



**An Evaluation of the Sustainability of Inclusive
Business Models for Street Vendors in Ghana:
A Case Study of the 2SCALE-Yedent Partnership**

A Research Paper presented by:

Muhammed Alhassan Yakubu

Ghana

in partial fulfilment of the requirements for obtaining the degree of
MASTER OF ARTS IN DEVELOPMENT STUDIES

Major:

Governance and Development Policy

GDP

Specialization: PPM

Public Policy and Management

Members of the Examining Committee:

Marijn Faling

Georgina Gomez

The Hague, The Netherlands

December 2024

Disclaimer:

This document represents part of the author's study programme while at the International Institute of Social Studies. The views stated therein are those of the author and not necessarily those of the Institute.

Inquiries:

International Institute of Social Studies
P.O. Box 29776
2502 LT The Hague
The Netherlands

t: +31 70 426 0460
e: info@iss.nl
w: www.iss.nl
fb: <http://www.facebook.com/iss.nl>
twitter: [@issnl](https://twitter.com/issnl)

Location:

Kortenaerkade 12
2518 AX The Hague
The Netherlands

Contents

List of Tables	vi
List of Appendices	vi
Acknowledgement	viii
Abstract	viii
Relevance to Development Studies	ix
Keywords	ix
Chapter 1 1.0 Introduction	1
1.1 Statement of the Research Problem	2
1.2 Research Questions	2
1.3 Rationale and Justification of the Study	3
Chapter 2 Framework for Analysis and Review of Relevant Literature	4
2.1 Introduction	4
2.2 About 2SCALE	4
2.3 The Inclusive Business Model	5
2.3.1. Inclusion in the Context of Inclusive Business Models	5
2.3.2 Dimensions and Terms of Inclusion	6
2.3.3 Ownership	7
2.3.5 Risk	7
2.3.6 Reward	8
2.4 Adapting Terms of Inclusion Framework for Street Vendor Inclusion	8
2.4.1 Adjusting the Terms of Inclusion Framework for Street Vendors	9
2.4.2 Ownership in Street Vendor Context	10
2.4.3 Voice: Street Vendor Influence over Business Decisions	10
2.4.4 Risk: Risk Adaptation for Street Vendors	10
2.4.5 Rewards: Economic Benefits and Stable Incomes for Street Vendors	11
Chapter 3 Research Methodology	12
3.1 Introduction	12
3.2 The Case of the 2SCALE and Yedent Agro Partnership	12
3.2.1 Case Selection	12
3.2.2 Case Study Design	13
3.3 Data Collection	13
Table 3.1	13
3.3.1 Demographic Summary of Respondents	14
3.4 Document Analysis	14
3.5 Data Analysis	14
3.5.1 Coding and Thematic Analysis	14
3.5.2 Inclusive Business as a Guiding Framework for Analysis	15
3.5.3 Pattern Matching	15

3.6 Positionality and Ethical Considerations	15
3.7 Limitations of the Study and Reflections	16
3.7.1 Data and Sample Size Limitations	16
3.7.2 Geographical Location and Logistics	16
3.7.3 Challenges Accessing Data on Project Implementation	17
3.7.4 Field Interview Challenges	17
3.7.5 Inadequate Representation of Rural-Urban Dynamics	17
Chapter 4 Results and Findings	19
4.1 Demographic Analysis of Respondents	19
4.1.2 Gender Distribution of Street Vendors and Household Responsibilities	19
4.1.3 Age	19
4.1.4 Educational Background	20
4.1.5 Duration of Street Vending	20
4.2 Terms of Inclusion of Street Vendors	20
4.2.1 Organisation of the 2SCALE Inclusive Business Model	20
4.2.2 Lack of Support to Mitigate Rising Cost of Production for Street Vendors.	21
4.2.3 Ownership	21
4.2.4 Voice	22
4.2.5 Risk	22
4.2.6 Reward	23
4.3 Changes in the Terms of Inclusion and the Implications for Street Vendors Post-2SCALE	23
4.3.1 Ownership	24
4.3.2 Voice	24
4.3.3 Risks	24
4.3.4 Reward	24
4.4 Sustaining the Inclusive Business Model	24
4.5 Diversification of Income Generation by Street Vendors	25
4.6 Emerging Dimensions in Street Vendor Inclusion	25
Chapter 5 Reflections on Emerging Issues	28
5.1 Heterogeneity in the Experiences of Vendors	28
5.2 Social Networks	28
5.3 Autonomy	29
Chapter 6 Discussion of Findings, Conclusion and Recommendations	30
6.1 Implications of Demographic Characteristics for this Study	30
6.2 Household Responsibility and Economic Contribution	30
6.3 Terms of Inclusion of Street Vendors – the 2SCALE Inclusive Business Model	31
6.4 The Impact of the Terms of Inclusion on Street Vendors	32

6.5 The Changes in the Terms of Inclusion after the end of 2SCALE Project Support and the Implications	32
6.7 Diversification of Income Sources	33
6.8 Conclusion	34
6.9 Recommendations	34
Appendices	35

List of Tables

Table 4.1 List of Participants

Table 4.1 Summary of Findings and Discussion

List of Appendices

Information and Consent Form

Interview Guide for Street Vendors

Interview Guide for Yedent Staff

Interview Guide for 2SCALE Programme Staff

List of Acronyms

2SCALE	Towards Sustainable Clusters in Agribusiness through Learning in Entrepreneurship
BSS	Business Support Services
FAO	Food and Agriculture Organization
IBM	Inclusive Business Model
IFDC	International Fertilizer Development Centre
ISS	Institute of Social Studies
NGO	Non-Governmental Organisation
UNDP	United Nations Development Programme

Acknowledgement

My heartfelt thanks and praises goes to the almighty Allah for his grace and mercies throughout my studies and research in the past year and half. I am deeply indebted to my supervisor Dr. Marijn Faling, for her invaluable guidance, motivation and insights throughout the research process. Her constructive feedback and continuous encouragement has contributed immensely to shaping this study in meaningful ways. I am also deeply grateful to my second reader, Professor Georgina Gomez for her thoughtful reviews, insights, suggestions and motivation, which strengthened and enriched the analysis and contributions of this study. Special gratitude to the team at 2SCALE and Yedent Agro Limited for opening their doors to me and cooperating fully throughout this study. To my research assistant, Fidelis for the support and great job in the interpretations from the local dialects to English language. I am especially appreciative of all street vendors for generously sharing their lived experiences, perspectives, challenges and aspirations, giving me key insights to ground this study in real-world impact. I am profoundly grateful to my family for their steadfast support, patience and prayers during this journey. Their understanding and motivation have been an unwavering source of encouragement. This study would not have been possible without the full funding by the Government of the Kingdom of Netherlands, through the Orange Knowledge Programme (OKP), thank you for granting me this rare opportunity to learn. I am fully motivated to give it back to society to impact sustainable development. Finally, I wish to express my sincere appreciation to my friends back in Ghana and around the world, as well as my colleagues and friends at ISS, we lamented, laughed, learned and had fun together in diversity and beyond the classrooms of ISS.

Abstract

This research paper investigates the design and sustainability of the 2SCALE-Yedent Inclusive Business Model (IBM) in Ghana, with a focus on street vendor inclusion and sustainability in an inclusive value chain for soy-based agricultural products. Deploying the IBM framework which underlines empowerment, equitable access and distribution of benefits for marginalised actors, this study explores the perspectives and experiences of street vendors in accessing business support services, improved access to markets and capacity building support during project implementation, but encountered significant sustainability issues post-project. The findings show that while the partnership initially increased market linkages and enhanced capacities, critical gaps in the value chain including inadequate financial risk mitigation strategy, limited access to business resources and decision-making limitations, created vulnerabilities upon termination of 2SCALE support. Vendors resorted to informal networks and multiple income sources to complement their regular incomes. This underscores the importance of informal support mechanisms that were not originally part of the IBM framework. This paper recommends for IBMs in the future to adopt decentralised value chains and informal social networks to enhance their resilience and sustainability beyond lifespans of development interventions.

Relevance to Development Studies

This study is significant to development studies in so far as it provides significant insights into development interventions, especially investigating the role of Inclusive Business Models (IBM) in engendering inclusion and livelihood enhancement of marginalised actors like street vendors. The research focuses on the 2SCALE project in Ghana, highlighting the need to design inclusive business models with sustained impact beyond the life cycles of interventions. Through an analysis of the Terms of Inclusion, that is ownership, voice, risk and rewards, this study offers a thorough understanding of the opportunities and challenges related with the creation of inclusive business settings.

Particularly, this research is relevant to the field of development studies in view of the emphasis placed on exploring value chain inclusion and providing detailed insights into how marginalised actors could gain access to the market and reap benefits associated with formalised business environments. This fits well into the broader objectives of development interventions that seek to empower marginalised populations or low income earners to be able to participate effectively in markets.

In addition, using 2SCALE as a case study exposes the challenges associated with sustaining inclusion without adequate external support. It also contributes to debates on long-term impacts and sustainability of IBMs as well as how to structure these models to attain sustainable development outcomes that benefit the vulnerable in society.

Furthermore, this study addresses the critical issue of poverty alleviation as it highlights the essence of designing interventions in ways that tackle the various structural barriers to the promotion of equitable development. The research findings make practical proposals for the development of inclusive value chains to benefit the most vulnerable and marginalised populations.

Keywords

Inclusion, Inclusive Business, Sustainability, value chains, street vendors. Impact, empowerment, ownership, voice, rewards, risk.

Chapter 1

1.0 Introduction

Inclusive business has emerged as an approach focusing on the integration of marginalised actors into inclusive value chains by means of designing strategic partnerships to enhance social and economic value. Inclusive businesses seek to bridge gaps in market access and foster sustainable socio-economic empowerment through the amalgamation of low-income actors like smallholder farmers and street vendors, lead business entities and development agencies (Vermeulen and Cotula, 2010). Inclusive businesses put emphasis on the creation of collaborative interventions that enable risk-sharing, creation of livelihood opportunities and mechanisms through which systemic barriers facing low-income stakeholders are addressed. This approach has gained momentum in the development studies field and provides potential avenues for equitable development and sustainable economic inclusion, especially in the informal economy where accessibility to broader market systems has remained a challenge (Vorley et al., 2009; Thorpe, 2014; Schouten and Vellema, 2019).

Inclusive development has gained thrust as an effective response to the shortfalls of traditional development models which to an extent fail to tackle the development needs of the marginalised and vulnerable groups (Gupta et al., 2015). Critics have argued that sustainable development models place emphasis on conserving the environment in the long-term while neglecting the immediate socio-economic realities of the marginalised (Leach, 2015). As a result, inclusion in this context seeks to bridge this gap by ensuring a broader involvement of all groups, particularly those who operate in the informal economy including street vendors, are not left behind in the pursuit of sustainable development (Gupta et al., 2015).

Furthermore, critics of inclusive business have raised concerns about the true nature of inclusion. They argue that the terms of inclusions are usually skewed to favour the larger businesses leaving marginalised actors such as smallholder farmers and street vendors with minimal control and agency to make decisions (Ros-Tonen et al., 2019). Also, the emphasis on short-term economic benefits tends to mirage the long-term impacts and sustainability, especially when external support truncates (Guarin et al., 2022).

However, the need to address the challenges relative to sustainability is critical in ensuring sustained impact for street vendors in the long-term as far as inclusive business models are concerned. This further ensures deeper understanding and improvement in the role played by street vendors in inclusive value chains and how these impacts poverty alleviation and achievement of inclusive economic development.

Inclusive business models, such as the partnerships implemented under the 2SCALE project, are expected to enhance food security and development through the integration of smallholder farmers and micro-entrepreneurs such as street vendors into value chains. However, findings from research demonstrate that these IBMs have not always achieved their expected outcomes, especially in making sustainable impacts on vulnerable and marginalised populations like street vendors over time within the value chain (Thorpe and Reed, 2016)

There is a critical challenge regarding the role of IBMs in sustaining initial impacts made on marginalised actors in the value chain such as street vendors because the impacts often weaken after the termination of external support, as witnessed in many post-project assessments (Ros-Tonen et al., 2019). This raises questions on how IBMs can facilitate sustainability of marginalised actors, especially considering the inclusion terms and conditions under which actors in the value chain are engaged (ibid).

The ability of IBMs to sustain marginalised actors in value chains depends on the specific inclusion terms such as ownership of key business assets, risk-sharing, rewards and the voice that these marginalised actors have in the making of key business decisions (Vermeulen and Cotula, 2010). This determines the participation of various actors and the benefits they reap by participating in the partnership. The effectiveness and transparency of these terms as defined at the initial stages and how they are operationalised by IBMs can influence the long-term impact and sustainability of the benefits of these terms for marginalised actors (Vermeulen and Cotula, 2010).

For this study, the Inclusive Business Model (IBM) helps as a foundation to analyse the integration of marginalised actors into formal value chains, with the objective of having both the lead businesses and marginalised actors benefit mutually. Vermeulen and Cotula (2010) talk about inclusion of smallholder farmers and rural entrepreneurs seeking to understand the critical dynamics of business models that involve marginalised actors in different economic contexts. This leaves a critical knowledge gap in understanding the inclusion and sustainability for the actors such as street vendors. Vermeulen and Cotula (2010) concepts of ownership, voice, risk and reward offer a critical lens to study how street vendors experience inclusion and sustain the impact within a value chain.

This study adapts the framework by Vermeulen and Cotula to understand the specific context of street vendors in the 2SCALE-Yedent partnership since they served as intermediary actors in the 2SCALE inclusive business model, who processed soybeans into soy khebab and sold to low-income consumers to have access to affordable and fortified and nutritious food. Additionally, this study contributes to knowledge by expanding and altering these dimensions of inclusion as well as providing an adaptable and flexible framework to guide research into different actors within inclusive business models.

1.1 Statement of the Research Problem

The termination of the 2SCALE support at the end of the project has presented uncertainties relating to sustainability of street vendors in the inclusion model of the value chain implemented by the project. Whilst IBMs are intended to enhance food security and inclusive development, available evidence shows increased limitations associated with it. This has resulted in criticisms about the ability of IBMs to demonstrate sustainable impacts, particularly for marginalised actors in the value chain (Mangnus, 2023). While IBMs could show positive results at the initial stages of inclusive value chain partnerships, they could result in negative repercussions for the livelihoods of marginalised actors in the long term (ibid).

This study interrogates the sustainability of marginalised actors in inclusive business models by assessing the terms of inclusion that informed the engagement of street vendors in the 2SCALE Yedent partnership as well as investigate how these terms of inclusion, that is ownership, voice, risk and reward, at the core of the contractual arrangements affect the sustainability of the benefits for street vendors after the 2SCALE intervention ended and how these benefits or impacts can be sustained beyond the cessation of external support (Thorpe and Reed, 2016).

1.2 Research Questions

This study will be conducted within the framework of the following research questions:

1. How did inclusive business partnership of 2SCALE influence the terms of inclusion of street vendors, and how have the terms of inclusion evolved after termination of support?
2. What were the initial terms of inclusion in the 2SCALE-Yedent partnership for street vendors and how were these terms intended to benefit street vendors?
3. What changes have occurred in the terms of inclusion and the overall value chain for street vendors in the partnership and what are the implications of these changes for street vendors post 2SCALE project support?
4. To what extent has 2SCALE contributed to sustaining the inclusive business model and what has hindered the sustainability of the model?

1.3 Rationale and Justification of the Study

Inclusive Business Models (IBMs) have been recognised as a pathway for integrating marginalised actors like smallholder farmers and micro-entrepreneurs within formal value chains, thereby increasing their access to livelihood enhancement opportunities and poverty alleviation (Vermeulen and Cotula, 2010; Falling, 2022). Nevertheless, how street vendors who play crucial roles in the informal sector of most developing economies, are included in formal value chains have not been explored much in the broader literature of inclusive business frameworks. Street vendors constitute an important segment in the provision of accessible goods and services to marginalised populations, but understanding their sustainability and terms of inclusion in formal value chains have not been thoroughly researched (Navarrete-Hernandez et al., 2023).

This gap is addressed in this study through investigating street vendor inclusion and sustainability in the inclusive business model with the 2SCALE-Yedent partnership in Ghana as a case study. By examining the initial terms of inclusion and sustainability of street vendor inclusion within 2SCALE, this study would contribute to a broader appreciation of inclusive business practices and recommend how the IBM framework can be better developed to sustain livelihoods and resilience of street vendors post-project and other actors in informal economies.

1.4 Organisation of the Study

This study is organised into 6 chapters. Chapter one discusses the background and statement of the research problem. Chapter two delves into the theoretical framework for the study and review of relevant literature. Chapter three discusses the research methodology, while chapter four contains the findings of the study. Chapter five contains reflections on emerging issues while chapter six discusses the study's findings as well as the conclusion and recommendation of the study.

Chapter 2 Framework for Analysis and Review of Relevant Literature

2.1 Introduction

This chapter discusses the framework that guides the conduct of the study. The research utilises the Inclusive Business Model (IBM) as the approach to examine the 2SCALE-Yedent partnership and street vendor inclusion within the value chain. The success of IBMs largely depends on the terms of inclusion (ToI) - ownership, voice, risk and reward. These four dimensions define terms and conditions of the inclusion of all actors in the inclusive value chain. This will provide the theoretical lens by which the 2SCALE-Yedent partnership in Ghana will be analysed focusing on street vendor inclusion and sustainability.

This section also explores the broad literature on street vendors inclusion and sustainability within inclusive business models. The literature review situates the study within the broader inclusive business discourse as a strategy for development interventions and highlights the benefits and limitations of such business models in surmounting poverty and inequality.

2.2 About 2SCALE

This exploratory study on street vendor sustainability in Inclusive Business Models (IBMs) is situated within a case study of the 2SCALE programme in Ghana, specifically the 2SCALE Yedent Agro Partnership project. Towards Sustainable Clusters in Agribusiness through Learning in Entrepreneurship (2SCALE) programme is an intervention funded by the Dutch government that seeks to foster inclusive agribusiness in Africa south of the Sahara. 2SCALE is one of the largest agribusiness incubators in the region that focuses on the improvement in rural livelihoods, enhancement of nutrition and food security as well as the integration of large-scale companies, smallholder farmers and rural enterprises into inclusive and profitable value chains (IFDC, 2017).

The first phase of the project was launched in 2012 and ended in 2012. The programme currently involves a portfolio of fifty-two (52) commodity based public-private partnerships (PPPs) driving inclusive business development in the agro-food sector in nine African countries. 2SCALE is implemented by the creation of agribusiness clusters led by business champions who play the role of lead firms in the partnerships. These lead business champions are producer organisations or locally based small and medium enterprises (SMEs) interested in the development of inclusive business models. Also, these business champions also engage in trading or processing of farm produce from smallholder farmers. 2SCALE supports the various cluster of partnerships in the project to develop products and markets to meet the demands of local consumers, especially low income consumers serving as the target for affordable and fortified nutritious food products.

The strategy of 2SCALE focuses on developing PPPs, usually originating from the business ideas of local actors in the value chain such as producer organisations and local entrepreneurs (IFDC, 2017). In some cases the partnerships are initiated by large scale firms as a collaboration with smallholder farmers to guarantee regular and reliable access to raw materials. Through the assembling of different stakeholders, the 2SCALE programme play a facilitating role to integrate smallholder farmers and local enterprises into bigger value

chains. This enables them to benefit in terms of capacity building, improved access to markets and enhanced agricultural practices (2SCALE, n.d).

In Ghana, the 2SCALE programme created partnerships during the first phase of the project (2012-2017), one of which was the emphasis on developing inclusive soybean value chains. The soybean initiative was initially led by local producer farm groups and eventually expanded to include micro-entrepreneurs - local women soybean processors and vendors and SMEs such as Yedent Agro Limited, that specialises in the processing of fortified nutritious blends of cereals. Yedent Agro Limited entered into collaboration with 2SCALE to diversify its market by adopting a more consumer-inclined product distribution approach.

Hitherto the Ghana Health Service and the Ministry of Health were the only buyers of Yedent's products (Maisoy Forte), where the company only sold around 20 tons per month (Nti Pipim, 2018). The support of 2SCALE enabled Yedent to expand its operations and produced nutritious products from soybeans for consumers and established training centres for women processors (ibid).

One of the notable 2SCALE local community partnerships was the intervention with street vendors, particularly the Banda Borae group of women in the Kpandai area of the Northern region of Ghana. These women initially operated as individual street vendors but due to the 2SCALE intervention formed a cooperative under the Yedent partnership (2SCALE, n.d.). This women group demonstrates the inclusive business model adopted by the 2SCALE programme because it integrated marginalised women street vendors or entrepreneurs into a structured value chain. This enabled them to evolve from an informal to a formal agribusiness venture. The intervention supported the Banda Borae women group with resources, capacity development and market access opportunities intended to enhance their livelihoods and make effective contributions to the growth of the local economy.

2.3 The Inclusive Business Model

Inclusive business models (IBMs) integrate low-income populations into formal value chains, and this extends the benefits of economic growth to a wider segment of society (Prahalad and Hart, 2002). Partners in IBMs aim to realize profit and still contribute to the alleviation of poverty through the involvement of marginalised actors within value chains. The engagement of street vendors under the 2SCALE-Yedent partnership is a typical example of an inclusive business approach aimed at creating economic opportunities while at the same time addressing nutritional deficiency among low-income consumers. The inclusive business model is relevant for this study because 2SCALE-Yedent partnership employed the model in its attempt to integrate street vendors into its value chain.

2.3.1. Inclusion in the Context of Inclusive Business Models

Generally, inclusion concerns the processes and conditions by which people or groups of people become integrated in a particular environment, that is a community, society or an economic arrangement. But in the context of economic development, inclusion refers to situations where marginalised populations are able to equally participate in formal systems of value chains.

According to Guarín et al. (2022) inclusion is defined as the guarantee of active participation for marginalised stakeholders not as mere participants in formal value chains, but as active contributors in decision making processes, having control over the roles they play, rewards and decisions. Within the IBM sphere, beyond participation, inclusion facilitates

meaningful access to business decision making power and inputs to empower low-income actors in value chains to enhance their livelihoods (Ton et al., 2018). This emphasises the importance of access to resources and opportunities in the processes of making business decisions that enable marginalised actors to reap benefits as well as contribute to economic growth.

In view of the above, this study conceptualises inclusion as conditional and multidimensional. For that matter inclusion should be genuine and able to sustain impact and not just nominal participation of low-income players in value chains. Again, this research recognises that inclusive businesses should be able to create conditions that empower marginalised actors to grow and improve their resilience to fluctuations in the market. This framing enables the research to exclude certain arrangements that may not facilitate the agency of marginalised actors. Consequently, this refines the scope of inclusion in this study to connote sustainable empowerment instead of just transient engagement of actors.

Studies on inclusive business models adopt frameworks to operationalise inclusion and to understand how marginalised actors are integrated into value chains under equitable, empowered and sustainable conditions. The Terms of Inclusion as used by authors such as Vermeulen and Cotula (2010) and Ton et al. (2018) offer a structured means to examine the participation of marginalised groups formal value chains.

These dimensions of inclusion such as ownership, voice, risk and reward enable understanding of the nuances of how IBM interventions facilitate the thriving of marginalised actors within inclusive value chains and sustain their livelihoods (Vermeulen and Cotula, 2010; Ton et al., 2018). Inclusion is essential in the pursuit of sustainable development, especially in poverty reduction and reducing economic inequalities. This basic tenet of inclusion is not just a social responsibility, but also a deliberate business decision intended to expand access to markets by informal traders and to improve supply chain resilience (ibid).

Within value chains in the agricultural sector smallholder farmers have faced persistent barriers related to market access, financing challenges, access to information and technological advancements. The inclusive business model integrates farmers into a formal value chain that helps them to surmount these barriers through the acquisition of the necessary resources and tools to effectively participate in the market (Vermeulen and Cotula, 2010; Thorpe and Reed, 2016; Ton et al., 2018; Guarin et al., 2022). This is done by establishing cross-sector collaborations between governments, private sector and non-governmental organisations (NGOs) to create the enabling environment to ensure the success of inclusive business practices (Guarin et al., 2022). These cross-sector collaborations aim to provide the requisite support for street vendors and smallholder farmers to access a stable market.

2.3.2 Dimensions and Terms of Inclusion

IBMs are intended to integrate marginalised populations, particularly smallholder farmers, into formal value chains so that their livelihoods can be enhanced for the promotion of inclusive development. But how effectively IBMs can do this depends largely on the terms of inclusion designed at the initial stages to define how the various actors will be integrated into the value chain.

To examine the impact and sustainability of inclusive business models, the four dimensions of the terms of inclusion – ownership, voice, risk and reward are important (Ton et al., 2018). Each of the four dimensions mainly refer to smallholder farmer inclusion in the value chain and depicts a specific part of the relationship between them and lead firm in the partnership.

2.3.3 Ownership

Ownership refers to the distribution of resources, assets, and responsibilities between actors in the value chain such as micro-entrepreneurs, smallholder farmers and the lead businesses. In IBMs, the objective is to promote joint ownership or shared control over key resources including land, equipment, and processing facilities. Marginalised actors gain agency in the value chain if they have some degree of agency. This allows them to participate in decision making and obtain more benefits from their investments and labour (Ros-Tonen et al., 2019).

However, in some situations, ownership remains concentrated in the hands of lead organisations and this limits the autonomy of street vendors or smallholder farmers. In some IBM initiatives, smallholders could just be acting as suppliers with little influence over assets or resource allocation (Vorley et al, 2008). For instance, farmers could have access to farm inputs such as fertilizers and seeds, from contract farming schemes from lead companies without over the inputs and this limits their autonomy as far decision making is concerned (Ton et al., 2018).

2.3.4 Voice

Voice connotes the capability of smallholders and street vendors to have say over critical business decisions like pricing, quality standards and marketing strategies. IBMs are challenged when it comes to addressing power asymmetries in decision making between large businesses and marginalised actors. IBMs provide mechanisms for smallholder actors to participate meaningfully in decision making processes by way of smallholder associations, periodic consultations and collective bargaining processes (Ton et al., 2018).

Absence of voice could lead to unfair practices in which marginalised actors would have less influence or control when it comes to the terms of inclusion. Without appropriate mechanisms to amplify their voice, street vendors might be unable to negotiate equitable pricing and influence policies directly affecting their well-being (Vermeulen and Cotula, 2010). Also, smallholder empowerment using cooperatives, collective bargaining platforms, and advisory committees gives them influence in the operations of the value chain, resulting in decisions that align well with their needs and interests (Ton et al., 2018).

2.3.5 Risk

Risk is a critical element in any business model, as such IBMs must always consider carefully the sharing of risks between smallholders and larger or leading businesses in the relationship. Risk could emerge from varying sources including market demand fluctuations, social and political instabilities, and climate change and its associated factors. Risks are usually distributed unevenly in value chains. In some cases, smaller actors would bear the much of the risks, particularly in situations where they are supposed to buy products upfront or take credit to fund their operations in the value chain (Guarin et al., 2022).

Within IBM context, mechanisms that engender sustainable risk-sharing are important to protect the livelihoods of marginalised actors such as street vendors. For example, the provision of insurance programmes, providing fair compensation and giving flexible contracts go a long way in mitigating the risks for marginalised actors (Magnus, 2023). However, when the risk is not shared fairly, these smaller actors could face financial challenges during

market fluctuations and shocks. This can undermine the long-term impacts and sustainability of the business model.

2.3.6 Reward

Reward connotes the circulation of economic benefits in the value chain. A crucial part of IBM is making sure that smaller actors are fairly compensated for their contributions. This includes among others making financing accessible to them, setting fair and equitable pricing systems for goods and services and providing incentives for the upgrade of their business operations (Ton et al., 2018). However, the sharing of rewards is usually skewed to favour lead firms, and this makes them capture larger share of the value that is created in the chain, whereas smaller returns are disproportionately left for smaller actors such as street vendors (Vermeulen and Cotula, 2010).

Fair reward systems are important to foster long-term commitment and sustainable impact in IBMs. If inclusive businesses ensure that smaller actors get an equitable share of the value created then IBMs would have improved the livelihoods of marginalised actors and provided the incentive for them to continue participating in the value chain. However, this requires transparency in pricing mechanisms, access to financing and recognising the value created by smallholder farmers and street vendors (Thorpe and Reed, 2016).

The four dimensions of inclusion – ownership, voice, risk and reward – are important elements required for IBMs to be successful and sustainable. Instituting these dimensions well within the structure of inclusive businesses can lead to significant social and economic returns for marginalised actors, thereby fostering inclusive growth and development. In contrast, poorly designed inclusion terms can generate unfair risk sharing, exploitation and limited economic benefits for smaller actors (Ros-Tonen et al., 2019).

In summary, IBMs seek to integrate marginalised actors into formal value chains in ways that bring positive gains to both businesses and marginalised actors. IBMs that are focused on equity in ownership, voice, risk-distribution and reward allocation can enhance inclusive development and reduce poverty. However, there remain challenges regarding the operationalisation of these terms of inclusion in real world initiatives, especially to address the power asymmetries between larger businesses leading the partnerships and smaller actors (Magnus, 2023). It is necessary to critically understand these four dimensions of inclusion so that inclusive businesses can lead to inclusions that are meaningful and sustainable.

2.4 Adapting Terms of Inclusion Framework for Street Vendor Inclusion

The inclusion of street vendors among other actors in the value chain is important because they are critical in the transmission of agricultural products to end consumers, especially those in low-income markets (Saha, 2011). Street vendors play significant roles in developing countries, especially in the informal sector of the economy where they are the main source of essential goods and services for low-income households whose access to affordable products are usually limited (Termeer et al., 2024). In the realms of inclusive business models, the

relationship between formal businesses and street vendors is usually multifaceted and complex.

Guarin et al. (2022) argue that as much as considerable progress has been made by the integration of smallholder farmers into value chains in recent times, the scope of inclusion should be opened to involve other actors in the value chain. Thus, inclusive business interventions should look beyond producers and consider other actors like street vendors who play essential roles in the distribution of goods and services to low-income consumers (Saha, 2011).

However, as far street vendors are concerned inclusion in formal value chains should facilitate their access to regular incomes, regular supplies, training opportunities, business tools and stable market access, often not available in the informal sector (Navarrete-Hernandez et al., 2023). Additionally, inclusion should provide street vendors with access to legitimacy and visibility as well as enhanced business management skills and secure them sustainable livelihood opportunities. This strategy is supposed to increase street vendor economic inclusion and enhance their resilience by providing them access to benefits that operating in the informal economy alone might not offer them (Lyons and Snoxell, 2005).

This study has adapted the 'Terms of Inclusion (ToI) framework which was initially designed to analyse smallholder farmers' inclusion in value chains. ToI is utilised by this research to assess street vendor inclusion within the 2SCALE Yedent partnership. Conventionally, this framework is organised around four dimensions of ownership, voice, risk and reward (Ton et al., 2018).

Each of these dimensions is used as a lens for analysing the extent and quality of inclusion experienced by marginalised actors in the inclusive business model. However, since the terms of inclusion framework was initially developed to study smallholder farmers, applying it for understanding street vendors will require some alterations. This alteration will reflect the unique roles, circumstances, dynamics and challenges of street vendors in informal economies.

The operations of street vendors occur under different social and economic situations as compared to smallholder farmers. Given this, ownership for street vendors may not relate to land or agricultural resources as in the case of smallholder farmers but could relate to equipment and products related to street vending such as branded umbrellas, market stalls and product supplies. Likewise, risk in street vending context relates to market fluctuations, spoiled products and customer access asymmetries. These are significantly different from seasonal, weather and harvest related risks faced by smallholder farmers.

2.4.1 Adjusting the Terms of Inclusion Framework for Street Vendors

Adapting the Terms of Inclusion (ToI) framework for purposes of this study requires an adjustment of each dimension of inclusion, that is ownership, voice, risk and reward, to address the distinct street vendor characteristics. This will reflect the specific context and challenges that street vendors encounter within informal economies, as well as ensure the application of the framework to suit the context of this research.

2.4.2 Ownership in Street Vendor Context

In contrast to smallholder farmers whose ownership included among others land and farming resources, street vendors fundamentally need to own or control products and equipment for vending. Ownership in the case of street vendors could be related to control and access to minor assets or resources such as display tables, soy products and branded umbrellas among others provided by the lead business. While these resources may appear small, they are critical for the setup of a successful space for vending. Some street vendors see incomes they earn as a form of ownership because they offer a possible pathway to accumulate savings and other personal assets.

Lyons and Snoxell (2005) notes the importance of ownership to street vendors indicating that ownership of critical business tools generates immense benefits to street vendors in the informal sector because ownership enhances their agency for economic growth and stability. Enabling street vendors to have control over assets though small, the business model fosters some degrees of autonomy and personal investments, which are critical for sustainability of value chain inclusion. In this regard, the ownership dimension examines whether street vendors in the inclusive business have true ownership over crucial business tools necessary for successful operations and whether the inclusive business model facilitates long-term acquisition of assets for street vendors.

2.4.3 Voice: Street Vendor Influence over Business Decisions

Voice for street vendors embodies the ability to influence terms and conditions in business models including setting prices and product supplies. In contrast to smallholder farmers who might belong to formal cooperatives, street vendors generally operated autonomously, and this limits their participation in decision-making or negotiation with larger businesses. Voice can be examined by an assessment of whether street vendors have access to established feedback mechanisms and whether they also were able to influence critical decisions regarding their business operations and their impact on their incomes.

Marginalised actors in IBMs require structured mechanisms for feedback that protects their business interests (Saha, 2011). For vendors giving them voice includes ensuring the availability of platforms or avenues for expressing their preferences and grievances as well as making suggestions for improved business operations. This research examines how effectively IBMs integrate the voice or views of street vendors into business practices and whether these vendors have the opportunity to take part in processes of decision-making within the inclusive value chain.

2.4.4 Risk: Risk Adaptation for Street Vendors

Unlike smallholder farmers, the risks distribution in the case of street vendors is notably distinct. Street vendors encounter various risks in the market, including fluctuations in the flow of customers, competition and spoiling of perishable products like soy khebab among others. Street vendors also face risks associated with their safety and security, particularly

when conducting business activities in public places that lack formal security arrangements. In analysing risks for the purpose of this study, the research assesses how the lead firm in the inclusive business model absorbed part of the financial burden related to unsold products, minimising their immediate exposure to losses.

Thorpe and Reed (2016) posit that risks distribution is critical in IBMs since it makes marginalised actors participate in the value chain without fear of excessive burdens. This study examined whether the risk-sharing systems offered by lead firms in value chains effectively mitigate these risks for street vendors to improve their business stability. Again, this study assesses if these risk-sharing mechanisms utilised during project implementation continued to be accessible post-project because sustained support is important for street vendor value chain inclusion in the long-term.

2.4.5 Rewards: Economic Benefits and Stable Incomes for Street Vendors

Street vendors' rewards are realised in daily sales and commissions earned from sales, unlike seasonal agricultural harvest or yields in the case of smallholder farmers. The reward dimension investigates whether the income and incentive structures or mechanisms put in place in the partnerships offer sufficient financial returns that can sustain street vendor livelihoods. Street vendors in rural communities with minimal access to constant customer flows could encounter lower sales and less stable earnings as compared to their counterparts in urban suburbs. This raised questions regarding the inclusiveness and equity of the reward system. Inclusive and equitable reward systems are essential for the sustainability of IBMs (Vermeulen and Cotula, 2010). Providing equitable and stable earnings in inclusive business models enhances the financial security and ability of street vendors to plan well for the future with reduced risks. This research further examines how the reward system offered by IBMs influence the economic benefits for street vendors, especially relative to reliable income and opportunities for growth. Also, the study explores whether lead partners make any financial incentives available to boost participation of vendors while enhancing their value chain inclusion.

Adjusting the ToI framework offers a more meaningful and accurate evaluation of the sustainability and inclusion of street vendors in the inclusive business model and underlines the essential elements that hitherto might not have been captured in the framework that was designed mainly for smallholder farmers.

Chapter 3

Research Methodology

3.1 Introduction

This study utilises a qualitative research approach to investigate the inclusion terms and sustainability of the 2SCALE inclusive agribusiness partnership in Ghana's Kpandai District, focusing on the Banda Bora women, a group of 18 street vendors who traded mainly soy khebab made from soybeans and some of them retailed soy flour products from Yedent Agro Limited. Semi-structured questionnaire was developed and used to solicit the responses of 10 street vendors engaged under the 2SCALE-Yedent partnership. Separate questionnaires were used to solicit responses from 2SCALE project team members and a project officer in charge of marketing at Yedent Agro. These 13 participants across the 3 categories constituted the primary respondents for this research.

3.2 The Case of the 2SCALE and Yedent Agro Partnership

The 2SCALE project, an inclusive agricultural business incubator in Africa was implemented through the creation of partnerships integrating smallholder farmers, street vendors and other actors into a formal value chain. Critical components of the 2SCALE project approach are the promotion of market linkages, capacity building and access to financing (Ros-Tonen et al., 2019, page 10).

Yedent Agro Group Limited specialises in producing and distributing processed foods in Ghana. It serves as an example of businesses that engage street vendors within the framework of an inclusive business model. Yedent operates through street vendors as the main channel to distribute processed foods to end users, specifically targeting low-income consumers and supplying them with affordable and nutritious foods. The nature of Yedent's dealings with the street vendors serves as a good case of inclusive business to consider the terms of inclusion and the resultant implications for sustainability of street vendors in collaboration.

3.2.1 Case Selection

Banda Borea women group of street vendors in the Kpandai District of the Northern region in Ghana was selected as the case study site using purposive sampling because it was the only project cluster out of the seven clusters that had street vendors provided with business support services. Purposive case selection can be utilised in qualitative research when a particular case is deemed informative and representative of the population under study (Gerring, 2007). The street vendors' group in Kpandai is considered as a typical case for this study due to the insights it provides into the integration of street vendors in inclusive business models and how IBMs operate within informal economies. As a typical

case, it enables generalisation of findings to other similar cases of IBMs and provides valuable insights and lessons for future initiatives (Yin, 2018).

3.2.2 Case Study Design

This study adopted a single-case study design in alignment with the provisions for the researching critical or unique cases (Yin, 2018, page 50). This study uses Banda Borea as a critical case to explore the long-term impact of the 2SCALE partnership on street vendors after the termination of external support from the project. Focusing on Banda Borea as a single case further allows for this study to explore in-depth how the terms of inclusion, that is ownership, voice, risk and reward impact the sustainability of the partnership. This study is also an explanatory case design that seeks to explain how and why certain issues such as the termination of project support, affect outcomes for street vendors (Yin, 2018, page 52).

3.3 Data Collection

Semi-structured interviews was conducted with 10 street vendors who were part of the beneficiaries of the 2SCALE project, 2 SCALE project team members and 1 Yedent Agro focal person for the 2SCALE partnership. The use of semi-structured interviews allowed for both open ended questions and further probing. This enabled respondents to share their personal experiences and perspectives and provided a structured outline for the researcher to explore the key themes related to the objectives of the study (Bryman, 2016). The questions of the interview focused on the experiences of street vendors in the 2SCALE partnership and how they have adapted to post project conditions, as well as their perspectives on the terms of inclusion. Using semi-structured questionnaires enabled the researcher to gain deeper understanding of the perspectives and lived experiences of the street vendors because it provided flexibility and depth (O’Leary, 2014, page 195; Creswell and Creswell, 2017).

Table 3.1

List of Study Participants

Stakeholder	Number of Participants	Action
2SCALE Project Team	2	Provide information on the objectives of the project, ToI and whether the project achieved set objectives and their sustainability.
Yedent Agro Staff	1	Provide insight on business structure of the partnership, sustainability and how the ToI was designed.
Street Vendors	10	Provide insight on how 2SCALE shaped their inclusion and their sustainability post-project
Total	13	

3.3.1 Demographic Summary of Respondents

The demographic characteristics of street vendors who were engaged in the 2SCALE project as beneficiaries and participated in this study is outlined below by way of providing context for this research. The demographic summary seeks to help understand the experiences of respondents in the 2SCALE inclusive business model.

In terms of gender distribution, all the participants were females. This highlights the important roles women play as street vendors in the economy of rural areas. Their ages ranged from 24 to 55 years, this shows that respondents were matured enough with wide-ranging experiences in their chosen trades. As far as education is concern all the nine street vendors interviewed had no formal education at all. This reflects the limited access to education in rural communities for those above school going age and emphasises the relevance of providing access to capacity building programmes. Their vending activities range from having places where they sit to ply their trades on daily basis while hawking at specified times in schools, markets and communities. Eight of the respondents who ranged from 43 to 55 years have had between 19 to 21 years of experience in street vending. This demonstrates their long-term involvement and adaptability in informal economies.

The above demographic summary serves as foundation for detailed analysis at the results section of this study where the backgrounds of street vendors are linked to their perspectives and personal experiences in the inclusive business model as well as the challenges encountered post-2SCALE project support.

3.4 Document Analysis

Aside interviews, document analysis was employed to examine project reports and policy documents relevant to IBMs in Ghana. This complimented data collected from interviews by providing additional context and triangulation (Yin, 2018, page 63). This enabled the establishment of construct validity of the study in view of the utilisation of multiple sources of evidence (ibid).

3.5 Data Analysis

3.5.1 Coding and Thematic Analysis

In conducting data analysis, both transcripts of interviews and relevant documents were coded and analysed thematically. Coding was done inductively and deductively, utilising open coding to identify emerging themes and used pre-defined codes based on the theoretical framework of IBMs. The inductive coding allowed for the emergence of themes right from the data such as unexpected challenges that street vendors encountered, while on the other hand deductive applied the inclusion terms, that is ownership, voice, risk and reward, to the data (Creswell and Creswell, 2017). The adoption of this hybrid approach ensured that the

analysis captured both the specific experiences of street vendors and how these experiences aligns with the inclusive business framework.

3.5.2 Inclusive Business as a Guiding Framework for Analysis

IBM guided the analysis by serving as the framework for the interpretation of the data. The four crucial dimensions of the terms of inclusion, ownership, voice, risk and reward, served as the key categories for the thematic analysis. The research examined how the ownership of resources was divided between Yedent as the business supplying goods and the vendors as retailers of these goods; how street vendors influenced decision making (voice); how risks were shared; as well as how rewards (economic benefits) were distributed (Ton et al., 2018, page 206). IBM provided a structured framework to assess the effectiveness of the terms of inclusion and the sustainability of the partnership.

3.5.3 Pattern Matching

This study employed pattern matching in order to enhance internal validity (Yin, 2018). This was done by the comparison of findings from interviews with expected outcomes based on the framework of inclusive business. This involved the identification of patterns in the data that either confirmed and contradicted the theoretical expectations. The varying data sources by way of interviews and document analysis further ensured that the findings are reliable and robust (Creswell and Creswell, 2017).

3.6 Positionality and Ethical Considerations

The researcher's positionality denotes the identity, background and the potential predispositions or biases of the researcher that could affect the various processes of the study such as the gathering and interpretation as well as presentation of data. This study acknowledges the positionality of the researcher as an important part of reflexivity to ensure transparency of how individual and professional viewpoints could influence research findings (O'Leary, 2017).

As an external person assessing the sustainability of inclusive business models in a predominantly rural Ghanaian setting, the researcher assumes an outsider position as far as street vendors and the study area is concerned. This external status could influence the perception of respondents towards the researcher and potentially affect the readiness of study participants to divulge certain information. Also, considering the researcher's academic and professional orientation in development studies, the tendency of implied bias in expecting inclusive value chains to enhance equitable development outcomes.

In recognition of this the researcher carefully approached the process of collecting data with an open and unbiased mindset by ensuring that the responses of street vendors, Yedent Agro staff and 2SCALE project team members guide the findings of the study without any shred of predetermined assumptions about the effectiveness of the inclusive business model.

Additionally, the role of the researcher in gathering and analysing primary data required constant reflexivity, particularly during the interpretation of qualitative interview data. As a result, this study fully emphasises transparency in the process of collecting and interpreting data, as well as acknowledging the potential impact of the position of the researcher on the research findings.

Finally, in undertaking this study, the researcher gave considerable attention to ethical considerations in order to ensure that the rights, dignity and privacy of all respondents in the study were respected. As such the study adhered to the standard ethical principles guiding qualitative research such as confidentiality, informed consent, as well as minimising harm to participants (Creswell and Creswell, 2017).

3.7 Limitations of the Study and Reflections

Notwithstanding the comprehensiveness of this study, a number of limitations were met that could have impacted the scope and depth of the research findings. These limitations traversed diverse stages of the research such as field work and data collection as well as challenges with logistics in view of the geographical area of the study.

3.7.1 Data and Sample Size Limitations

The sample size of this study, though relatively small, shows the contextual and logistical challenges faced during the field work. The sample comprises 13 respondents in all, 10 being street vendors who were engaged under the 2SCALE-Yedent partnership to process and sell soy-based products as part of the inclusive value chain. Although the database appear small, the sample represents a cross-section of the population who were directly affected by the 2SCALE programme and provides valuable qualitative insights about their lived perspectives and experiences after the first phase of the programme ended. The sample size enabled a thorough exploration of respective participants' experiences and challenges, in line with the basic tenets of qualitative research, which prioritises rich and in-depth contextual data rather than breadth (Bryman, 2016; Creswell and Creswell, 2017).

3.7.2 Geographical Location and Logistics

The geographical remoteness of the study area, the Kpandai District of the Northern region in Ghana was one of the key limitations encountered during the study. The remoteness and rural landscape of the area presented substantial logistical issues during fieldwork. Accessing the study locations was difficult in view of the poor road network which affected transportation and prolonged travel time.

The last-minute decline for funding support for fieldwork initially agreed upon also hindered logistical arrangements for fieldwork. These issues affected the timelines of the

research as getting the street vendors for in-person interviews required several visits, which was further exacerbated by weather conditions and the farming season where interviews had to be scheduled at night because most of the vendors were engaged in farming activities during the day.

Again, the inadequate infrastructure in such rural communities limited access to information and communication technologies, including reliable mobile network and unstable internet connectivity. This complicated the organisation of interviews with participants. The respondents operating in communities where access to market was limited were difficult to reach except on market days, where they traded in temporary structures and mobile set ups.

3.7.3 Challenges Accessing Data on Project Implementation

One of the major limitations of this study was the limited availability of comprehensive data regarding the implementation phase of the project. Though this study accessed official 2SCALE project documents, certain project reports and complete impact evaluations were unavailable or incomplete. This affected the assessment of the full impact of the project in street vendors. For instance, some official documentation on the performance of vendors and post-project evaluations were either incomplete or not readily available or systematically documented. The study uncovered that a formal tracking mechanism did not exist to track the performance of vendors after the cessation of the project support. This made it challenging to thoroughly compare how the terms of inclusion for street vendors evolved during the project implementation and post-project and to also analyse the long-term economic impact on beneficiary street vendors.

3.7.4 Field Interview Challenges

It was challenging to conduct interviews with street vendors. Some of them refused to participate in the study because they were out of business due to high cost of raw materials for making of soy khebab, while some thought the interviewer was a 2SCALE official who was coming to provide them additional support to boost their trades. Also, the majority of the respondents were operating in informal settings and had no fixed place for their business operations. This made it difficult to locate or reach them to schedule interview sessions.

Additionally, the language barrier in many instances demanded the use of local interpreters. This could influence the accuracy and substance of the interview data. While the study ensured precise translation, some nuances in responses could be lost and this has the potential to affect the depth of the analysis.

3.7.5 Inadequate Representation of Rural-Urban Dynamics

The study was focused on rural clusters of street vendors under the 2SCALE project, specifically the Banda Borea Women Group in the Kpandai District. Therefore the findings may not thoroughly represent the lived experiences and perspectives of street vendors in more urbanised clusters. This is because street vendors in urban areas where there is larger market access and infrastructure could experience different outcomes in terms of inclusion, risk

distribution and sharing of rewards. Because of time constraints and logistics, the research could not undertake comparative case studies for rural and urban clusters. This may have offered a more comprehensive understanding of how the inclusive business model and the terms of inclusion evolved in different context.

3.7.6 Lack of Post-2SCALE Performance Tracking

It was challenging to access data on the sustainability of the businesses of street vendors after the end of project support. Due to the fact that there was no post-project monitoring mechanisms to track vendor performance, it was difficult to understand how street vendors adapted to the lack of external support and its impact on their livelihoods. Though the qualitative interviews offered valuable insight, the limited access to quantitative data on the performance of street vendors post-2SCALE hinders the ability of the study to thoroughly analyse the long-term impact and sustainability of the 2SCALE inclusive business model as far as the inclusion of street vendors is concerned.

Notwithstanding the significant challenges these limitations may pose, the study took steps to mitigate their impacts. The research employed qualitative interviews and reviewed available 2SCALE project documentation to minimise the effects of lack of quantitative data. Nonetheless, the findings of this study should be viewed with an understanding of these challenges. Future studies could utilise more vigorous or robust data gathering techniques and comparative case study between rural and urban street vendor experiences to gain a comprehensive understanding of the evolution of inclusion terms and inclusive business models such as 2SCALE.

Chapter 4 Results and Findings

This chapter presents the results and findings from the data analysis from the key informant interviews and analysis of project documents of the 2SCALE intervention in Ghana. Analysis of the results is guided by the framework of the inclusive business model (IBM) and focus on inclusion terms situated in the study's objectives and research questions.

4.1 Demographic Analysis of Respondents

A more comprehensive analysis of the demographic data gathered from respondents is presented in this section to provide some insights into how the demographic characteristics of street vendors affect the roles they played in the 2SCALE partnership as well as their experiences operating within the inclusive value chain.

4.1.2 Gender Distribution of Street Vendors and Household Responsibilities

All the nine street vendors interviewed were females and this aligns with the trend where street vending activities in low-income countries, especially in the informal sector, are often dominated by women. The predominance of women in street vending is crucial in income generation of households, thereby contributing significantly to the larger outcomes of economic empowerment (Navarret-Hernandez et al, 2023).

All nine respondents admitted to playing significant roles in their households, though they were not the heads of their households. One respondent indicated that, "I pick up responsibilities in the house with money from my sales to take care of my family's daily expenses on food and petty expenses." Another respondent also said, *"though I don't have physical assets from the sales I made as a result of 2SCALE support, but I have been able to get money from it to cater for my children's education."* Also, another respondent said that, "A lot of us over the years have been able to save money to take care of family responsibilities and also buy soybeans and equipment to continue processing to keep us in business."

The youngest respondent who is 24 years old indicated that *"through the training from 2SCALE I have been able to learn how to save money from sales and divert to selling other products when the cost of raw materials like oil for making soy kebab was high."*

4.1.3 Age

The age range of the respondents was from 24 to 55 years with 8 of them having 19 to 21 years of experience in vending.

The age range above indicates that these street vendors are considerably matured with higher levels of experience in street vending. This suggests their resilience and deeper understanding of the market environment and their cumulative experience is critical in

navigating the challenges within informal economies and being able to adapt to fluctuations in the inclusive value chain (Lyons and Snoxell, 2005).

4.1.4 Educational Background

All ten (10) street vendors have not had any formal education.

4.1.5 Duration of Street Vending

Most of the respondents, that is 9 out of the 10 had many years of experience in street vending, ranging from 19 to 21 years. This means that they have over the years developed strong social capital and ties in their communities. These are critical for the sustainability of their business operations. This also allows them the opportunity to rely on the informal networks and community ties to mitigate risks and adapt to changes in the market (Guarin et al., 2022).

4.2 Terms of Inclusion of Street Vendors

4.2.1 Organisation of the 2SCALE Inclusive Business Model

Key findings

Inclusive Design and Support System - The 2SCALE Inclusive Business Model was designed to involve multiple actors within the value chain including the lead firm, smallholder farmers as well as micro-entrepreneurs which include street vendors, dealers of farm inputs and aggregators. The organisational structure facilitated the contribution of each stakeholder to the value chain and benefitting from programme support in the form of trainings, enhanced market access and business and product branding (2SCALE, 2018).

Business Support Services (BSS) – This was a critical part of the business model where a localised business support service was provided to street vendors without direct oversight by 2SCALE and Yedent Agro. “This was supposed to ensure that vendors will gain the capacity to independently sustain their business activities upon termination of the project”, 2SCALE project assistant intimated during interview.

Capacity Building and Training - Both interviews with 2SCALE project team members placed emphasis on the huge investment the programme made in building capacities of micro-entrepreneurs to improve their business management skills, customer service as well as health and safety standards. For instance, street vendors were trained in safe food handling and certified by environmental and food hygiene regulators. This enhanced their trust and credibility in the eyes of their customers, since they are assured of eating healthy and nutritious soy khebab.

Access to Market and Branding – Improved branding and marketing initiatives were central to the design of the 2SCALE value chain. The programme enabled the creation of well branded products and this placed micro-entrepreneurs at a competitive edge in the local markets. For instance, the project assistant related in the interview that, “Branded containers, aprons, and umbrellas were provided as support to vendors. They also got support for market activations including selling at community events such as funerals and selling at schools.”

Cost-Sharing and Ownership Model - the inclusive value chain of the programme deployed a cost-sharing model in which business resources such as the supply of packaging and promotional materials like containers, umbrellas and aprons, acquisition of soybean and oil were partially financed by 2SCALE and vendors contributed the remaining cost such as transportation and firewood for processing. “This was meant to encourage vendors to have a sense of ownership and reduced reliance on project support.” The 2SCALE programme lead said.

4.2.2 Lack of Support to Mitigate Rising Cost of Production for Street Vendors.

Key Finding

The findings indicate a lack of financial and risk mitigation support such as credit and insurance cover to manage rising cost of production and market volatilities. While Yedent Agro in view of its control over key resources could absorb market fluctuations, street vendors encountered serious financial problems without adequate strategies to serve as buffer against such market shocks. A vendor noted that, “When oil prices go up, it is on us to cover the extra cost. It would have helped us a lot if we are able to get support to make up for this cost or we get support to buy oil and soybeans in large quantities at discount rates, so that it will keep long and cushion us against constant prices hikes.” This lack of risk mitigation increase the financial vulnerabilities of street vendors, limiting IBMs capacity to sustained inclusion.

4.2.3 Ownership

Key Findings

IBM relates ownership to the level of control over key business assets and operations by street vendors. 2SCALE Highlights Report, 2022 and interview with Yedent staff member shows that the ownership of street vendors under the project was related mainly to marketing materials like branded umbrellas, aprons and storage equipment. These assets were meant to increase visibility and make their work more attractive (2SCALE Highlights, 2022). Apart from this there was no indication of the extent of ownership by street vendors over critical business resources such as raw materials – soybeans, cooking oil, and tools such as refrigerators for storage and market stalls needed for business operations in the long-term.

Interview with street vendors in Banda Borea group highlighted similar sentiments with 5 of them confirming receiving business operational tools – aprons, containers and umbrellas but did not have control over supply of soybeans, cooking oil and fuel for processing because prices of these materials were controlled by market forces. A young female vendor mentioned that “We have been giving some tools like umbrellas and aprons, but we

don't control the other materials like cooking oil, fuel and raw soybeans for processing, which makes cost of production beyond our control,” indicating the limited scope of ownership by vendors.

4.2.4 Voice

Key findings

The 2SCALE IBM defines voice as enabling street vendors to have influence over critical business decisions. The study reveals that voice was limited to some extent. Yedent Agro staff confirmed that vendors had no power relative to pricing of products already processed and supplied to them by Yedent, but they had control over pricing of soy khebab processed by vendors themselves. *“They didn’t have any role in setting prices of our products like fortified soy flour, but they determined prices for their soy khebab because they make that themselves.”* (Yedent staff interview transcript). There were monthly sessions where street vendors provided feedback, these meetings centered more around experience and customer feedback sharing and not meant to influence the broader business strategy or price setting (2SCALE Impact Evaluation Report).

Similarly, street vendors confirmed that they had limited decision making influence. One vendor noted that “We didn’t decide on pricing of Yedent products, except our own made soy khebab, Yedent decide how much to buy and sell products and the raw material for soy khebab, we only shared our feedback and that of customers when there are issues.” The lack of voice in strategic business decisions such as pricing indicates imbalances of power because Yedent Agro as the lead company, maintained control over strategic business issues where street vendors had limited inputs.

4.2.5 Risk

Key Findings

Risks sharing between the lead firm (Yedent) and street vendors in the partnership was shown to be unequal because Yedent absorbed most of the financial risks regarding unsold goods. The Yedent staff in the interview indicated that products that were not sold were returned to the warehouse after market days, so street vendors did not have to bear the costs of unsold inventory. This protected vendors from the immediate financial losses. However, this did not address long-term risks like market fluctuations and reduced or lack of demand in the post-2SCALE period.

Most vendors reported that they are currently struggling to sell their products and adapt to changing conditions in the market. A vendor said, “Since the project support ceased coming, it has been very difficult to make sales. We don’t get the same support and help again.” This highlights the challenges encountered by street vendors without external support or mechanisms for mitigating risks. This leaves street vendors very vulnerable to shifts in market conditions.

Also, 2SCALE enabled access to larger markets by making street vendors as key distributors for Yedent made soy flour products. This was supported by regular access to soybeans and cooking oil at lower prices for vendors processing soybeans into soy khebab during the project and made regular productions possible. A vendor reported that, “We used to buy soybeans and cooking oil for production of soy khebab at lower prices which kept us doing well in business.” This means they had access to regular supplies of raw materials during 2SCALE project implementation.

Again, as part of vendor voice for decision making, they control the setting of prices only for soy khebab and not soy flour because they do not process that. They are able to adjust prices of soy khebab depending on the costs of production. This makes it possible for them to manage their own profits. One of the vendors operating at the market centre noted that, “if prices of soybeans and oil go up, we also increase price per stick of soy khebab so that we can cover our cost of production.” This underscores the role of IBMs in enhancing adaptive market responses.

4.2.6 Reward

Key Findings

The reward system of the 2SCALE inclusive value chain model related to street vendors receiving income from sales of soy khebab and a commission-based model for those selling packaged tom brown flour. Yedent staff during the interview indicated that vendors were paid commissions based on their reported sales with some additional stipends paid to selected vendors who had worked in the programme for long period, for their loyalty. However, the 2SCALE official reports highlights significant levels of variability in the profits made by street vendors. Street vendors in urban settings achieved higher returns because of better access to markets as compared to those in rural settings such as Banda Borea vendors who even struggled to make consistent incomes.

The responses from vendors during the interviews reflected this variance in financial returns. A vendor in Banda Borea mentioned that, “It is hard to make good sales and profit when you do not have many customers.” This points to the geographical market based challenges on earnings. This disparity in the distribution of rewards suggests that the provision of income to vendors through the commission based model, the weight of rewards earned is influenced largely by the structure of the market. The commission-based reward model for street vendors offered some financial returns. But the extent of market access and geographical location significantly determined profits of rural vendors who faced lower sales as compared to their counterparts in urban areas.

4.3 Changes in the Terms of Inclusion and the Implications for Street Vendors Post-2SCALE

The terms of inclusion, that is ownership, voice, risk and reward, evolved after the end of the 2SCALE project support. This was significantly detrimental to street vendors. Key findings from the interviews and across 2SCALE documents suggest that street vendors

encountered more challenges after the project ended, mainly in terms of lack of support and reduced market linkages.

4.3.1 Ownership

In the absence of 2SCALE continuous support, street vendors had less resources to keep investing in their business operations, while ownership of key assets continued to be limited. The lack of ownership of assets has affected the ability of street vendors to independently scale their business operations. Hitherto 2SCALE supported them with materials and equipment such as soybeans, aprons, umbrellas and containers for production and sales. This has ceased post-project and prices of raw materials such as soybeans and cooking oil have increased many folds, thereby affecting ownership and control of key business resources.

4.3.2 Voice

The monthly review meetings designed as part of structured mechanisms for receiving feedback truncated after the project ended. As such street vendors lost a critical avenue for engagement in order to express their concerns and enabling platform to influence strategic business outcomes.

4.3.3 Risks

The termination of the lead firm's risk absorption (taking back unsold inventory) and the lack of support to procure storage equipment increased the vulnerability of vendors financially, especially with unpredictable market conditions.

4.3.4 Reward

With declined market linkages the ability of vendors to make regular incomes declined as well. Street vendors operating in rural areas such as Banda Borea struggled to sell their soy khebab in the absence of logistical and promotional support from 2SCALE.

The evolution of the terms of inclusion after the end of the 2SCALE project support has led to significant challenges for street vendors. This became pronounced by way of reduced ownership, diminishing of street vendor voice in decision making, increased risks and diminished financial rewards. These changes threatened the sustainability of the terms of inclusion for street vendors in the long-term as far as the value chain is concerned.

4.4 Sustaining the Inclusive Business Model

Key Findings

Sustaining the inclusive value chain beyond the 2SCALE project is highly uncertain. While the project had initially contributed to providing assets, market linkages and building

capacities of actors in the value chain, the cessation of project support has created gaps in both logistical and financially sustaining the business operations of street vendors. The staff of Yedent Agro acknowledged the existing difficulties in sustaining the support system in the absence of external funding support from 2SCALE, mentioning that, “We couldn’t maintain the same level of support to the vendors after the 2SCALE funding ended.”

Street vendors were also concerned about the future of their business operations, indicating that the lack of sustained access to markets, lack of equitable risk distribution mechanisms and promotional support hinder their sustainable source of livelihood. A vendor noted that, *“It feels as though we are now on our own and it is harder to trade without the help we used to get.”*

The absence of sustainable external support post-2SCALE project has affected the long-term sustainability of the inclusive business model. Street vendors in rural settings in particular are faced with increased risks and diminished profits without sustained support from 2SCALE.

4.5 Diversification of Income Generation by Street Vendors

Key Findings

The study unraveled that though 2SCALE improved the access of vendors to market for soy-based products, majority of them diversified their income generation sources in order to boost their financial stability and increase their resilience in volatile business settings. They engaged in small business activities such as small-scale animal rearing and selling of seasonal fruits and vegetables, especially when the business of soy-khebab is slow outside market days and when pupils are on holidays and not in school. One vendor who mostly sells to school children noted that, *“During seasons when fruits and vegetables are in abundance, I also sell mango and orange, this increase my income and help me to take care of other domestic expenses, especially when soy khebab sales become slow.”* While another vendor also said that “we rear local chicken alongside khebab sales, so when sales are low, we then sell the chicken or eggs to compliment.” This revelation resonates with findings in the informal sector where having added streams of income is a complimentary safety net.

4.6 Emerging Dimensions in Street Vendor Inclusion

Utilising the adapted framework of the Terms of Inclusion (ToI) to analyse street vendor inclusion in the 2SCALE-Yedent partnership, the findings expose a number of factors extending beyond the four existing dimensions of the framework. Specific issues including vendor heterogeneity, the role of social networks and autonomy emerged strongly as crucial factors for understanding the unique challenges facing street vendors and the opportunities available to them within inclusive business models. The recognition of these elements as critical components of inclusion might necessitate the addition of new dimensions or adjusting the current inclusion dimensions further in order to better capture street vendor dynamics.

Table 4.1 Summary of Findings and Analysis

Research Question	Findings	Analysis
How did inclusive business partnership of 2SCALE influence the terms of inclusion of street vendors, and how have the terms of inclusion evolved after termination of support?	<p>-Street vendor inclusion enabled using marketing tools such as aprons and umbrellas, in the inclusive value chain, it did not provide long-term ownership opportunities for street vendors got risk protection because Yedent absorbed unsold inventory.</p> <p>-Ownership opportunities for vendors continued to be limited.</p> <p>-Post-2SCALE street has faced increased market risks and limited ownership of resources without continued project support.</p> <p>-Reliance on informal or social networks for support.</p>	<p>-While the IBM initially enabled participation of vendors in the inclusive value chain, it did not provide long-term ownership opportunities for vendors to own key crucial business resources/assets (Vermeulen and Cotula, 2010).</p> <p>-The risk-sharing mechanisms were effective during 2SCALE support but street vendors became vulnerable to market and financial risks post-project (Thorpe and Reed, 2016).</p> <p>-Post-2SCALE vendors increasingly depended on social networks for support. This underscores the need to expand IBMs to make room for social capital (Lyons and Snoxell, 2005).</p>
What were the initial terms of inclusion in the 2SCALE-Yedent partnership for street vendors and how were these terms intended to benefit street vendors?	<p>Ownership - Street vendors had limited say in decision making such as price setting</p> <p>Risk – Yedent Agro Limited shared risk during the project by absorbing unsold stock.</p> <p>Reward – Street vendors selling soy khebab benefitted from sales and commission based rewards which favoured urban vendors because of higher sales than rural vendors, thus uneven rewards structure.</p>	<p>-While the terms of inclusion initially provided stability for street vendors, but this was not empowerment in the long-term because vendors had limited control over critical business assets and influence for economic empowerment (Ton et al., 2018).</p> <p>-Reward structures and risk-sharing benefitted vendors during 2SCALE-Yedent partnership, but they were not built for long-term sustained impact.</p> <p>-Social networks emerged as an important dimension for inclusion. Street vendors indicated their dependence on community relations to cope with risks and sustain their businesses, hence the necessity to adjust the ToI framework.</p>

<p>What changes have occurred in the terms of inclusion and the overall value chain for street vendors in the partnership and what are the implications of these changes for street vendors post 2SCALE project support?</p>	<p>Post-2SCALE Support</p> <p>Ownership – Ownership opportunities has not increased.</p> <p>Voice – Voice has diminished because of termination of regular sessions that served as feedback mechanisms.</p> <p>Risk – Street vendors exposure to financial and market risks increased, particularly for rural vendors due to low sales</p> <p>-Street vendors relied on informal social networks to survive market fluctuations.</p> <p>Reward – Decreased in reward benefits because of limited access to market.</p>	<p>-End of 2SCALE support resulted in a decline of the ToI. This underscores the reliance of street vendors on external support (Mangnus, 2023).</p> <p>-Challenges faced by street vendors in rural settings were uneven underscoring geographic disparities in market access (Ros-Tonen et al., 2019).</p> <p>-These findings highlights the inadequacies of the ToI framework to facilitate sustainability of street vendors in its current form. As such this study proposes autonomy and social networks as important for enhancing street vendor inclusion. This should be considered in order to capture the unique realities of street vendors (Mangnus, 2023).</p>
--	--	---

<p>To what extent has 2SCALE contributed to sustaining the inclusive business model and what has hindered the sustainability of the model?</p>	<p>-The 2SCALE-Yedent partnership supported the integration of vendors in the value chain through capacity building, market linkages opportunities introduced mechanisms for sharing risks.</p> <p>Issues with sustaining impact emerged after the end of the project because Yedent Agro was unable to maintain the same level of support for vendors. This left vendors exposed to increased risks.</p>	<p>-The IBM sustainability was reliant on continuous 2SCALE support which was terminated after the project ended and made street vendors vulnerable without support (Thorpe and Reed, 2016).</p> <p>-Post-2SCALE dependencies affected long-term sustainability of street vendor inclusion in the value chain.</p> <p>-The findings highlights that sustainability of IBMs involved support from formalised social networks and mechanisms for street vendor autonomy for making business decisions to ensure resilience post-project.</p>
--	---	--

Chapter 5 Reflections on Emerging Issues

This chapter reflects on elements that emerged as interesting components of inclusion and might trigger adjustments of the current inclusion dimensions further to better capture street vendor dynamics in future studies in development studies and for consideration in designing development programmes in the future.

5.1 Heterogeneity in the Experiences of Vendors

The findings revealed heterogeneity among vendors in terms of age, location and experiences. This created variability in their involvement and benefits reaped from the inclusive value chain. Young street vendors, for example, adapted easily to new business practices. Two of them felt the branding of their trades helped them to increase sales. “The branding we were exposed to helped me to reach new customers and this has increased my sales more.” On the other hand, older street vendors were rather concerned about the long-term impact of the lack of consistent supplies of raw materials and cooking oil.

The heterogeneity in vendor experiences indicates the necessity for IBMs to recognise demographic diversity among actors in value chains. Younger street vendors who adapted more easily to formalised trainings and branding benefitted more through increased customer base than the older generation of vendors. Providing tailor-made training and resource allocation to accommodate different demography of actors in value chains will ensure the realisation of more equitable outcomes and increase the effectiveness of IBMs.

5.2 Social Networks

Social networks are a significant and critical support system for street vendors. It facilitates access to informal credit, customer base and patronage in communities thereby mitigating risks and helping vendors to navigate problems associated with market volatilities. A respondent noted, “*when business is not good I borrow from my colleague vendors I relate well with, and sometimes we refer customers to each other and trade other products customers may want but I don’t have or sell them.*” The reliance on these networks for support underscores a crucial part of street vendor inclusion that the initial ToI might not comprehensively capture. This aligns with Lyons and Snoxell (2005) who posit that social networks are crucial for the operations of informal economies. The way street vendors rely on their social connections indicates the importance of community relations and how street vendors utilised it for risk management as well as sustaining their business operations.

While social networks might be related to voice if considered from the point of collective influence or ownership when considered as an intangible asset. However, social networks function separately as a system of resilience that enables the inclusion and livelihoods of street vendors. Integrating social networks as a distinctive inclusion dimension will enable the terms of inclusion framework to better reflect informal networks as relevant resources leveraged by street vendors to sustain their businesses.

5.3 Autonomy

Autonomy relates to the degree or extent of independence or freedom experienced by street vendors in carrying out their daily business activities as well as decision making and determining their own engagement terms. This is particularly crucial in informal economies where street vendors are typically self-reliant and used to making decisions without significant external influences or control.

One vendor who sells within the central market area of Kpandai noted that, *“This is my only work that gives me regular income to help my household so I make the decision on what to sell and when I should sell it, so if I allow someone too much space to make the rules for me then it is no more my business.”* Vendors see this independence or self-reliance as a unique component of their business identity. The dimension of autonomy aligns with the suggestion of Saha (2011) that autonomy is pivotal if a business model is to succeed in the empowerment of marginalised actors in the value chain.

Autonomy is an essential aspect of street vending, and this differentiates the activities of street vendors from the activities of smallholder farmers in a more structured sector of agriculture regulated by cooperative or contractual arrangements.

While to some extent voice can be associated with decision making, autonomy, which is crucial for actors in the informal economy, aligns with the liberty for self-management devoid of external control. Incorporating autonomy as a distinct dimension in the terms of inclusion facilitates a more precise representation of the experience and perspectives of street vendors. Autonomy as an additional dimension emphasises the need for street vendors to have freedom or independence in inclusive business models and whether IBMs strengthen or compromise the autonomy of marginalised actors as far as decision making is concerned.

Chapter 6 Discussion of Findings, Conclusion and Recommendations

This chapter thoroughly analyses the findings from key informant interviews and 2SCALE partnership documents related to the inclusion of street vendors. The discussion is organised around the research objectives of the study and guided by the conceptual framework of Inclusive Business Model (IBM) as well as critical literature on sustainability of inclusive value chains.

6.1 Implications of Demographic Characteristics for this Study

The demographic characteristics of street vendors who participated in this study offer valuable context in the interpretation of their involvement in the inclusive business model and the challenges that affect the sustainability of their business activities after termination of the 2SCALE support.

The lack of formal education among street vendors suggests the need for 2SCALE to concentrate on providing accessible capacity building as part of the intervention for street vendors. These programmes should be designed in ways that ensure the learning needs of street vendors by way of experiential learning (Saha, 2011).

Furthermore, the long-term involvement of respondents in street vending suggests their resilient and adaptive mindsets. These are crucial for the sustainability of inclusive business interventions in the long-term. It also suggests that street vendors have over the years developed strong social capital and ties in their communities. These are critical for the sustainability of their business operations. This also allows them the opportunity to rely on the informal networks and community ties to mitigate risks and adapt to changes in the market (Guarin et al., 2022).

6.2 Household Responsibility and Economic Contribution

This study's results show that most of the vendors play roles as de facto heads of their households by performing critical financial obligations made possible by the incomes generated from their vending business operations. This highlights the relevance of IBMs in capacitating street vendors not just as entrepreneurs but also as key contributors to the sustenance of families. This study unravels that notwithstanding the inadequate accumulation of physical assets from street vending activities, several women have succeeded in making additional income to shoulder domestic responsibilities as well as expanding their businesses.

This underscores the important roles played by street vendors within their households and the larger development of their communities. This also reinforces the call for a more comprehensive understanding of inclusive business models that accounts for socio-economic activities of street vendors. Performing dual roles as entrepreneurs and key actors in their families, these street vendors prove how inclusive business models can make positive impact on street vendor sustainability as well as empower marginalised women to prioritise the welfare of their families.

6.3 Terms of Inclusion of Street Vendors – the 2SCALE Inclusive Business Model

The primary objective of this study was to examine how the 2SCALE's IBM influenced street vendor inclusion and how the terms evolved when the project support ended. The study unravelled that the 2SCALE partnership in the beginning enabled the inclusion of vendors by providing marketing tools such as branded aprons, umbrellas and ice chest for storage and a reward structure through the commission-based earnings scheme. These interventions created a framework that facilitated the integration of street vendors into the lead firm's value chain and aligned with the focus of IBMs on the promotion of economic inclusion (Ton et al., 2018).

However, the interview responses from both Yedent Agro staff and street vendors revealed a critical gap of limited ownership for street vendors. The marketing tools given out to them increased the brand visibility of street vendors but did not offer them ownership over crucial business assets like raw materials for making soy khebab. This reiterated the argument by Vermeulen and Cotula (2010) that a meaningful inclusion must ensure that marginalised actors in the value chain are given ownership and control over critical business resources and not just being given tools to enhance their visibility. Street vendor inclusion remains shallow if they do not have access to resources that directly contribute to generating incomes for them but rather increases their dependence on continued external support or worsens their vulnerability without it.

With regards to voice, the research results show that though street vendors participated in giving feedback to through monthly review sessions in the project, they did not have any meaningful role strategic business decision making such as price setting. The lack of voice in decision making undermines a critical principle of IBM which seeks to empower marginalised actors in value chains to have a say in decisions that impact their livelihoods. As highlighted by Ton et al. (2018), IBMs must enable actors to be able to influence business decision in order to foster true inclusion and long-term empowerment.

The interviews and project documents also show the existence of mechanisms for sharing risks during the 2SCALE project, where Yedent Agro as the lead firm absorbed the risks of products not sold. Thus, street vendors did not bear the financial risk of products that were not sold because Yedent collected back leftover goods at the end of each market day. This arrangement fits into the IBM framework that provides for equitable distribution of risks among actors in value chains. But this was tied to the continuous existence of the 2SCALE project, as a result this mechanism for risk-sharing truncated after termination of the project and vendors became vulnerable to market fluctuations. This highlights the dependence of street vendors on the 2SCALE support to enhance their financial security.

In addition, the reward structure of 2SCALE was predicated on a commission-based scheme where vendors who retailed soy tom brown flour only earned their incomes based on the amount of sales made. Though this offered immediate financial rewards, it did not ensure long-term sustainability. 2SCALE Impact evaluation report showed that street vendors in urban settings benefitted more because of higher demands and those in rural settings struggled because of small consumer base. This was corroborated by rural vendors from Banda Borea who in the interviews complained about challenges in making consistent sales when 2SCALE support ended. This shows unequal reward system post-2SCALE and echoes the challenges noted by Ros-Tonen et al. (2019), that IBMs must ensure equitable rewards distribution across geographic areas to avoid aggravating existing inequalities.

6.4 The Impact of the Terms of Inclusion on Street Vendors

This study's second objective was to assess the terms of inclusion for street vendors and determine whether they were beneficial to the vendors. These terms of inclusion (ownership, voice, risk and reward) served as key benchmarks for evaluating how beneficial and equitable street vendor inclusion was under 2SCALE.

For ownership, the findings indicate that the terms of ownership had limitations. While street vendors had marketing tools, they did not have control over key business assets like equipment and raw materials. This would have enhanced their stake in the value chain. This lack of ownership over assets limited the ability of vendors to independently scale up their business operations. As noted by Prahad (2010) and Vermeulen and Cotula (2010), real empowerment in inclusive value chains must ensure that marginalised actors control assets and not just having access to products for retail purposes.

The terms of inclusion regarding voice were negligible. Street vendors had no say in price setting and key supply chain decision making. Despite the review meetings serving as platform for giving feedback, they could not influence strategic business decisions. This lack of voice contradicts inclusive business principles where marginalised actors are expected to have decision making agency (Vermeulen and Cotula, 2010).

Also, the inclusion terms on risks favoured street vendors during project implementation as the responsibility for unsold inventory was assumed by Yedent Agro. But as the project came to an end, the vulnerability of street vendors to market shocks increased and they did not have any formal mechanism for risk-sharing to rely on. This change shows how unsustainable the inclusion terms regarding risk was after 2SCALE ended. This exposed vendors particularly in rural areas to increased financial vulnerability (Thorpe and Reed, 2016).

Furthermore, the inclusion terms relating to rewards were also not equally shared. While vendors in urban areas benefitted more from commission from sales because of their access to larger markets, rural vendors could not generate regular incomes after the end of the project. This reflects geographical inequalities in the reward system (Thorpe and Reed, 2016).

The findings above suggest that though the terms of inclusion had immediate benefits for street vendors, they were not well designed for the long-term empowerment and sustainability of the business operations of street vendors. Limitations in ownership and voice coupled with uneven reward structure and lack of permanent risk-sharing mechanisms meant that street vendors could only depend on the support from 2SCALE and became vulnerable once the support ceased.

6.5 The Changes in the Terms of Inclusion after the end of 2SCALE Project Support and the Implications

The focus of the third research question was to inquire about the changes that have occurred in the terms of inclusion after the cessation of the 2SCALE project support and the consequences of the changes for vendors. The end of the 2SCALE project marked a significant shift in the terms of inclusion. This led to reduction in opportunities for ownership, reduced voice, increased risks in the market and lower financial rewards for street vendors.

Market linkages declined after the termination of the project and this left street vendors struggling to keep their businesses afloat without 2SCALE support. The lack of structured accessibility to market and logistics meant that street vendors encountered greater challenges in reaching customers, especially in rural areas that had fewer commercial opportunities. This aligns with the findings of Magnus (2023) who posits that the sustainability of IBMs in the long-term is mostly undermined by the lack of post-project support systems. This leaves marginalised actors vulnerable once external supports end.

When it comes to soy khebab vendors, the risks sharing systems that existed during the project ceased to exist and this leaves them exposed to financial losses from unsold products due to lack of refrigerators for storage. This shift in the sharing of risks depicts the fragility of inclusive value chains which relied more on external interventions to protect vendors from market shocks. The income of vendors became unstable as they became heavily exposed to market fluctuations, especially those in rural areas like Banda Borea where there is lower demand for products.

Also, the reduction in rewards after the end of the project support had significant implications for vendors. The lack of continuous incentives and stipends from the project led to a significant decline in the income of street vendors and many of them struggled to retain the same level of profits they made during the project. This uneven distribution of financial rewards reflects a critical challenge regarding the equitability and sustainability of IBMs beyond the lifespans of projects (Ros-Tonen et al., 2019).

6.6 Sustainability of Inclusive Business Models

The final research question sought to explore the contribution of 2SCALE to the sustainability of the inclusive business model and the factors that hindered its sustainability. While the 2SCALE intervention created market linkages, built capacities, established risk-sharing mechanisms and reward structures, these interventions were reliant on external support. As the 2SCALE project ceased, the sustainability of the inclusive business model significantly declined, especially for street vendors in rural clusters such as Banda Borea street vendors who currently lack consistent access to markets due to lack of materials for production because of hikes in cost of raw materials like cooking oil and decline in supply of soybeans which is the main raw material for making of soy khebab, because of hike in prices beyond the reach of vendors.

Yedent Agro has also not be able to sustain supplies to street vendors making soy khebab and because of lack of continuous 2SCALE support Yedent has not been able to provide the same level of support to vendors, especially when it comes to marketing tools and logistics support. This dependence on external support highlights a critical challenge in sustaining inclusive business models were post-project needs exposed weaknesses in the value chain for marginalised actors (Thorpe and Reed, 2016).

6.7 Diversification of Income Sources

A common phenomenon among participants is their diverse sources of income. Most street vendors do not depend on the sale of soy khebab alone but indicated they had multiple streams of generating incomes. This diversification is typical of low-income actors operating

in the informal economy where relying on just a single source of income generation is deemed to be risky (Navarrete-Hernandez et al., 2023).

Additionally, respondents also sold seasonal produce such as fruits and vegetables to ensure constant flow of income all year round. While others also resort to small scale animal rearing such as local poultry and small livestock as alternative sources of protein and incomes.

The diverse income streams underscores the adaptability and resilience of street vendors as mitigating strategies to ensure sustainable livelihoods. The diversification of income generation sources supports our understanding of street vendor sustainability and underscores the necessity to design IBMs in ways to support such adaptability.

6.8 Conclusion

The findings reveal that though the 2SCALE project partnership with Yedent Agro initially created the enabling environment to facilitate the inclusion of street vendors by creating risk-sharing mechanisms and immediate financial returns, the terms of inclusion were not designed for empowerment and sustainability in the long-term. Limitations regarding ownership, lack of voice or decision-making powers and the unequal rewards system left vendors vulnerable after the termination of external 2SCALE support. The findings of this study underscore the need to build more robust post-project support mechanisms to sustain the gains made during the implementation of interventions. The lack of opportunities to enhance long-term ownerships, risk-sharing and voice in decision making left street vendors vulnerable to market fluctuations and this reduced the sustainability of the inclusive business model. These findings largely align with critical literature on inclusive business models and underscore the significance of prioritising in value chains the long-term sustainability and equitable inclusion of marginalised actors when designing development projects.

6.9 Recommendations

This study based on its findings proposes a revision or adjustment of the Terms of Inclusion (ToI) framework to comprehensively capture existing dynamics of street vendor inclusion. The capturing of autonomy and social networks as novel dimensions of the inclusion terms facilitates thorough analysis reflecting the multifaceted realities of street vendor inclusion in business models. These adjustments as recommended demonstrate the application of IBMs to various actors within informal economies by considering their resilience, resourcefulness and adaptability.

Expanding the ToI framework to capture autonomy and social networks as additional dimensions strengthens the contribution of this study to the literature on IBMs by proving the adaptability of the framework to include diversity within value chains. The revised framework therefore serves as the basis for future studies and IBM programme designs that takes into consideration context-specific and relevant aspects of IBMs that empower marginalised actors for sustained impact.

Appendices

Appendix A

Information and Consent Form

Title: **An Evaluation of the Sustainability of Inclusive Business Models for Street Vendors in Ghana: A Case Study of 2SCALE-Yedent Partnership**

You are invited to participate in an interview as part of project conducted by **Muhammed Alhassan Yakubu** from Erasmus University Rotterdam. During the interview/survey/focus group, the following personal data will be collected from you: **Demographic data, experiences and views on the inclusive business model and the 2SCALE-Yedent partnership in Ghana.**

At Erasmus University, we conduct scientific research. We do this to learn, help people, and contribute to society. Since we are an academic institution conducting scientific research, we process your personal data exclusively for this study on the basis of public interest.

Your participation is entirely voluntary. All information will be kept anonymous and confidential in the reporting and quotes attributed to you will capture only your position, designation or location of business. There will be no reference made in oral or written reports which could link you to this study. You do not need to tell us your real names or the names of other people. If you have any questions, please ask me.

This interview aims to explore the sustainability and impact of the 2SCALE and Yedent partnership's inclusive business model, with a focus on the involvement of street vendors and the changes that occurred since the end of the 2SCALE project support. This interview will be conducted **face-to-face** and/or **online** (*depending on the choice of respondent*). You will be asked to share your experience and perspective about the 2SCALE Yedent partnership in Ghana.

Though no discomfort is anticipated while participating in this study, you can withdraw your participation at any time during the process without penalty and without loss of benefits to which you are otherwise entitled. You are not expected to answer any questions that you are not comfortable with.

It will be helpful to take audio-record/audio-visual record of the interview and obtain digital screenshots without personal details for analysis. But if you feel uncomfortable about taking record or pictures, we will shut the equipment and take notes by hand instead.

We will store all your data securely and confidentially, accessible only to researchers involved in the project. Any identifiable personal data will be deleted. All data will be stored for 10 years before they are disposed of safely and securely.

This research has been reviewed and approved by an internal review committee of Erasmus University Rotterdam. This committee ensures that research participants are protected. You can call us at +31617103541 or send us an email at 684717my@eur.nl to request a copy of the results of this study or any questions about the study or your privacy rights, such as accessing, changing, deleting, or updating your data. Do you have a complaint or concerns about your privacy? Please email the Data Protection Officer (fg@eur.nl) or visit www.autoriteitpersoonsgegevens.nl. (T: 088 - 1805250).

Declaration of Consent

I have read the information letter. I understand what the study is about and what data will be collected from me. I was able to ask questions as well. My questions were adequately answered. I know that I am allowed to stop at any time. By signing this form, I

1. consent to participate in this research.
2. consent to the use of my personal data;
3. confirm that I am at least 18 years old^[1].
4. understand that participating in this research is completely voluntary and that I can stop at any time; and
5. understand that my data will be pseudonymous for publication, education and further research.

Check the boxes below if you consent to this.

Data

I consent to the researcher's collection, use and retention of the following data:

Audio recording

I consent to the interview being audio recorded.

Screenshot recording

I consent to screenshots being taken without personal details.

I consent to the sharing of my data with Erasmus University Rotterdam in the Netherlands.

Use for educational purposes and further research

I hereby consent to having my personal data under a pseudonym stored and used for educational purposes and for future research, also in other areas of research than this research.

Name of the participant:

Name of the researcher: M.A.Yakubu

Signature:

Signature: MAY

Date:

Date:

Appendix B

Interview Guide for Street Vendors

Section 1: Background Information

1. Could you please provide some basic information about yourself (age, gender, education level)?
2. How long have you been working as a street vendor?
3. What products do you typically sell, and how did you come to sell Yedent products?
4. Can you describe the process you went through to become a vendor for Yedent products?

Section 2: Experience with the Yedent Partnership

1. How did you first hear about the opportunity to sell Yedent products?
2. What motivated you to join the Yedent partnership as a vendor?
3. How would you describe your overall experience working with Yedent?
4. What kind of benefits have you received from Yedent or 2SCALE to help you sell their products (e.g., training, marketing materials, credit)?
5. Can you describe any challenges you have faced while selling Yedent products?

Section 3: Terms of Inclusion

Questions under this section are based on the terms of inclusion – ownership, voice, risk and rewards.

Ownership

1. Do you own any requisite assets (such as equipment or materials) for your business or they are provided by Yedent?
2. How do you see your ownership over business resources in the 2SCALE Yedent partnership? E.g. do you think you control the resources or products needed for your business?
3. What are the conditions set by Yedent regarding the usage of resources provided to you for your business?

Voice

1. Do you think you have a say in business decisions in the Yedent partnership? e.g. price setting, product supplies and sales planning? If yes how does Yedent consider your opinions?
2. Do you have access to formal or informal mechanisms for providing feedback in the partnership? If so, describe.
3. How do you handle settling of disputes in the partnership, especially with Yedent as the lead firm?
4. How do you perceive communication and transparency between the lead business Yedent and you, especially when it comes to decisions affecting your business?

Risk

1. What kind of risks do you encounter in your sale of soy khebab and other products?
2. How is the risk shared in the partnership? Do you see the risk-sharing as fair?
3. What support does the partnership provide to help you mitigate risks?
4. How do you handle unsold products?

Reward

1. What margin of profit do you make in selling soybeans or Yedent products?
2. What financial arrangement or incentives are available to you in the partnership?
3. Do you think the benefits you get from your integration in the partnership is adequate or fair?
4. What are the improvements you wish to see?

Section 4: Market System and Environment

1. How do you perceive the market environment for your business operations?
2. Do you face specific challenges in the local market setting, such as competition, regulations?
3. What are some of the skills, resources and characteristics does one need to succeed as a vendor of soy khebab or other products you sell?

Closing Questions

1. Generally, what do you think about the sustainability of this partnership?
2. Would you like to add or share any further information that we have not covered in this interaction?

Appendix C

Interview Guide for the Management of Yedent

Background Information

1. Could you provide a summary of Yedent and its business operations?
2. What was the main objective of Yedent partnership in the 2SCALE project?

Section 2: Yedent's Role in the 2SCALE Project

1. What was the overall goal for going into the 2SCALE partnership?
2. What kind of support did you provide for street vendors?
3. How did you select vendors to participate in the partnership?
4. How did Yedent address problems with street vendors?

Section 3: Business Operations and Market Linkages

1. How did street vendors get access to soybeans and soy flour for processing and selling?
2. What training did Yedent provided to vendors to enhance their capacities for business success?

Section 4: Terms of Inclusion (ToI)

Questions under this section are based on the terms of inclusion – ownership, voice, risk and rewards.

Ownership

1. How did Yedent divide business assets or resources between you as lead firm and street vendors?
2. Did street vendors under the partnership own or control these assets such as raw materials or equipment for business operations?
3. How did you ensure these vendors have some sense of ownership and responsibility for their business operations?

Voice

1. What were the mechanisms established for participation of vendors in decision making processes? E.g. price setting for products, sales and distribution strategy, etc.
2. How did Yedent gauge feedback from vendors in the partnership? How was feedback incorporated in decision making?

Risk

1. How did Yedent handle issues of risks with vendors? E.g. unsold products, market changes, change in demand.
2. What were the systems available for risk mitigation by street vendors?

Reward

1. How did Yedent handle sharing of benefits with vendors, such as profits?
2. Did Yedent provide incentives or any additional benefits to vendors like bonuses?
3. What were the financial arrangements available for street vendors? Such as credit, insurance, to support business operations of street vendors?

Section 5: Sustainability and Long-Term Impact

1. What benefits do you foresee in the long-run in continuing your partnership with these vendors post-2SCALE?
2. Without continuing 2SCALE support, what challenges do you foresee in sustaining the business model?

Closing Questions

1. Generally, what do you think about the sustainability of this partnership?
2. Would you like to add or share any further information that we have not covered in this interaction?

Appendix D

Interview Guide for the 2SCALE Project Team

Section 1: Background Information

1. What can you say briefly about your role in 2SCALE?
2. How long have you been involved in 2SCALE project implementation, especially with the Yedent partnership?
3. What is the primary goal of the partnership with Yedent and how did you tailor it to the needs of street vendors?

Section: Design and Implementation of the Project

1. How did 2SCALE approach the selection of vendors for inclusion in the project?
2. What are the key intervention supports for partners in the project – Yedent, small-holder farmers and vendors?
3. How did you consider post-2SCALE sustainability of the partnership in the project design?
4. What were the specific business development support offered to street vendors in the Banda Borae group of street vendors? How different was this to the support provided to other actors in the partnership?

Section 3: Terms of Inclusion (ToI)

Questions under this section are based on the terms of inclusion – ownership, voice, risk and rewards.

Ownership

1. How was division of business resources structured between actors in the partnership, particularly between Yedent and street vendors? Did street vendors provided control or ownership of crucial business resources, equipment or products?
2. How did street vendors control their business activities in the partnership?

Voice

1. What were the mechanisms established for participation of vendors in decision making processes? E.g. price setting for products, sales and distribution strategy, etc.
2. How did the business model gauge feedback from vendors in the partnership? How was feedback incorporated in decision making?
3. How was issues of power dynamics between Yedent as the lead business and street vendors on the other hand handled by 2SCALE?

Risk

1. How did you handle risks relating to market volatilities between Yedent and vendors? Did street vendors bear any financial risk?
2. What were the available safety nets for risk mitigation by 2SCALE to help street vendors to manage risks?

3. What do you think about the fairness of risk-sharing between the lead business and street vendors?

Reward

1. How did you manage the sharing of benefits, profits or revenues between the lead business and street vendors?
2. What additional benefits or incentives were provided by 2SCALE to support business activities of street vendors to be sustainable beyond the project? Loans, grants, etc?
3. How did you measure successes of the reward distribution system relating to street vendors income and general livelihood improvements?

Section 4: Sustainability and Post-Project Impact

1. What were the measures put in place by 2SCALE to engender sustained impact of the partnership, particularly for street vendors post-project?
2. What impact has the partnership on the livelihoods of street vendors and their ability to maintain their competitiveness in the market?

Closing Questions

1. What do you think could have been improved in the terms to enhance inclusion of street vendors?
2. What are some of the lessons learned by 2SCALE from this partnership that can influence other partnerships in the future?
3. Would you like to add or share any further information that we have not covered in this interaction?

Reference List

- Bitzer, V., van Jeroen, W., Helmsing, A.B. and Van Der Linden, V., 2012. Partnering to facilitate smallholder inclusion in value chains. In *Value Chains, Social Inclusion and Economic Development* (pp. 221-246). Routledge. Available at <https://www.taylorfrancis.com/chapters/edit/10.4324/9780203816806-14/partnering-facilitate-smallholder-inclusion-value-chains-verena-bitzer-wijk-van-jeroen-bert-helmsing-victor-van-der-linden> (Accessed: 09/08/24).
- Bryman, A., 2016. *Social research methods*. Oxford university press.
- Creswell, J.W. and Creswell, J.D., 2017. *Research design: Qualitative, quantitative, and mixed methods approaches*. Sage publications.
- Faling, M. (2022). 'Assessing contributions collaboratively: Using process tracing to capture crowding in', *IDS Bulletin*, 53(1). doi:10.19088/1968-2022.108.
- FAO, 2013. *Developing Sustainable Food Value Chains. Guiding Principles. Policy Support and Governance Gateway*. Available at <https://www.fao.org/policy-support/tools-and-publications/resources-details/en/c/422953/> (Accessed: 10/08/24).
- German, L.A., Bonanno, A.M., Foster, L.C. and Cotula, L., 2020. "Inclusive business" in agriculture: Evidence from the evolution of agricultural value chains. *World Development*, 134, p.105018. Available at https://www.sciencedirect.com/science/article/pii/S0305750X20301443?casa_token=jvds3-Y8gQIAAAAA:gpwSgjk3uI-NaHp7yL4SObsI7pk30EH7X8bXRA37IMB1k-IB91GsDYVPxoqJBI_W6JwJsm28_W_k (Accessed: 10/08/24).
- Guarín, A., Nicolini, G., Vorley, B., Blackmore, E. and Kelly, L., 2022. 'Taking stock of smallholder inclusion in modern value chains: ambitions, reality and signs of change. Available at <https://www.iied.org/21086iied> (Accessed: 10/08/24).
- Gupta, J., Pouw, N.R. and Ros-Tonen, M.A., 2015. Towards an elaborated theory of inclusive development. *The European Journal of Development Research*, 27, pp.541-559.
- IFDC, 2017. *Business Unusual: The 2SCALE Project*
- Available at https://ifdc.org/wp-content/uploads/2019/01/2SCALE-Highlights_2017_final.pdf (Accessed: 17/08/24).
- Leach, M., 2015. The Ebola crisis and post-2015 development. *Journal of International Development*, 27(6), pp.816-834. Available at <https://onlinelibrary-wiley-com.eur.idm.oclc.org/doi/epdf/10.1002/jid.3112> (Accessed: 10/08/2024).
- London, T. and Hart, S.L., 2004. Reinventing strategies for emerging markets: beyond the transnational model. *Journal of international business studies*, 35, pp.350-370. Available at <https://link.springer.com/article/10.1057/palgrave.jibs.8400099> (Accessed: 10/08/2024).

- Mangnus, E., 2023. An assessment of 'Inclusive' Business Models: Vehicles for Development, or Neo-Colonial Practices? Case Studies from Ghana and Kenya. *Journal of Agricultural and Environmental Ethics*, 36(3), p.17. Available at <https://link.springer.com/article/10.1007/s10806-023-09911-z> (Accessed: 10/08/24).
- Navarrete-Hernández, P., Alford, M. and Toro, F., 2023. Inclusive informal-to-informal trade: the poverty alleviation potential of street vendors' trade networks in Santiago de Chile. *Third World Quarterly*, 44(8), pp.1844-1864. Available at <https://www.tandfonline.com/doi/full/10.1080/01436597.2023.2208060> (Accessed: 10/08/24).
- O'Leary, Z. (2017). *The Essential Guide to Doing Your Research Project* (3rd ed.). SAGE Publications Ltd.
- Prahalad, C.K., and Hart, S.L., 2002. The fortune at the bottom of the pyramid: Eradicating poverty through profits. (No Title). Available at <https://sihombing17.wordpress.com/wp-content/uploads/2008/03/the-fortune-at-the-bottom-of-the-pyramid.pdf> (Accessed: 10/08/24).
- Roever, S. and Skinner, C., 2016. Street vendors and cities. *Environment and Urbanization*, 28(2), pp.359-374.
- Ros-Tonen, M.A., Bitzer, V., Laven, A., de Leth, D.O., Van Leynseele, Y. and Vos, A., 2019. Conceptualizing inclusiveness of smallholder value chain integration. *Current opinion in environmental sustainability*, 41, pp.10-17. Available at <https://www.kit.nl/wp-content/uploads/2019/11/Conceptualizing-Inclusiveness.pdf> (Accessed: 10/08/24).
- Saha, D., 2011. Working life of street vendors in Mumbai. *The Indian journal of labour economics*, 54(2), pp.301-325. Available at <https://www.shram.org/upload-Files/20171004021025.pdf> (Accessed: 10/08/24).
- Schouten, G. and Vellema, S., 2019. Partnering for inclusive business in food provisioning. *Current Opinion in Environmental Sustainability*, 41, pp.38-42.
- Lyons, M. and Snoxell, S., 2005. Creating urban social capital: some evidence from informal traders in Nairobi. *Urban Studies*, 42(7), pp.1077-1097. Available at https://journals.sagepub.com/doi/abs/10.1080/00420980500120865?casa_token=YEU-OqCcbmUAAAAA:s-RJaPoY5Z_i9GhT-mOI2RD8nrjsL6Zn4BAGQvEOxq5IP1r3rFjI4MuxC6x0edQfc3OhOlk3SB0ENag (Accessed: 03/10/24).
- Termeer, E., van Berkum, S., Dijkxhoorn, Y. and de Steenhuijsen Piters, B., 2024. Unpacking the informal midstream: how the informal economy could contribute to enhanced food system outcomes. *Current Opinion in Environmental Sustainability*, 68, p.101433. Available at <https://www.sciencedirect.com/science/article/pii/S1877343524000204> (Accessed: 10/08/24).
- Thorpe, J., and Reed, P., 2016. Addressing market constraints to providing nutrient-rich foods: an exploration of market systems approaches (No. IDS Evidence Report; 172). IDS.

- Vellema, S., Schouten, G. and Faling, M., 2022. Monitoring systemic change in inclusive agribusiness. *IDS Bulletin-Institute of Development Studies*, 53(1), pp.103-122. Available at <https://edepot.wur.nl/568157> (Accessed: 10/08/24).
- Vermeulen, S. and Cotula, L., 2010. Making the most of agricultural investment. *Survey of Business*. Londres, Roma, Berna: IIED, FAO, IFAD, SDC. Available at <https://www.fao.org/3/AL297E/al297e.pdf> (Accessed: 26/08/24).
- Vorley, B., Lundy, M. and MacGregor, J., 2009. Business models that are inclusive of small farmers. In *Agro-industries for development* (pp. 186-222). Wallingford UK: CABI. Available at <https://www.cabidigitallibrary.org/doi/abs/10.1079/9781845935764.0186> (Accessed: 10/08/24).
- Yin, Robert K., 2018. *Case Study Research and Applications: Design and Methods*. California: SAGE Publications, Ltd. pp. 57-116.
- 2SCALE (2022). 'Advancing local milk production in Nigeria through crossbreeding'. Available at:
Advancing local milk production in Nigeria through crossbreed - 2scale (Accessed: 22 June 2024).
- 2SCALE (2018). 'Highlights 2018'. Available at: [de86d6_Highlights_2018.pdf](#) (2scale.org) (Accessed: 20 June 2022).