment scheme which was previously a SAGCOT partner and later on decided to pull out was purposively selected to offer insights on SAGCOT's partnership benefits and challenges.

The six case studies included Silverlands Tanzania Ltd, Mtenda Rice Company Ltd, Clinton Development Initiative's Dabaga anchor Farm, Kapunga Rice Company Ltd, Kilombero Valley Teak Company Ltd (KVTC), and Unilever Tea Tanzania (10 interviews). During the research the management, and key stakeholders of these investment schemes were engaged, particularly through in-depth interviews and focus group discussions. Individual respondents who were involved included employees of the investment schemes (52), out-grower or contract farmers (78) and the surrounding community members including local leaders, farmers, agricultural officers and other value chain actors (45).

ajfand SCHOLARLY, PEER REVIEWED
AFRICAN JOURNAL OF FOOD, AGRICULTURE, NUTRITION AND DEVELOPMENT
Volume 23 No. 3
March 2023
PUBLISHED BY AFRICAN SCHOLARLY SCIENCE COMMUNICATIONS TRUST
ISSN 1684 5374

Interviews were also conducted with high level policy makers at the Ministries responsible for Agriculture, Industry, Investment, and Local Governance (5). Furthermore, respondents from the following organizations were reached out: the SAGCOT Centre Ltd, Tea Board of Tanzania, and the World Bank office in Tanzania, relevant NGOs like Agricultural Council of Tanzania, Agriculture Non-State Actors Alliance, Tanzania national Business Council and the Tanzania Private Sector Foundation, media organizations (21) . Some of these respondents were reached through a stakeholders' workshop. A total of 211 individuals were engaged in this study and include 175 questionnaire respondents and 36 who were reached through focus group discussions and in-depth interviews.

The fieldwork began with a scoping study which took place in December 2019. This was followed by the main fieldwork between February and March 2020 when a wave of the COVID 19 outbreak erupted. The main fieldwork involved four teams led by the four members of the research project and five research assistants, covering the six districts which host the investment. The team managed to administer 202 face to face interviews, four follow= up phone calls, one email response and four workshop interactions.

The dataset gathered from the six areas were predominantly qualitative with some quantitative information collected from the closed ended questions. For the latter set of questions, descriptive statistical tools were used through the help of IBM Statistics Software. Among the results from these analytical tools include measures of central tendency, frequencies, percentages and cross-tabulations. The Nvivo software package was used to organize the qualitative research data into themes, which were then applied in data aggregation. The non-categorical qualitative data were subjected to plausible conceptual arguments to identify approaches and strategies deployed by the investment schemes to promote inclusiveness, community friendly practices and the treatments of the various stakeholders. Analytical approaches such as argumentation and narration were used to repackage the general information such as the historical evolution of large-scale agricultural investments in Tanzania.

RESULTS AND DISCUSSION

Profiling the six researched investment schemes

This study was informed by primary data gathered from six investment schemes and neighbouring communities in the SAGCOT region of Tanzania. While identities of these schemes are revealed in the paper, some of their attributes particularly the

https://doi.org/10.18697/ajfand.118.22205

ajfand SCHOLARLY, PEER REVIEWED AFRICAN JOURNAL OF FOOD, AGRICULTURE, NUTRITION AND DEVELOPMENT Volume 23 No. 3 March 2023 PUBLISHED BY AFRICAN SCHOLARLY SCIENCE COMMUNICATIONS TRUST ISSN 1684 5374

commercially sensitive information are concealed to abide with a mutually agreed research confidentiality.

Generally, the six investments revealed investment capital ranging between 2.6 and 84.6 Million SD. This range conforms to the large enterprise category under the Tanzania SME Policy of 2013, which sets a minimum threshold of 350,000 USD. The schemes acquired their capital from both local and international sources, commercial and developmental financing organizations. This also included the loan schemes and development funding arrangements facilitated by the SAGCOT Center. Three out of the six researched SAGCOT Partners were already operational before the inception of the SAGCOT initiative in 2011. It was also discovered during the interview that one of the investors had decided to withdraw from SAGCOT Partnership a year before the survey was conducted, while another one remained dormant with no active participation in the partnership activities during the past three years.

The six researched organizations were engaged in a single or multiple forms of agribusiness activities in the SAGCOT area, including plantations, leasing of farmland to local farmers, and the acquisition, processing and trading of agricultural products. The land holding data revealed that the CDI had acquired a farmland of 900 hectares from the Agricultural Seed Agency through a 20-year lease which was abruptly terminated by the government in 2018. In the case of Kapunga rice plantation in Mbarali, 5500 hectares were acquired from a private investor who had signed a 99-year lease from the state agency (NAFCO). An additional 2000 ha or so was purchased from the local government authorities; this piece has constituted a key source of land disputes in the area. Kilombero Valley Teak has mixture of land sources including that from local private owners and that from local government, which sums up to 28,000 hectares. Unilever Tanzania had purchased land in Mufindi from Brooke Bond Tea way back before independence, and out of the 20,000 hectares only 3000 of them are currently being cultivated.

A Profile of the individual respondents

The surveyed respondents (175) constituted employees, out-growers and surrounding community members. The composition of such categories is summarized on table 2. In terms of education, it was not surprising to find that employee respondents attained a relatively higher level of education when compared to the out-grower farmers. The team interviewed different employees including farm workers, office workers, drivers, operators, technicians and security guards. As Figure 1 demonstrates, over 80% of the out-growers reported to have only primary education as their highest level, with none of them at tertiary levels.

ajfand SCHOLARLY, PEER REVIEWED
AFRICAN JOURNAL OF FOOD, AGRICULTURE, NUTRITION AND DEVELOPMENT
Volume 23 No. 3
March 2023
PUBLISHED BY AFRICAN SCHOLARLY SCIENCE COMMUNICATIONS TRUST
ISSN 1684 5374

Employees on the other hand were spread across the primary and secondary education, with 7% attaining a university degree.

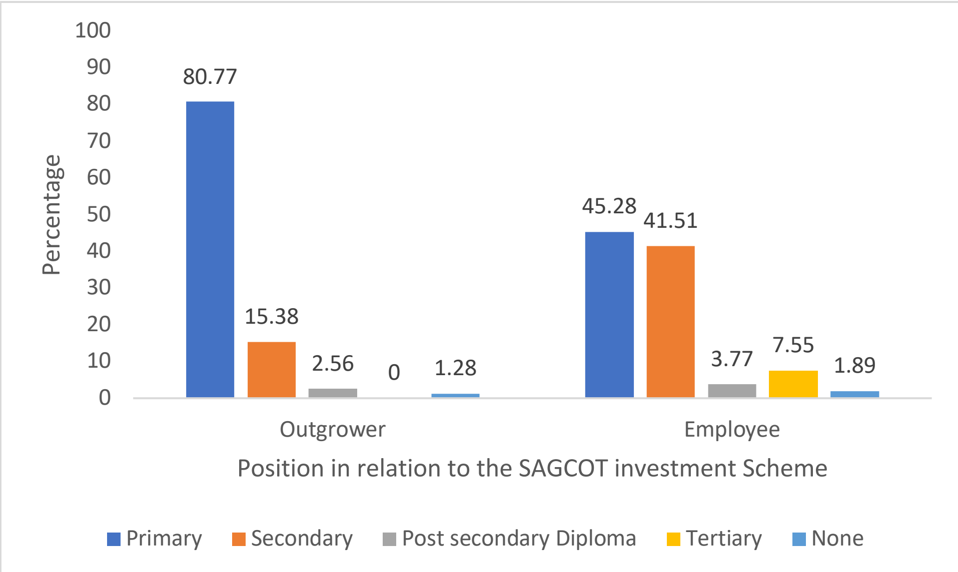

Figure 1: Education level of out-growers and employees
Source: Field data, 2020

The wellbeing of individual respondents is captured through indicators such as quality of housing for the employee and out-grower respondents employed, and by looking at materials used for walls and roofing. Based on these indicators, it was found that the dwelling among most of the respondents was largely modest, with less than 10% of them living in either thatched grass roofed or mud walled houses. Variations between employees and out-grower groups in this aspect were rather insignificant. Nevertheless, 94% of the out-grower respondents reported to own the houses they lived in, compared to 57% employees. This implies that employees are largely renting or live in employer-provided accommodations. Home ownership is among the key indicators of social security and wellbeing in the Tanzanian society.

SAGCOT investments and Inclusive Development

The study invoked on both SAGCOT policies and practices of the six partner investors towards sustainability. It should be noted that the practices of investors are subject to various forms of legal and regulatory requirements under the laws of the United Republic of Tanzania as well internal standards set by their parent multinational corporations. Furthermore, the pressures from stakeholders such as civil society organizations and buyers of their products were also influential to their practices.

https://doi.org/10.18697/ajfand.118.22205

ajfand SCHOLARLY, PEER REVIEWED
AFRICAN JOURNAL OF FOOD, AGRICULTURE, NUTRITION AND DEVELOPMENT
Volume 23 No. 3
March 2023
PUBLISHED BY AFRICAN SCHOLARLY SCIENCE COMMUNICATIONS TRUST
ISSN 1684 5374

The study found a persistent challenge of poor local content acquisition across the investment schemes. This was particularly notable on the engagement of local SMEs and procurements across the various agricultural value chains in the researched areas. Consequently, outside the crop out-grower schemes, local SMEs have hardly tapped into the various opportunities to offer services and sub-contracts arising from the investment schemes. Local villagers complained that most of the skilled job opportunities were taken by people from outside, ignoring some few existing members of surrounding communities who bear relevant skills. On the contrary, the investors indicated that some members of their surrounding community lacked motivation and capacity to undertake the various opportunities offered.

The GRG, in collaboration with the Vice President's Office repackaged the social and environmental guidelines based on the laws of Tanzania for the SAGCOT partners to adhere to. Such guidelines are monitored by joint taskforces made up of SCL, government agencies and partner CSOs. The GRG social feeder group has also developed a self-assessment tool for the SAGCOT partners to use; the annual self-assessment exercise is monitored by the GRG.

The GRG comprises the giant international NGOs which are also more inclined to environmental sustainability mission rather than local and socially oriented CSOs who push for social inclusion agenda. It is, therefore, important to engage more local agriculture CSOs and the local government authorities across the various initiatives undertaken under the SAGCOT partnership framework.

Contrary to practices among large-scale investments, this study revealed that a few sub-contracted small- and medium- scale producers and processors remain the least compliant with inclusive green growth guiding tools. This is partly influenced by their capacity constraints, the use of poor technology and limited awareness on the importance of such issues. In the wake of the observed weak regulatory instruments, capacity building of the local SMEs becomes imperative.

Labour practices across the Investment Schemes

The ratio of permanent to seasonal workers varied between the schemes with two organizations employing over three thousand workers having ratio of twenty seasonal workers against one permanent worker. In a relatively smaller scheme with a total of four hundred workers, the ratio was about four to one. In other words, the non-labour -intensive organization demonstrated higher proportions of permanent employees. As it will be further indicated in this section, seasonal

ajfand SCHOLARLY, PEER REVIEWED
AFRICAN JOURNAL OF FOOD, AGRICULTURE, NUTRITION AND DEVELOPMENT
Volume 23 No. 3
March 2023
PUBLISHED BY AFRICAN SCHOLARLY SCIENCE COMMUNICATIONS TRUST
ISSN 1684 5374

workers tend to experience tougher working conditions than their permanent counterparts.

A wage rate is another important indicator of investor's efforts to promote inclusive development. Generally, variations in wages offered horizontally across the six investment schemes were not significant. This pattern was notable across the contract of seasonal workers who define the majority employees. The gaps, however, were rather experienced vertically across the various employment cadres, with farm workers being among the least paid. Generally, wages for farm workers ranged between 52.2 USD and 155.5 USD equivalents per month, with an overall average of 80.8 USD for all respondent employees. This range surpasses the minimum wage threshold of 43.7 USD set for agricultural services by the government of Tanzania in 2013. Threshold is considered to be out-dated and significantly lower than those of other sectors including the public service, and a similar agriculture sector in the neighbouring countries of Kenya and Uganda. It is worth noting that two out of the six investment schemes were paying up to 100% beyond the government's minimum as their lowest salary. Wages for employees of sub-contracted SMEs were relatively lower and not monitored by the large investors. It should be noted that sub-contractors constituted up to 20% of the core operations for the two investigated labour-intensive plantations.

In terms of payment modalities, almost all respondents were being paid per duration of work rather than the amount of output delivered, the arrangement which is regarded as less exploitative. This modality applied not only to the 78% of respondents who received their salaries on a monthly basis but also to the 20% and 2% weekly and daily waged, respectively. Forty (40) respondent employees acknowledged the receipt of salary advances from their employers on a regular basis. This proportion suggests that employers were flexible and adaptive to the personal challenges and needs of their employees. At the same time, the regular need for salary advance could be interpreted as low wages which are insufficient throughout the month.

A notable proportion of workers (52%) saw themselves to be working for their employers in the next 5 years, leaving a few of them (19%) who intended to leave, while 27% were indifferent about continuing to work or leaving. Several areas of improvements in labour conditions were proposed by respondents, including a better salary, improvements of general working conditions, reduced working hours and improved access to children's education, healthcare and other social services. It is significant that a large proportion of respondents who were uncertain or desperate to leave their employers belonged to the two largest investment

ajfand SCHOLARLY, PEER REVIEWED AFRICAN JOURNAL OF FOOD, AGRICULTURE, NUTRITION AND DEVELOPMENT Volume 23 No. 3 March 2023 PUBLISHED BY AFRICAN SCHOLARLY SCIENCE COMMUNICATIONS TRUST ISSN 1684 5374

schemes. Although the largest schemes paid up to 100% higher than the officially prescribed minimum wage, some of their workers were not satisfied. One of the reasons could be the desire to engage in self-employment as the following respondent revealed:

"I am trying to mobilize a capital and quit this job to establish my own small business but this is not easy with my family responsibilities and the wage I receive. Otherwise, I really wish to see changes in the working conditions. This job exposes me to some health risks with the chemicals applied in the farm". Respondent #23 Farm Worker (M).

The duration used by employees to travel between their home and workplace recorded an average of 30 minutes. Most workers walked to their workplace, closely followed by cycling while very few of the employees used motorcycles and motor vehicles. Two investment schemes offered buses to shuttle their employees, accounting for 23% of all respondent employees who acknowledged the transport benefits from employers. Improved transportation services were mentioned among the critical areas of improvements as revealed by one employee.

"My house is not very far from the plantation. But the season when the maize plants grow tall, I get terrified of walking early morning or late evening. Such times come with risks of robberies, snakes and other dangerous creatures". Respondent # 81; Cook (F)

A notable attention was given on Personal Protective Equipment (PPEs) in the researched schemes, as many as 85% of respondent workers claimed to be using PPEs. This was fuelled by both the Tanzanian law and internal policies towards some MNCs. Two MNC Schemes went as far as setting up departments on safety and risk matters in their organizational structures and pursued both strict policies and safety enforcement measures. Formal training was also provided regularly by these organizations to update the knowledge and skills on safety. Sixty three percent of the respondent employees acknowledged attending training on occupational health and safety. Nonetheless, despite those measures, some employees were still reluctant to use PPEs, which calls for more investment in awareness raising and monitoring.

In most schemes, full-time workers also enjoyed non-salary incentives including paid leaves, health support/insurance, and overtime allowance among other financial benefits. With the exception of loans and loan guarantees, more than 50%

of the respondent employees were positive about how their employers provided for those services.

There were 16 (24%) employees (of which 4 were female) who claimed to have witnessed incidences of sexual harassment in their work places. To a large extent, such respondents were rather uncomfortable discussing the details of such incidences. This reflects the persistent poor tendency of reporting sexual harassment incidences at workplaces in Tanzania, thus escalating the problem [24]. Three out of the six researched companies were found to have documented the Anti-sexual harassment policies. But only one of these firms demonstrated some serious actions such as circulation of the documents and monitoring of their implementation.

Out of the 50 employees who responded to the question on labour union, 21 confirmed their membership. Furthermore, 17% acknowledged to have received direct support from their union on employer-related matters and disputes across their career life. The management side of researched companies were aware that the labour union is a regulatory requirement of the Tanzanian government. Consequently, labour unions were found in five out of six researched investors with three of them being more active with recognized leadership, office space and regular meetings permitted by the company management. In all the five organizations the labour unions were composed of only permanent employees. The majority of farm workers who were often seasonal/ casual workers did not belong to such unions. Farm workers expressed a dire need for seasonal workers to have a platform to negotiate with the employer and pursue their labour related rights. The sixth company had very few well-paid employees who acknowledged their lack of incentives to form a union.

A small number of workers had encountered disputes with their employers recorded at 8 out of 55 respondent employees. Nevertheless, five interviewed community members reported to have experienced conflicts with their employers or superiors, leading to their dismissal from the investor companies. Among the major sources of employer-employee grievances included delays in wage payments, employers' reluctance to pay the overtime allowances, rejected complaints and claims related to the exposures on hazardous substances. Some employees were unhappy with segregation on health insurance packages where the senior members of staff were covered by a better National level scheme (NHIF) leaving the junior cadres under a limited cover offered through the community health funds (CHF). In one plantation, the labour-related complaints echoed a

ajfand SCHOLARLY, PEER REVIEWED AFRICAN JOURNAL OF FOOD, AGRICULTURE, NUTRITION AND DEVELOPMENT Volume 23 No. 3 March 2023 PUBLISHED BY AFRICAN SCHOLARLY SCIENCE COMMUNICATIONS TRUST ISSN 1684 5374

more prominent tension, but this is rather typical across the labour-intensive organizations in Tanzania.

The investors' management side also aired their complaints towards employees, particularly on incidences of theft, laziness, dishonesty and non-compliance to the workplace regulations being the main drivers for conflicts. Other challenges on the employee side include the reluctance to use PPE, failure to report challenges faced including sexual harassment incidences and poor engagement in labour unions until conflicts emerge. Issues of poor awareness and low capacity on labour rights and obligations prevailed across the researched investment schemes. Variations in specific components of the labour-related aspects of inclusive development across the six schemes suggest the need for harmonization of standards across the SAGCOT region and other large-scale investments in Tanzania.

Investment Schemes' Out-grower arrangements

Large- scale investors' interactions with local farmers can be broadly organized into three major categories. First, a simple trading arrangement whereby a scheme merely procures agricultural produce from the farmers in the market. The second one entailed investment schemes entering into contractual agreements with local farmers and SMEs to supply specific services to the schemes like harvesting and transport (not employment contracts). The third category involved some more complex contractual arrangements with a combination of options ranging from land leasing, agreement on processing, extension and quality monitoring services, input supplies and cash loans and acquisition of farmers' produce.

The trading modality was the simplest of the three, with fewer complications given the minimal levels of commitment.

The second modality of investors' relationship with farmers, namely that of contractual agreement between the large-scale investors and farmers, was most common as acknowledged by 81.5% of the out-growers. Such contracts were perceived to be offering market guarantee to out-growers by 78% of respondents. However, flexibility and regular revision to improve the contracts was urged for most of the out-grower arrangements. The two largest investors preferred the contracts to be entered with Agricultural Marketing Co-operative Societies (AMCOS) rather than individual farmers for easy management and collective provision of technical support.

ajfand SCHOLARLY, PEER REVIEWED AFRICAN JOURNAL OF FOOD, AGRICULTURE, NUTRITION AND DEVELOPMENT Volume 23 No. 3 March 2023 PUBLISHED BY AFRICAN SCHOLARLY SCIENCE COMMUNICATIONS TRUST ISSN 1684 5374

The third modality, namely the comprehensive contractual arrangement between investors and farmers or out-growers was also found in the field. Three of the six investors were involved in lending farmers key inputs leading to the ownership harvest proportions under the agreed rates. The out-grower farmers had mixed feelings over such arrangement, partly regarded as beneficial especially where the investor was engaged actively in technology transfer and technical support to guarantee high productivity. But some (13%) respondent out-growers claimed that the contractual agreements with large scale investors denied them the right to sell their produce to other buyers. For the ease of management, many out-growers (45%) engaged with the large-scale investors through a cooperative arrangement.

The commitment to voluntary and involuntary support towards out-grower farmers defines another key attribute of out-grower support among the investors. Among the reported services include: the supply of improved seeds, fertilizers and pesticides. Some companies were also engaged in providing training services to local farmers and establishing and supervising demonstration farms. But none of these investors was found to be offering financial services including loans and loan guarantees, the essential need for the majority farmers.

Interventions to support the local farmers were reported by the investment schemes along with RAI provisions. Through the Community Led Agribusiness (CAB) program, CDI provides improved seeds, extension services and promotes access to better markets on produce to more than 4000 farmers in Kilolo and other parts of Iringa region. Similarly, the collaboration between IDH, a Norwegian-NGO, and Unilever provided extensive support to Tea farmers in Mufindi. The program namely Mufindi Out-growers Project is co-funded by the European government and it integrates commercial activities with service provisions. Through the program, farmers receive quality bonuses, training, technical assistance and livelihood improvement services. Different forms of interventions were also experienced with Kapunga Rice, Mtenda Rice and KVTC, partly as a tool to ensure quality of produce, and also as a form of corporate social responsibility. Such initiatives are also embedded with some forms of donor-driven co-financing arrangements.

Conclusions from these findings sum up mixed levels of support and capacity building to the local farmers. This was also coupled with a few limitations particularly in terms of exploitative commercial engagements. Although out-grower farmers were fairly empowered by the six researched investors, incidences of bias to favour elite farmers and people from outside the villages hosting the investments

ajfand SCHOLARLY, PEER REVIEWED AFRICAN JOURNAL OF FOOD, AGRICULTURE, NUTRITION AND DEVELOPMENT Volume 23 No. 3 March 2023 PUBLISHED BY AFRICAN SCHOLARLY SCIENCE COMMUNICATIONS TRUST ISSN 1684 5374

were reported. For example, the minimum land lease of six hectares is translated as an automatic exclusion of poor local peasants, thus against the RAI.

Relating with local communities

The large-scale agricultural investment schemes do coexist with communities, and thus expected to collaborate. The observed partnership modalities range from the provision of training, joint extension services and infrastructural development among others. Investors reported their direct engagement in providing social infrastructure such as schools, healthcare facilities, water distribution systems and construction of roads. Furthermore, some investment schemes were also providing food to community schools and also shared their equipment for free or at low rates. Generally, 65% of respondents demonstrated a positive attitude towards their neighbouring investment schemes.

The major sources of tension between the investment schemes and local communities are rooted on matters of land acquisition and border disputes. In addition to that, disturbances from aerial pesticide spraying and poor compensations for the border-zone crop damages were among the key complaints by villagers. In general, the land related disputes were reported by 11% of all respondents, while other challenges were seen by 18%. Moreover, investors competed with local villagers for access to the shared irrigation water systems and on several occasions, investors complained about nomadic pastoralists who grazed in their plantations.

On top of being considered local-friendly and supportive, investors were found largely divorced from the day-to-day community activities outside their CSR programs. Their engagement in activities such as village meetings was reported when their interests were at stake. For example, investors were reported to be closer to the local leaders when it comes to matters relating to distribution of irrigation water and curbing of theft tendencies and uncontrolled animal grazing. Otherwise, economic engagements with local SMEs remain limited.

CONCLUSION

The six SAGCOT investment schemes varied in terms of strengths and weakness related to one or more of the key aspects of Responsible Agriculture Investments. For example, a company that demonstrated the outstanding performance in terms of corporate social responsibility was also performing poorly in the domain of wages and employee-relations. The study recommends a collective set of interventions to harmonize the social inclusion efforts across the large-scale

https://doi.org/10.18697/ajfand.118.22205

ajfand SCHOLARLY, PEER REVIEWED AFRICAN JOURNAL OF FOOD, AGRICULTURE, NUTRITION AND DEVELOPMENT Volume 23 No. 3 March 2023 PUBLISHED BY AFRICAN SCHOLARLY SCIENCE COMMUNICATIONS TRUST ISSN 1684 5374

agribusiness investments in the SAGCOT region and Tanzania at large. Such interventions shall include awareness raising campaign and capacity building efforts which will ensure that all the key stakeholders are actively involved. Local Government Authorities (LGA's) are poorly engaged and ill equipped to monitor and ensure inclusiveness while engaging with existing and incoming investment schemes in their areas, thus they need to be strengthened.

The future research must pay attention to the SAGCOT'S GRG developed benchmarking indicators through which investors can be assessed in terms of how they promote inclusiveness. Such benchmarks could be revised with more diverse stakeholder groups, taking into consideration the diverse issues including those confronting the poor peasants, women, youth and people with disability.

Generally, resource flows from the investment schemes in terms of CSR, salaries and acquisitions from local out-growers contributed in improving the livelihood of the people. Three of the six investments demonstrated contributions to improving food security through their direct engagement in food production. At the same time, evidences of compromised food security could not be traced with the remaining three investment schemes.

The study paid a little attention to a broader spectrum of growth and sustainability, for example on environmental issues and labour, capital, tax and other broader contributions of the investors towards the economy including technology transfer. Such issues are very important in defining the role of agriculture-based investment schemes towards the society.

ajfand SCHOLARLY, PEER REVIEWED AFRICAN JOURNAL OF FOOD, AGRICULTURE, NUTRITION AND DEVELOPMENT Volume 23 No. 3 March 2023 PUBLISHED BY AFRICAN SCHOLARLY SCIENCE COMMUNICATIONS TRUST ISSN 1684 5374

REFERENCES

1. **Béné C, Barange M, Subasinghe R, Pinstrup-Andersen P, Merino G, Hemre GI and M Williams** Feeding 9 billion by 2050–Putting fish back on the menu. *Food Security*. 2015; **7(2):**261-74.

2. **Pernechele V, Fontes F, Baborska R, Nkuingoua J, Pan X and C Tuyishime** Public expenditure on food and agriculture in sub-Saharan Africa: trends, challenges and priorities. Rome, FAO. https://doi.org/10.4060/cb4492en

3. **Mhlanga N** Private sector agribusiness investment in sub-Saharan Africa. Rome: FAO. 2010.

4. **URT.** United Republic of Tanzania. Agricultural Sector Development Strategy - II 2015/2016 – 2024/2025. Dar es Salaam, URT,2017.

5. **BOT.** Bank of Tanzania. Tanzania Investment Report 201- Foreign Private Investments. Dar es Salaam. BOT,2018.

6. **Pallaver K** Labor Relations and Population Developments in Tanzania: Sources, Shifts, and Continuities from 1800 to 2000. *History in Africa*. 2014; **41:**307-35.

7. **Huijzendveld FD** Changes in political economy and ecology in West-Usambara, Tanzania: ca. 1850-1950. *The international journal of African historical studies*, 2008; **41(3):**383-409.

8. **Iliffe JA** modern history of Tanganyika. Cambridge University Press, 1979.

9. **Bowring J** Foreign Settlers and Agricultural Development in Tanganyika under British Rule 1920 - 1961. Ph.D. Thesis SOAS University of London, 1976.

10. **Otto O, Isinika A and H Musahara** Land tenure dynamics in East Africa: changing practices and rights to land, The Nordic Africa Institute, Uppsala 2019.

11. **Akilagpa Sawyerr GF** Discriminatory Restrictions on Private Dispositions of Land in Tanganyika: A Second Look, *Journal of African Law,*1 **3:1**, 1969.

12. **Kirilo E and S Early** The Meru Land Case, Nairobi: East African Publishing House, 1967.

13. **Sullivan JA, Brown DG, Moyo F, Jain M and A Agrawal** Impacts of large-scale land acquisitions on smallholder agriculture and livelihoods in Tanzania. 2022, *Environ. Res. Lett.* 17 084019.

14. **Kjekshus H** The Tanzanian villagization policy: Implementational lessons and ecological dimensions. *Canadian Journal of African Studies/La Revue Canadienne des études Africaines*. 1977; **11(2):**269-82.

15. **SAGCOT.** Southern Agricultural Growth Corridor of Tanzania. : Investment Blueprint. Southern Agricultural Growth Corridor of Tanzania, 2011.

16. **Development Corridors Partnership.** Development Corridors in Tanzania-A scoping study. Cambridge, UK: UNEP-WCMC, 2019.

17. **Sulle E** Bureaucrats, investors and smallholders: Contesting land rights and agro-commercialisation in the Southern agricultural growth corridor of Tanzania. *Journal of Eastern African Studies,* 2020; **14(2):**332-53.

18. **De Cleene S** Agricultural growth corridors–unlocking rural potential, catalyzing economic development. In Finance for food. *Springer*, Berlin, Heidelberg. **2014:** 67-87.

19. **ILO.** Decent Work in Agriculture. International Workers symposium on Decent Work in Agriculture. Geneva, 2003.

20. **Scherrer C and S Verma** Decent Work Deficits in Southern Agriculture.

21. **UNCTAD and World Bank.** Healthy and Safe Working Environment: Responsible Agricultural Investment: Knowledge into Action no. 16. World Bank. Washington D.C, 2018.

22. **UNCTAD and World Bank.** Out growers Out growers Schemes: Responsible Agricultural Investment (RAI) Knowledge into Action Note no.4. World Bank. Washington D.C, 2018.

23. **UNCTAD and World Bank.** Relocation and Resettlement: Responsible Agricultural Investment (RAI) Knowledge into Action Note no.12. World Bank. Washington D.C, 2018.

ajfand SCHOLARLY, PEER REVIEWED AFRICAN JOURNAL OF FOOD, AGRICULTURE, NUTRITION AND DEVELOPMENT Volume 23 No. 3 March 2023 PUBLISHED BY AFRICAN SCHOLARLY SCIENCE COMMUNICATIONS TRUST ISSN 1684 5374

Annex 1: Summary of the Analysis

RAI Indicator	Silverlands Tanzania Ltd	Mtenda Rice Company Ltd	Clinton Developm ent Initiative	Kapunga Rice Company Ltd	Kilombero Valley Teak Company Ltd (KVTC)	Unilever Tea Tanzania
Wages and benefits	Above minimum wage	Few employees with high pay	Wide gap between seasonal workers and full-time employees	Few employees, high pay	Wide gap between seasonal workers and full-time employees	Above minimum wage. Medium to high pay
Treatment of employees	Fair, Labour compliance	Excellent, all statutory benefits. Few employees	Mixed. Good for permanent workers, moderate for seasonal	Mixed. Good for permanent workers, moderate for sub-contractor workers	Moderate, some complaints	Good, all statutory benefits
Working conditions	Very good	Very good	Very good	Very good	Very good	Very good
Handling of outgrowers	Unpredictable, low pay	Market practices	Low engageme nt	Market practice, complained to be unfair	Good practice, complained to be unfair	Market practice
Work Safety and overall local compliance	Fully standardized and enforced	Standardiz ed	Standardiz ed	Standardiz ed	Standardized but not enforced for sub-contractors	Fully Standardiz ed
Engagements with CSOs and local communities	Limited community engagements, Improved food security	Receives grants for farmer empower ment, improved food security	Extensive CSO activities, cooperatio n with farmers, improved	No CSO activities, Limited community interactions. Border complaints, enhance	Good neighbourhoo d practices. No CSO activities found	Extensive CSO activities, cooperation with local farmers

ajfand SCHOLARLY, PEER REVIEWED
AFRICAN JOURNAL OF FOOD, AGRICULTURE, NUTRITION AND DEVELOPMENT
Volume 23 No. 3
March 2023
PUBLISHED BY AFRICAN SCHOLARLY SCIENCE COMMUNICATIONS TRUST
ISSN 1684 5374

			food security	food production		
Local content	Source and supply. Some complaints	Sourcing from farmers	Source from farmers	Source and Supply	Source from farmers. Some complaints	Source from farmers
Capacity building & Technology transfer	Improved breeds, technology transfer, training	Limited	Improved breeds, technology transfer, training	Improved breeds, technology tranfer, training	Training	Improved breeds, technology transfer, training