Multinational food corporations and food sovereignty Adaptation Measures

MSc Thesis

Name: Florian Vermeiden (1030098)
Chair group: Business Management and Organization
Course code: BMO80436
Date: December 2025
Supervisor: Dr. Gerben van der Velde
Co-reader: Dr. Emiel F.M. Wubben

Abstract

The aim of this study was to assess how food sovereignty Adaptation Measures help improve Market Performance of multinational food corporations. Four strategies; Contract Farming, Localization of Production, Customization of Goods, and Local Procurement were examined against performance indicators Market Position and Competitive Advantage to study overall Market Performance. Survey data revealed Localization of Production showed strategic potential, while not showing immediate results. Customization of Goods was perceived as the most impactful strategy, while in contrast, Contract Farming showed inconsistent results, while Local Procurement presented potential trade-offs with cost efficiency and its alignment with sustainability goals. The findings align with literature, emphasizing the benefits of local responsiveness, while also highlighting the challenges of balancing customization, sourcing and operational efficiency. Although the study provides support for the strategic value of food sovereignty measures, limitations such as survey reliability and sectoral diversity suggest that results should be interpreted as indicative. Future research should explore sector-specific contexts and make use of longitudinal methods to strengthen understanding of how food sovereignty adaptations shape competitive performance over time.

Table of Contents

Table of Figures

Table of Tables

Executive Management Summary

This study investigated how multinational food corporations can leverage four food sovereignty Adaptation Measures: Contract Farming, Localization of Production, Customization of Goods, and Local Procurement, to help improve Market Performance. The Adaptation Measures aim to align corporate operations with sustainability goals and support local economies, yet their effectiveness varies across measures and contexts.

Key Insights

- Localization of Production: Provides the strongest strategic benefits by improving responsiveness to local markets, supporting regulatory compliance, and strengthening community engagement. Even where direct performance impacts are modest, it enhances legitimacy and resilience.
- Customization of Goods: Increases consumer relevance and brand differentiation. Tailoring products to local preferences, particularly with data-driven insights, fosters engagement and loyalty, supporting competitive positioning.
- Contract Farming: Results are inconsistent due to dependence on external partners and local conditions. Competitive Advantage is limited when farmer profits are undermined or long-term cooperation is uncertain.
- Local Procurement: Offers sustainability and reputational benefits, but its direct impact on Market Performance is low. Success depends on the reliability and capability of local suppliers.

Strategic Recommendation

- Prioritize Localization of Production and Customization of Goods for long-term competitiveness.
- Integrate food sovereignty strategies into core business operations rather than treating them as additional initiatives.
- Invest in strengthening local supplier and farmer capacity to reduce operational risks associated with Contract Farming and Local Procurement.
- Evaluate performance using both financial and non-financial indicators to capture broader strategic value.

Limitations and Considerations

- Findings are based on survey data, which may be affected by response bias or incomplete information.
- The study focuses on countries with existing food sovereignty policies, which could limit generalizability.

- Industry diversity and varying local contexts influence the applicability of findings across different subsectors.

Conclusion

Food sovereignty Adaptation Measures can contribute to Competitive Advantage and Market Performance if they are strategically and contextually applied. The firms focusing on Localization of Production and Customization of Goods with careful management of the risks of Contract Farming and Local Procurement would be best positioned to offer sustainable, long-term benefits in the global food markets.

1. Introduction

Food sovereignty as a concept was introduced during the 1996 World Food Summit in Rome by the international movement La Via Campesina (Edelman et al., 2014; International Movement for Food Sovereignty, 2021). Food sovereignty arose as a response to the growing influence of multinational food corporations over national food corporations (International Movement for Food Sovereignty, 2021; iPES, 2023).

Food sovereignty seeks to counter multinational food corporations' dominance over national food corporations (Morck et al., 2004; Kalén, 2007). Due to advocacy from social movements, countries such as Venezuela, Senegal, Mali, Ecuador, and Bolivia have incorporated food sovereignty principles into their legal frameworks (Edelman et al., 2014; International Movement for Food Sovereignty, 2021). These countries have implemented food sovereignty principles such as prioritizing local food production, fair land distribution, protecting biodiversity, and empowering communities to define their own food systems (Carlile et al., 2021; Rinella & Okoronko, 2015)

In response to the increasing prominence of food sovereignty, multinational food corporations have implemented four food sovereignty Adaptation Measures.

First, Contract Farming as a food sovereignty Adaptation Measure involves multinational food corporations to establish agreements with national food corporations, thereby providing national food corporations market access and technical assistance (Mills, 2017).

Second, Localization of Production as a food sovereignty Adaptation Measure involves multinational food corporations sourcing raw materials nationally and establishing national processing facilities (Jin, 2023).

Third, Customization of Goods involves multinational food corporations tailoring products to national tastes and preferences, reflecting national cultural food traditions (Duncan & Claeys, 2018).

The fourth food sovereignty Adaptation Measure is Local Procurement and involves multinational food corporations sourcing inputs locally, thereby integrating national small-scale producers into global supply chains (Clapp, 2016).

The literature remains inconclusive as to whether these food sovereignty Adaptation Measures actually help multinational food corporations improve their Market Position (Rivera et al., 2024).

In this research, primary data collected from multinational food corporation managers will be used to assess the effectiveness of food sovereignty Adaptation Measures for improving the Market Position of multinational food corporations.

1.1 Scientific Relevance

Studies on Contract Farming as a food sovereignty Adaptation Measure highlight its potential to improve national food corporations' market access and technical support from multinational food corporations. Whilst productivity and income effects on the small farm sector were analyzed in many previous studies (Meshesha, 2011), very little information can be found on the resulting improvements for multinational food corporations when it comes to their Market Position and competitiveness (Meshesha, 2011). There is a literature gap as to whether Contract Farming impacts multinational food corporations' long-term Market Position (Khalili et al., 2024). Although current literature allows for educated guesses of advantages, further research is needed to determine whether and to what extent Contract Farming improves the ability of multinational food corporations to sustain or enhance their Market Position over time (Mills, 2017; Kamgang et al., 2024; Hoang, 2021; Eaton & Shepherd, 2001).

Localization of Production as a food sovereignty adaptation measure may help enhance multinational food corporations' Market position through proximity to national consumers and improved understanding of national preferences (Jin, 2023) However, the lack of available data does not allow currently for confirmation whether the Localization of Production contributes to the Market Position of multinational corporations (Patel, 2009; Wittman, 2011). Further research is needed to clarify to what extent localization affects multinational food corporations' Market Position (Jin, 2023; Altieri & Toledo, 2011).

Customization of Goods, as a food sovereignty adaptation measure, allows multinational food corporations to tailor products to national tastes and identify with local tradition thereby enhancing multinational food corporations' Market Position and addressing diverse consumer preferences (Duncan & Claeys, 2018). This strategy may confer a Competitive Advantage over national food corporations in culturally specific markets by demonstrating responsiveness to local needs (Rosset, 2008). Current literature does, however, not allow for conclusive affirmation of a causal relation. The relation between customization efforts and consumer behavior remains underexplored, and it is therefore not clear if long-term Market Position is affected positively by customization nor if the same confers overall competitiveness to multinational food corporations in food sovereignty-driven markets (Duncan & Claeys, 2018; Giménez & Shattuck, 2011). Further research is necessary to quantify the impact of product customization on multinational food corporations' Market Performance.

Local Procurement as a food sovereignty adaptation measure may help improve the Market Position of multinational food firms by expanding their presence in national markets and cultivating partnerships with national suppliers (Clapp, 2016). By showcasing support for national economies and improving corporate reputation, Local Procurement may provide

multinational food corporations with a competitive edge (McMichael, 2009). However, the extent to which these strategies translate into market advantages remains unclear, and current literature remains inconclusive (McMichael, 2009).

1.2 Managerial Relevance

This study provides insights into how managers within multinational food corporations can apply food sovereignty Adaptation Measures to improve their Market Performance in terms of Market Position and Competitive Advantage. (Tessarolo et al., 2023; Dahmiri et al., 2024; Kotler & Keller, 2016).

1.3 Problem statement

This research examines to what extent multinational food corporations' food sovereignty Adaptation Measures (i.e., Contract Farming, Localization of Production, Customization of Goods and local procurement) help improve Market Performance in terms of Market Position and Competitive Advantage (Kotler & Keller, 2016; Maritan & Peteraf, 2018; Saputra et al., 2023).

All the sub-questions aim at a specific individual adaptation measure, allowing for detailed examination of the independent contribution of each to Market Performance. Another sub-question also examines current academic literature to ascertain the theoretical foundation and contextual suitability of the measures. Together, the sub-questions offer a coherent framework enabling the entire research question can be addressed, bringing together empirical analysis and theoretical observation.

1.4 Research questions

The research objective will be operationalized through one main research question and several subsidiary questions. The overarching question directly answers the aim of the study, while the sub-questions serve to elaborate on the central research question.

Main Research question

To what extent do food sovereignty Adaptation Measures improve Market Performance of multinational food corporations?

The central question will be answered in the conclusions of the research. To answer the main research question, a series of sub-questions were developed. These subsidiary questions give specific information required to generate a well-substantiated answer to the overarching

question, the sub-questions will be treated in the results and discussion and answered in the conclusion.

Sub-questions

- To what extent do food sovereignty Adaptation Measures improve Market Performance of multinational food corporations according to current literature?
- To what extent does Contract Farming as a food sovereignty Adaptation Measure help improve Market Performance of multinational food corporations in terms of Market Position and Competitive Advantage?
- To what extent does Localization of Production as a food sovereignty Adaptation Measure help improve Market Performance of multinational food corporations in terms of Market Position and Competitive Advantage?
- To what extent does Customization of Goods as a food sovereignty Adaptation Measure help improve Market Performance of multinational food corporations in terms of Market Position and Competitive Advantage?
- To what extent does Local Procurement as a food sovereignty Adaptation Measure help improve Market Performance of multinational food corporations in terms of Market Position and Competitive Advantage?

1.5 Research framework

The research framework for this study involves gathering quantitative data and relevant literature for examining how multinational food corporations adapt to food sovereignty Adaptation Measures and the effects on their Market Position. Data was collected through structured surveys with managers at multinational food corporations that deal with food sovereignty.

The literature review gathered scientific studies to analyze how multinational food corporations responded to Adaptation Measures and how this shaped their Market Positions.

The study will conclude by highlighting to what extent adoption measures to food sovereignty help to improve the Market Performance of multinationals. An overview of the research framework can be seen in Figure 1. The realized study timeline can be found in Table 7 in the Appendix.

Figure 1 Research framework.

1.6 Key concepts

Multinational food corporations

Multinational food corporations are defined as businesses which sell commodities or services in more than one country (Smith, 2012). In addition to having an impact on local economy, Multinational food corporations have a major impact on food systems, cultural dietary practices, and the global phenomena of food homogeneity (Alexander et al., 2011)

Food sovereignty

Food sovereignty is the right of local people to control their own food systems, including markets, ecological resources, and food. It extends beyond food security by emphasizing who produces food, how it is produced, and the socioeconomic implications of food production and distribution (Wittman, 2011).

Market Position

The act of designing the company's offering and image to occupy a distinct place in the mind of the targeted market, determined by factors such as Competitive Advantage, and consumer perception (Kotler & Keller, 2016).

Market Performance

Market Performance can be defined as the ability of a company to achieve a distinctive and favorable position in the market by leveraging strategies such as Cost Leadership and product differentiation. This performance is reflected in outcomes like Market Share, Brand Equity, and operational success, which are influenced by factors like strategic positioning (Tessarolo et al., 2023; Dahmiri et al., 2024; Saqib, 2020).

Competitive Advantage

Competitive Advantage is the degree to which a firm creates more economic value than rival firms in each product market (Maritan & Peteraf, 2018). When a business has a Competitive Advantage, it can draw in more clients, hold onto a bigger portion of the market, and make more money than its rivals (Saputra et al., 2023).

Contract Farming

When a farmer and a buyer come to an agreement whereby the farmer promises to produce a certain agricultural product in a given quantity and quality, and the buyer promises to buy the product and often provides assistance with production, this agreement is called Contract Farming (Bijman, 2008).

Localization of Production

The strategic choice to situate production facilities close to suppliers, key markets, or critical resources to lower expenses, enhance responsiveness, and leverage local strengths (Johansen & Winroth, 2003).

Customization of Goods

This is the process of creating, altering, or tailoring a product to meet the specific requirements or tastes of local markets or customers. (2009, Oxford University Press).

Local Procurement

Local Procurement is a systematic strategy to buy resources, goods, or services from vendors within a designated local area to support regional economic growth and save supply chain expenses (International Finance Corporation, 2011).

2. Literature review

This literature review provides the conceptual background needed to examine how food sovereignty Adaptation Measures relate to the Market Performance of multinational food corporations. By synthesizing research on food sovereignty principles and performance outcomes, it clarifies the theoretical connections between Adaptation Measures and Competitive Advantage. The review also supplies the foundational insights required to address Sub-question 1, and to guide further empirical analysis.

2.1 Data collection

To find publications addressing the relationship between multinational food corporations, Search terms were determined to capture variations in terminology across databases allowing for data and publication collection pertaining the relationship between multinational food corporations, food sovereignty, and adaptive measures influencing Market Performance. Table 1 summarizes the search strategy, filters applied, and results. The final set for Scopus consists of 133 publications in English, mostly journal articles (n = 128). Keyword patterns reflect a strong focus on food sovereignty (n = 65) and food safety (n = 47), supplemented by themes such as sovereignty, agroecology, and sustainability. Institutions most frequently represented include Coventry University and Leuphana University (each n = 6), along with several large North American universities. Funding sources are dominated by large national agencies, with the German Federal Ministry of Education and Research, the U.S. National Science Foundation, and UK Research and Innovation prominent among these. Authors from the United States (n = 32) and Canada (n = 26) are most heavily represented, followed by Germany, the United Kingdom, and Brazil. Key publication outlets include Frontiers in Sustainable Food Systems and Sustainability, each having ten articles. Taken together, these descriptives point to a literature anchored in sustainability-oriented food system governance, heavily weighted toward North American and European research institutions.

Table 1 Literature data collection string for Scopus and Google Scholar

Database	Search String	Filters	Initial Hits	Selected
Scopus	Step 1:“Food sovereignty” Step 2 (within results): *(adopt* OR adapt* OR "market perform*" OR market* OR perform* OR "market position" OR advantag* OR "competitive advantag*" OR "contract farming" OR localization* OR customiz* OR local*)*	Publication years: 2009–2025 Document type: Peer-reviewed Subject areas: Environmental Science, Agriculture, Social Sciences, Economics,	147	133

		Econometrics and Finance, Business, Management, Accounting		
Google Scholar	"multinational corporation" OR "global company" OR "transnational corporation" OR "international business" OR "global enterprise" OR "worldwide corporation" OR "cross-border company" AND ("food sovereignty" OR "food sovereignty movement" OR "local food system" OR "localized food chain" OR "food autonomy" OR "agricultural sovereignty" OR "community food systems" OR "local agricultural policies" OR "decentralized food systems" OR "food system localization")	Publication years: 2009–2025 Document type: Peer-reviewed	109	58

2.2 Analysis of existing research

Contract Farming and Market Performance

Multinational food corporations face pressure to adapt to the effects of climate change. Corporations are adapting by diversification of supply bases and strengthening partnerships with local farmers. Empirical evidence shows diversification of agricultural products and supply chains is a critical strategy for increasing supply-chain resilience against climate uncertainty (Yuan et al., 2024). By engaging with farmers, encouraging farmers, and supporting their agricultural practices, corporations can better monitor plant performance, anticipate disruptions, and put in place targeted responses to climate issues such as drought or heat extremes.

Contract Farming improves supply chains and product quality by lowering market uncertainty for both farmers and consumers (Dubbert & Abdulai, 2021; Liang et al., 2023). Compared to spot markets (a public financial market in which financial means or commodities are traded for immediate delivery (Basu, 2020)), this structure frequently delivers higher yields and earnings for farmers, especially for high-value commodities (Dubbert & Abdulai, 2021; Minot & Ronchi, 2014). Furthermore, the benefits on farm household income can be partially mediated by the ability of Contract Farming to increase technical efficiency of farmers in agricultural production (Liang et al., 2023). The advantages of Contract Farming cannot always be shared fairly, with smaller-scale farmers in lower income brackets sometimes having a worse chance of reaping the benefits (Minot & Ronchi, 2014). As fixed costs for Contract Farming are very high, they

preferentially contract larger or better-resourced farmers, thereby leaving smaller and poorer farmers less likely to be included, and thus less able to benefit. (Minot & Ronchi, 2014).

Contract Farming agreements can still in lower transaction costs, better access to markets, and more production, all of which eventually boost Market Performance (Liang et al., 2023; Food and Agriculture Organization of the United Nations, z.d.).

By increasing supply chain dependability and raising the quality of agricultural input, Contract Farming significantly influences how multinational firms operate in the market. Corporations work with small-scale farmers (less than 2ha (Lowder et al., 2016)) through relational contracting to obtain supplies that satisfy market quality standards, which are necessary to keep a competitive edge in both domestic and international markets (Bulte et al., 2024; Vicol et al., 2021). These contracts, which are sometimes backed by provisions from traders or corporations, encourage small-scale farmers to invest in their businesses while also improving output consistency (Bulte et al., 2024; Vicol et al., 2021).

The competitive environment and local market factors affect how effective partnerships work. Increased buyer competition may affect the viability of these relationships by lowering the advantages farmers can obtain, such as advantageous terms or access to inputs (Bulte et al., 2024; Vicol et al., 2021). Inequalities in power within these arrangements may cause conflict, especially if farmers believe corporations are disproportionately gaining from the deals. Resolving these issues is essential to guarantee long-term viability and trust in Contract Farming agreements. (Bulte et al., 2024; Vicol et al., 2021).

In conclusion, multinational food corporations respond to climate change by diversifying supply chains and partnering with local farmers through Contract Farming. This adaptation measure enhances supply-chain resilience, improves product quality, and stabilizes Market Performance. While they often increase farmer income and efficiency, benefits are not always evenly shared, especially for small-scale farmers. Ensuring fair partnerships, addressing power imbalances, and adapting to local market conditions are essential for long-term success and sustainability.

Localization of Production and Market Performance

Being close to local markets and suppliers can enable businesses to better adapt to consumer preferences and respond faster to environmental changes. However, the benefits of localization are influenced by market stability and the ability to maintain efficient operations amid shifting economic conditions. (Lee et al., 2021)

In different African countries, farmers are recovering control over their seed systems as part of a broader campaign for food sovereignty. Case studies illustrate the process by which

communities are restoring high-performing and resilient native seed kinds (Alliance For Food Sovereignty Africa, 2024). This project supports local agricultural practices against the pressures of modern agriculture while simultaneously promoting biodiversity (Alliance For Food Sovereignty Africa, 2024).

In South Africa, food sovereignty is being looked at through farming cooperatives in Limpopo Province (Groenmeyer, 2013). The farming cooperative highlights the democratic right of communities to shape agricultural policies from the ground up, with the focus on small-scale farmers who are particularly vulnerable to climate change impacts. The cooperative model aims to enhance resilience and self-determination in food production, showing a bottom-up approach to food sovereignty (Groenmeyer, 2013).

Indigenous communities in Canada are actively working toward food sovereignty by reestablishing connections with their traditional food systems through various projects the significance of self-determination in food systems is emphasized by the British Columbia Working Group on Indigenous Food Sovereignty (The British Columbia University, n.d.). This movement strives to integrate Indigenous knowledge and practices into current food policies, supporting cultural regeneration alongside greater access to nutritional foods (The British Columbia University, n.d.).

The European Union Farm to Fork Strategy shows how multinational food corporations must adapt to regulatory frameworks aimed at creating sustainable food systems. This strategy emphasizes reducing greenhouse gas emissions, promotion of biodiversity, and ensuring good economic returns for all factions of the food supply chain (European Commission, 2022). Corporations operating in Europe need to adjust their practices to comply with these regulations while also seizing new market opportunities presented by sustainability initiatives (European Commission, 2022).

The conclusion, proximity to local suppliers and markets allows firms to be responsive to changing customer preferences and environmental changes, but the economic stability of the country will affect this potential benefit of localization. Food sovereignty initiatives in Africa and Canada, such as the restoration of native seed systems, support for small-scale farmers, and integration of Indigenous knowledge, have demonstrated increased resilience, self-determination, and biodiversity. Across Europe, multinational food corporations should be able to handle the sustainability-focused legislation in the form of the Farm to Fork Strategy-a way to ensure environmental protection and fair outcomes within the supply chain. Overall, local engagement along with sustainable practices strengthens business resilience and social responsibility.

Customization of Goods and Market Performance

Better relationships with local suppliers can lead to innovation and collaboration, enabling multinational food corporations to help develop products tailored to local tastes and preferences, while also adhering to food sovereignty principles. (Byaruhanga & Isgren, 2023; Kamgang et al., 2024)

By promoting more frequent encounters and closer brand ties, customization increases consumer engagement and loyalty (Hui et al., 2024). By satisfying particular needs, cutting waste, and adhering to sustainable principles, mass customization gives businesses a competitive edge and can increase long-term profitability. Achieving balance is necessary since too much personalization might have a detrimental effect on the performance of the product as it can lead to manufacturing errors, order mismatches or rework, thereby degrading both performance and conformance (Hegde et al., 2005).

Customization tactics are complex for multinational food corporations, as research shows the relationship between customization and sustainable performance is strengthened by cross-border e-commerce, which is a type of internet commerce that enables corporations to reach a wider audience, establish connections with worldwide clientele, and enter new markets more effectively (Yang et al., 2024; Hui et al., 2024). Efficiency requires a balance between global adaptation and standardization (Persson & Lantz, 2022). By improving personalization tactics, utilizing big data analytics increases the impact of customization even more (Kamel, 2023).

In conclusion, strong relationships with regional suppliers support innovation and product development for local tastes and food sovereignty principles. Personalization and mass customization of these products ensure a more engaged consumer, with less waste and greater sustainability. Global standardization balances with local adaptation as multinationals use big data and cross-border e-commerce to optimize efficiency, reach further markets, and sustain competitiveness.

Local Procurement and Market performance

Local Procurement is beneficial for multinational food corporations. By shortening supply chains, corporations can minimize logistic expenses, leading to better profit margins and less emissions (Sampson et al., 2021; Byaruhanga & Isgren, 2023).

Local Procurement increases flexibility and responsiveness to consumer demands, allowing businesses to adapt to market changes in the food industry (Byaruhanga & Isgren, 2023; Transnational Institute, 2018).

Local Procurement can also strengthen brand loyalty, as consumers increasingly value products that support local economies. By aligning with consumer preferences for

sustainability, corporations can gain a Competitive Advantage in markets where ethical practices are a priority (Kamgang et al., 2024; Weiler et al., 2014). Proximity to suppliers also allows for better quality assurance, enabling multinational corporations to do more thorough quality checks. (Transnational Institute, 2018; Weiler et al., 2014). Local Procurement contributes to supply chain resilience, lowering dependence on global supply chains that are susceptible to disruptions caused by global crises or geopolitical tensions (Sampson et al., 2021; European Commission, 2022).

A drawback of Local Procurement is the potential loss of economies of scale offered by global suppliers. Local suppliers may not consistently provide the same volume at competitive prices, impacting overall cost structures (Weiler et al., 2014; European Commission, 2022). There may also be a limited number of local suppliers capable of meeting specific quality or quantity requirements, making it difficult for multinational corporations to scale their operations effectively (Transnational Institute, 2018; Kamgang et al., 2024).

There is also the possibility multinational corporations will need to invest time and resources into developing local suppliers to meet operational standards, which could divert resources from other areas (Byaruhanga & Isgren, 2023; Weiler et al., 2014). Aligning with regulatory frameworks that promote sustainability and food sovereignty, such as the EU's Farm to Fork Strategy, can facilitate better compliance with local laws (European Commission, 2022). Corporations prioritizing Local Procurement often improve their corporate social responsibility image and create the possibility of attracting other potential customers (Kamgang et al., 2024; Weiler et al., 2014).

Multinational food corporations dominate access to essential resources such as land and water, limiting opportunities for local farmers to cultivate their own land or access resources for sustainable farming practices (Byaruhanga & Isgren, 2023; Singh & Conway, 2021). By controlling supply chains, multinational corporations can dictate pricing, quality standards, and distribution networks, making it difficult for local producers to compete (Byaruhanga & Isgren, 2023; Transnational Institute, 2018).

In conclusion, Local Procurement by multinational corporations can help reduce costs, emissions, and supply-chain risks while enhancing responsiveness, quality assurance, and the meeting of customer preferences for sustainability. It might also enhance brand loyalty and corporate social responsibility. However, potential challenges include loss of economies of scale, limited supplier capacity, and investment in the development of local suppliers. In addition, multinational firms are in control of resources, which creates fewer opportunities for small farmers; therefore, business benefits should be weighed against equitable and sustainable local practices.

2.3 Conceptual framework

This conceptual framework in Figure 1 demonstrates the way in which multinational food corporations may use Adaptation Measures for food sovereignty, such as Contract Farming, Localization of Production, Customization of Goods, and Local Procurement, to improve their Market Performance in terms of Market Position and Competitive Advantage. It extends the literature by linking these strategic practices to both resilience and profitability in global food markets.

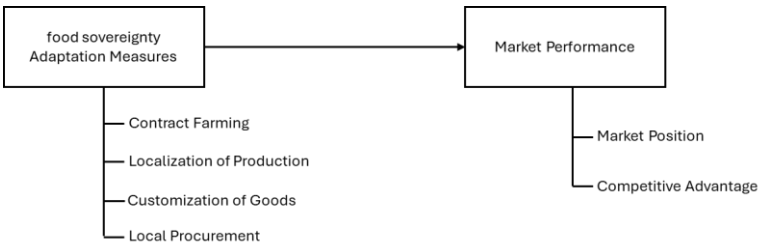

Figure 2 Conceptual framework

2.4 Chapter summary

Throughout the literature review, Contract Farming and Local Procurement demonstrate the most direct and strongest positive relationships with supply-chain resilience, product quality, and Market Performance. They are seen to clearly enhance farmer participation, reduce market instability, and enable sustainability, although sharing benefits equally with small-scale farmers remains one of the most important challenges. Localization of Production also contributes to adaptability, responsiveness to the needs of customers, and alignment with food sovereignty and sustainability objectives, but its benefits are more context-dependent and dependent upon economic stability and local supplier capabilities. Customization of Produce can enhance consumer loyalty and sustainability along with Competitive Advantage, but its effect is less certain, since too much personalization or a failure to balance it properly with global standardization can result in inefficiency and reduce product performance. Overall, combining these Adaptation Measures while addressing equity, supplier development, and local market conditions enables multinationals to strengthen their Market Position, enhance Competitive Advantage, and improve overall Market Performance in a sustainable and locally responsive way.

For this research the hypothesis is thus that multinational food corporations consider food sovereignty Adaptation Measures (Contract Farming, Localization of Production, Customization of Goods and Local Procurement) as an instrument to improve their Market Performance in terms of Market Position and Competitive Advantage.

3. Methodology

The methodology chapter gives an outline of the research design that guided the study, the procedures for data collection, and analytical techniques, which can be found in 3.1 and 3.2. The chapter explains how key concepts in the study are operationalized for clarity and consistency in measurement in 3.3. The Methodology also explains how the data was analyzed in chapter 3.4.

3.1 Research design

The study will be deductive in character, aiming to assess relationships identified in the literature regarding the connections between adaptive measures and Market Performance (Fife & Gossner, 2024). The study is quantitative in nature, as it collects numerical data that can be statistically analyzed to test the relationship between Adaptation Measures and Market Performance (Sullivan & Artino, 2013; Rana et al., 2021).

To assess the relevance of food sovereignty Adaptation Measures for Market Performance, primary data will be obtained through structured surveys using Likert-scale questions to increase comparability across samples and ensuring consistency and reliability in responses that are suitable for statistical analysis (Wagh, 2024). The research design is cross-sectional which is appropriate, as the present Market Performance is analyzed rather than tracking changes over time (Wang & Cheng, 2020).

3.2 Data collection and analysis

Sample selection

To identify suitable multinational food corporations for the research, purposive sampling was conducted to select corporations that were dealing with food sovereignty issues (Ncsc, 2022). In addition, corporations were required to be multinationals, defined as businesses that sell commodities or services in more than one country (Smith, 2012). Once appropriate corporations had been identified, managers at those corporations were approached at a fair, through email or LinkedIn, supported by active phone call reminders. Company websites were also examined for information on key personnel and their roles. Furthermore, professional networks and industry associations were leveraged to identify potential participants.

The target population in this study comprises all managers working in the multinational food industry who have firsthand knowledge of or direct experience with the relationship between issues of food sovereignty and multinational food business operations.

These limitations narrowed the potential sample size from the theoretical population of all managers eligible for participation. The final sample thus reflects those people who met the criteria both in terms of expertise and were also accessible and allowed to participate.

The final population sample size for this study was 40, which was sufficient for this study, as sample sizes generally become normally distributed once they reach 30 (Krithikadatta, 2014). All participants were managers from unique multinational food corporations dealing with food sovereignty issues (Vasileiou et al., 2018; Knott et al., 2022; Delice, 2010).

Data collection

A survey was chosen as a form of measurement because of their ability to efficiently collect data from a larger population across diverse geographical areas (Kuphanga, 2024; Wright, 2006)

Additionally, surveys offer an accessible method to gather information, allowing to reach a broad and diverse sample while maintaining the flexibility to analyze multiple variables and detect small effects (Kelley, 2003).

A customized survey guide based on the research topic and its sub-questions was used to conduct surveys. The questions focus on how multinational food corporations deal with food sovereignty issues, and how their response to food sovereignty impacts their Market Performance. The questions in the survey were developed with reference to the concepts of Market Performance and food sovereignty Adaptation Measures, reflecting both theoretical foundations and the researcher's own design considerations. The questions can be found in Table 2 under section 3.3, the operationalization of concepts.

Surveys were conducted physically or online, depending on the availability and preference of the respondents, with twelve responses being obtained in person and the remaining responses being obtained online. Responses were collected and stored securely for analysis. Consent was obtained from participants to ensure ethical compliance. The survey included closed-ended questions to capture quantitative data. When not all answers were given, the respondent was contacted again, or the respondent was omitted from the dataset if responses were unavailable. These measures increased the reliability and validity of the data for analyzing relationships between food sovereignty Adaptation Measures and Market Performance.

3.3 Operationalization of concepts

The concepts of this study were operationalized through its indicators, which were measured using underlying variables. Each variable corresponded to a single Likert-scale question (1 = strongly disagree, 7 = strongly agree). For each indicator, the scores of its respective variables were combined into a composite indicator score by calculating their mean value. These indicator scores were subsequently used as independent variables in the regression analysis to examine their relationship with the concepts Market Performance and Food sovereignty

Adaptation Measures. A full operationalization of the 2 concepts to the 11 variables can be found in Table 2 at the end of this chapter.

Concept: Market Performance

The concept Market Performance was measured by the indicators Market Position and Competitive Advantage, which was consistent with the work of Porter (1985) and Day (1994). Porter's competitive strategy framework emphasizes the importance of Market Position and Competitive Advantage in determining a firm's performance, while Day's work on market-driven organizations again emphasizes these factors as key determinants of Market Performance. (Porter, 1985; Day, 1994).

Indicator: Market Position

The Indicator Market Position was measured using three variables: Market Share, Price Position, and Brand Equity, in line with Keller's (1993) customer-based Brand Equity model and Longwell's (1994) method. Market Share reflects the firm's relative standing in its industry, aligning with market-based outcomes identified by Porter (1985). Price Position reflects the manner in which a firm situates its offerings strategically in relation to competition, in line with Porter's strategic differentiation concept. Brand Equity involves attitudes and loyalty on the part of the consumer, which are central to Keller's (1993) market-based advantage theory. For Market Position, the total score was the average of Likert-scale ratings for Market Share, Price Position, and Brand Equity.

Variable: Market Share

In the literature, Market Share of a company was defined as its share in total market sales. It was calculated as (company sales / total market sales) x 100, showing the company's standing relative to competitors (Melitz & Ottaviano, 2008). In the survey, the variable Market Share was measured as the share in total market sales a company makes, rated by the respondent on a scale from 1 to 7.

Variable: Price Position

In the literature, Price Position was defined as (company's average price / industry average price), indicating if the firm products are positioned as premium, mid-range, or budget (Melitz & Ottaviano, 2008). In the survey, the variable Price Position was measured as how the company's prices compare to those of its competitors, rated by the respondent on a scale from 1 to 7.

Variable: Brand Equity

In the literature, Brand Equity was defined as (market value - book value of the company), where strong Brand Equity correlates with a favorable Market Position (Mariadoss, n.d.). In the survey, Brand Equity was measured as the degree to what the brand was recognized and trusted by consumers, rated by the respondent on a scale from 1 to 7.

Indicator: Competitive Advantage

Competitive Advantage was measured using four variables, Cost Leadership, Innovation Capability, Imitability, and Durability, derived from Barney's (1991) resource-based view and the VRIO model. Cost Leadership is the "Value" component of the VRIO model, as the efficient utilization of resources creates greater value for the company. Innovation Capability relates to the "Organization" component, it reflects the company's ability to efficiently utilize and coordinate resources. Imitability and Durability translate to the "Rarity" and "Imitability" dimensions, emphasizing how hard-to-replicate and distinctive resources sustain the long-term advantage of a company. For Competitive Advantage, the overall score is the average of the Likert-scale values for Cost Leadership, Innovation Capability, Imitability, and Durability.

Variable: Cost leadership

The ability of the company to produce at a lower cost than competitors, measured by comparing production costs to the industry average (Insee & Suttipun, 2023). In the survey, Cost Leadership was defined as the company's ability to produce products at a lower cost than competitors, rated by the respondent on a scale from 1 to 7.

Variable: Innovation Capability

In the literature, the ability of the company to introduce new products, services, or processes was measured through R&D spending as a percentage of revenues (Insee & Suttipun, 2023). In the survey, the variable Innovation Capability was defined as the ability of the company to create new products, services or processes, rated by the respondent on a scale from 1 to 7.

Variable: Imitability

The difficulty for competitors to replicate the key resources or capabilities of a company, assessed by expert evaluations or industry surveys (Farida & Setiawan, 2022). In the survey, Imitability was defined as how hard it was for competitors to copy the company's products, services or strategies, rated by the respondent on a scale from 1 to 7.

Variable: Durability

In the literature, Durability was defined as the sustainability of the company's Competitive Advantage, measured by the stability of Market Share over time (Farida & Setiawan, 2022). In the survey, Durability was defined as the stability of the company's Competitive Advantage, rated by the respondent on a scale from 1 to 7.

Concept: Food Sovereignty Adaptation Measures

Food sovereignty Adaptation Measures are corporate initiatives designed to address the growing demand for food sovereignty principles in their operations. These measures aim to bridge the gap between global food systems and local food sovereignty movements (Silva et al., 2024; Rivera et al., 2024).

Indicator / variable: Contract Farming

In the literature, Contract Farming was defined as a buyer and a farmer enter into an agreement under which the farmer promises to produce a particular agricultural commodity in a given quantity and quality, and the buyer agrees to buy the product and frequently offers production support (Bijman, 2008). In the survey, the variable Contract Farming was measured as the frequency with which the firm uses Contract Farming as part of its operations, rated by the respondent on a scale from 1 to 7.

Indicator / Variable: Localization of Production

In the literature, Localization of Production was defined as the strategic choice to locate production facilities near suppliers, target markets, or other important resources to reduce costs, increase responsiveness and make use of local capabilities (Johansen & Winroth, 2003). In the survey, the variable Localization of Production was specified as what the company focusses on producing goods nationally, rated by the respondent on a scale from 1 to 7.

Indicator / Variable: Customization of Goods

In the literature, Customization of Goods was defined as the process of creating, altering, or tailoring a product to satisfy the unique needs or preferences of particular consumers or regional markets (2009, Oxford University Press). In the survey, Customization of Goods was measured as the company's ability to customize products to meet national customer needs, rated by the respondent on a scale from 1 to 7.

Indicator / Variable: Local Procurement

In the literature, Local Procurement was defined as the strategy to buy resources, goods, or services from vendors within a designated local area to assist local economic development and lower supply chain costs (International Finance Corporation, 2011). In the survey, Local Procurement was measured as the company's reliance on sourcing materials of inputs nationally, rated by the respondent on a scale from 1 to 7.

Measurement and scale justification

A 7-point Likert scale is preferred for this research as it offers greater measurement sensitivity and potentially higher reliability and validity than scales with fewer points, enabling more precise results and a stronger model fit. It must be noted that it may at the same time increase respondent burden and susceptibility to response-style biases (Russo et al., 2021).

Likert scales influence internal validity by affecting measurement consistency and construct accuracy. Likert scales affect external validity because limited response options or differences in how respondents interpret them may reduce the extent to which results can be generalized to other groups or contexts (Boateng et al., 2018).

Overview of operationalization of concepts

Table 2 presents the concepts, their indicators, and corresponding variables, along with the specific question associated with each variable.

Table 2 Table of Operationalization

Concept	**Indicator**	**variable**	**Survey question**
Market Performance	Market Position	Market Share	Q: How would you rate your company's share of total sales in the market? (Rate on a scale from 1 to 7 where 1 = Very small share and 7 = Very large share)
		Price Position	Q: How would you rate your company's pricing strategy? (Rate on a scale from 1 to 7, where 1 = Lower (budget) and 7 = Higher (premium))
		Brand Equity	Q: How strongly do you believe your brand is recognized and trusted by consumers? (Rate on a scale from 1 to 7, where 1 = Not recognized and trusted and 7 = Very recognized and trusted)
	Competitive Advantage	Cost Leadership	Q: How well does your company manage to produce at lower costs? (Rate on a scale from 1 to 7, where 1 = Very poor and 7 = Excellent)
		Innovation Capability	Q: How would you rate your company's ability to create new products, services, or processes? (Rate on a scale from 1 to 7, where 1 = Very poor and 7 = Excellent)
		Imitability	Q: How difficult do you think it is for competitors to copy your company's products, services, or strategies? (Rate on a scale from 1 to 7, where 1 = Very difficult and 7 = Very easy)
		Durability	Q: How stable has your company's Competitive Advantage been over time? (Rate on a scale from 1 to 7, where 1 = Very unstable and 7 = Very stable)
Food sovereignty	Contract Farming	Contract Farming	Q: How would you rate your company's use of Contract Farming as part of its operations?

Adaptation Measures			(Rate on a scale from 1 to 7, where 1 = Not at all and 7 = Extensively applied)
	Localization of Production	Localization of Production	Q: How would you rate your company's focus on producing goods nationally to serve the market? (Rate on a scale from 1 to 7, where 1 = Not at all and 7 = A primary focus)
	Customization of Goods	Customization of Goods	Q: How would you assess your company's ability to customize products to meet national customer needs? (Rate on a scale from 1 to 7, where 1 = Not at all and 7 = Fully tailored to local preferences)
	Local Procurement	Local Procurement	Q: How would you evaluate your company's reliance on sourcing materials or inputs nationally? (Rate on a scale from 1 to 7, where 1 = Not at all and 7 = Sourced almost entirely nationally)

Most of the complex concepts in social sciences are multidimensional and thus cannot be directly observed. Following Adcock and Collier (2001), valid empirical research has to transform these abstract constructs into observable indicators of their distinct dimensions, which then need further operationalization into measurable variables. These variables can be captured either as survey questions or as quantitative data. This hierarchical process, from concept over indicator to variable, strengthens conceptual clarity, enables comparison across studies, and enhances the overall validity of measurement.

3.4 Data analysis

To examine the importance of food sovereignty Adaptation Measures (Contract Farming, Localization of Production, Customization of Goods, Local Procurement) for Market Performance in terms of Market Position and Competitive Advantage. The models were constructed by specifying the Adaptation Measures as independent variables and the two dimensions of Market Performance as dependent variables, which allowed for testing both their individual and combined effects. Linear regression is suitable because it estimates how a one-point change on each Likert-scale predictor is associated with changes in Market Performance, while also showing the direction and strength of these relationships. (Lederer, 2021)

Model 1: Market Position:
Market Position = $\beta_0+\beta_1$(Contract Farming)+β_2(Localization of Production)+β_3(Customization of Goods)+β_4(Local Procurement)+ϵ

Model 2: Competitive Advantage:
Competitive Advantage = $\beta_0+\beta_1$(Contract Farming)+β_2(Localization of Production)+β_3(Customization of Goods)+β_4(Local Procurement)+ϵ

3.5 Chapter summary

This chapter presented the deductive quantitative research design of the study, which involved a cross-sectional survey of managers from multinational food corporations using a customized Likert-scale questionnaire based on research questions. Key concepts were operationalized through indicators measured by underlying variables. The analytical procedures included regression analysis, in which Adaptation Measures were specified as independent variables and the two dimensions of Market Performance as dependent variables, thus allowing for the assessment of both individual and combined effects.

4. Results

In this chapter the outcome of the statistical analysis can be found that examines the relationships between the variables Market Position and Competitive Advantage, Contract Farming, Localization of Production, Customization of Goods and Local Procurement. The analyses includes descriptive statistics, Correlation matrix and a Linear regression analysis (Dong, 2023; Pham-Gia & Choulakian, 2014; Schneider et al., 2010).

4.1 Descriptive statistics

The survey was sent out 146 times by email and 56 via LinkedIn and was answered 12 times in person over a period of 3 months. From the 40 returned surveys (response rate of 18.7%), no necessary data was missing. Descriptive statistics were calculated for the variables Market Share, Price Position, Brand Equity, Cost Leadership, Innovation Capability, Imitability, Durability, Contract Farming, Localization of Production, Customization of Goods and Local Procurement. Table 3 presents the means, standard deviations, minimum, maximum, and median values.

Table 3 Descriptive statistics of variables

Metric	*Average*	*St. Dev*	*MIN*	*MAX*	*MEDIAN*	*N*
Market Share	3.88	1.63	1.00	7.00	4.00	40
Price Position	4.82	1.48	2.00	7.00	5.00	40
Brand Equity	5.38	1.26	2.00	7.00	6.00	40
Cost Leadership	4.18	1.30	2.00	7.00	4.00	40
Innovation Capability	4.88	1.50	2.00	7.00	5.00	40
Imitability	4.58	1.39	2.00	7.00	5.00	40
Durability	4.82	1.22	2.00	7.00	5.00	40
Contract Farming	4.10	1.73	1.00	7.00	4.50	40
Localization of Production	4.70	1.54	1.00	7.00	5.00	40
Customization of Goods	4.65	1.68	1.00	7.00	5.00	40
Local Procurement	4.175	1.50	1.00	7.00	4.00	40

The results show that, within the dimension of Market Performance, participants reported the highest mean scores for Brand Equity (M = 5.38, SD = 1.26) and Innovation Capability (M = 4.88, SD = 1.50). Among the Adaptation Measures, Localization of Production (M = 4.70, SD = 1.54) and Customization of Goods (M = 4.65, SD = 1.68) had the highest scores. These results indicate respondents rated Brand Equity, Innovation Capability, Localization of Production and Customization of Goods more favorably compared to the other measured variables.

4.2 Correlation matrix

Below in Table 4 the correlation matrix showing the relationships between the variables can be found.

Table 4 The correlation matrix for variables Market Share, Price Position, Brand Equity, Cost Leadership, Innovation Capability, Imitability, Durability, Contract Farming, Localization of Production, Customization of Goods and Local Procurement

Metric	*Market Share*	*Price Position*	*Brand Equity*	*Cost Leadership*	*Innovation Capability*	*Imitability*	*Durability*	*Contract Farming*	*Localization of Production*	*Customization of Goods*	*Local Procurement*
Market Share	1										
Price Position	0.157	1									
Brand Equity	0.424	0.397	1								
Cost Leadership	-0.096	0.094	0.250	1							
Innovation Capability	0.116	0.159	0.355	-0.002	1						
Imitability	-0.144	0.133	0.077	0.137	0.130	1					
Durability	0.566	0.232	0.563	0.098	0.423	0.294	1				
Contract Farming	0.288	-0.003	-0.144	-0.074	-0.014	-0.055	0.103	1			
Localization of Production	0.065	-0.045	0.097	0.064	0.644	-0.025	0.132	0.05835	1		
Customization of Goods	-0.016	0.226	0.334	0.199	0.497	0.096	0.238	0.012	0.559	1	
Local Procurement	0.081	-0.166	0.005	-0.234	0.265	0.072	0.044	-0.219	0.262	0.143	1

The correlation matrix in Table 4 indicates that the highest positive correlation was between Localization of Production and Innovation Capability (r = 0.64), indicating a strong positive relationship between these two variables. There was also a moderate positive correlation between Innovation Capability and Customization of Goods (r = 0.49).

The strongest negative correlation occurred between Local Procurement and Cost Leadership (r = –0.23). The remaining correlations were weak and close to zero, suggesting weak linear relationships between other variables.

The r-values in the current presentation are already expressed in terms of association strength and direction, t-values were therefore not presented, as relative patterns are of interest here, not statistical significance.

Examination of the correlations among these items indicates moderate to strong positive relationships, supporting their combination into single dependent variables (Market Performance and Competitive Advantage) for the linear regression analyses.

4.3 Linear regression

The outcome for the linear regressions where Market Performance and Competitive Advantage are dependent variables, and Local Procurement, Customization of Goods, Contract Farming, and Localization of Production are the independent variables, is presented in Tables 5 and 6.

Linear regression of Market Position

Table 5 The coefficients of the linear regression of the dependent variable Market Position with the independent variables Local Procurement, Customization of Goods, Contract Farming, Localization of Production with an Adjusted R Square of -0.038.

Predictor variables	**Standardized Coefficients (Beta)**	**T**	**Significance**
Constant	-	4.702	<.001
Contract Farming	.085	.505	.617
Localization of Production	-.110	-.543	.591
Customization of Goods	.291	1.476	.149
Local Procurement	-.028	-.160	.874

Linear regression of Competitive Advantage

Table 6 The coefficients of the linear regression of the dependent variable Competitive Advantage with the independent variables Local Procurement, Customization of Goods, Contract Farming, Localization of Production with an Adjusted R Square of 0.110.

Predictor variables	**Standardized Coefficients (Beta)**	**T**	**Significance**
Constant	-	5.675	<.001
Contract Farming	-.041	-.263	.794

Localization of Production	.174	.925	.361
Customization of Goods	.333	1.828	.076
Local Procurement	-.029	-.177	.860

Although no coefficients are statistically significant at $p < 0.05$, the results show that Customization of Goods was most strongly positively correlated with both dependent variables, Beta = 0.291 ($p = 0.149$) and Market Performance, and Beta = 0.333 ($p = 0.076$) for Competitive Advantage. The lowest significance was found for the relationships of Local Procurement, Beta = –0.028 ($p = 0.874$) and Market Performance, and Beta = –0.029 ($p = 0.860$) for Competitive Advantage. The remaining predictors evidenced weaker and less strong associations with the dependent measures.

To get a full picture of their relationships with Market Performance and Competitive Advantage, the independent variables (Local Procurement, Customization of Goods, Contract Farming, and Localization of Production) were included in the regression models. Even if some beta coefficients are nearly zero and not significant, this method enables the identification of both strong and weak effects, showing which predictors significantly contribute and which do not.

4.4 Chapter summary

The analysis in the results chapter showed that the highest mean scores were for Brand Equity and Innovation Capability, whereas the highest-rated adaptation strategies were for Localization of Production and Customization of Goods. The strongest positive correlation was between Localization of Production and Innovation Capability ($r = 0.64$), whereas the strongest negative correlation was between Local Procurement and Cost Leadership ($r = –0.23$). According to the regression analysis, Customization of Goods had the strongest positive-though not significant-effects on both Market Performance and Competitive Advantage, whereas for Local Procurement, effects were weakest and non-significant.

5. Discussion

This discussion will address each of the study's sub-questions in turn, using the empirical findings to provide clear answers and set up the foundation for an informed conclusion. Looking at how the results relate to the existing literature and the context of the research, the discussion will bring these insights together to answer the main research question in the conclusion.

This research examined to what extent food sovereignty Adaptation Measures improve Market Position of multinational food corporations. The study focused on four Adaptation Measures: Contract Farming, Localization of Production, Customization of Goods, and Local Procurement. Market Position was analyzed through two indicators: Market Performance and Competitive Advantage.

Although literature suggests that while adaptations may appear to support local empowerment, structural imbalances remain, especially when large corporations continue to dominate land and resource access (Byaruhanga & Isgren, 2023; Singh & Conway, 2021). It does raise the question whether adaptation strategies are truly transformative or if they serve as instruments of strategic adjustment within an existing corporate framework.

Nonetheless, the research showed the impact of Adaptation Measures. Market Performance and Competitive Advantage showed the highest significant associations with Customization of Goods (Beta = 0.291, p = 0.149, for Market Performance; Beta = 0.333, p = 0.076 for Competitive Advantage). The results suggest customizing products to local consumer needs has an important role in how a firm is perceived. Literature supports this by highlighting that Customization, especially when combined with data analytics and feedback systems, can increase the relevance of a product (Kamel, 2023).

Literature on Customization of Goods shows it can complicate logistics, reduce economies of scale, and increase product development costs (Persson & Lantz, 2022). The challenge for multinational food corporations is therefore to form a balance between adapting products to local markets and maintaining operational efficiency. Balance is important in the food industry, where production systems and supply chains are complex, and changes can have wide-reaching effects (Bushueva et al., 2024).

Multinationals prefer strategies allowing direct control, especially in the initial phases of market entry or expansion. Localization of Production and Customization fit these characteristics, as the two measures are more an extension of existing business processes, rather than requiring building new supply chains or negotiating contracts. The measures therefore involve less risk, which could explain why both measures score relatively high in the study. (Meemken & Bellemare, 2019; Anh et al., 2019)

Competitive Advantage showed values closest to significance for Localization of Production (Beta = 0.174, p = 0.361), this suggests this strategic approach may contribute to a firm's competitive positioning. Market Performance, on the other hand, showed a negative, statistically insignificant relationship with Localization of Production (Beta = –0.11, p = 0.591), despite Localization receiving the highest average score across respondents (M = 4.70 on a 7-point scale), which does indicate stakeholders perceive it as particularly important. While the results of the regression do not indicate a strong direct effect on performance, the perceived importance by stakeholders and the score with Competitive Advantage suggest Localization is still strategically relevant. This interpretation aligns with prior research that emphasizes the potential benefits of localizing operations, such as enhanced responsiveness to market conditions, alignment with regulatory demands, and stronger community engagement (Feenstra, 2002; Byaruhanga & Isgren, 2023). While literature highlights the strategic potential of Localization, the mixed results in this study suggest the benefits of Localization of Production may be perceived more strongly by firms than they are reflected in Market Performance.

Market Performance and Competitive Advantage showed low significance and weak beta values in relation to Contract Farming (Beta = 0.085, p = .617 for Market Performance; Beta = -0.041, p = .794 for Competitive Advantage). Contract Farming did not significantly predict Market Performance in any of the regression models, which may indicate inconsistency in how this strategy is perceived or applied across firms. This is in contrast with previous studies that highlighted Contract Farming as a tool for improving supply chain reliability and product quality (Bulte et al., 2024; Vicol et al., 2021).

The low score coupled with a low significance for Contract Farming suggests that while there is strategic potential, the effectiveness could be dependent on other factors, like implementation and local conditions. Previous studies have shown that when buyer competition increases, benefits for farmers, like favorable contract terms or secure input supply may decrease and weaken the long-term sustainability of partnerships (Kamgang et al., 2024; Vicol et al., 2021). The low score results here may therefore reflect either limited engagement with Contract Farming across the surveyed firms, or the presence of variable, context-specific applications do not translate into a Competitive Advantage.

Market Performance and Competitive Advantage showed the weakest results in relation to Local Procurement, with Beta values close to zero and low significance (Beta = -0.028, p = 0.874 for Market Performance; Beta = -0.029, p = 0.860 for Competitive Advantage), despite its alignment with sustainability goals. This result suggests that sourcing materials locally, while possibly beneficial in terms of environmental impact or consumer trust, could increase costs or reduce operational flexibility. This is supported by research noting how Local Procurement

can limit the ability of a firm to benefit from global economies of scale, especially when local suppliers are smaller or less consistent (Weiler et al., 2014; European Commission, 2022). It is also possible for Local Procurement to improve brand loyalty by aligning the firm with consumer preferences for local and sustainably produced goods (Kamgang et al., 2024; Sampson et al., 2021). The role of Local Procurement may therefore be more relevant for firms emphasizing corporate social responsibility or brand differentiation, rather than those pursuing low-Cost Leadership.

Contract Farming and Local Procurement inherently have a greater risk, as they depend on the reliability, capacity, and practices of local partners. The risks being supply variability, quality issues, and potential conflicts or misalignments of interest. Literature on global production planning and supply chain risk confirms reliance on external partners introduces variable information and increased exposure to factors outside the direct control of multinationals, such as local policies, partner reliability, and market volatility (Jung & Sim, 2015; (McMaster et al., 2020). The greater risk in implementation could explain the lower scores and eigen values of Contract Farming and Local Procurement in the analysis.

The results show multinational food corporations are engaging with Adaptation Measures that reflect the principles of food sovereignty (Altieri & Nicholls, 2012; Clapp, 2017). The Adaptation Measures do not affect Market Performance in the same way. Localization and Customization offer tangible strategic advantages and are more widely adopted, while Contract Farming and Local Procurement appear to be more variable in effect, possibly due to differences in implementation or context.

5.1 Chapter summary

The relationships between the Market Performance of multinational food corporations and four food sovereignty Adaptation Measures: Contract Farming, Localization of Production, Customization of Goods, and Local Procurement, were analyzed. Localization and Customization emerged as the most strategically valuable. Localization was strongly perceived to enhance Competitive Advantage through improved responsiveness, regulatory alignment, and community engagement, while Customization increased the relevance of products and enhanced consumer loyalty. In contrast, Contract Farming was unrelated to Market Performance, which suggests that benefits depend on the quality of implementation and/or local conditions. Local Procurement had the weakest association with performance, presumably due to cost increases and constrained operational flexibility, even though it may still foster brand perception and sustainability credentials. Overall, these results suggest that food sovereignty adaptation may contribute to Competitive Advantage but does so only under circumstances where measures are well-integrated and context-specific, without overreliance

on third-party actors. The results underline the necessity for nuanced, strategically aligned approaches rather than assuming that all sustainability-driven measures yield equal performance benefits.

6. Conclusion, Limitations, and Recommendations

This chapter summarizes the key findings from this research by systematically answering the sub-questions and the central research question about how food sovereignty Adaptation Measures have an impact on the Market Performance of multinational food corporations. The section synthesizes empirical findings with existing literature to detail implications at the strategic level, identifying which Adaptation Measures significantly contribute toward Competitive Advantage in 6.1, hereby explicitly answering each sub-question and main research question. This chapter points out significant avenues for future research, showing where further empirical and qualitative inquiry is required in order to deepen understanding about how food sovereignty strategies work across different contexts within the global food industry in 6.2. Finally, this chapter also reflects upon the limitations of the research design and data, shaping the bounds within which findings can be generalized in 6.3.

6.1 Conclusion

This study assessed the extent to which food sovereignty Adaptation Measures improve the Market Performance of multinational food corporations, focusing on four principal Adaptation Measures: Contract Farming, Localization of Production, Customization of Goods, and Local Procurement. The findings indicate that while each adaptation measure contributes to an improvement and higher sustainability as well as better corporate responsiveness to local contexts, the resulting impact on Market Performance and competitiveness is unevenly apparent and retains a highly context dependent character.

Addressing the first sub-question on food sovereignty Adaptation Measures and Market Performance by review of literature illustrates food sovereignty adaptation practices are increasingly seen as means through which corporations can align their operations with sustainability practices, whilst empowering local firms. Although current studies also caution uneven power structures still prevail extensively, where multinational food corporations continue to routinely dominate access to land, capital, and market infrastructure. The results of this study also show that while the media keep promoting sustainability stories, their impact on Market Performance is inconsistent.

The second sub-question on Contract Farming as a food sovereignty adaptation measure contributing to the improvement of Market Performance, highlights the stabilization potential of Contract Farming in supply chains and enhancement of product quality. Analysis, however, demonstrates it is not of significance as a Market Performance indicator. The findings suggest the success of the strategy depends significantly on the local adaptation of the application and the power relation between those involved. The dependency of Contract Farming on partnerships and unforeseeable local conditions appear to limit its capacity to offer a

sustainable Competitive Advantage. It is especially true in the face of competing purchasers undermining farmer profits or worse, jeopardizing extended and long-lasting collaboration.

The Localization of Production, third sub-question in this study, brought stronger and more convincing results. Localization is seen as strategically significant, particularly in facilitating responsiveness to local markets, conformity with regulatory environments, and interactions with local communities. Though the regression results did not identify a direct significant effect on Market Performance, the high perceived strategic importance of localization confirms the argument it brings resilience and responsiveness to dynamic market environments. The findings therefore confirm localization enhances competitive positioning by placing actors further in local socio-economic networks.

Regarding the fourth sub-question on Customization of Goods as a food sovereignty adaptation measure to help improve Market Performance, it was ascertained to be among the most effective Adaptation Measures. The result of this study shows product customization in response to local consumer demands significantly explains perceived market differentiation and local relevance. Literature aligns with this result and argues product customization, particularly together with digital feedback loops and data-driven design, enables organizations to enhance customer involvement and brand loyalty. Customization of Goods thus offers a direct path to improving Market Performance and Competitive Advantage, especially in diverse and preference-sensitive markets.

Local Procurement, the fifth and last sub question, has proven to be the least successful adaptation measure and contributes the least to Market Performance improvement. While Local Procurement aligns with customer requirements for sustainability and can establish local legitimacy, it seems also plausible Local Procurement will contribute to adding costs and reduce operating flexibility at the same time. The success of Local Procurement is therefore dependent on the reliability of local supply networks. Though Local Procurement can contribute to developing brand image and social capital, the direct contribution towards Competitive Advantage is limited.

To answer the main research question, to what extent food sovereignty Adaptation Measures improve the Market Performance of multinational food corporations, the findings from the study have indicated that several measures can enhance Market Performance when they are strategically integrated into corporate operations. Localization and customization hold the most promise, as such a strategy enhances local responsiveness, consumer alignment, and innovation without weakening corporate control. Conversely, Contract Farming and Local Procurement provide benefits in the areas of sustainability and inclusivity but rely on external actors whose priorities are not aligned with corporate objectives and hence diminish their effect

on performance. Overall, the effectiveness of these measures depends on their consistent implementation within the broader corporate structure and the extent to which they are genuinely benefiting the local stakeholders.

Thus, food sovereignty Adaptation Measures can enhance Market Performance and Competitive Advantage in multinational food corporations, yet their success is contingent upon strategic coherence, flexibility, and the extent to which they transcend symbolic sustainability commitments to achieve tangible local empowerment.

6.2 Recommendations

The findings of this study do not allow for a clearcut determination as to which measure will significantly improve performance and in which case one should be implemented. It highlights the probable requirement for situation specifics adaptations.

The findings allow nonetheless the deduction of several strategic implications enabling multinational food corporations to achieve a better understanding in regard to the mechanisms of achieving higher Market Performance through implementation of food sovereignty values. Furthermore, this addresses where further research is needed.

The findings do allow for a recommendation to multinational food corporations to prioritize Production Localization and Product Customization, as these yield the most sustainable contribution to competitiveness. Both Adaptation Measures enhance responsiveness to market fluctuations, improve consumer relevance, and solidify brand position.

At the same time, Adaptation Measures must be adopted with local caution. Multinational food corporations have diversified markets, and the effect of food sovereignty efforts varies across regulatory systems, cultures, and supply chain systems. Multinational food corporations therefore need to abandon one-size-fits-all solutions and instead create context-specific measures in accordance with local socio-economic situations and consumer behaviors.

To realize optimal long-term performance returns, food sovereignty Adaptation Measures appear to require integration at the heart of a company strategy rather than being considered outlying sustainability initiatives. This would make sustainability and profitability objectives mutually supportive. Moreover, multinational food corporations should invest in building the capacity of local suppliers and farmers to manage the operating risks of Contract Farming and Local Procurement. These efforts in capacity building have a significant potential to strengthen reliability, encourage shared value, and increase corporate legitimacy.

In measuring the success of adaptation strategy, multinational food corporations should use a combination of performance markers going beyond a financial perspective. The addition of

social, environmental, and relational indicators will allow multinational food corporations to take in the strategic value of food sovereignty measures such as financial reporting. Transparency and fair governance should also be central to prevent structural power and resource disparities, allowing for local empowerment to be genuine and lasting.

Finally, to better understand the implementation of food sovereignty policies in practice, follow-up research must adopt sectoral and qualitative approaches. Interviews, case studies, and longitudinal research would provide valuable information on how adaptation plans influence market structure and stakeholder participation in the long run. These studies would also enhance the understanding of how practices based on sustainability can be applied to both competitive and inclusive development of the world food system.

6.3 Limitations

The quality of the information gathered is an evident limitation, and response errors could be a study drawback (Tulis & Dresel, 2024). A total of 202 survey invitations were distributed, 146 via email, 56 via LinkedIn and an additional 12 surveys were completed in person over a period of three months. From these, 40 surveys were returned, resulting in an overall response rate of 18.7%. Because not all respondents provided their names, it was not always possible to verify whether the survey was completed by the intended recipient. These issues create potential for both interviewer-initiated and participant-initiated response errors. When a respondent's choice or ignorance prevents them from providing an accurate response to a question, this is known as a participant-initiated error. For instance, it is assumed managers are knowledgeable and possess the majority, if not all, of the appropriate responses to the survey questions. However, as understanding varies this may not be the case.

Although efforts were made to ensure appropriate respondent selection by making use of specific inclusion criteria matching the specifications needed for this study, survey data is self-reported and may be affected by bias or misunderstanding. It also cannot be excluded some participants were not directly involved in strategic decision-making or misrepresented their organizational role even so when their position or perceived role in the organization suggested differently.

The food industry is highly heterogeneous, encompassing sectors like beverages, meat, dairy, meat analogues, and processed foods. While this diversity allows for a broad view in this study, it also limits the ability to draw conclusions about specific subsectors. The results should be seen as providing indicative, rather than fully representative, insights.

The focus of the study is solely on host countries already implementing food sovereignty policies; therefore, applicability is limited. Consequently, results may not generalize to areas

with different political systems, regulatory frameworks, and other economic conditions. While a sample size of 40 responses is more than the minimum threshold necessary to produce approximate normality, it may still have distorted the statistical power of the test and limits generalizability of the results. The cross-sectional design further constrains an evaluation of how corporate adaptation strategies change over time, given that the data reflects only one point in the adaptation process. Moreover, several host countries might have changed their regulations during the data collection period, which could have influenced the response of participants. Such fluctuations in policy and market conditions can reduce relevance for long-term strategic projections. (Kamper, 2020).

6.4 Chapter summary

Research indicates that multinational food corporations increasingly adopt food sovereignty strategies in support of sustainability and local economic development, but unequal power dynamics constrain the potential for transformative change. Local context and the balance of power among different actors have huge implications for how effectively the strategies will work. Localization of Production and Customization of Goods are the most promising approaches, as these improve responsiveness, regulatory fit, and consumer relevance, even if this is not always at significant statistical levels. In contrast, the performance impact of Contract Farming and Local Procurement is weaker due to dependence on third-party partners and variability in local supply networks. Overall, food sovereignty strategies can enhance Competitive Advantage when they are coherently integrated into corporate strategy, applied with consistency, and genuinely supportive of local empowerment.

Based on the results, the Adaptation Measure Localization of Production and Customization of Goods are recommended to be prioritized, while showing caution when it comes to Contract Farming and Local Procurement. These approaches should be integrated into core business, with proper investment in the development and enhancement of local supplier capacity, coupled with the assessment of their performance through non-financial and financial metrics.

Potential limitations to this study include possible biases from questionnaire responses, diversity in the food industry, and consideration of host countries where food sovereignty policies are already in place. Future research should test these sector-specific and qualitative methods such as case studies, interviews, and longitudinal analysis in different regulatory and cultural contexts for an in-depth understanding of how these strategies work.

7. References

Adcock, R., & Collier, D. (2001). Measurement Validity: A Shared Standard for Qualitative and Quantitative Research. *American Political Science Review*, *95*(3), 529–546. https://doi.org/10.1017/s0003055401003100

Anh, N. H., Bokelmann, W., Thuan, N. T., Nga, D. T. & Van Minh, N. (2019). Smallholders' Preferences for Different Contract Farming Models: Empirical Evidence from Sustainable Certified Coffee Production in Vietnam. Sustainability, 11(14), 3799. https://doi.org/10.3390/su11143799

Alexander, E., Yach, D., & Mensah, G. A. (2011). Major multinational food and beverage companies and informal sector contributions to global food consumption: implications for nutrition policy. *Globalization And Health*, *7*(1). https://doi.org/10.1186/1744-8603-7-26

Alliance For Food Sovereignty Africa. (2024, 10 juni). *Case studies – Seed - AFSA*. AFSA. https://afsafrica.org/case-studies-seed/

Altieri, M. A., & Toledo, V. M. (2011). The agroecological revolution in Latin America: rescuing nature, ensuring food sovereignty and empowering peasants. The Journal Of Peasant Studies, 38(3), 587–612. https://doi.org/10.1080/03066150.2011.582947

Barney, J. (1991). Firm Resources and Sustained Competitive Advantage. Journal Of Management, 17(1), 99–120. https://doi.org/10.1177/014920639101700108

Basu, S. (2020). Spot and futures markets – Scope for integration. IIMB Management Review, 32(3), 336–345. https://doi.org/10.1016/j.iimb.2020.10.001

Bijman, J. (2008, mei). Contract Farming in Developing Countries. Wageningen University And Research. https://www.wur.nl/upload_mm/5/c/b/79333121-6f4b-4f86-9e8e-0a1782e784d6_ReviewContractFarming.pdf

Boateng, G. O., Neilands, T. B., Frongillo, E. A., Melgar-Quiñonez, H. R., & Young, S. L. (2018). Best Practices for Developing and Validating Scales for Health, Social, and Behavioral

Research: A Primer. Frontiers in Public Health, 6. https://doi.org/10.3389/fpubh.2018.00149

Bulte, E., Anissa, B. P., & Miguel, J. D. N. M. (2024). *Competition on Agricultural Markets and Quality of Smallholder Supply: The Role of Relational Contracting and Input Provision by Traders*. https://www.wur.nl/nl/show/competition-on-agricultural-markets-and-quality-of-smallholder-supply-the-role-of-relational-contracting-and-input-provision-by-traders.htm

Bushueva, A., Adeleye, T., & Roy, P. (2024). Socioeconomic and Environmental Prospects of the Food Industry. Agricultural & Rural Studies, 2(3), 0016. https://doi.org/10.59978/ar02030016

Byaruhanga, R., & Isgren, E. (2023). Rethinking the Alternatives: Food Sovereignty as a Prerequisite for Sustainable Food Security. *Food Ethics*, *8*(2). https://doi.org/10.1007/s41055-023-00126-6

Carlile, R., Kessler, M., & Garnett, T. (2021). What is food sovereignty? TABLEExplainer Series. TABLE, University of Oxford, Swedish University of Agricultural Sciences and Wageningen University & Research.

Clapp, J. (2016). Food self-sufficiency: Making sense of it, and when it makes sense. *Food Policy*, *66*, 88–96. https://doi.org/10.1016/j.foodpol.2016.12.001

Dahmiri, D., Junaidi, J., Johannes, J., Yacob, S., & Indrawijaya, S. (2024). THE IMPACT OF MARKET ORIENTATION ON MARKETING PERFORMANCE: EXPLORING THE MODERATING ROLE OF COMPETITIVE ADVANTAGE. Verslas Teorija Ir Praktika, 25(1), 164–174. https://doi.org/10.3846/btp.2024.20174

Day, G. S. (1994). The Capabilities of Market-Driven Organizations. Journal Of Marketing, 58(4), 37–52. https://doi.org/10.2307/1251915https://www.jstor.org/stable/1251915

Delice, A. (2010). *The Sampling Issues in Quantitative Research*. https://files.eric.ed.gov/fulltext/EJ919871.pdf

Dong, Y. (2023). Descriptive Statistics and Its Applications. Highlights in Science Engineering And Technology, 47, 16–23. https://doi.org/10.54097/hset.v47i.8159

Dubbert, C., & Abdulai, A. (2021). Does the Contract Type Matter? Impact of Marketing and Production Contracts on Cashew Farmers' Farm Performance in Ghana. *Journal Of Agricultural & Food Industrial Organization*, *20*(2), 119–134. https://doi.org/10.1515/jafio-2020-0040

Duncan, J., & Claeys, P. (2018). Politicizing food security governance through participation: opportunities and opposition. Food Security, 10(6), 1411–1424. https://doi.org/10.1007/s12571-018-0852-x

Eaton, C., & Shepherd, A. W. (2001). Contract farming - Partnerships for growth. https://www.fao.org/4/y0937e/y0937e03.htm Eaton, C., & Shepherd, A. W. (2001). Contract farming - Partnerships for growth. https://www.fao.org/4/y0937e/y0937e03.htm

Edelman, M., Weis, T., Baviskar, A., Borras, S. M., Holt-Giménez, E., Kandiyoti, D., & Wolford, W. (2014). Introduction: critical perspectives on food sovereignty. The Journal Of Peasant Studies, 41(6), 911–931. https://doi.org/10.1080/03066150.2014.963568

European Commission. (2022). *Farm to Fork Strategy*. Food Safety. https://food.ec.europa.eu/horizontal-topics/farm-fork-strategy_en

Farida, I., & Setiawan, D. (2022). Business Strategies and Competitive Advantage: The Role of Performance and Innovation. *Journal Of Open Innovation Technology Market And Complexity*, *8*(3), 163. https://doi.org/10.3390/joitmc8030163

Fife, S. T., & Gossner, J. D. (2024). Deductive Qualitative Analysis: Evaluating, Expanding, and Refining Theory. *International Journal Of Qualitative Methods*, *23*. https://doi.org/10.1177/16094069241244856

Food and Agriculture Organization of the United Nations. (z.d.). *Contract Farming - Partnerships for growth*. Food And Agriculture Organization Of The United Nations. https://www.fao.org/4/y0937e/y0937e03.htm

Giménez, E. H., & Shattuck, A. (2011). Food crises, food regimes and food movements: rumblings of reform or tides of transformation? The Journal Of Peasant Studies, 38(1), 109–144. https://doi.org/10.1080/03066150.2010.538578

Groenmeyer, S. (2013). The Right to Food Sovereignty for Small Scale Farmers: Case Study of Farming Cooperatives in Limpopo Province, South Africa. *International Journal Of Social Science Studies*, *1*(2). https://doi.org/10.11114/ijsss.v1i2.180

Gusenbauer, M. Search where you will find most: Comparing the disciplinary coverage of 56 bibliographic databases. Scientometrics 127, 2683–2745 (2022). https://doi.org/10.1007/s11192-022-04289-7

Hegde, V. G., Kekre, S., Rajiv, S., & Tadikamalla, P. R. (2005). Customization: Impact on Product and Process Performance. *Production And Operations Management*, *14*(4), 388–399. https://doi.org/10.1111/j.1937-5956.2005.tb00228.x

Hoang, V. (2021). Impact of Contract Farming on Farmers' Income in the Food Value Chain: A Theoretical Analysis and Empirical Study in Vietnam. Agriculture, 11(8), 797. https://doi.org/10.3390/agriculture11080797

Hui, G., Mamun, A. A., Masukujjaman, M., Makhbul, Z. K. M., & Ali, M. H. (2024). The relationship between mass customization and sustainable performance: The role of firm size and global E-commerce. *Heliyon*, *10*(6), e27726. https://doi.org/10.1016/j.heliyon.2024.e27726

Insee, K., & Suttipun, M. (2023). R&D spending, Competitive Advantage, and firm performance in Thailand. *Cogent Business & Management*, *10*(2). https://doi.org/10.1080/23311975.2023.2225831

International Finance Corporation. (2011). A guide to getting started in local procuremen. https://ppp.worldbank.org/public-private-partnership/sites/default/files/2024-08/A_Guide_to_Getting_Started_Local_Procurement_EN_2011.pdf

International movement for food sovereignty. (2021). *nyeleni newsletter*. https://nyeleni.org/DOWNLOADS/newsletters/Nyeleni_Newsletter_Num_45_EN.pdf

iPES. (2023). *The growing influence of corporations on the governance of food systems, and how to counter it*. International Panel Of Experts On Sustainable Food Systems. https://www.ipes-food.org/_img/upload/files/tippingthescales.pdf

Jin, Y. (2023). Analysis of Localization Strategy of Multinational Corporations in China. OALib, 10(02), 1–7. https://doi.org/10.4236/oalib.1109789

Johansen, K., & Winroth, M. (2003). LOCALIZATION OF MANUFACTURING – A SYSTEMATIC FRAMEWORK. https://www.diva-portal.org/smash/get/diva2:36895/FULLTEXT01.pdf

Jung, H. & Sim, S. (2015). Global Production Planning Process considering the Supply Risk of Overseas Manufacturing Sites. Mathematical Problems in Engineering, 2015, 1–13. https://doi.org/10.1155/2015/469198

Kalén, A. (2007). Definition of dominance within the meaning of Article 82 EC. https://www.diva-portal.org/smash/get/diva2:134898/fulltext01.pdf

Kamel, M. A. (2023). Big data analytics and Market Performance: the roles of customization and personalization strategies and competitive intensity. *Journal Of Enterprise Information Management*, *36*(6), 1727–1749. https://doi.org/10.1108/jeim-04-2022-0114

Kamgang, S. E., Boiral, O., Guillaumie, L. & Brotherton, M. (2023). Responsible sourcing in the food industry: a scoping review. Environment Development And Sustainability, 26(8), 19325–19349. https://doi.org/10.1007/s10668-023-03509-1

Kamper, S. J. (2020). Generalizability: Linking Evidence to Practice. *Journal Of Orthopaedic And Sports Physical Therapy*, *50*(1), 45–46. https://doi.org/10.2519/jospt.2020.0701

Keller, K. L. (1993). Conceptualizing, Measuring, and Managing Customer-Based Brand Equity. Journal Of Marketing, 57(1), 1–22. https://doi.org/10.1177/002224299305700101

Kelley, K. (2003). Good practice in the conduct and reporting of survey research. *International Journal For Quality in Health Care*, *15*(3), 261–266. https://doi.org/10.1093/intqhc/mzg031

Khalili, F., Choobchian, S., & Abbasi, E. (2024). Investigating the factors affecting farmers' intention to adopt contract farming. *Scientific Reports*, *14*(1). https://doi.org/10.1038/s41598-024-60317-x

Knott, E., Rao, A. H., Summers, K., & Teeger, C. (2022). Interviews in the social sciences. *Nature Reviews Methods Primers*, *2*(1). https://doi.org/10.1038/s43586-022-00150-6

Kotler, P., & Keller, K. L. (2016). Marketing management. Google Books. https://books.google.nl/books/about/Marketing_Management.html?id=UbfwtwEACAAJ&redir_esc=y

Kuphanga, D. (2024). *Questionnaires in Research: Their Role, Advantages, and Main Aspects*. ReseachGate. https://doi.org/10.13140/RG.2.2.15334.64325

Lederer, J. (2021). Linear regression. In Springer texts in statistics (pp. 37–79). https://doi.org/10.1007/978-3-030-73792-4_2

Lee, J., Kim, J., Kim, J. & Choi, S. (2021). Why Localization Is Necessary as a Business Strategy in Emerging Markets: The Case Comparison of Hyundai and Volkswagen. Journal Of Open Innovation Technology Market And Complexity, 7(3), 190. https://doi.org/10.3390/joitmc7030190

Liang, Y., Bi, W., & Zhang, Y. (2023). Can Contract Farming improve farmers' technical efficiency and income? Evidence from beef cattle farmers in China. *Frontiers in Sustainable Food Systems*, *7*. https://doi.org/10.3389/fsufs.2023.1179423

Longwell, G. J. (1994). Managing Brand Equity: Capitalizing on the value of a brand name: David A. Aaker, The Free Press, New York (1991). https://www.semanticscholar.org/paper/Managing-brand-equity%3A-Capitalizing-on-the-value-of-Longwell/e04692fb98caf71988e029616e0a7e04c47235be

Lowder, S. K., Skoet, J., & Raney, T. (2016). The Number, Size, and Distribution of Farms, Smallholder Farms, and Family Farms Worldwide. *World Development*, *87*, 16–29. https://doi.org/10.1016/j.worlddev.2015.10.041

Mariadoss, B. J. (z.d.). *6.1 Measuring Market Attractiveness – Core Principles of International Marketing*. https://opentext.wsu.edu/cpim/chapter/6-1-measuring-market-attractiveness/

Maritan, C. A., & Peteraf, M. (2018). Competitive Advantage. In *Palgrave Macmillan UK eBooks* (pp. 298–300). https://doi.org/10.1057/978-1-137-00772-8_465

McMaster, M., Nettleton, C., Tom, C., Xu, B., Cao, C. & Qiao, P. (2020). Risk Management: Rethinking Fashion Supply Chain Management for Multinational Corporations in Light of the COVID-19 Outbreak. Journal Of Risk And Financial Management, 13(8), 173. https://doi.org/10.3390/jrfm13080173

McMichael, P. (2009). A food regime genealogy. The Journal Of Peasant Studies, 36(1), 139–169. https://doi.org/10.1080/03066150902820354

Meemken, E. & Bellemare, M. F. (2019). Smallholder farmers and contract farming in developing countries. Proceedings Of The National Academy Of Sciences, 117(1), 259–264. https://doi.org/10.1073/pnas.1909501116

Melitz, M. J., & Ottaviano, G. I. P. (2008). Market Size, Trade, and Productivity. *The Review Of Economic Studies*, *75*(1), 295–316. https://doi.org/10.1111/j.1467-937x.2007.00463.x

Mercado, G., & Hjortsø, C. N. (2023). Explaining the development policy implementation gap: A case of a failed food sovereignty policy in Bolivia. *World Development*, *166*, 106216. https://doi.org/10.1016/j.worlddev.2023.106216

Meshesha, J. G. (2011). Impact of contract farming on household income of smallholder farmers: The case of organic honey production in South West Ethiopia, Sheka Zone. Wageningen University And Research. https://edepot.wur.nl/193737

Mills, E. (2017). Global Kerosene Subsidies: An Obstacle to Energy Efficiency and Development. *World Development*, *99*, 463–480. https://doi.org/10.1016/j.worlddev.2017.05.036

Minot, N., & Ronchi, L. (2014). *Risks and Benefits of Partnership between Farmers and Firms*. https://documents1.worldbank.org/curated/pt/340251467998214789/pdf/102736-BRI-VP-344-Contract-Farming-Box394838B-PUBLIC.pdf

Ncsc. (2022, 17 oktober). *Purposive and Convenience Sampling*. NCSC. https://www.ncsc.org/consulting-and-research/areas-of-expertise/communications,-civics-and-disinformation/community-engagement/toolkit/purposive-and-convenience-sampling

Oxford University Press. (2009). A Dictionary of Business and Management (5 ed.). https://www.oxfordreference.com/display/10.1093/acref/9780199234899.001.0001/acref-9780199234899

Patel, R. (2009). Food sovereignty. The Journal Of Peasant Studies, 36(3), 663–706. https://doi.org/10.1080/03066150903143079

Persson, M., & Lantz, B. (2022). Effects of customization and product modularization on financial performance. *Journal Of Engineering And Technology Management*, *65*, 101704. https://doi.org/10.1016/j.jengtecman.2022.101704

Pham-Gia, T. & Choulakian, V. (2014). Distribution of the Sample Correlation Matrix and Applications. Open Journal Of Statistics, 04(05), 330–344. https://doi.org/10.4236/ojs.2014.45033

Porter, M. E. (1985). The Competitive Advantage: Creating and Sustaining Superior Performance - Book - Faculty & Research - Harvard Business School. https://www.hbs.edu/faculty/Pages/item.aspx?num=193

Rana, J., Gutierrez, P. L., & Oldroyd, J. C. (2021). Quantitative methods. In *Springer eBooks* (pp. 1–6). https://doi.org/10.1007/978-3-319-31816-5_460-1

Rivera, I., De León, D. D., & Del Rosario Pérez-Salazar, M. (2024). Drivers of the food system based on food sovereignty domains: an integrative systematic literature review. Frontiers in Sustainable Food Systems, 8. https://doi.org/10.3389/fsufs.2024.1450321

Rosset, P. (2008). Food Sovereignty and the Contemporary Food Crisis. Development, 51(4), 460–463. https://doi.org/10.1057/dev.2008.48

Russo, G. M., Tomei, P. A., Serra, B., & Mello, S. (2021). Differences in the Use of 5- or 7-point Likert Scale: An Application in Food Safety Culture. Organizational Cultures An International Journal, 21(2), 1–17. https://doi.org/10.18848/2327-8013/cgp/v21i02/1-17

Sampson, D., Cely-Santos, M., Gemmill-Herren, B., Babin, N., Bernhart, A., Kerr, R. B., Blesh, J., Bowness, E., Feldman, M., Gonçalves, A. L., James, D., Kerssen, T., Klassen, S., Wezel, A., & Wittman, H. (2021). Food Sovereignty and Rights-Based Approaches Strengthen Food Security and Nutrition Across the Globe: A Systematic Review. *Frontiers in Sustainable Food Systems*, *5*. https://doi.org/10.3389/fsufs.2021.686492

Saputra, A. M., Ilmi, D. A., Angelina, W., Gadzali, S. S., & Ausat, A. M. A. (2023, 22 februari). *PT Pos Indonesia Public Service Innovation in Maintaining Existence and Competitiveness in the Industrial Era 4.0 (Case Study of PT Pos Indonesia KC Subang)*. https://jonedu.org/index.php/joe/article/view/1926

Saqib, N. (2020). Positioning – a literature review. *PSU Research Review*, *5*(2), 141–169. https://doi.org/10.1108/prr-06-2019-0016

Schneider, A., Hommel, G., & Blettner, M. (2010). Linear Regression analysis. Deutsches Ärzteblatt International. https://doi.org/10.3238/arztebl.2010.0776

Silva, A., Barrera, A., Ribera, L., & Del Valle, M. (2024). Food sovereignty, food security, and international trade: evidence from Chile. Frontiers in Sustainable Food Systems, 8. https://doi.org/10.3389/fsufs.2024.1388498

Singh, S., & Conway, G. (2021). *Food Sovereignty in Practice: Developing Climate Resilient Food Systems Briefing Paper 5*. Imperial College London.

https://www.imperial.ac.uk/media/imperial-college/faculty-of-natural-sciences/centre-for-environmental-policy/protective-foods-that-protect-the-planet/public/Food-Sovereignty-in-Practice-Developing-Climate-Resilient-Food-Systems.pdf

Smith, A. F. (2012). The Oxford Encyclopedia of Food and Drink in America. In *Oxford University Press eBooks*. https://doi.org/10.1093/acref/9780199734962.001.0001

Smith, P. B. (2014). Response Bias(es). In *Springer eBooks* (pp. 5539–5540). https://doi.org/10.1007/978-94-007-0753-5_2503

Sullivan, G. M., & Artino, A. R. (2013). Analyzing and Interpreting Data From Likert-Type Scales. *Journal Of Graduate Medical Education*, *5*(4), 541–542. https://doi.org/10.4300/jgme-5-4-18

Tessarolo, G. L., Azolin, L. G., & Louzada, L. C. (2023). The Effect of the Positioning Strategy on the Firms' Performance Moderated by the Product Market Competition. BAR - Brazilian Administration Review, 20(4). https://doi.org/10.1590/1807-7692bar2023210124

Transnational Institute. (2018). *Public Policies for Food Sovereignty*. https://www.tni.org/files/publication-downloads/web_public_pol_food_sov.pdf

Tulis, M., & Dresel, M. (2024). Effects on and consequences of responses to errors: Results from two experimental studies. *British Journal Of Educational Psychology*. https://doi.org/10.1111/bjep.12686

Vasileiou, K., Barnett, J., Thorpe, S., & Young, T. (2018). Characterising and justifying sample size sufficiency in interview-based studies: systematic analysis of qualitative health research over a 15-year period. *BMC Medical Research Methodology*, *18*(1). https://doi.org/10.1186/s12874-018-0594-7

Vicol, M., Fold, N., Hambloch, C., Narayanan, S., & Niño, H. P. (2021). Twenty-five years ofLiving Under Contract: Contract Farming and agrarian change in the developing world. *Journal Of Agrarian Change*, *22*(1), 3–18. https://doi.org/10.1111/joac.12471

Wageningen University and Research. (z.d.). *Food systems*. WUR. https://www.wur.nl/en/research-results/themes/from-hunger-to-food-security/food-systems.htm

Wagh, S. (2024). *Research Guides: Public Health Research Guide: Primary & Secondary Data Definitions*. https://researchguides.ben.edu/c.php?g=282050&p=4036581

Wang, X., & Cheng, Z. (2020). Cross-Sectional studies. *CHEST Journal*, *158*(1), S65–S71. https://doi.org/10.1016/j.chest.2020.03.012

Weiler, A. M., Hergesheimer, C., Brisbois, B., Wittman, H., Yassi, A., & Spiegel, J. M. (2014). Food sovereignty, food security and health equity: a meta-narrative mapping exercise. *Health Policy And Planning*, *30*(8), 1078–1092. https://doi.org/10.1093/heapol/czu109

Wittman, H. (2011). Food Sovereignty: a new rights framework for food and nature? *Environment And Society*, *2*(1). https://doi.org/10.3167/ares.2011.020106

Wright, K. B. (2006). Researching Internet-Based Populations: Advantages and Disadvantages of Online Survey Research, Online Questionnaire Authoring Software Packages, and Web Survey Services. *Journal Of Computer-Mediated Communication*, *10*(3), 00. https://doi.org/10.1111/j.1083-6101.2005.tb00259.x

Yang, L., Dong, J. & Yang, W. (2024). Analysis of Regional Competitiveness of China's Cross-Border E-Commerce. Sustainability, 16(3), 1007. https://doi.org/10.3390/su16031007

Yuan, M., Hu, H., Xue, M., & Li, J. (2024). Framework for resilience strategies in agricultural supply chain: assessment in the era of climate change. Frontiers in Sustainable Food Systems, 8. https://doi.org/10.3389/fsufs.2024.1444910

Appendix

Table 7 Realized timeline

Activity	**Planned Timeline**	**Actual Completion**
Literature Review	Sep – Oct 24	Oct-25
Research Design & Proposal	Oct – Nov 24	Feb-25
Survey/Questionnaire Development	Dec 24- Jan 25	Jan-25
Data Collection	Jan – Feb 25	Mar - May 2025
Data Analysis	Jan – Feb 25	Jun-25
Writing Results Chapter	Feb-25	Jun-25
Writing Discussion & Conclusion	Feb-25	Jun – Jul 25
Final Review & Submission	Mar-25	Dec-25