# Feasibility of a purchasing cooperative for rural grocery stores: The case of Rural Access Distribution Cooperative North Dakota & exploring purchasing cooperative model for rural grocers in Southeast Kansas.

by

Adetola Emmanuel Lamidi

B.Tech., Federal University of Technology Akure (FUTA), 2018

A THESIS

Submitted in partial fulfillment of the requirements for the degree

MASTER OF SCIENCE

Department of Agricultural Economics

College of Agriculture

KANSAS STATE UNIVERSITY
Manhattan, Kansas

2024

Approved by:

Major Professor
Dr. Brian Briggeman

## Abstract

This thesis examines the feasibility and potential of establishing a shared service cooperative among rural grocers in Southeast Kansas, inspired by the success of the Rural Access Distribution (RAD) Cooperative in Walsh County, North Dakota. The study meticulously investigates the economic viability, operational challenges, and benefits of adopting a cooperative model to address the pressing issues of food distribution and access in rural areas. Through a detailed analysis encompassing dairy, produce, and alcohol categories across three grocery stores in Southeast Kansas, the research provides critical insights into the pricing disparities, procurement inefficiencies, and the minimal purchasing volumes that significantly impact these stores' ability to achieve economies of scale and operational sustainability.

Despite the theoretical appeal of purchasing cooperatives in reducing costs and enhancing product diversity, the study concludes that the current circumstances and purchasing dynamics in Southeast Kansas do not support the practical or economic viability of such a model. The projected cost savings are modest at best, and significant challenges, including supplier pricing and the need for increased purchasing volumes, hinder the feasibility of establishing a purchasing cooperative under present conditions.

However, the thesis goes beyond its primary investigation to offer broader implications for rural grocery stores considering cooperative models. It underscores the importance of scale, volume, selective benefits, learning from successful initiatives, strategic considerations, and adaptation to evolving retail landscapes. By detailing the comprehensive process involved—from initial exploration to operational commencement—the study serves as a strategic framework for other stores contemplating similar cooperative endeavors.

In synthesizing these findings, the research contributes a nuanced perspective on the potential and limitations of shared service cooperatives in rural grocery distribution. It underscores the need for detailed analysis, realistic assessment, and strategic planning in the decision-making process, offering valuable lessons for stakeholders in Southeast Kansas and beyond interested in exploring cooperative models as a strategy for ensuring sustainable food access and economic resilience in rural communities.

## Table of Contents

## List of figures

## List of Tables

## Acknowledgments

I stand at the culmination of this journey with a heart brimming with gratitude, acknowledging the many influences that have shepherded me to this point of accomplishment. First and foremost, I am profoundly thankful to God for the countless blessings and opportunities bestowed upon me, without which this thesis would not have been possible.

To my beloved mother, whose unwavering support and enduring love have been the bedrock of my life, I owe an eternal debt of gratitude. Your sacrifices and belief in me have been the guiding light through the most challenging moments of this endeavor.

My siblings, your constant encouragement and our joy have been a source of immeasurable strength. You have celebrated every small victory and have been there through every setback, reminding me of the importance of perseverance.

The adage that 'friends are the family we choose' has never resonated more with me than during my time in the USA. I am immensely grateful to those special friends who became family and have enriched my life with laughter, support, and moments of solace. Your presence has transformed this academic pursuit into a cherished life experience.

I extend my most profound appreciation to my advisor, Dr. Brian Briggeman, whose expertise and insightful guidance have been pivotal in shaping this research's direction and outcome. Your unwavering patience and academic rigor have been instrumental in bringing this work to fruition.

To my esteemed committee members, Dr. Aaron Johnson, and Dr. Logan Britton, thank you for your invaluable feedback and critical insights and for challenging me to push the boundaries of my research. Your collective wisdom has not only refined my work but also contributed significantly to my personal and professional growth.

A special note of thanks goes to the K-State Rural Grocery Initiative team, Erica and Rial, for their collaboration and enthusiasm. Your passion for community empowerment and sustainable solutions in rural grocery contexts has been inspiring and infectious.

This thesis is not just a reflection of my efforts, but a tapestry woven with the contributions of each one of you. I am honored to share this achievement with all of you, and I look forward to carrying the lessons learned here into future endeavors.

Thank you.

## Chapter 1: Introduction

### 1.1 Background on the study

Accessing affordable and nutritious food in rural areas of the United States is a challenge, exacerbated by geographic isolation, low population density, and inadequate infrastructure. These factors complicate food distribution, a concern identified by the USDA in 2009. To address this issue, the concept of Shared Service Cooperatives has been proposed as a strategic innovation. Defined by the USDA in 1995, these cooperatives are partnerships between private businesses or public entities, forming a cooperative corporation to enhance the competitiveness of their operations through shared services. By strategically amalgamating resources, distribution networks, and collective buying power, Shared Service Cooperatives among rural grocers offer a promising solution. This model aims to transform the accessibility and sustainability of food distribution in rural areas. Highlighted by Valentinov in 2007, the approach not only tackles the existing challenges but also has the potential to revolutionize the rural food landscape, ensuring that residents have better access to affordable and nutritious food.

A shared-services cooperative is defined as a group of private businesses or public entities that form a cooperative corporation to provide one or more services that enhance or increase the competitiveness of their operations. The role of these cooperatives is to provide services in response to the specific needs of member-owners (Crooks et al., 1995). In these contexts, it is designed to address rural grocers' unique obstacles, such as disproportionately high operational costs and limited access to a diverse range of suppliers. By leveraging the collective capacity of these cooperatives, members can significantly reduce expenses, enhance product diversity, and ensure the delivery of fresher food to remote locations, thereby directly confronting the logistical

complexities imposed by geographic isolation and infrastructural inadequacies prevalent in rural areas (Skerratt, 2013; Crooks, 1995).

The significance of cooperative endeavors in sustaining rural grocery stores is evident through the success of various initiatives across different regions. Fearne (2021) highlighted that supply chain collaboration efforts have enhanced operational efficiency, promoted sustainability, and empowered rural communities. Within this context, the Rural Grocery Initiative at Kansas State University Research and Extension emerges as a pivotal program to preserve the local ownership of rural grocery stores in Kansas. This initiative is driven by the urgent need to address the closure of these stores in Kansas, a trend exacerbated by economic difficulties and competitive pressures by the large chain stores. Such closures significantly threaten rural communities' social and economic fabric by reducing access to fresh food and diminishing local engagement.

To counter these challenges, the Rural Grocery Initiative strengthens community well-being and improves access to nutritious foods. It accomplishes this by identifying, developing, and sharing resources supporting rural grocers and their communities. The initiative underscores the importance of these establishments by emphasizing the essential role of rural grocery stores beyond mere shopping venues to their status as critical centers for economic and social interaction. They are crucial for ensuring access to healthy foods and maintaining the vibrancy of rural communities.

The significance of rural grocers extends beyond the immediate provision of food; they play a fundamental role in supporting the nutritional well-being and overall health of rural populations. Research conducted by the United States Departments of Agriculture and Economic Research Service (ERS) in 2010 has highlighted the essential function these establishments fulfill in offering accessible, nutritious, and affordable food options, contributing significantly to the

health outcomes of rural communities. Enhancing the operational capabilities of rural grocers through shared service models results in a tangible improvement in the resilience and efficiency of food distribution networks, thus reinforcing the sustainability of rural food ecosystems (USDA, 2009).

Within this context, this study investigates the feasibility and potential impact of establishing a shared service cooperative in Southeast Kansas to alleviate the pervasive food distribution challenges the region faces. Drawing on the precedents set by successful models, such as the Rural Access Distribution (RAD) cooperative initiative by the North Dakota Association of Rural Electric Cooperatives, the present research seeks to ascertain the viability of replicating similar successes in other rural areas. The RAD model has significantly improved its grocery store members' profitability and breadth of product offerings through innovative strategies in cooperative buying, online retailing, and distribution (Simmons, 2023).

This research aims to provide a detailed, actionable framework for implementing shared service cooperatives that could enhance food security, the economic resilience of these stores, and community well-being in rural areas. By leveraging the lessons learned from existing cooperative initiatives and adapting them to the unique needs and challenges of grocers in Southeast Kansas, this study aims to contribute a comprehensive strategy for revitalizing rural grocery stores, thus ensuring the sustainable development of rural communities.

## 1.1 Tackling the Crisis: Revitalizing Rural Grocery Stores to Sustain Community Health and Food Accessibility

The steady decrease in rural populations across the United States has precipitated a significant and complex issue that cuts to the core of rural community life: the ongoing closure of local grocery stores. This worrying trend not only signals the loss of crucial commercial centers but also erects formidable barriers to accessing essential, nutritious foods, thereby deepening the food insecurity crisis among rural dwellers. The USDA's 2019 report by Alana Rhone highlights that an alarming figure of 19 million Americans, constituting 6.1% of the nation's population, reside in low-income zones where the nearest grocery outlet is over 10 miles away. This situation transcends mere inconvenience, emerging as a grave public health concern, particularly in rural areas that account for 63% of the country's counties and, distressingly, 87% of those experiencing the highest food insecurity levels (Gunderson C., 2020).

The disparity in food security between rural and urban areas is both significant and alarming. Coleman-Jensen's 2017 report on Household Food Security in the United States reveals a stark contrast: a food insecurity rate of 13.3% in rural areas compared to 11.5% in urban centers. This difference highlights a crucial issue facing rural communities—economic and social challenges arising from the loss of grocery stores. These essential outlets are disappearing due to declining populations and economic hardships, leaving a gap affecting access to healthy food, community cohesion, and economic resilience. The vanishing of grocery stores not only underscores the struggle of rural areas to secure healthy food but also signifies a broader impact on these communities' health, welfare, and unity.

Addressing this issue requires a nuanced, comprehensive strategy that delves into this trend's root causes and broader implications. There is a pressing need for specific interventions to

support the sustainability of rural grocery stores, thereby boosting food accessibility and security. The demographic makeup of rural populations, notably featuring a substantial proportion of individuals over 70, highlights the acute necessity for readily accessible local grocery outlets and transportation to these critical amenities (Morton et al., 2007). Moreover, with 803 counties identified as having "low access" — where over half the populace lives more than ten miles from a full-service grocery — nearly 20% of rural households face increased obesity rates and related health issues (Morton et al., 2007).

Kansas has witnessed a sharp decline in its rural grocery infrastructure, with 82 stores in communities of fewer than 2,500 people shutting down since 2007. It represents nearly a fifth of rural grocery stores going out of business since 2006, leading to a 38% closure rate among 213 grocery stores in smaller Kansas towns from 2006 to 2009 (Procter, 2008); (Impact Lab, 2010). Iowa's grocery retail landscape has also transformed drastically from 1995 to 2005, seeing the number of grocery stores with employees halve from around 1,400 to just over 700, while the presence of large chain retail stores like Wal-Mart and Target increased by 175 percent (O'Brien, M. 2008).

The closure of rural grocery stores is a visible sign of the deeper issues they face, as identified by (Clark et al., 2008). Rising operational costs, labor shortages, intense competition from large retail chains, and strict minimum purchase requirements from suppliers collectively contribute to rural grocers' challenges. Specifically, the higher transportation and distribution expenses inherent to rural locations significantly inflate operational costs. This situation is exacerbated by labor shortages, which force rural grocers to offer higher wages to attract and retain employees, further narrowing their profit margins. Additionally, the competition from large retail chains, which benefit from economies of scale, puts rural stores at a severe disadvantage. These

chains can offer lower prices and a more comprehensive selection of goods, making it challenging for rural grocers to compete. The culmination of these factors results in higher prices and a reduced selection of goods in rural stores, leading to their gradual decline and closure. This trend impacts the economic viability of these stores and restricts access to fresh and affordable food for rural communities, deepening the divide between rural and urban food accessibility.

Adopting a holistic approach tailored to the specific needs of rural communities is crucial to surmount these challenges. Shared service cooperatives represent a promising solution by offering a collective model to access goods and services for grocers, thus bolstering the health and vitality of these communities. Rural grocery stores can maintain competitiveness by establishing cooperative purchasing agreements, optimizing logistics, and negotiating favorable terms between local grocers and suppliers. It ensures that a wide range of affordable, nutritious food options are available, tackling the underlying food insecurity issues in rural America head-on.

## 1.3 Research Question

The questions to be addressed in this study are: -

1. What benefits does a shared service cooperative model offer to grocers and the broader community in improving food access?
2. What are rural grocers' perceptions of the shared service cooperative model, and what factors determine their readiness to engage in it?
3. Which critical factors influence the success or failure of shared service cooperatives in rural settings?

## 1.4 Research Objectives

1. Examine the advantages of employing a shared service cooperative model for rural grocers and their communities, focusing on its impact on enhancing food access and affordability.
2. Investigate rural grocers' attitudes towards shared service cooperatives, identifying key motivators and barriers that affect their decision to participate in such a model.
3. Assess the crucial elements contributing to the effectiveness of shared service cooperatives.

## 1.5 Motivation for this research

This research project delves into the critical need and feasibility for implementing a shared service cooperative among rural grocers in Southeast Kansas, a strategic initiative to address the profound food distribution challenges that plague this region and beyond. Rural grocery stores are cornerstone institutions within their communities, providing much more than just a place to purchase groceries. They offer crucial employment opportunities, contribute significantly to the local tax base, and play a pivotal role in enhancing the quality of life for rural residents. Beyond their economic impact, these stores serve as vital community hubs, fostering social connections and offering a more comprehensive selection of healthier food options at more competitive prices than in discount or convenience stores.

The alarming trend highlighted by the K-State Rural Grocery Initiative, which documented the closure of 105 rural grocery stores across Kansas between 2008 and 2018—with no replacements in half of these locales—illustrates a dire challenge. This disturbing pattern signals a looming health crisis due to reduced access to nutritious food and poses a significant threat to these rural communities' social cohesion and economic viability. The disappearance of these vital

businesses is intricately linked to escalating food insecurity and deteriorating health conditions, demanding targeted interventions to reverse these negative cycles and support the infrastructure of rural grocery stores, ensuring the sustainability of the communities that rely on them (Clark et al., 2008).

In confronting these issues, the proposition of a shared services cooperative model stands out as a viable and innovative solution tailored to the unique challenges of rural food distribution in Southeast Kansas. This model proposes a collaborative approach to centralizing distribution, pooling resources and expertise, and achieving economies of scale, thereby enhancing the affordability and accessibility of food. Such a cooperative framework aims not only to alleviate operational pressures on rural grocers but also to ensure a consistent supply of nutritious food options, thereby bolstering the health and resilience of rural communities.

This research will employ comprehensive case studies and detailed surveys to determine the feasibility of the shared services cooperative model for interested grocers. Through this analysis, the project intends to substantiate the pressing need for such innovative strategies to overcome the challenges of rural food distribution, with broader implications for economic development, health outcomes, and social cohesion in rural settings. By offering a detailed exploration and evidence-based justification, this study aims to provide a cogent and actionable framework for revitalizing the rural grocery sector in Southeast Kansas, thus ensuring sustainable food access and supporting the continued vitality of these essential community anchors.

This thesis is structured to provide an in-depth analysis of rural grocery stores' challenges and the quest for food accessibility in these areas. Initially, we will delve into a literature review, summarizing existing research and debates on the difficulties rural grocery stores encounter and potential solutions to these issues. Following the literature review, the thesis will introduce a case

study on a Rural Access Distribution (RAD) cooperative. This section investigates a successful cooperative model for grocery access in rural settings. The research is inspired by this cooperative model's success, aiming to evaluate its effectiveness and potential replication in other rural regions across America.

The subsequent part of the thesis will cover a feasibility survey conducted among interested grocery stores in Kansas. This survey is designed to gauge the level of interest and the viability of implementing a shared service cooperative to tackle food distribution challenges and assess possible cost benefits for local grocers. This analysis is pivotal in demonstrating the practicality of shared service cooperatives to support rural grocery stores, thereby enhancing food accessibility, and determining the feasibility of such a model.

## Chapter II: Review of the Literature

### 2.1 Understanding Food Distribution Challenges in Rural America

The distribution of food in rural America presents a complex set of challenges that affect the economic viability of rural grocery stores and the accessibility of food for local communities. Recent research highlights the multifaceted nature of these challenges, encompassing operational difficulties, logistical constraints, limited supplier networks, and competitive pressures from larger retail entities and e-commerce platforms.

Operational costs for rural grocery stores are notably high, a direct consequence of the extensive distances that food distribution networks must cover, leading to elevated transportation and delivery expenses (Dimitri et al., 2005). These stores' smaller scale and reduced volume of sales further exacerbate the issue, as they cannot leverage the same economies of scale that benefit urban stores. This results in higher prices for rural customers and a competitive disadvantage against larger retail chains.

Access to suppliers represents another critical hurdle. Rural grocery stores are often disadvantaged, as suppliers prioritize larger, more consistent orders from urban centers, leaving rural areas with fewer options and higher costs. This lack of access to a diverse supplier network restricts product variety and can hinder rural stores' ability to compete effectively (Martinez et al., 2010).

Rural areas' geographical and demographic characteristics introduce additional logistical challenges, such as increased costs and less frequent deliveries, due to lower population density and greater distances between locations (Smith & Sparks, 2004). These factors necessitate smaller,

more frequent deliveries for rural stores, a demand that could be more attractive to large suppliers, leading to consistent stock levels and a reduced ability to offer a wide range of fresh products.

The emergence of large retail chains and online shopping options has further complicated the competitive dynamics in rural areas. With their sophisticated distribution networks and substantial buying power, these entities can provide a more comprehensive selection of goods at lower prices, posing a significant threat to the survival of rural grocery stores. The resulting closures impact local economies, weaken community ties, and contribute to the overall decline of rural regions (Russo et al., 2022; Lauchlan & Schrader, 2009).

Interestingly, recent findings by Chenarides et al. (2023) suggest that the rise of dollar stores, while intensifying competition, unequivocally worsens the situation for rural grocers. Although they pose a threat to smaller stores, potentially leading to their closures, supermarkets, and larger stores might indirectly benefit from the competitive realignment prompted by dollar stores' expansion. This nuanced perspective highlights the need for strategic responses that address the unique challenges facing rural food distribution and retailing.

This intricate understanding highlights the necessity for a comprehensive strategy to tackle the food distribution challenges in rural America. It is crucial to recognize the changing retail environment and its implications on food access and community well-being. In facing these multifaceted challenges, an emphasis on cooperative models emerges as a promising solution. Cooperatives can play a pivotal role in enhancing food accessibility and affordability by leveraging collective buying power to mitigate high operational costs, overcome logistical obstacles, and navigate the competitive pressures from larger retail entities and online platforms.

By uniting the efforts of rural grocery stores through cooperatives, these businesses can achieve economies of scale that lower prices and expand product variety, directly addressing issues of limited supplier access and financial constraints. Moreover, cooperatives can streamline distribution processes, making the delivery of goods more efficient and consistent, which is vital for maintaining a steady supply of fresh and nutritious food options.

Embracing cooperative models is a step towards securing a future where rural communities have equitable access to the resources needed for their sustenance and prosperity. This commitment to addressing the comprehensive challenges through cooperative efforts underscores the potential to transform food distribution in rural America, ensuring that all individuals can access affordable and nutritious food regardless of their geographical location.

## 2.2 Rural Grocery Stores: Challenges and the Cooperative Advantage

Small, independent grocery stores are vital to rural America, acting as critical businesses and pillars of the community. However, they face significant hurdles. Their relatively small scale limits their ability to secure favorable deals with suppliers, often leading to increased costs for essential items. They also compete with competition from larger national chains, which can afford to offer lower prices and a more comprehensive selection, further tightening rural grocers' margins. Moreover, meeting the minimum purchase requirements set by wholesalers can take time and effort, as these quantities often surpass what small stores can realistically sell, affecting their product range and elevating the cost per item. This scenario underscores rural grocery stores' complex environment (S.C. Center for Cooperative and Enterprise Development, n.d.).

These challenges contribute to the alarming rise of "food deserts," defined as areas where residents lack access to affordable, healthy food options. A staggering 6,500 food deserts exist

across the United States, disproportionately impacting rural communities and posing a significant threat to their health and well-being. (Feeding America, n.d.)

Historically, the cooperative movement has shown promise in addressing similar challenges by promoting rural empowerment. In the late 19th century, to combat monopolistic practices, farmers banded together to form agricultural cooperatives; these cooperatives were successful in securing better market conditions and negotiating prices for supplies, drawing on the strength of collective action. (Peters, 1963), This success established legal frameworks like the Capper-Volstead Act of 1922 and Section 6 of the Clayton Act of 1914. These laws provided agricultural cooperatives with limited antitrust immunity, promoting their growth and enabling farmers to work together more effectively. This framework has empowered farmers historically and presents a viable pathway for rural grocery stores today to navigate their challenges by leveraging the cooperative model.

Similarly, the Rural Electrification Act (REA) of 1936 is a historic testament to the power of cooperative efforts in transforming rural infrastructure. By facilitating federal loans to develop electrical distribution systems, the REA catalyzed a dramatic shift, illuminating rural America by increasing the electrification rate of U.S. farms from a mere 10% in 1935 to approximately 80% by 1950 (McBride, 2016). This monumental change underscored the potential for cooperatives to significantly impact infrastructure development and enhance the quality of life in rural communities.

Building on this foundation, agricultural cooperatives have evolved into pivotal elements of sustainable development within these communities. By promoting collaboration and shared resources, these cooperatives have made strides in economic sustainability, social equity, and environmental stewardship. Their collective efforts and community-focused ethos highlight the

transformative impact that cooperatives can have on various sustainability facets. (Isabel et al., 2023).

At their essence, cooperatives operate on a model that diverges from traditional business paradigms. Governed by the principle of meeting member needs over profit maximization, cooperatives are owned and managed by their members, according to the International Cooperative Alliance (ICA). This structure fosters several key advantages crucial for the success and sustainability of rural grocery stores:

1. Collective Bargaining Power: By pooling their resources, member grocers can negotiate better terms with suppliers, reducing costs and providing access to a broader range of products (Steven et al., 2009). This collaborative power can reduce costs, access a broader array of products, and sometimes exclusive rights to sell certain items, making it a vital tool for securing competitive advantages.
2. Resources and Services: By leveraging a cooperative model, members gain access to marketing, training, and technical support services that would be otherwise unattainable individually. Resource-sharing promotes economies of scale, effectively lowering operational costs for all involved (Schaars et al., 1971).
3. Enhanced Market Access: Through aggregating products and optimizing distribution channels, cooperatives offer their members avenues to broader markets. This collective approach to branding and marketing opens opportunities for local, regional, and international exposure, expanding the market reach beyond local confines (NCBA CLUSA, n.d.).

Rural grocery stores, crucial to their communities, are confronting significant hurdles, including stiff competition from dollar stores and a pressing need to forge stronger connections with the local food system. The 2020 Minnesota Rural Grocery Survey Report highlights these

issues, revealing that 88% of grocery store operators are worried about their long-term economic viability, while nearly half fear closure within five years. This concern is primarily driven by high operating costs and competitive pressures from dollar stores, a trend that has intensified over the last five years (Olive et al., 2020). In response to these challenges, one promising approach is the establishment of purchasing cooperatives among rural grocers. These cooperatives consolidate buying power, allowing member stores to secure more favorable prices and terms from suppliers, expand their product offerings, and potentially obtain exclusive selling rights for specific products in their regions. This strategy not only enhances the competitiveness of rural grocery stores but also supports their sustainability and growth.

The benefits of purchasing cooperatives extend beyond mere cost savings. They also streamline logistics and distribution, pivotal for rural stores often separated by considerable distances. This efficiency can reduce transportation costs and the environmental footprint, ensuring the prompt delivery of fresh goods (K-State et al. Initiative). Additionally, cooperatives can increase the diversity of products available in rural areas, including organic and locally sourced options, thereby attracting a broader customer base (University of Wisconsin Center for Cooperatives). Moreover, these cooperatives enhance community development and social capital, promoting a culture of mutual support and shared ownership among member stores. This strengthens the resilience and sustainability of rural communities (Wilson et al., 2011).

The cooperative model offers a powerful tool for rural grocers to overcome challenges and ensure long-term viability. By leveraging the collective strength of member stores, purchasing cooperatives can enhance economic sustainability and contribute to rural communities' social fabric and well-being. In a world increasingly dominated by large corporations, cooperatives offer a unique economic development model rooted in democracy, participation, and social

responsibility, as championed by Vandana Shiva, an advocate for environmental and social issues (Braker, 2009).

## 2.3 Enhancing Rural Food Distribution through Cooperative Principles

In addressing the pressing challenges of food distribution among rural grocers, the cooperative model emerges as a particularly viable solution, deeply rooted in principles and values that blend social, political, and economic considerations into a coherent framework. This model, with its origins, traced back to the establishment of the first modern cooperative in Rochdale, England, in 1844, is built upon the pillars of self-help, self-responsibility, democracy, equality, equity, solidarity, and ethical principles such as honesty, openness, social responsibility, and caring (ICA, 1995). These core values ensure that cooperatives operate in a manner that is inclusive, democratic, and oriented towards community welfare, making them uniquely positioned to address the needs and feasibility of a shared service cooperative among rural grocers to alleviate food distribution challenges.

1. Voluntary and Open Membership is foundational, ensuring that any rural grocer willing to participate can do so without facing discrimination. This principle is crucial for building an inclusive network of rural grocers, thereby pooling resources and knowledge to overcome the geographical and logistical barriers often hindering efficient food distribution in rural areas.
2. Democratic Member Governance ensures that all members have an equal say in the cooperative's decisions. Such a governance structure is vital for aligning the cooperative's strategies with the diverse needs of its member grocers, ensuring that decisions reflect a collective agreement that benefits all parties involved. This democratic ethos fosters a sense of

ownership and accountability among members, instrumental in the cooperative's success and resilience.

3. Member Economic Participation involves members contributing to and democratically controlling the cooperative's capital. This principle not only bolsters the cooperative's financial health but also ensures that profits and surpluses are reinvested for the collective benefit of members or to support other community-oriented initiatives. Such economic participation encourages sustainability and autonomy, enabling the cooperative to devise innovative solutions to distribution challenges that are both effective and financially viable.
4. Autonomy and Independence are critical, ensuring that cooperatives remain self-governing even when engaging with external entities. This autonomy is essential for maintaining the cooperative's focus on member needs and objectives, particularly in negotiating with suppliers and logistics providers to secure favorable terms that benefit rural grocers.
5. Education, Training, and Information underscores the importance of empowering members and the public with knowledge about the cooperative model and its benefits. This investment in education is pivotal for equipping rural grocers with the skills and understanding necessary to navigate the complexities of food distribution and to leverage cooperative practices for their collective advantage.
6. Cooperation Among Cooperatives encourages partnerships that enhance service quality and effectively address community needs. For rural grocers facing distribution challenges, this principle signifies the power of collaboration in forming strategic alliances with other cooperatives, thereby extending their reach and capabilities in solving everyday problems.
7. Concern for the Community reflects the cooperative's commitment to contributing to their communities' welfare and sustainable development. This principle is especially relevant for

rural grocers, whose success is intricately linked to the health and vitality of their communities. By prioritizing community welfare, a shared service cooperative can play a transformative role in improving access to food, supporting local economies, and fostering overall community well-being.

Integrating these cooperative principles into the design and operation of a shared service cooperative among rural grocers presents a structured, democratic, and sustainable approach to addressing food distribution challenges. With over eight hundred million people worldwide engaged in cooperatives and more than 40,000 cooperatives in the United States alone, serving one in every four citizens, the cooperative model's success across various sectors is well-documented (ICA, 1995; USDA, 1995). This success illustrates the model's capacity to prioritize member needs, ensure democratic governance, and enhance community welfare, thereby underlining the feasibility and need for a cooperative approach to alleviate the distribution challenges faced by rural grocers. Through such a cooperative venture, rural grocers can achieve improved distribution efficiencies, ensuring the economic sustainability of their operations and the well-being of the communities they serve.

## 2.4 Purchasing Cooperatives

Purchasing cooperatives embody the essence of collective action by utilizing the combined buying power of their members to obtain goods and services at lower rates, providing significant economic benefits across various sectors. These organizations achieve economies of scale, resulting in notable cost savings and giving members a competitive advantage that would take more work to secure individually. Associated Wholesale Grocers, Inc. (AWG), the largest cooperative food wholesaler in the United States, exemplifies the ability of grocery retailer-owners of AWG to

negotiate more favorable terms for a wide array of products and services, showcasing the model's effectiveness and adaptability.

Central to the success of purchasing cooperatives is their capacity to aggregate the demands of their members, thus wielding greater collective bargaining power. This approach facilitates negotiations with suppliers to achieve lower prices and better terms, effectively enhancing bargaining strength through larger, combined orders. The work of Hendrikse and Veerman (2001) illustrates how such collective purchasing leads to lower per-unit costs for members, enabling competitive pricing strategies and improved profit margins, which is particularly beneficial for small businesses and rural grocers facing challenges in achieving such financial leverage independently.

The financial structure and operational efficiency of purchasing cooperatives further underscore their effectiveness. Bijman, Hendrikse, and Van Oijen (2013) explore how aligning members' interests with reduced transaction costs enables cooperatives to operate more efficiently than traditional business models. This focus on member benefits over profit maximization ensures that cooperatives remain committed to their members' success, fostering an environment where mutual benefits are paramount.

The democratic governance model of purchasing cooperatives, where each member has a say in the cooperative's direction and policies, reinforces this commitment. As Chaddad and Cook (2004) discuss, this system promotes ownership among members and ensures the cooperative remains responsive to their needs, a critical aspect for adaptability and long-term sustainability.

Moreover, the advantages of purchasing cooperatives extend beyond just negotiated prices. As King and Park (2002) note, economies of scale also translate into operational efficiencies and

access to a broader range of products and services. Otherwise, this is particularly vital for rural grocers who must remain competitive against larger chains, ensuring these small businesses can thrive in challenging market conditions by accessing technologies and products that would otherwise be unaffordable.

Lastly, purchasing cooperatives effectively manage influence costs, which pertain to aligning managerial decisions with member interests. Iliopoulos and Hendrikse (2009) show how these cooperatives focus on member benefits, enhancing member satisfaction and loyalty. This approach fosters a cooperative spirit and secures a more sustainable and profitable future for all members involved.

Purchasing cooperatives play a pivotal role in sectors like agriculture and food distribution, where they act as stabilizers in fluctuating markets and ensure that small producers and grocers remain competitive. The work of Sexton (1986) highlights the crucial function of cooperatives in agricultural marketing, illustrating how they help mitigate market volatility and afford small players a stable and dependable market position. In essence, the cooperative model harnesses the power of collective bargaining and economies of scale to procure goods and services at lower rates, passing these savings and advantages onto its members. The democratic governance structure of cooperatives ensures that each member has a voice in decision-making processes, fostering a community where the needs and preferences of all are considered. Moreover, effectively managing influence costs ensures that the cooperative's operations align with members' interests, boosting satisfaction and loyalty.

## 2.5 The Need for Research on Rural Grocery Purchasing Cooperatives

Addressing the complex challenges faced by rural grocers in the United States, the exploration of purchasing cooperatives stands as a critical focus within the academic sphere. This literature review synthesizes findings from diverse studies to highlight the cooperative model's potential in easing the logistical and competitive difficulties prevalent in rural environments. The time frame from 1990 to 2015 marked significant transformations in the food retail sector, especially with the rise in market consolidation—a trend that escalated after the economic downturn of 2008. This period's developments have particularly affected rural markets, where the proliferation of large chain stores has precipitated a higher closure rate of independent grocery retailers (IGRs), underscoring the intense competition these smaller entities face (Zeballos, 2023; Basker, 2007; Çakir, 2020). With an annual exit rate of 6.6% for IGRs during these years, the narrative highlights the compounded challenges from market competition, the dominance of large chains, and adverse socioeconomic conditions.

This study aims to bridge the identified research gaps by evaluating the shared service cooperative model's potential to aid rural grocers in navigating distribution challenges. It zeroes in on the Rural Access Distribution (RAD) Cooperative in Walsh County, North Dakota, as a beacon of success. By dissecting this case, the research seeks to uncover the foundational elements contributing to such triumphs. The experience of Walsh County with the RAD Cooperative vividly illustrates how shared service models can alleviate logistical and financial burdens for rural grocers, enhance food accessibility, and fortify local economies.

Yet, despite the promising potential exhibited by initiatives like the RAD Cooperative, a significant void remains in the comprehensive analysis of these cooperatives' scalability, economic

impacts, and governance structures across different rural landscapes. Delving into these dimensions is paramount to understanding the factors driving the sustained success and communal advantages of purchasing cooperatives within the rural grocery realm.

The essence of this research is its potential to enlighten and steer stakeholders engaged in the development of cooperatives, particularly within rural settings. By scrutinizing the shared service cooperative model for its adaptability and efficacy, the study advocates for strengthening the sustainability and resilience of rural grocery distribution systems. This effort is pivotal for ensuring the longevity and vibrancy of rural communities by facilitating wider food access and boosting economic resilience.

Thus, by investigating the feasibility and necessity of shared service cooperatives among rural grocers, the research endeavors to unearth strategies that could tailor and expand cooperative models to aptly meet the unique challenges of rural grocery distribution. In doing so, it aspires to make a significant scholarly contribution, offering a thorough analysis that could lay the groundwork for future endeavors aimed at enhancing the resilience and efficiency of rural food distribution networks. This comprehensive approach ensures a seamless flow of thought, bridging gaps in the existing literature and paving the way for impactful future research.

## Chapter III: Case study on Rural Access Distribution (RAD) Cooperative

### 3.1 Addressing Food Distribution challenges in Rural America: Access Distribution Cooperative in Walsh County, North Dakota.

Rural America, which covers about 97% of the United States' land area, is home to only around 20% of the population (U.S. Census Bureau, 2017). The remaining 80% reside in urban areas that occupy just 3% of the country's total land. Unfortunately, food insecurity is more prevalent in rural areas, with 11% of rural households facing this issue than their urban counterparts (USDA, 2022). Shockingly, 9 of the top 10 counties with the highest food insecurity rates are rural (Map the Meal Gap, 2022). Although rural communities comprise 63% of all U.S. counties (Feeding America, 2021), they disproportionately bear the burden of food insecurity, with 87% of counties with the highest rates falling into this category (Map the Meal Gap, 2022). Several unique challenges contribute to this disparity, including limited transportation options, low-wage job opportunities, and underemployment.

The decline of rural grocery stores presents a pressing challenge across various states. In Iowa, 43% of grocery stores in towns with populations under 1,000 have closed, while in Kansas, nearly 20% of rural grocery stores have shut down since 2006 (Bailey, October 2010). Adding to the concern, Capouch (2019) noted a 20% decline in grocery stores five years before the COVID-19 pandemic. North Dakota is not spared either, with only 98 grocery stores remaining in towns with fewer than 2,100 residents (Bos, 2022). This trend is alarming as rural grocery stores are essential to sustaining rural communities. Not only do they contribute significantly to local tax revenue, which supports essential civic services and amenities, but they also provide stable employment opportunities for residents. Jobs such as butchers, cashiers, managers, and stockers are vital given the current demand for employment options (Procter, 2010). The dwindling number

of rural grocery stores underscores the urgency to address this issue to ensure food security and economic stability in rural America.

Access to affordable and nutritious food remains a substantial hurdle for many individuals residing in rural areas, compounded by food deserts. *Food deserts* are defined as geographic regions with limited access to grocery stores, a situation that is particularly acute in low-income areas (Shaw, 2006). These regions often face significant obstacles in sustaining a healthy diet, which is ironic given that some of these food deserts are located in areas where agriculture plays a vital role in the local economy. The United States Department of Agriculture (USDA) elaborates on this issue by identifying low-income census tracts where a substantial number of residents (at least 500 people) or a significant portion (at least 33 percent) of the population lives more than 1 mile away from the nearest supermarket, supercenter, or large grocery store in urban areas, or more than 10 miles away in rural areas. Such criteria reveal that an estimated 18.8 million Americans, or 6.1 percent of the U.S. population, reside in areas with low income and limited access to food retailers. To tackle this issue, the USDA initiated a project in 2009 to map food access, identifying communities with scarce availability of affordable and nutritious food. This effort unveiled the existence of food deserts across every state in the U.S., affecting approximately 23 million people living in 6,529 food desert communities (Allison et al., 2020).

In rural areas, the lack of nearby food stores and higher food prices present a significant problem, especially for older residents, who comprise a significant portion of the population in rural areas (Junfeng Jiao, 2012). These older residents not only have to travel longer distances to reach grocery stores, often requiring easy access to transportation, but they also contend with inflated prices compared to urban areas. Living in these areas puts considerable strain on their budgets and overall well-being. To alleviate these disparities, it is imperative to address the

shortage of food stores in rural America and rectify the discrepancies in food prices. Ensuring everyone in rural communities, especially the vulnerable elderly, can afford healthy food without financial strain is essential.

A promising solution has gained traction recently – creating purchasing cooperatives, often known as cooperatives. These cooperatives have become a lifeline for these rural areas (Rocha, 2019); they address the shortage of essential services like healthcare, education, and agricultural support in these regions. These collaborative models have a long and rich history in rural America, dating back to the 18th and 19th centuries when farmers banded together to gain economic clout. Early cooperatives helped farmers by facilitating bulk purchases of supplies and marketing their harvests collectively for better prices (Leesa Witt, 2015). Today, cooperatives continue to empower rural communities by fostering local ownership, economic sustainability, and a sense of shared purpose. Cooperatives are making a significant impact by delivering much-needed services and contributing to the well-being and resilience of rural communities. Common examples of cooperatives in rural areas include agricultural purchasing cooperatives, credit unions, housing cooperatives, rural electric cooperatives, marketing cooperatives, and food cooperatives.

The Rural Access Distribution (RAD) Cooperative in Walsh County, North Dakota, stands out in the rural grocery store landscape. It focuses on alleviating food distribution challenges and enhancing access to quality, affordable food in rural communities in North Dakota. Operating as a shared service cooperative, RAD enables rural grocers to collaboratively order from suppliers and redistribute products from a central location. This approach secures better pricing from suppliers and diversifies and increases the products available in these grocery stores for their communities.

The case study of RAD Cooperative seeks to examine the following objectives comprehensively:

1. To analyse the reasoning behind establishing the RAD Cooperative, exploring the steps and strategies involved in its creation, and the key learnings from its early development.
2. To evaluate the benefits and positive impacts the RAD Cooperative has brought to the grocery stores and their community.
3. To investigate the RAD Cooperative's strategic challenges and identify potential opportunities for growth and expansion.
4. To integrate strategic questions into the case analysis, fostering critical thinking about the cooperative's future direction and potential decision-making scenarios.

## 3.2 The Need for Cooperatives

Cooperatives play an indispensable role in the U.S. economy, particularly in rural areas where they often fill critical market gaps. This importance was highlighted with the establishment of the Rural Electric Cooperative on May 11, 1935, following President Franklin D. Roosevelt's creation of the Rural Electrification Administration (Malone et al., 2008). These electric cooperatives have become crucial in providing electricity to rural regions through a model where members own and ensure reliable and cost-effective electricity. They achieve this by purchasing power in bulk, predominantly from government-run hydroelectric plants, and then distributing it directly to consumers at wholesale prices (Velaga et al., 2019).

The need for cooperatives extends beyond energy to encompass other essential services, especially evident in the challenges rural communities face regarding access to food. Rural areas, often far from urban centers, struggle to need help and diverse food options. Cooperatives serve

as a collective response to this issue, ensuring that rural residents have access to the necessary foods for a healthy and sustainable lifestyle. This intervention is critical for bridging the accessibility gap and promoting nutritional well-being (Greg Lawless, 2005).

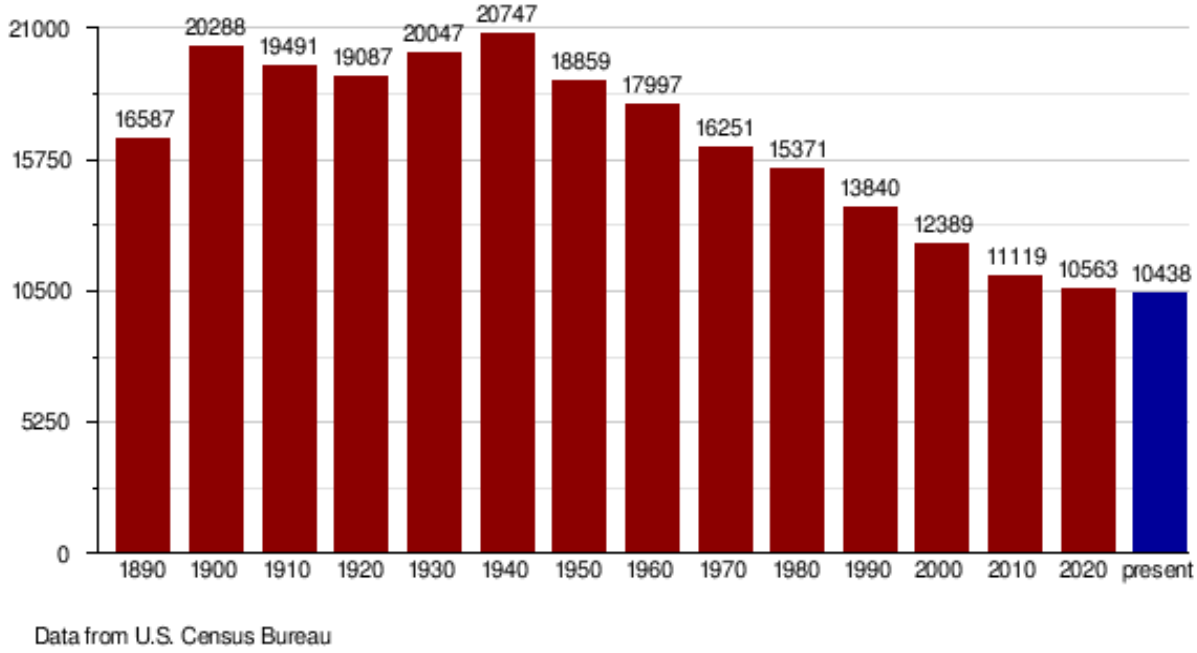
Further analysis by L. Chenarides, M. Cakır, and T.J. Richards (2023) delves into the competitive dynamics of dollar stores entering rural markets, highlighting how this affects small-format grocery stores. Their research, employing a sophisticated econometric model, investigates the strategic interactions among various retail formats, including dollar stores, supermarkets, and small grocers. While dollar stores' entry does not directly force grocery stores out of business, it alters market dynamics and consumer preferences, presenting challenges in food distribution for rural communities. The findings suggest that cooperatives could be a strategic solution for rural grocers, helping them to navigate these market changes by strengthening their competitive position and ensuring the availability of a diverse food selection for rural residents.

Moreover, the significant distances that residents of rural areas must travel to obtain food underscore the value of cooperatives. This reliance on distant supermarkets or the limited, often less nutritious options available at convenience stores underscores the inefficiency and resource expenditure involved in such endeavors. Cooperatives can alleviate this burden by providing closer, more affordable access to essential food items like fresh produce, dairy, and staples, showcasing their vital role in supporting rural communities (Ruralhealthinfo, 2022).

Cooperatives are not just practical solutions for economic and logistical challenges in rural areas; they represent a form of collective empowerment. By facilitating access to critical services, from electricity to nutritious food, cooperatives significantly improve the quality of life and economic sustainability of rural communities, affirming their status as essential pillars of rural infrastructure and community welfare.

Moreover, the absence of accessible grocery stores can negatively affect the community. As people find it increasingly challenging to meet their basic needs, they may reconsider their decision to reside or further lead to the already increasing migration of people from rural areas. The resulting mass departure of residents can negatively impact local businesses, school attendance, and overall community vibrancy; thereby, the decline in economic activity can lead to business closures, further exacerbating the scarcity of essential services in rural areas. Figure 1 indicates a significant decline in the population of Walsh County, North Dakota, which is the study area for the case. The county's population has decreased by half from its peak in the 1940s, which saw a resident count 20,747, to its current figure of 10,438. This substantial reduction strongly implies a substantial level of migration in the county.

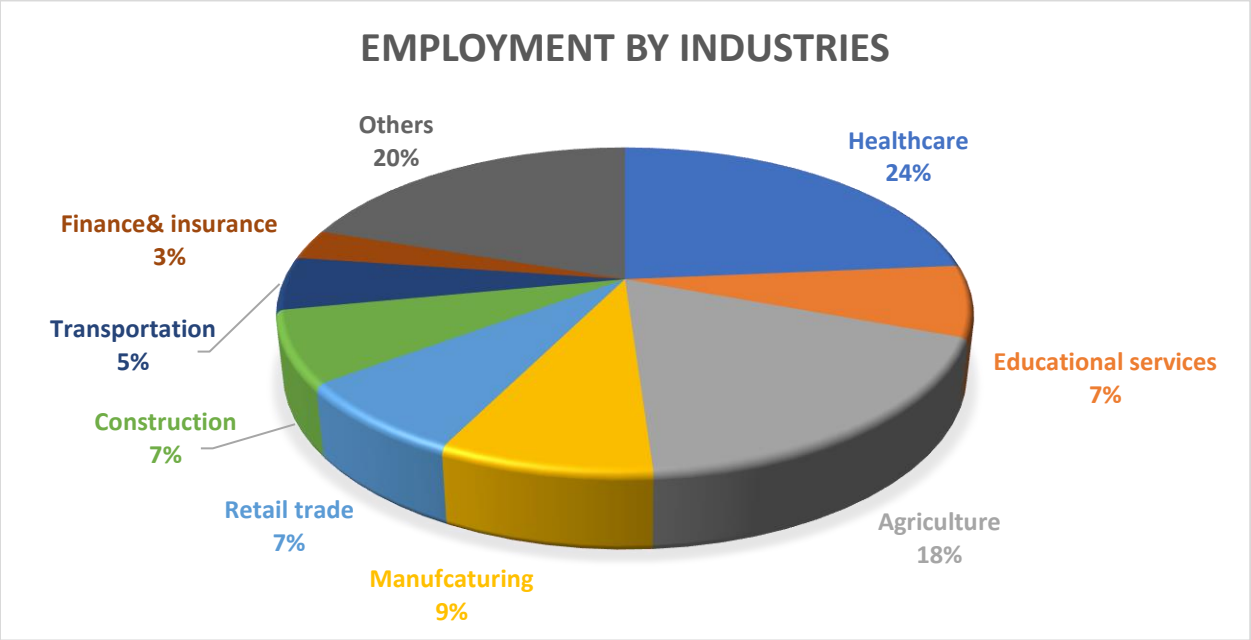
Figure 1 Population by Decade in Walsh County, North Dakota




Source: U.S. Census Bureau

The county's demographic composition includes a mix of rural and small-town communities. The county has a predominantly Caucasian population, with a significant portion of residents of German and Norwegian ancestry, reflecting the region's historical immigration patterns during the late 1800s.

Figure 2 Employment by industries in Walsh County, North Dakota.




Source: (DataUSA, 2020)

Figure 2 shows the employment distribution in Walsh County, North Dakota, which reflects its rural and small-town character. The largest employers are healthcare (24%) and agriculture (18%), indicating the county's focus on essential services and its agricultural heritage. Education, construction, and retail trade each account for 7% of employment, pointing to a balanced support structure for community needs and consumer markets. Manufacturing has a moderate presence at 9%, possibly linked to agricultural processing. Finance, insurance, and transportation have more minor roles, consistent with the more self-sufficient nature of rural economies. The "Others" category, making up 20% of employment, suggests a diverse range of jobs, likely including government and local businesses.

## 3.3 Background of Rural Access Distribution Cooperative (RAD Cooperatives)

The Rural Access Distribution Cooperative (RAD) is a regional collaboration with a mission to improve access to healthy foods and locally retailed and produced products in rural communities (Radcoopnd, 2022). The purpose of this cooperative is to engage in any activity or service in connection with the distribution, marketing, and sale of affordable food and beverages and other locally produced and retailed products within the state of North Dakota. The cooperative will operate as a shared service cooperative through purchasing and aggregating orders to get wholesale benefits, providing a local online shopping and delivery option for communities in their service area that do not have a grocery store to access healthy foods (Radcoopnd, 2022). This section sets the stage for the case study as it explores the inception, development, and operational aspects of RAD Cooperatives, shedding light on The North Dakota Association Rural Electric Cooperative (NDAREC), involvement, project ideation, initial meetings, participating stores, Walsh County food Distribution Hub, funding, organization structure, and supplier selection of the cooperative.

The NDAREC was founded to advance rural electrification and enhance the quality of life in rural communities. Beyond its core mission, NDAREC collaborates with the state's electric cooperatives to deliver services, including communication, government relations, professional development, and economic development. A pivotal area of its efforts is to tackle the unique challenges rural communities face, particularly in food distribution, which has led to the establishment of the North Dakota Rural Grocery Initiative in response to North Dakota's challenges in food distribution, particularly in small towns grappling with food deserts.

A critical challenge identified in these efforts was the disparity in weekly sales volumes between rural and urban grocery stores. Research by Capouch (2019) illustrates this point, showing

that while an average weekly grocery store in the U.S. reports sales exceeding $300,000, rural counterparts manage only about $25,000. This discrepancy affects rural grocery stores' viability and attractiveness to suppliers. Consequently, rural stores are often forced to source from suppliers ranging from 7 to 30, including Associated Wholesale Grocery, SpartanNash, United Natural Foods, Inc., Sysco Corporation, C&S Wholesale Grocers, and others. Most of these suppliers typically impose delivery fees, putting a significant financial burden on these small-scale operations.

Addressing these challenges head-on, The North Dakota Rural Grocery Initiative, orchestrated by the Rural Development department within the North Dakota Association of Rural Electric Cooperatives, aimed to create a small-scale grocery distribution model to enhance the profitability of rural grocery stores. Walsh County was selected as the pioneering location for this distribution center, aiming to achieve several key objectives: improving residents' access to retail groceries, reducing wholesale costs for grocers, and enhancing the selection of groceries available. The initiative is built on a cooperative model, enabling members to procure products at lower costs than they would individually incur. It offers a dual advantage of acting as a purchaser and providing a distribution service that reduces overall costs.

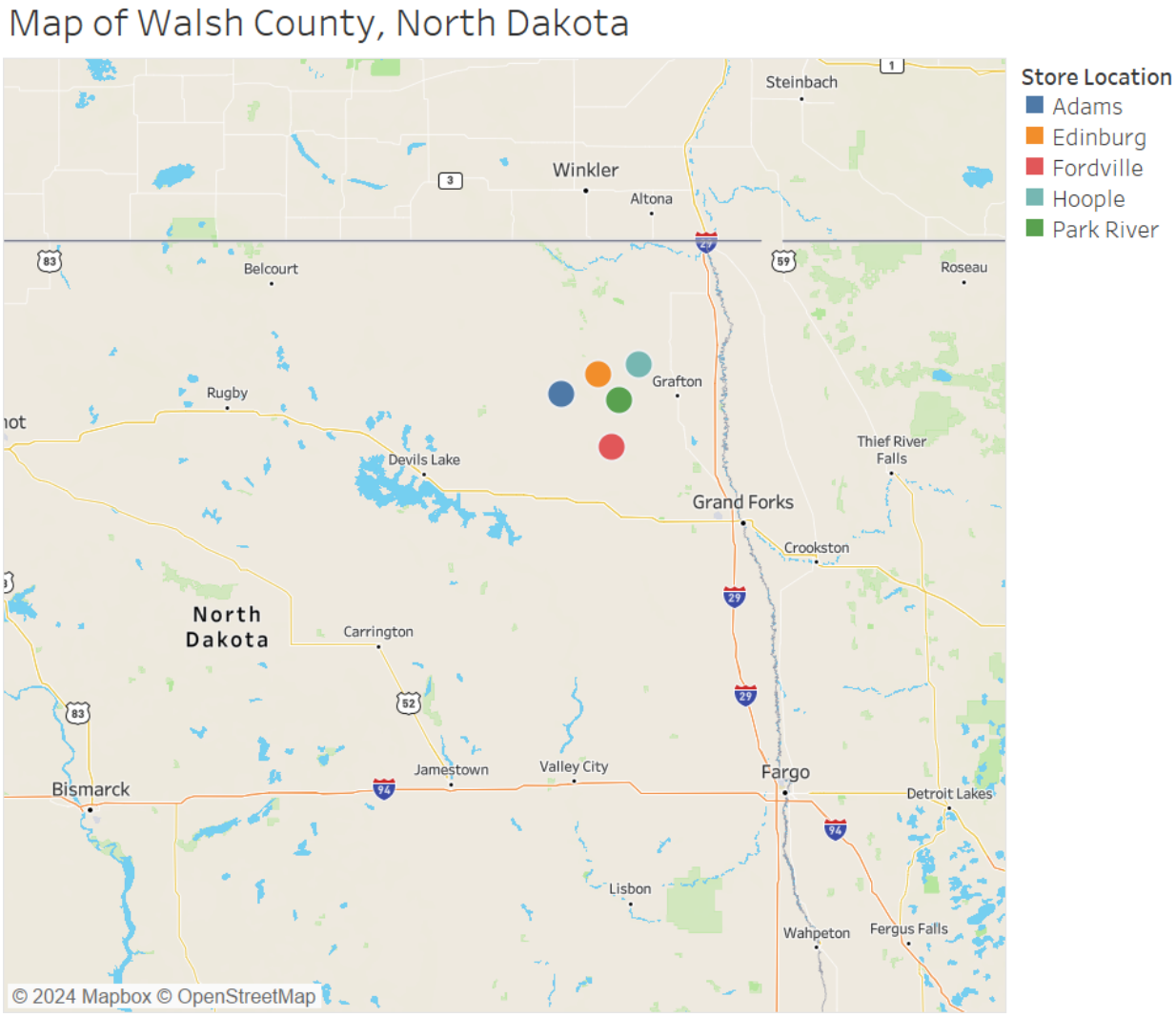
In 2014, the North Dakota Rural Grocery Initiative conducted comprehensive surveys across rural grocery stores in North Dakota, leveraging a survey instrument developed by Dr. David Proctor. This tool was instrumental in gathering data on these stores' operational challenges, such as supply chain inefficiencies, elevated distribution costs, and a limited product range. The insights gleaned from these surveys were crucial for shaping the small-scale distribution model and enhancing collaborative efforts to sustain and profitably run rural grocery stores.

The survey results revealed inconsistencies in distribution routes among primary suppliers, leading to increased costs and a constrained product offering. Collaborations with North Dakota State University Extension and the Great Plains Transportation Institute were pivotal in optimizing distribution routes, unearthing potential savings estimated at around $383,000, as highlighted by Capouch (2019).

Acknowledging the indispensable role of financial assistance in achieving their ambitious objectives, NDAREC diligently sought out grants and fostered partnerships with entities aligned with their mission. Despite facing obstacles, such as not securing funding from the Rural Cooperative Business Grant (RCBG), their persistence paid off when they successfully obtained support from CoBank. This funding from CoBank was pivotal for undertaking crucial studies that propelled their initiatives forward. In addition to CoBank's support, NDAREC also received significant backing from the Blue Cross Blue Shield of North Dakota (BCBSND) Caring Foundation, which provided targeted funding to enhance the operations of the RAD Cooperative.

At the heart of this initiative lies the RAD Cooperative, established in Walsh County as a collaborative hub. This cooperative brings together three grocery stores, a bar, and a community development organization across five towns, creating a synergy that fosters communal business success and sustainability.

Figure 3 Map showing the location of Rural Access Distribution Cooperative Members




At the heart of the cooperative stands Jim Supervalu in Park River, North Dakota, meticulously overseen by Diana and Randy Hahn. This establishment is far more than a mere distribution center; it is the core of the cooperative and the most substantial grocery store within the network and throughout Walsh County. Famous for its wide selection of products, including smoked meats and deer processing services, alongside an extensive catering offering, Jim Supervalu is a critical piece of the community fabric. Strategically situated in Park River, the county's second-largest city, the store benefits from its prime location. This advantageous

positioning not only aids in maintaining logistical efficiency, thanks to easy access to more extensive grocery distribution networks but also solidifies its role as an essential resource for the community. By enhancing local food accessibility and making a significant economic contribution, Jim Supervalu has cemented its place within the region. The logistical model of the cooperative is further optimized by the proximity of Jim Supervalu to its four member stores, which are located at distances ranging from 12 to 21.5 miles. This careful spacing is crucial; were the stores situated too far apart, elevated transportation costs would compromise the economic viability. Thus, this strategic distribution ensures not just the operational success of Jim Supervalu but also that of the entire cooperative, underlining its pivotal role within the network and the wider community.

Within the RAD Cooperative, another standout member is Market on Main in Edinburg, which has flourished under Cindy Vargason's leadership for more than seven years. What sets this store apart is its innovative community ownership model, where an actively involved board of community owners plays a pivotal role in management decisions. This model was born from the community's initiative when the city took over the store, embedding it within the local economic landscape. Community engagement has been instrumental to the store's prosperity, evidenced by a remarkable 16% increase in cost savings following the adoption of the RAD Cooperative's procurement and delivery strategies. These improvements have streamlined operations and reduced costs, enabling the store to offer more affordable groceries to its customers (Simmons, 2023).

In the small town of Hoople, which serves nearly 300 residents, Hoople Grocery stands as a beacon of the strength and perseverance of community stores. Managed by Jenna Gullickson, who, with her husband, assumed ownership in 2015, this store has become a vital member of the RAD Cooperative. Their decision to join was a deliberate effort to maintain operations amidst a

widespread trend of rural grocery closures. This decision paid off with a significant 23% surge in cost savings after joining the cooperative (Simmons, 2023), underscoring the cooperative model's efficacy in rejuvenating even the smallest retail entities.

Diana Hahn, the owner of Jim Supervalu and a central figure in the RAD Cooperative, explains that her motive for joining was to consolidate her purchasing power. Large wholesalers often hesitate to deliver to smaller accounts, but members like Hahn can secure a steady supply chain by joining forces within the RAD. “The more products I can bring on…the less chance I have of them saying, ‘You know what, you are just not buying enough. We are not going to stop anymore,’” Hahn stated. This collective bargaining power not only ensures consistent supply but also allows for a broader product selection in their stores, which directly contributes to the cost savings and the success of cooperative members.

The RAD Cooperative in North Dakota was also established to foster collaboration among grocery stores, with Diana from Jim Supervalu playing a pivotal role in its inception. Her leadership and deep-rooted connections in the grocery industry were instrumental in rallying support from other store owners, particularly in Hoople and Edinburg. A significant step in building this collaboration was sharing confidential sales and purchase records among the stores, a crucial step for demonstrating the tangible benefits of unified purchasing.

In the foundational stages, despite only Diana Hahn and Lori Capouch being present at the first meeting, Diana's influence and strategic vision were decisive. She successfully integrated two other stores with Jim Supervalu, treating them as sister stores and establishing the cooperative's foundation. This early collaboration allowed for in-depth data analysis, revealing that the stores could achieve a 16% reduction in costs by pooling their purchasing power, thereby incentivizing their participation.

A detailed feasibility study utilizing the stores' shared data underpinned the cooperative's strategy. This study highlighted the disparities in weekly sales and calculated the potential for increased net profits once operational costs, such as logistics and utilities, were managed more efficiently. The collective action enabled the stores to negotiate better wholesale prices and diversify their product ranges.

Technological advancement was also a cornerstone of the RAD Cooperative's strategy. In partnership with T4 Solutions, a company specializing in online grocery platforms, the cooperative developed an innovative online shopping platform and Point-of-Sale (POS) systems. These systems were customized to each store's specific product range and pricing, enabling them to offer online shopping services to their communities.

The cooperative's strategic alliance with United Natural Foods, Inc. (UNFI) has transformed its grocery distribution chain. UNFI's extensive reach in distributing organic and natural foods across the United States and Canada, catering to a diverse clientele of over 43,000 locations, including grocery stores, health food stores, and specialty retailers, sets a robust foundation for this partnership. With a commitment to sustainability and health, UNFI has become a cornerstone in the food distribution industry, offering an impressive array of over 250,000 distinct products from upwards of 10,000 suppliers. This vast product range and focus on health have made UNFI an ideal match for the cooperative's mission and values.

The cooperative's innovative joint purchasing model, which UNFI has adeptly adapted to, underscores the success of this partnership. By packaging orders for the cooperative's members individually but delivering them collectively to Jim Supervalu, UNFI has dramatically streamlined the distribution process. This approach removes the need for time-consuming sorting upon delivery, thereby enhancing the efficiency and operation of each member grocer. Such logistical

advancements have played a pivotal role in spurring sales growth and elevating the cooperative's operational prowess. Furthermore, this strategic collaboration has simplified logistics and significantly contributed to the financial well-being of the member stores. It enabled the smaller "sister" stores within the cooperative to access wholesale prices through Jim Supervalu, showcasing the vital role of strategic supplier selection in the retail grocery arena. The cooperative has bolstered its competitive position by tapping into UNFI's extensive product range and efficient distribution network, highlighting the importance of strategic partnerships in securing operational and financial improvements.

Under Diana's leadership, the cooperative has embraced a cohesive strategy in its interactions with UNFI, with Jim Supervalu serving as the central hub for order coordination. This efficient setup has reduced management fees and improved pricing, further streamlining order processing and delivery efficiency. Trust forms the bedrock of their operational ethos, ensuring that sister stores adhere to prompt payment schedules post-delivery, fostering a reliable and economically viable partnership. This collective approach, underpinned by trust and strategic coordination, has been instrumental in enhancing the cooperative's market standing, proving the indispensable value of unity and strategic foresight in navigating the complexities of grocery distribution.

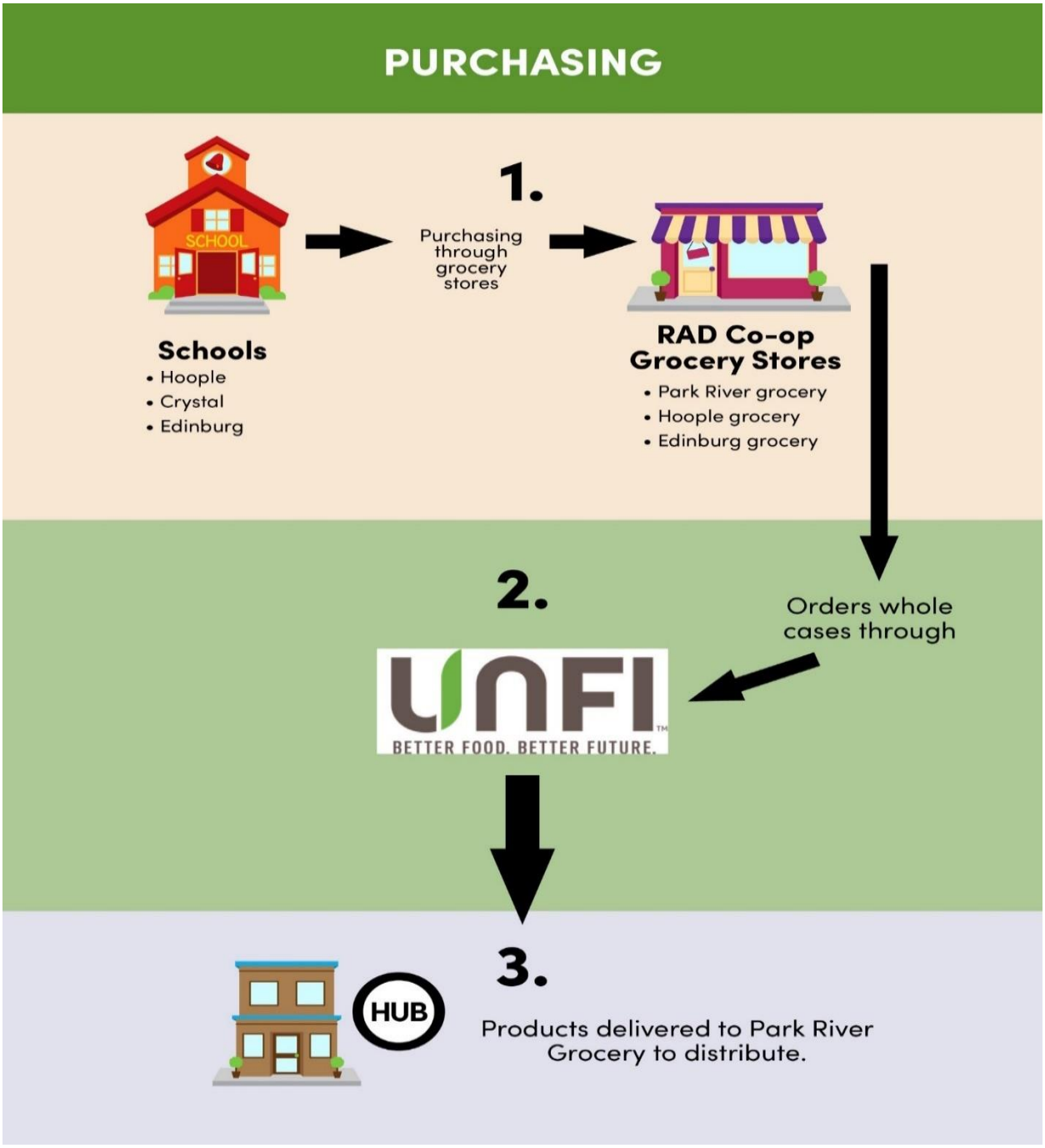
RAD Cooperative operates democratically and is overseen by an elected board responsible for strategic direction and operations. Communication among the board members primarily occurs via text and virtual meetings. This board includes various non-grocer members who play crucial roles. Among these are Steven Wells, owner of Wells Drinking Well in Fordville, and Alex Bata, president of the Adams Community Development Corporation. Together, they contribute significantly to the board, which comprises a total of five members. The cooperative's annual

meetings and decision-making processes are designed to ensure active member engagement and democratic governance. Schools can access food items more effectively and affordably through cooperative purchasing, leveraging collective buying power to secure lower prices and reliable yearlong supply.

### 3.4 Walsh County Food distribution

Jim Supervalu store, Park River, is the central redistribution hub with a unique approach. Instead of acting as a conventional warehouse for sister stores, it focuses on same-day in-and-out redistribution. In this model, Jim Supervalu collaborates with Hoople and Edinburg; the ordering process involves these communities collectively placing their orders, which are then delivered to Park River by UNFI.

Figure 4 Rural Access Distribution Cooperative Purchasing



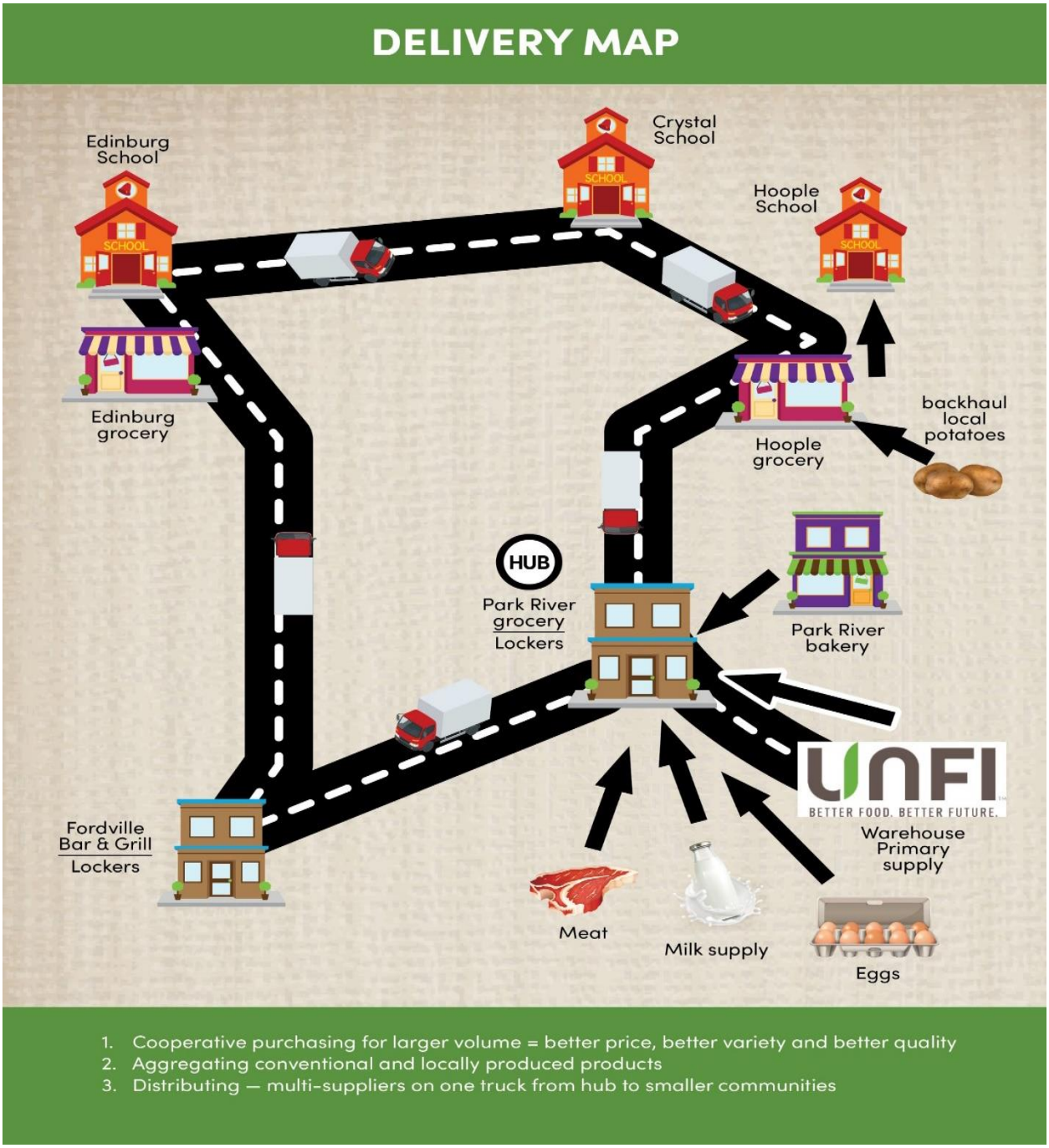

Source: North Dakota Association of Rural Electric Cooperatives.

The ordering process for RAD Cooperative is a well-orchestrated chain of actions beginning with schools in Hoople, Crystal, and Edinburg placing their orders. These orders are

funneled through the RAD Cooperative network of grocery stores, including those in Park River, Hoople, and Edinburg. The cooperative then orders whole cases collectively with United Natural Foods, Inc. (UNFI). Upon arrival, the products are delivered to Park River Grocery, which serves as a hub for distribution, ensuring that each school receives its requested food items efficiently and affordably. This entire process exemplifies the cooperative's innovative approach to meeting the needs of local schools and their communities by consolidating orders of the schools and the stores.

Launching the RAD food distribution pilot project, the RAD Cooperative received a Bush Foundation grant, more than an anonymous donor, and additional funding from CoBank, the Blue Cross Blue Shield of North Dakota (BCBSND) Caring Foundation, N.D. Farmers Union, Gate City Bank, First United Bank, and Polar Communications (Peterson, 2021).

Figure 5 Rural Access Distribution Cooperative Food Redistribution




Source: North Dakota Association of Rural Electric Cooperatives

Figure 5 shows the delivery map, which shows the delivery process involving several suppliers. Starting at Jim Supervalu in Park River, the central hub of RAD Cooperative, the UNFI

truck delivers a wide array of grocery items. Complementing this, local suppliers provide fresh essentials such as milk, meat, and eggs alongside bakery products from Park River Bakery. The hub becomes a beehive of activity as these items are sorted for further distribution.

Once sorted, a RAD Cooperative truck embarks on a carefully planned route to ensure timely deliveries. Its first stop is the Fordville Bar & Grill Lockers, after which it proceeds to Edinburg Grocery and then to Edinburg School. The route continues, serving both the Crystal School and Hoople School, and rounds off with a delivery to Hoople Grocery Store.

The system is designed to be cost-effective for the participating schools and grocery stores. They all pay delivery costs to enhance the cooperative's financial sustainability, making the process economical for each location and maximizing the efficiency of the delivery truck's route. Notably, the truck backhauls local potatoes from Hoople to the Jim Supervalu store, incentivizing Diana for her role in running the redistribution process.

The Park River location, mainly the Jim Supervalu store, is pivotal in this network because it has the necessary space to temporarily hold and organize a variety of perishable goods, such as frozen and refrigerated items before they are redistributed. The deliveries usually occur twice a week, on Tuesdays and Thursdays, although this frequency might change based on the volume of orders and the market season.

### 3.5 RAD Cooperative Climate Controlled Lockers

RAD Cooperative is set to revolutionize the grocery shopping landscape in River Park and Fordville, North Dakota, with the upcoming introduction of climate-controlled grocery lockers, a venture in partnership with T4 Solutions. Figure 6 shows a picture of these grocery lockers. This initiative is poised to streamline how community members shop for groceries by allowing them to

place orders through a secure online platform, thus allowing them to tailor their grocery shopping around their schedules and preferences. This innovation is expected to significantly improve access to shopping and introduce benefits such as more flexible shopping hours. Once implemented, customers can choose a locker location that aligns with their daily commute, be it close to their place of work, home, or any other location that suits their lifestyle.

The climate-controlled aspect of these lockers is a game-changer, ensuring that the food—whether it is dairy, produce, or frozen goods—remains fresh and preserved until the customer is ready for pickup. It is a silent nod to quality, underlining the cooperatives' dedication to providing the best, regardless of logistical challenges. Customers receive a prompt notification once the groceries are safely delivered to the designated locker. It could be late in the evening or the wee hours of the morning, but the time does not matter—these lockers are designed to fit into the customer's life, not the other way around. Customers can open their assigned locker and collect groceries with a personalized access code. This system's particular advantage shines through for those with non-traditional or demanding work hours, such as hospital staff, who often work twelve-hour shifts and find typical store hours incompatible with their schedules. The flexibility to order groceries the day before and pick them up after a long shift offers convenience in their hectic routines. Similarly, for young mothers or anyone juggling multiple responsibilities, the ability to bypass the time spent in store aisles is a welcome relief.

Figure 6 Climate-Controlled Grocery Locker Systems

Source: https://news.minnkota.com/post/food-for-the-community-food-for-the-soul

## 3.6 Benefits of RAD Cooperative and Key Lessons Learned

Membership of RAD Cooperative brings a range of advantages for both the members and their communities. Members gain from the cooperative's group purchasing model, which optimizes supply chain efficiency and secures better pricing from suppliers, as the cooperative also provides the stores with a reliable year-long supply of grocery products. Additionally, the collective purchasing power of the cooperatives facilitates cost savings through bulk buying, granting members access to an expanded range of products from suppliers. These efficiencies enable members to cut operational expenses, offer competitive prices, and increase their overall savings. Moreover, resource sharing, such as utilizing the cooperative's delivery truck and pooling cases, contributes to further cost reduction.

The cooperative's impact is multifaceted for the community, particularly in Walsh County, ND. It ensures more accessible access to essential goods and services at reasonable prices, promoting local spending and reducing the need for residents to travel far for necessities. This local spending supports the community's economic growth, creating jobs and enhancing local business opportunities. By promoting and selling locally produced items, the cooperatives strengthen the local economy and support the sustainability of the community.

Key insights have been derived from the experience of the RAD Cooperative, underscoring crucial insights for the triumph of cooperative endeavors. An essential focal point is the profound value of trust, particularly considering the different scales of the three stores' operations within the cooperative. The mix of people with qualities that build trust is crucial for the success of cooperatives like RAD. Trust serves as the bedrock upon which cooperative efforts flourish. A key takeaway is the importance of conducting a feasibility study, especially in establishing a shared

service cooperative like RAD. This preliminary step is a cornerstone for comprehensively evaluating the cooperative's viability, enabling it to lay a strong and informed foundation.

Flexibility and adaptability have emerged as pivotal traits among cooperative members, notably observed in the two sister stores transitioning to UNFI as their primary supplier. This flexibility empowers the cooperative to navigate unexpected challenges and seize emerging opportunities.

An important lesson is finding the right balance between trust and being able to speak up. Trust is the base, but people should also feel free to share their thoughts and disagreements helpfully. This balance leads to good communication, intense discussions, and problem-solving teamwork. The group's success depends on creating a fair way for everyone to have a say in decisions. This approach makes sure all members have an equal voice, keeps things fair and democratic, and stops any one person from having too much power. It is vital for the group's health that everyone's views are valued. When everyone's input is considered, it creates a sense of shared ownership and commitment to the group's goals.

During its early development, the RAD Cooperative greatly benefited from help from outside sources. The North Dakota Rural Electric Cooperative (NDAREC) provided crucial assistance, especially with Lori Capouch's significant involvement. This shows how vital outside advice is in setting up and managing a cooperative. The success story of the RAD Cooperative highlights the critical elements for cooperative success: trust, flexibility, good communication, fair involvement, and a dedication to ongoing learning. These core values have driven the cooperative's success and serve as a guide for future cooperative projects.

## 3.7 Opportunities for RAD Cooperative

RAD Cooperative stands at the threshold of numerous growth opportunities that can enhance its impact in Walsh County and potentially beyond. Each avenue promises to expand the cooperative's reach and deepen its connection with the community.

1. Creative Marketing: RAD Cooperative can increase awareness of its unique climate-controlled locker system by deploying innovative marketing strategies. RAD can attract a broader customer base through targeted campaigns, offering unique deals, or implementing a rewards program for loyal customers. These marketing efforts can highlight the convenience and innovation of their service, encouraging more residents to take advantage of their offerings.
2. Leveraging Technology: Advanced technology, particularly the online platform developed by T4 Solutions, is a pivotal point for RAD Cooperatives. This technological enhancement will make the shopping experience more accessible and user-friendly, ensuring all community members can easily benefit from their services when launched. Improvements and updates to this platform can make the process smoother, encouraging more frequent use.
3. Collaboration with Local Businesses: Forming partnerships offers a two-fold advantage. It provides a support network for RAD Cooperative and facilitates mutual benefits. By offering memberships to these businesses, RAD can foster a sense of community cohesion. Collaborations can extend to community groups and schools, creating a comprehensive support ecosystem that benefits all parties involved.
4. Expanding Product Range: Introducing a more comprehensive array of products could significantly enhance customer satisfaction and draw in a larger audience. By diversifying its offerings to include Icelandic goods, organic products, and locally sourced items, RAD Cooperative can cater to a broader spectrum of consumer preferences. This strategy meets the

community's varied needs and positions RAD as a one-stop shop for unique, high-quality goods.

These opportunities for RAD Cooperatives, when explored, have the potential to transform their service delivery, making it more inclusive, convenient, and appealing to a wide range of customers. By embracing these paths, RAD can solidify its position as a key player in enhancing food accessibility and fostering community well-being in Walsh County and potentially beyond.

## 3.8 Challenges Faced by RAD Cooperatives

RAD Cooperatives' journey in enhancing local food distribution through innovative solutions like climate-controlled grocery lockers and a streamlined online ordering platform has encountered challenges. These hurdles reflect the intricate balance between adopting new technologies, maintaining operational efficiency, and navigating a cooperative's competitive and human aspects. The following are challenges currently faced by the cooperative:

1. Technical and Operational Adjustments: The transition to a more digitized operation, aiming to modernize the grocery shopping experience, introduced initial technical difficulties. Manual entry issues and IT complications were significant early obstacles, highlighting the challenges inherent in integrating new technologies into existing systems. Moreover, the operational shift demanded by the new online platform and exterior lockers necessitated a considerable adjustment period. Sister stores, in particular, faced challenges adapting to new ordering methods and a POS system, marking a departure from their familiar routines and suppliers.
2. Competitive Landscape: The entry of major chain stores like Walmart into the area will notably shift the competitive dynamics for RAD Cooperatives. These large-scale stores bring considerable advantages, including deep financial reserves, widespread brand familiarity, and

extensive logistical capabilities, positioning them as formidable competitors. This development will pose a significant threat to RAD Cooperatives, risking a reduction in their market share as these chains attract customers with their aggressive pricing strategies and an expansive assortment of products. Consequently, RAD Cooperatives faces the intricate challenge of sustaining their business and retaining customer loyalty amidst the intensified competition presented by these retail behemoths.

3. Equipment Reliability: Operational efficiency at RAD Cooperatives faced additional hurdles due to the unreliability of their used truck, especially problems with its cooling system. The truck's frequent need for repairs and maintenance resulted in significant costs but also caused disruptions in operations. This predicament underscored the critical importance of dependable equipment for ensuring a smooth distribution process. It brought to the forefront the challenge that RAD Cooperatives must navigate: finding a balance between cost-saving measures and the necessity for operational reliability.
4. Partnership Dynamics: The collaboration with T4 Solutions to deploy temperature-controlled grocery lockers underscored the complexities of working with external partners. The discrepancies between expectations set during the sales phase and the realities of implementation led to delays and unforeseen operational challenges. This experience highlighted the potential pitfalls in external collaborations, especially regarding clear communication and alignment of expectations.
5. Leadership and Succession Concerns: The cooperative faces leadership and succession planning challenges. The departure of key figures like Jim Supervalu and Diana's anticipated retirement poses significant concerns for the future stability and strategic direction of RAD

Cooperatives. These developments underscore the challenge of ensuring continuity and maintaining the cooperative's values and mission amidst leadership transitions.

## 3.9 The Road Ahead for RAD Cooperative

The narrative of RAD Cooperative's evolution in rural retailing is a compelling testament to the power of collaboration, forward-thinking leadership, and strategic innovation in navigating the path to success. Under the stewardship of Diana Hahn, whose leadership acumen was significantly bolstered by the strategic insights and support from the NDAREC's rural development team, the cooperative managed to surmount its initial set of challenges. This leadership synergy catalyzed the cooperative's trajectory toward notable growth and operational efficiency.

One of the foundational strategies that underpinned this growth was the implementation of effective data-sharing practices among the sister stores. This initiative fostered a spirit of unity and cooperation and facilitated a smoother navigation through the initial operational and technological hurdles. By pooling resources and insights, the cooperative could leverage collective knowledge to optimize operations and mitigate early-stage challenges.

RAD Cooperative embarked on diversifying its revenue streams to fortify its financial stability. This strategic diversification was creatively manifested through initiatives such as permitting local brands to advertise on the cooperative's delivery trucks and instituting a $50 delivery fee applicable in the two sister stores and participating schools. Such innovative revenue-enhancing strategies significantly bolstered the cooperative's financial foundation, ensuring a sustainable operational model.

Despite these successes, RAD Cooperative faced notable challenges from larger retail chains, which introduced competitive pressures through their extensive resources and broad

product offerings. Additionally, the cooperative grappled with issues stemming from the quality of its operational equipment. These challenges highlighted the critical need for the cooperative to maintain its unique value propositions and make judicious investments in high-quality resources to ensure reliability and operational continuity.

The core principles of trust, adaptability, and effective communication were at the heart of RAD Cooperative's success. These elements were pivotal in cultivating a strong, cohesive network capable of withstanding external market pressures and internal challenges. The seamless blend of trust within the cooperative, the adaptability to rapidly evolving market dynamics, and the commitment to maintaining open lines of communication formed the bedrock of RAD Cooperative resilience and growth.

The cooperative's journey thus serves as an instructive blueprint for rural retailing and collaborative business models. It underscores the immense potential of collective effort, strategic foresight, and a commitment to innovation in achieving sustainable success. This story is a beacon for other rural cooperatives and businesses, illustrating that overcoming initial challenges and achieving long-term sustainability is well within reach with the right mix of leadership, collaboration, and strategic innovation.

3.10 RAD Cooperative Benchmark for Success through Key Performance Indicators (KPI's)

Table 1 RAD Cooperative Benchmark for Success

| | KPI's | Strategy Implemented | Challenges | Solution |
|---|---|---|---|---|
| 1 | Cost Saving | Engaging in collective bargaining and bulk purchasing to negotiate better prices with suppliers. | Facing stiff competition from larger retail chains that offer lower prices due to their scale. | Leveraging the cooperative model for bulk purchasing to achieve cost savings notably the two sister stores saw cost savings of 23% and 16%, respectively. |
| 2 | Trust | Effective data-sharing among stores | Overcoming initial reluctance among sister stores to adapt to new operational methods and technologies. | Building on the existing relationships of trust, facilitating smooth transitions to new systems, and ensuring members see tangible benefits from their cooperation. |
| 3. | Flexibility | Introduction of innovative solutions like climate-controlled grocery lockers and online ordering platform | Adapting to rapidly changing consumer demands and the technological landscape. | Adjusting to new ordering methods through the cooperative and implementing the POS system for this store, moving away from their prior suppliers |
| 4. | Leadership stability | Focused on developing internal leadership | Departure of key figures and upcoming retirement. | The need for robust succession planning and nurturing internal leadership. |
| 5. | Revenue Diversification | Diversifying income streams through innovative channels such as advertising on delivery trucks and implementing delivery fees for the schools and stores. | Dependence on a single revenue stream. | Exploring multiple revenue streams to build a more resilient financial model, ensuring the cooperative's sustainability and growth. |

Source: Author

These KPIs and strategies explained above demonstrate the RAD Cooperative's holistic approach to addressing the multifaceted challenges of rural retailing. Other rural grocers seeking to establish a purchasing cooperative can benefit from adopting similar measures tailored to their specific contexts to enhance operational efficiencies, financial stability, and community impact. This cooperative model supports the sustainability of rural grocery stores and strengthens the fabric of rural communities.

## 3.11 Case Discussion Questions

1. What hurdles did RAD Cooperative encounter while setting up the food distribution network?
2. In what ways did the RAD Cooperative approach cater to the specific requirements of rural communities?
3. How can RAD Cooperative further utilize technology to enhance its operations and extend its reach?
4. What lasting effects could RAD Cooperative have on the local community and its economy?
5. How might RAD Cooperative modify its strategies to maintain sustainability amid changing challenges and competitive pressures?
6. What are the benefits and difficulties of RAD Cooperative operating as a cooperative compared to other business structures?
7. Considering Diana's pivotal role, how can RAD Cooperative ensure its continued growth and cohesion after retirement?

## Chapter IV: Need and Feasibility of a Purchasing Cooperative Among Rural Grocers to Alleviate Food Distribution Challenges

### 4.1 The Revitalization of Rural Retail: A Cooperative Approach in Southeast Kansas

In Southeast Kansas, like many rural areas across the United States, grocery stores are more than just shopping venues; they are crucial to the community's economic health and social cohesion. These stores act as a primary source of employment, contributing to the local tax revenue and playing a pivotal role in attracting and retaining residents. These stores are foundational to the fabric of rural life. However, between 2008 and 2018, the closure of 105 grocery stores in rural Kansas—a phenomenon mirrored in other states—highlights a distressing trend toward diminished access to essential goods and services in these areas (Rural Grocery Initiative). This situation exemplifies the broader challenges facing rural grocery stores, which are vital for access to food and local economic stability.

Small-scale rural stores grapple with two significant challenges: stiff competition from larger retailers and tough supplier negotiations. The inability of these stores to purchase in bulk places them at a significant disadvantage, leading to higher operational costs and making it difficult to compete with the pricing strategies of larger chains. This dynamic threatens their existence and affects the affordability and accessibility of nutritious food for local communities. The phenomenon contributes to the growing concern over "food deserts"—areas where access to grocery stores is severely limited, disproportionately affecting low-income residents who may not have the means to travel to distant supermarkets.

The closure of rural grocery stores exacerbates the food desert issue and has broader economic and social repercussions. According to Crandall (2016), consumer spending is diverted to larger retailers or online platforms when these stores close, resulting in job losses and a

diminished sense of community cohesion. Local stores often act as social gathering points, playing a crucial role in maintaining the social fabric of rural areas.

In the face of these challenges, innovative initiatives like the Rural Access Distribution (RAD) Cooperative in Walsh County, North Dakota, offer hope. Established by the North Dakota Association of Rural Electric Cooperatives (NDAREC), the RAD Cooperative utilizes a shared services model to address critical issues in rural grocery stores. By pooling their purchasing power, member stores can negotiate more effectively with suppliers, achieve lower operational costs, and enhance their product range. This model helps individual stores remain competitive and contributes to preserving access to affordable and nutritious food in rural communities, thereby tackling the adverse effects of food deserts and fostering economic and social resilience.

The RAD Cooperative model's success highlights several potential benefits, such as improved food distribution, an increased variety of products for consumers, and enhanced sustainability for rural grocery stores. Through Adopting similar cooperative models, rural communities elsewhere can work towards safeguarding their local grocery stores, ensuring access to affordable and nutritious food, and maintaining their communities' economic and social fabric. The success of this model in North Dakota, characterized by improved food distribution capabilities, an expanded product range, and financial efficiencies, offers a viable blueprint for rural grocery stores elsewhere, including Kansas.

By leveraging shared resources and collective bargaining, these stores can improve their competitive stance, addressing the critical issues of food accessibility and economic decline in rural communities. This case study underscores the potential of collaborative strategies in ensuring the sustainability and vitality of rural grocery stores, which are indispensable to their communities' social and economic well-being.

## 4.2 Exploring Purchasing cooperative Models for Sustainable Local Grocery Operations in Southeast Kansas

This pilot study, initiated in Southeast Kansas, aims to investigate new business models for local rural grocery stores by addressing their specific challenges and identifying opportunities for sustainable solutions. To understand the perspectives and hurdles local grocers face, The research team organized a series of meetings in both in-person and virtual (Zoom) formats. The primary goal of these intensive sessions was to gauge the grocers' interest in participating in the study and to explore the viability and potential outcomes of introducing a cooperative business model in Southeast Kansas. The first meeting was attended by approximately ten grocers wanting to know about purchasing cooperatives.

Initial dialogues with the grocers revealed several critical issues, including challenges in distribution and procurement and the practicality of implementing a cooperative model. Discussions revolved around crucial topics such as structuring cooperative leadership, model feasibility, accessing grant funding, and exploring partnerships with established wholesalers like AWG. The necessity of finding a balance between competitive pricing and profitability was a recurrent theme, alongside the importance of achieving sufficient volume for collective purchasing to be effective.

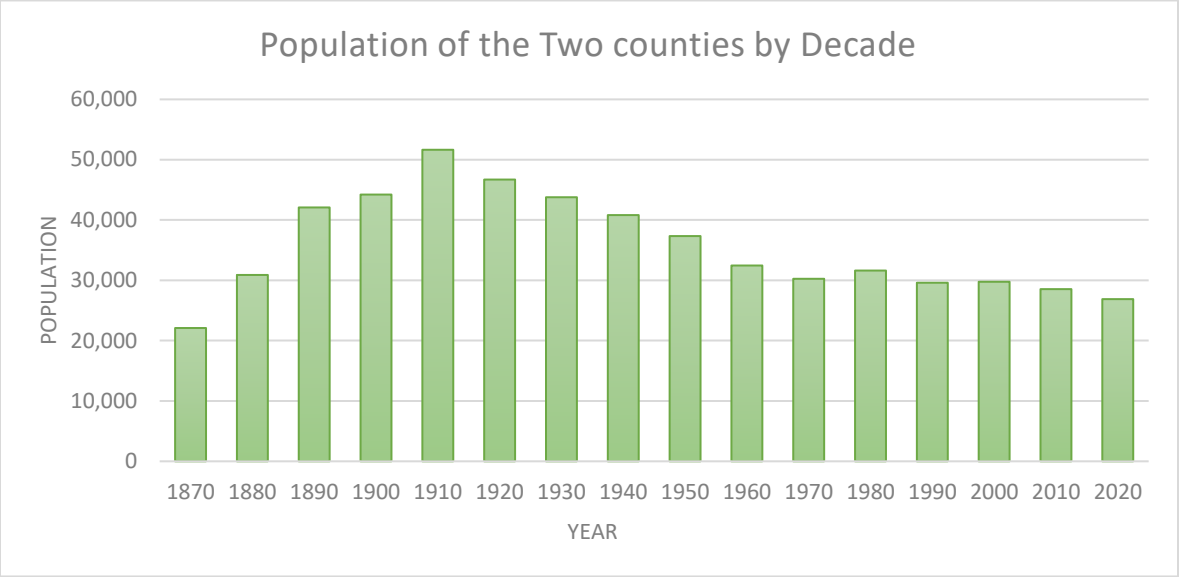
The participating stores each bring distinct advantages to the potential cooperative, such as offering community discounts, specialty items, hot meals, and grant-subsidized meals for seniors. However, they share common hurdles, such as the complexity of sourcing products efficiently, dealing with numerous suppliers (up to 25 in some cases), each imposing their fees, and the ongoing battle to maintain customer loyalty amidst competition from larger retail chains. Another

shared concern is managing operating costs while ensuring prices remain affordable for their community.

Throughout the discussions, the emphasis was placed on the critical need for a strong business foundation and a detailed feasibility plan. Concepts like shared transportation for distribution and the benefits of consolidated purchasing power were identified as potentially beneficial strategies. The conversations underscored the importance of securing better supplier contracts, adopting a community-centric approach for the success of the cooperative, and addressing the issue of high grocery taxes in Kansas. This initial meeting lays the groundwork for a comprehensive study to explore further the grocers' perceptions of how a cooperative model might positively influence their operations and communities.

In this study, we have identified and selected three grocery stores that have shown a keen interest in exploring an innovative business strategy and have demonstrated sustained engagement following our initial general meeting. These stores are located in two different counties in Southeast Kansas. They will be referred to as Store A, Store B, and Store C for confidentiality reasons. The subsequent phases of the study involved conducting comprehensive surveys to collect in-depth information about each store's characteristics and supplier relationships and performing a detailed analysis of their costs. The aim is to evaluate the feasibility of adopting a shared services cooperative model in Southeast Kansas, providing actionable recommendations to help local grocery stores thrive in a competitive market. The decline in population in these areas, as depicted in Figure 7, represents a critical challenge these grocers face.

Figure 7 Population of the two counties in Southeast Kansas by Decade




Source: Census.gov

## 4.3 Feasibility Survey Tool: Evaluating Grocery Stores Attributes

A feasibility survey tool was designed to gather essential data regarding the attributes of each participating rural grocery store. Its principal aim is to unearth potential synergies between these stores. By collecting information on specific store attributes such as square footage, aisle count, storage capacity, workforce dimensions, and the operational hours of both owners and employees, the tool sets the stage for initial discussions focused on optimizing operations to reduce the cost of goods sold and ensure a more stable supply of groceries.

This innovative tool plays a crucial role in formulating strategies that could include streamlining store operations, consolidating suppliers, and establishing reliable, year-round supply chains; for instance, by identifying which stores have ample storage facilities, a collaborative warehousing strategy might be devised, significantly cutting down overhead costs for all stores involved. This approach aims to make operations more efficient and enhance the product range

available to consumers under more advantageous conditions. The details and comprehensive methodology of this survey tool are elaborated in the thesis's final section, providing a roadmap for rural grocery stores to achieve cost-effectiveness and supply chain stability.

## 4.4 Stores Characteristics

Store A is a multifunctional grocery provider featuring a broad range of products, including a meat market, deli offerings, an assortment of cheeses, and a selection of fresh produce. Additionally, it offers specialty candies and custom deli trays designed for festive and social events. The store's ample storage space holds a substantial inventory that spans everyday bulk items to unique specialty products. It is equipped with diverse vehicles and accessible facilities.

Store B operates on a scale optimized for efficiency, catering to customers seeking convenience. Its commercial kitchen allows it to offer a variety of ready-to-eat meals, appealing to customers with fast-paced lifestyles. Although the storage capacity is relatively minor, Store B plays a vital role in the local economy, employing over 160 residents. The store is well-equipped with the necessary loading tools like forklifts and pallet jacks, ensuring smooth logistical operations.

Store C, the smallest storage size among the three, focuses on a carefully chosen product range that may feature local or handcrafted goods. Store C indicates a dedication to providing unique culinary experiences, setting it apart from standard grocery stores and attracting patrons with a taste for specialty products. Store C utilizes a cargo trailer to support its operations, highlighting the importance of strategic logistics planning tailored to its operational scale and market niche.

## 4.5 Supplier information

The survey explored the intricacies of supplier relationships among grocery stores, probing into the number of suppliers each store works with, the nature of these relationships, including the criteria for choosing suppliers, contract specifics, the share of total annual supplies sourced from the supplier, minimum order requirements, membership fees, delivery frequencies, and any rebates or discounts available. It also looked into logistical aspects like the distance covered to source products and the variety of products purchased, aiming to shed light on the stores' purchasing patterns and logistical challenges.

In Southeast Kansas, the grocer's approach to sourcing products varies significantly from one store to another, impacting their operational dynamics in diverse ways. For instance, Store A secures at least 35% of its grocery items from a primary supplier and supplements this by purchasing from a nearby rural grocery store. This dual approach of sourcing directly from a wholesaler and another retail store allows Store A to diversify its product offerings and mitigate supply disruptions despite facing hurdles such as meeting minimum purchase requirements and traveling distances to collect goods from various suppliers.

Conversely, Store B heavily relies on one of the nation's largest cooperative food wholesalers for 90% of its inventory, benefiting from competitive pricing and special offers through its membership. This substantial dependence on a single supplier simplifies operations but introduces risks related to supply shortages and limited bargaining power. Store B's commitment to this supplier is marked by a one-time membership fee and annual dividends, reflecting a financially driven long-term relationship yet constraining its flexibility to explore other suppliers.

Store C predominantly purchases from a major supplier across 32 states, accounting for 80% of its inventory. The requirement to place a minimum order of $700 poses financial challenges and risks of overstocking or insufficient product variety. These diverse procurement strategies of these stores illustrate the stores' varying priorities between securing competitive prices and maintaining a reliable supply versus opting for stability and potential financial advantages through a singular supplier relationship. Each approach presents challenges, including meeting minimum order thresholds and managing multiple supplier relations.

Given these complexities, adopting a cooperative model could offer a strategic advantage. It would allow stores to negotiate better terms collectively, share the responsibility of fulfilling large orders, and reduce costs through collaboration. This collective bargaining power could enable access to discounts and rebates unattainable individually, bolstering the stores' competitive edge and financial stability.

## 4.5 Product Categories

The survey aimed to gather comprehensive data on the sales performance and cost-saving opportunities within various departments of each store, such as dairy, meat, produce, deli, beverages, and bakery items, by inquiring about the total units purchased, units sold and sales revenue for each item in these departments, the survey intended to pinpoint areas for potential savings and identify the most popular products among consumers. This approach allowed for a detailed comparison of supplier deals and evaluation of sales effectiveness across the stores.

The findings revealed distinct consumer preferences and sales trends at each location. For instance, Store A's sales data highlighted a significant consumer interest in general merchandise, representing 50% of its top-selling items. This trend suggests a diversified consumer base that

values a wide range of non-food products. Additionally, categories like bakery, beer/wine, and tobacco contributed 10% of Store A's sales, underscoring their importance in the store's product mix.

Store B, on the other hand, demonstrated a strong focus on dairy products, which accounted for 13% of its best sellers. This indicates either a store specialization in dairy or a particularly high demand among its customers. Like Store A, the bakery and beer/wine categories were also significant, each making up 10% of sales, pointing to common consumer preferences across different stores.

Store C's sales distribution was markedly different, with meat products leading at 30% of top sellers, suggesting a particular emphasis on or high consumer demand for meat in its location. Prepared foods followed closely, representing 20% of the store's sales, indicating a customer inclination towards convenience and ready-to-eat options. Unlike Store A, tobacco and general merchandise had less impact on Store C's top-selling items, highlighting each store's distinct market dynamics and customer preferences. These insights provide a valuable understanding of each store's market position and customer demand patterns, offering a foundation for strategic decisions on inventory management, supplier negotiations, and marketing efforts to enhance overall sales performance and cost efficiency.

Table 2 Percentage Breakdown of Best-Selling Product Categories for Grocery Stores

| Product Categories | Store A (%) | Store B (%) | Store C (%) |
|---|---|---|---|
| Beverages | 1.0 | 3.1 | 5.0 |
| Meat | 3.0 | 6.9 | 30.0 |
| Produce | 6.0 | 5.4 | 5.0 |
| Dairy | 2.0 | 13.1 | 5.0 |
| Deli | 8.0 | 0 | 5.0 |
| Frozen | 2.0 | 9.5 | 5.0 |
| Beer/wine | 10.0 | 4.6 | 5.0 |
| Bakery | 1.0 | 0 | 5.0 |
| Health, beauty, and cosmetics | 0 | 1.3 | 0 |
| Seafood | 0 | 0 | 0 |
| General merchandize | 50.0 | 34.5 | 5.0 |
| Tobacco | 10.0 | 12.8 | 0 |
| Floral/ Live plants | 0 | 0 | 5.0 |
| Pet food | 0 | 1.6 | 5.0 |
| Prepared food | 7.0 | 7.2 | 20.0 |

Source: Author

Finally, the survey included questions about the stores' interest in joining a purchasing and shared services cooperative. This section aimed to gather the store owners' perspectives on this concept, potential challenges, and the benefits they hope for; it also sought their input on factors to consider when determining the physical location of the cooperative. The survey was conducted with clear communication about its purpose, ensuring participants felt comfortable providing honest and detailed information. This thorough approach was pivotal in understanding the current state of each store and exploring the feasibility of a cooperative business model in Southeast Kansas.

## 4.7 Findings and Results

The following comprehensive analysis delves into the purchasing strategies of the three grocery stores to determine the viability and potential benefits of a shared services model in southeast Kansas, emphasizing achieving cost savings and enhancing operational efficiencies. We evaluated

the volumes and the current grocery ordering process of each store against possible economies of scale that a cooperative purchasing system could provide.

### 4.7.1 Insights from Dairy COGS

The investigation into the Cost of Goods Sold (COGS) for dairy products highlights Store B's advantageous position in procurement costs, primarily due to its affiliation with its primary supplier. This membership grants Store B access to dairy items at significantly reduced rates. A closer look at the pricing for staple dairy products like whole and 2% milk reveals that Store B's costs are considerably lower, providing a competitive edge by offering prices markedly below those of Stores A and C.

Due to confidentiality agreements with the grocers, exact prices of these dairy items will not be disclosed. However, the percentage differences in prices for various dairy products among the stores offer a clear comparison. For example, the cost of a gallon of whole milk at Store A is 40.15% higher than at Store B, and Store C's price is 29.69% higher than Store B. Similarly, for a gallon of 2% milk, Store A's price is 42.14% higher, and Store C's is 26.84% higher than Store B's. This pattern is evident across several dairy items, with Store B consistently having the lowest relative prices, underscoring the effectiveness of its supply chain strategy. A more straightforward breakdown in clarifying the percentage difference explanation: 40.15% higher price at Store A for whole milk means that for every dollar Store B spends on milk, Store A spends $1.4015.

Similarly, a 29.69% higher price at Store C means it spends $1.2969 for every dollar Store B spends. These comparisons demonstrate the substantial cost savings Store B achieves through its supplier relationship, which could serve as a model for cost reduction within a cooperative framework. By leveraging collective bargaining and bulk purchasing, stores could realize

significant savings, like that of Store B. The detailed comparison in Table 3 showcases these percentage differences for a range of dairy items across the three stores, adjusted to a base where Store B often sees the lowest cost due to its strategic supplier partnership. This insight highlights the direct benefits of such partnerships and the potential for savings through a cooperative approach, suggesting a pathway for other stores to reduce their dairy COGS by adopting a similar bulk purchasing and collective bargaining strategy. Some items are marked as 'N/A', indicating that certain products are not available at the corresponding store.

Table 3 Dairy Cost of Goods Sold (COGS) at each Grocery Store

| Dairy Item | Store A | Store B | Store C |
|---|---|---|---|
| Whole Milk, Gallon | 40.15% | 0% | 29.69% |
| 2% Milk, Gallon | 42.14% | 0% | 26.84% |
| Butter | 66.93% | 63.79% | 0% |
| Whole Milk, Half Gallon | 42.85% | 0% | N/A |
| 2% Milk, Half Gallon | 44.60% | 0% | N/A |
| Cream Cheese | 0% | N/A | -3.78% |
| Eggs | N/A | -2.96% | 0% |

Source: Author

### 4.7.2 Insights from Produce COGS

The analysis of the Cost of Goods Sold (COGS) for produce items among the stores unveils a significant variance in procurement strategies and efficiency. Stores A and B, which opt for purchasing produce in case quantities, can secure lower per-unit costs due to the economies of scale, with Store B achieving slightly better terms than Store A. This indicates a more optimized procurement process at Store B, likely due to more robust negotiation capabilities or better supplier relationships.

Store C’s approach of buying in smaller quantities leads to higher per-unit costs. It suggests a less efficient procurement strategy, highlighting areas where Store C could enhance its operations. The current strategy at Store C may be limiting its ability to compete effectively in terms of pricing and the variety of produce offered to customers. The disparities in COGS, as detailed in Table 4, present a clear picture of how procurement strategies affect cost efficiency. For instance, the cost of lettuce at Store C is 56.68% higher than at Store A, indicating a significant opportunity for cost savings. Similarly, tomatoes and onions show marked cost differences, with Store C's costs being 60.99% and 87.89% higher, respectively, compared to Store A's baseline.

These findings underscore the potential benefits of a shared services model for Store C. By joining a collective purchasing group, Store C could leverage the purchasing power of multiple stores to negotiate better terms with suppliers, potentially leading to substantial reductions in COGS. This approach would improve Store C’s competitiveness by offering lower prices and allow it to expand its produce range, thereby attracting a broader customer base.

Embracing a shared services model represents a strategic pivot that could transform Store C’s procurement process. It would transition the store from an inefficient, small-scale buying to a more cost-effective, collaborative purchasing strategy. This change could significantly impact Store C's bottom line and market position, demonstrating the transformative power of collective action in the grocery retail sector.

Table 4 Produce Cost of Goods Sold (COGS) at each Grocery Store

| Produce Item | Store A | Store B | Store C |
|---|---|---|---|
| Lettuce | 0% | 21.23% | 56.68% |
| Tomatoes | 0% | 19.84% | 60.99% |
| Potatoes | 1.65% | 0% | N/A |
| Onions | 0% | N/A | 87.89% |

Source: Author

### 4.7.3 Insights from Alcohol COGS

The analysis of the Cost of Goods Sold (COGS) for alcohol products, such as Natural Light and Busch purchased from Crawford, reveals an exciting aspect of uniform pricing across all stores. This uniformity in cost suggests that, for specific product categories, the potential advantages of cooperative purchasing may be less significant due to the suppliers' practice of non-differential pricing. When a supplier offers the same price to all buyers regardless of their size or purchasing power, the leverage typically gained through collective buying diminishes.

However, this scenario also highlights a strategic opportunity. The presence of competitive pricing, as demonstrated by the uniform cost of items like Natural Light, can serve as a valuable benchmark for any cooperative effort. It offers a baseline against which the cooperative can measure its effectiveness in securing favorable deals. Even in categories where suppliers maintain non-differential pricing, the cooperative model can explore other avenues to add value for its members, such as negotiating better delivery terms, more extended payment periods, or additional rebates and discounts not strictly tied to the purchase price.

This insight suggests that while cooperative purchasing may not always result in direct cost reductions for certain products due to existing market conditions, it still represents a strategic tool for improving overall procurement efficiency and competitiveness. By focusing on areas where cooperative efforts can influence supplier terms beyond just pricing, stores can enhance their market position and offer more excellent value to their customers.

## 4.8 Potential Cost Savings

Our study took a different approach without a comprehensive pricing sheet to analyze the potential cost savings from consolidating orders and securing better policies from major suppliers through a collective purchasing effort. We investigated the financial outcomes if all three grocery stores—Store A, Store B, and Store C—could access the least price available among them for critical categories such as alcohol, dairy, and produce. This scenario assumes that if the stores operated under a unified cooperative model, they could benefit from the lowest prices currently available to each of them individually.

We first calculated the monthly cost savings for each store across these three categories to estimate the potential savings. This calculation assumed that each store would now be paying the same, lowest price that any one of the stores is currently paying for specific items within these categories. By extending these monthly savings over a year, we derived the annual cost savings for each store. Finally, to put these savings into perspective, we calculated what percentage of their annual Cost of Goods Sold (COGS) from the last year these savings represented.

Table 5 Analysis of Cost Savings on Common Items Sold at the Grocery Stores

| Grocery item | Potential cost savings per month | Potential annual cost savings | Percentage of cost savings per store |
|---|---|---|---|
| Store A | $178.48 | $2,141.76 | 0.76% |
| Store B | $82.12 | $985.44 | 0.42% |
| Store C | $148.67 | $1,784.04 | 0.59% |

Source: Author

The study's findings clearly show the challenges facing individual grocery stores when considering the formation of a purchasing cooperative, especially given their relatively low purchasing volumes. Despite the potential benefits theoretically offered by a cooperative model, the actual projected cost savings for the stores involved are marginal, barely exceeding the 1% threshold. For instance, the anticipated annual cost savings for Store A stand at a modest 0.7677%, with Stores B and C showing only slight potential for cost reductions.

This analysis, grounded in a hypothetical scenario where each store could access the lowest prices available, sheds light on the complexities and nuanced realities of cooperative purchasing. It reveals that, although there are opportunities for savings, the actual impact of such a model heavily depends on the specific scale and operational context of the participating stores. The minimal cost savings projected, coupled with the significant challenges identified, suggest that these stores' current conditions and purchasing dynamics do not lend themselves to the successful establishment of a purchasing cooperative.

Moreover, while specific product categories like dairy and produce might see some benefit from consolidated ordering through better supplier prices, more than these advantages are needed to warrant the formation of a purchasing cooperative under the prevailing circumstances. Establishing such a cooperative requires a comprehensive process, encompassing steps from the

initial concept exploration and member recruitment to feasibility studies and operational setup. Given the modest cost savings identified and the hurdles highlighted by the study, moving forward with a purchasing cooperative is not considered feasible or practical.

This conclusion is drawn after a meticulous exploration and a pragmatic evaluation of all relevant factors, emphasizing the critical need for a thorough and realistic assessment in decision-making processes for ventures of this nature. While the idea of a purchasing cooperative remains appealing in theory, its practical implementation and economic viability, in this case, need to be improved, underlining the essential role of detailed analysis in guiding strategic business decisions.

Additionally, the inspiration for this research came from the RAD cooperative initiative in North Dakota, led by the North Dakota Association of Rural Electric Cooperatives. Notably, Hoople Grocery and Edinburg's Market on Main saw cost savings of 23% and 16%, respectively, as part of this initiative. These success metrics served as a benchmark for our study. However, the modest 1% cost savings projection for the Southeast Kansas stores pales in comparison, further justifying our decision not to establish a purchasing cooperative. The achievements of Hoople Grocery and Edinburg's Market on Main underscore the potential of the cooperative model under favorable conditions. However, our findings indicate that without significant increases in purchasing volumes or broader cooperative membership, the envisioned benefits for Southeast Kansas grocers would likely not reach a similarly impactful scale.

## 4.9 Insights and Strategies for Grocery Stores Considering Cooperative Models

The insights garnered from this study have broader implications for small and medium-sized grocery stores contemplating the cooperative model as a strategy to overcome procurement and operational challenges:

1. Scale and Volume: The success of a cooperative model heavily depends on the scale of purchasing volumes. Stores with minimal purchasing volumes may need to explore alternative strategies or seek broader partnerships to make such a model viable.
2. Selective Benefits: While the cooperative model holds promise for specific categories, it may only be universally beneficial across some procurement segments. Stores must conduct category-specific analyses to identify where collective bargaining could yield tangible benefits.
3. Learning from Successes: The experiences of Jim SuperValu grocery store, Hoople grocery store, and Edinburg's Market on Main within the RAD cooperative initiative in Walsh County, North Dakota, offer valuable lessons. These cases demonstrate the potential for significant sales increases through cooperative models, suggesting that under the right conditions, such models can thrive. However, setting realistic benchmarks is crucial, as the modest savings potential identified in our study suggests that not all cooperative efforts will achieve the same level of success.
4. Strategic Consideration: The decision to pursue a cooperative model should be based on a thorough feasibility study considering all operational, financial, and market dynamics. The comprehensive process outlined in our study—from initial exploration to the decision point—serves as a strategic framework for other stores considering similar initiatives.
5. Adaptation and Flexibility: The evolving retail landscape necessitates adaptability and flexibility from small and medium-sized grocers. While beneficial under certain conditions,

cooperative models are just one of many strategies that can be employed. Stores must remain open to adapting their strategies in response to changing market conditions and procurement dynamics. While the concept of a shared services cooperative offers a compelling theoretical promise for cost savings and operational efficiencies, the practical application of this model requires careful consideration of the specific conditions and dynamics at play. The insights from this study underscore the need for detailed analysis, realistic assessment, and strategic planning in the decision-making process for grocery stores in Southeast Kansas and beyond.

## 4.10 Conclusion

The comprehensive analysis of the purchasing strategies across dairy, produce, and alcohol categories for three Southeast Kansas grocery stores gave us valuable insights into the shared services cooperative model's potential advantages and limitations. This study aimed to uncover ways to boost operational efficiencies and achieve cost savings through collective bargaining and bulk purchases.

The investigation revealed significant differences in how these stores manage their purchases. Store B, for example, enjoyed substantial savings on dairy products thanks to its relationship with a primary supplier, showcasing the kind of savings a cooperative could unlock. On the other hand, Store C faced challenges with small order quantities, pointing out areas where a shared services model could lead to more product offerings and cost savings.

However, the promise of these opportunities is tempered by significant challenges. A key issue is the small volume of purchases by the involved stores, leading to only modest potential savings. This situation complicates the justification for establishing a purchasing cooperative

under the current market conditions in Southeast Kansas, despite some suppliers offering competitive prices for specific categories.

The journey towards potentially establishing a cooperative is complex, starting with the initial idea and moving through to detailed planning and operational setup. Considering the modest savings and the challenges identified, the conclusion is that forming a purchasing cooperative in Southeast Kansas is not feasible or practical.

This realization prompts a need for alternative strategies. While a formal purchasing cooperative may not be viable at this time, stores could explore forming strategic alliances for purchasing. By aligning with stores that secure the best prices in specific categories, other retailers can access these savings without the formal structure of a cooperative. This flexible approach could provide a middle ground, allowing stores to enjoy some benefits of collective purchasing while navigating the current constraints.

## 4.11 Recommendation

After carefully analyzing the situation of rural grocery stores in Southeast Kansas and considering the viability of a purchasing cooperative modeled after the RAD Cooperative's success, we have identified several key challenges that must be addressed. While the concept of a purchasing cooperative has merit, particularly in the potential for operational efficiencies and cost savings through collective bargaining and bulk purchasing, the realities on the ground present significant obstacles. The disparities in pricing and procurement efficiency among the stores and the minimal purchasing volumes highlight substantial barriers to achieving the envisioned cost savings. Moreover, these rural stores in Southeast Kansas, much like those in the RAD Cooperative, are contending with the critical issue of declining populations, further complicating their operational

context. Given these challenges, here are some tailored recommendations for rural grocery stores in Southeast Kansas and similar contexts:

1. Explore Strategic Buying Arrangements: Instead of forming a formal purchasing cooperative, which our analysis suggests is not feasible, stores could explore strategic buying arrangements. It could involve partnering with the store that secures the best prices in specific categories, allowing others to access these savings. Such an arrangement would capitalize on the strengths within the existing network of stores without the complexities and commitments required to establish a formal cooperative.
2. Leverage Community Engagement: Strengthening the relationship with the local community can enhance customer loyalty and create a more resilient business model. Initiatives such as local produce sourcing, community events, and loyalty programs can reinforce the grocery store's role as a community hub and increase store traffic.
3. Investigate Grant and Subsidy Opportunities: To offset operational costs and fund improvements or expansions, stores should actively seek grants and subsidies for rural businesses. It could include funding for infrastructure upgrades, technology enhancements, or initiatives that promote local food systems.
4. Adopt Technology for Efficiency: Implementing or upgrading technology systems can improve inventory management, streamline operations, and open up e-commerce opportunities. A modest investment in technology could yield significant operational efficiencies and customer service improvements.
5. Engage in Regional Networking: Building networks with other rural grocery stores outside of the immediate Southeast Kansas area could provide opportunities for knowledge exchange,

shared advocacy, and broader collective purchasing arrangements that transcend the limitations identified in this study.

6. Continued Exploration of Cooperative Models: While a purchasing cooperative may not be viable, the landscape constantly changes. Stores should continue to explore this model and others, remaining open to future possibilities as market conditions and purchasing volumes evolve.

## Chapter V: Discussion

### 5.1 Discussion

The feasibility of establishing a purchasing cooperative among rural grocers in Southeast Kansas has unearthed a complex landscape of both opportunity and challenge. This research, inspired by the RAD Cooperative achievements in North Dakota, sought to identify whether a similar cooperative model could address the critical challenges facing rural grocery stores in Southeast Kansas. These challenges include high operational costs, limited access to a diverse range of suppliers, and the increasing risk of these areas becoming food deserts.

- Operational Challenges: Rural grocers in Southeast Kansas face significant operational challenges that impede their efficiency and profitability. These challenges stem from the stores' relatively small size and isolated locations, which exacerbate issues such as inventory management, product freshness, and the ability to meet consumer demand for various goods. The cooperative model offers solutions to these challenges by enabling collective bargaining and pooling of resources, potentially leading to improved supply chain logistics and reduced costs.
- Logistical Hurdles: Logistically, the rural grocers' geographic isolation poses significant hurdles to efficient supply chain management. The distances contribute to higher transportation costs and difficulty ensuring product freshness, particularly for perishable goods. Moreover, the minimal purchasing volumes highlighted in the study exacerbate these logistical challenges, as suppliers are less incentivized to provide competitive pricing or tailor their distribution strategies to meet the needs of smaller, rural stores.
- Financial Viability: Financially, the thesis underscores a critical barrier to the purchasing cooperative model's feasibility in Southeast Kansas: the marginal cost savings achievable

through collective purchasing. While aggregating orders promises to reduce operational costs and enhance product diversity, the reality of minimal purchasing volumes among Southeast Kansas's rural grocers undermines this potential. Suppliers' pricing structures and the economic scale necessary for significant savings suggest that the expected financial benefits of forming an SSC under current conditions may be limited.

- Market Dynamics and Supplier Diversity: The research also delves into the complexities of market dynamics and the importance of supplier diversity. Rural grocers' limited bargaining power with suppliers and dependence on a narrow supplier base can lead to unfavorable pricing and product selection. The cooperative model addresses these issues by consolidating orders and expanding the network of suppliers, potentially leading to better terms and a more diverse product offering. However, achieving this requires overcoming the inertia of current purchasing habits and establishing a cooperative structure that can effectively negotiate and manage these relationships.
- Sustainability and Community Impact: Beyond the operational, logistical, and financial considerations, the study also reflects on the potential of Purchasing Cooperatives to contribute to the sustainability of rural grocery stores and their communities. Purchasing Cooperatives could be vital in preserving access to essential goods and services in rural areas, combating food deserts, and supporting local economies by enhancing stores' competitiveness and viability. The potential community impact underscores the importance of finding viable pathways to overcome the identified barriers to establishing a Purchasing Cooperative in Southeast Kansas.

In conclusion, while the RAD Cooperative's success in North Dakota offers valuable lessons, the translation of this model to Southeast Kansas needs to be improved by unique challenges

specific to the region. The insights gained from this investigation into Purchasing Cooperative feasibility highlight the need for tailored strategies that account for the distinct operational, logistical, financial, and market dynamics rural grocers face in Southeast Kansas. Achieving the cooperative model's theoretical benefits requires addressing these nuanced challenges, suggesting a cautious and context-aware approach to exploring Purchasing Cooperatives as a solution for rural grocery stores.

**References**


A, Coleman-Jensen. (2017). Household Food Security in the United States. United States Department of Agriculture. Washington, DC, USA: Economic Research Report.

Allison E. Karpyn, Danielle Riser, Tara Tracy, Rui Wang, and Ye Shen. (2020, June 17). The changing landscape of food deserts. *National Library of Medicine* .

Bailey, J. M. (October 2010). *rural grocery stores: importance and challenges.* Center for Rural Affairs Rural Research and Analysis Program .

Bijman, J., Hendrikse, G., & Van Oijen, A. (2012, December 17). Accommodating two worlds in one organisation: Changing board models in agricultural cooperatives. *Managerial and Decision Economics*. doi:https://doi.org/10.1002/mde.2584

Bos, M. (2022). Retrieved from https://www.bushfoundation.org/story/rad-ical-solution

C¸ akir, M. X. (2020). Rural food retailing and independent grocery retailer exit. *American Journal of Agricultural Economics*, 102(5), 1352-1367.

Capouch, L. (2019). *Rural Food Access in North Dakota.* North Dakota Association of Rural Electric Cooperatives, Rural development director.

Census.gov. (2017, August 09). *Census*. Retrieved from https://www.census.gov/library/stories/2017/08/rural-america.html

Chaddad, F. R., & Cook, M. L. (2004). Understanding new cooperative models: An ownership–control rights typology. *Review of Agricultural Economics*, 26(3), 348-360. doi:DOI:10.2307/3700806

Clark, Paul, Tsoodle, Leah, Kahl, Dan.. (2008). *Rural Grocery Sustainability Project Owner Survey. Manhattan, Kansas: Kansas State University, Center for Engagement and Community Development.*

DataUSA. (2020). Retrieved from https://datausa.io/profile/geo/walsh-county-nd

Dimitri, C., Effland, A., & Conklin, N. (2005). The 20th Century Transformation of U.S. Agriculture and Farm Policy. *Economic Research Service/USDA.*

Eliana Zeballos, X. D. (2023). *A Disaggregated View of Market Concentration in the Food Retail Industry.* USDA, Economic Research Service.

Emek Basker, M. N. (2007). The Evolving Food Chain: Competitive Effects of Wal-Mart's Entry into the Supermarket Industry. *Journal of Economics & Management Strategy*. doi:10.1111/j.1530-9134.2009.00235.x

Extension, U. o. (2020, December 7). *New survey reveals challenges and opportunities facing rural grocers*. Retrieved from https://extension.umn.edu/rsdp-happenings/new-survey-reveals-challenges-and-opportunities-facing-rural-grocers

Feeding America. (2021). Retrieved from https://www.feedingamerica.org/: https://www.feedingamerica.org/hunger-in-america/rural-hunger-facts

Fearne, A. H. (2021). Concepts of collaboration: Supply chain management in a global food industry. *Food Industry Journal*, 4(3), 69-81.

Franco, R. C. (2010). Cooperatives, History and Theories of Cooperatives. (H. K. Toepler, Ed.) *In International Encyclopedia of Civil Society*, 563-70. doi:10.1007/978-0-387-93996-4_102

Greg Lawless, A. R. (2005). *Keys to Success for Food Co-op Start Ups in Rural Areas: Four Case Studies.* United States Department of Agriculture, A USDA-funded report prepared for Northcountry Cooperative.

Gunderson C., D. A. (2020). *Map the Meal Gap.* Feeding America, Chicago IL, USA.

Hendrikse, G. W. J., & Veerman, C. P. (2001, December ). Marketing cooperatives and financial structure: A transaction costs economics analysis. *Agricultural Economics*, 26(3):205 - 216. doi:DOI:10.1111/j.1574-0862.2001.tb00064.x

ICA. (1995). *Statement on the Co-operative Identity.* Geneva: International Cooperative Alliance.

Iliopoulos, C. &. (2009). Influence costs in agribusiness cooperatives: Evidence from case studies. *International Food and Agribusiness Management Review*, 12(4), 1-22. doi:10.2753/IMO0020-8825390404

Impact Lab. (2010). *Grocery Stores Closing in Record Numbers.* Retrieved from http://www.impactlab.net/2010/07/05/grocery-stores-closing-in-record-numbers/ (accessed May 17, 2012).

Isabel Dakina, Maribel Monteza, Hidaya Modasir, Junriel Ocor. (2023). Sustainability of Agricultural Cooperatives: A Comprehensive Analysis. doi:DOI: 10.13140/RG.2.2.25037.82405.

Junfeng Jiao, A. V. (2012, oct). How to Identify Food Deserts: Measuring Physical and Economic Access to Supermarkets in King County, Washington. 102(10): e32–e39. doi:10.2105/AJPH.2012.300675

Kaufman, P. (1998). Rural poor have less access to supermarkers, large grocery stores. *Rural Development*, 13,3,19-25.

King, R. P., & Park, T. . (2002). Modeling scale economies in supermarket operations: Incorporating the impacts of store characteristics and information technologies., . *Journal of Food Distribution Research*, 33(1), 99-109.

L. Chenarides, M. Cakır, T. J. Richards. (2023, May 1). Dynamic model of entry: Dollar stores. *American Journal of Agricultural Economics*.

Laurence J. Malone, H. C. (2008). *Market Failure In Delivering Electricity To Rural Areas Before 1930.* Retrieved from https://eh.net/encyclopedia/rural-electrification-administration/

Leesa Witt: National Farmers Union.

Map the Meal Gap. (2022). *A report on county and congressional district food insecurity and county food cost in the united states in 2020.*

Matzen, C. (2021, April 13). *Retail Partnerships For Distribution Challenges*. Retrieved from https://www.nationalgrocers.org/ngaftacenter/ngafta-news/retail-partnerships-for-distribution-challenges/

McBrige, B. (2016). *Celebrating the 80th Anniversary of the Rural Electrification Administration.* United States Department of Agriculture. Retrieved from https://www.usda.gov/media/blog/2016/05/20/celebrating-80th-anniversary-rural-electrification-administration

Morton, Lois W., and Blanchard, Troy C.. (2007). "Starved for Access: Life in Rural America's Food Deserts." .

Morton, Lois.W., Bitto, Ella A., Oakland, Mary J., and Sand. Mary. (2004). Iowa Food Security, Insecurity, and Hunger. *Ames, Iowa: Iowa State University Extension.*

National Cooperative Grocer's Association. (2018). *What is a Co-op?* Retrieved from https://www.ncg.coop/what-co-op#:~:text=Cooperatives%20are%20member%2Downed%2C%20member,unobtainable%20by%20one%20person%20alone.

NCB. (1994). *Group Purchasing Cooperatives.* Washington D.C: National Cooperative Bank.

NCBA CLUSA. (n.d.). *FOOD AND GROCERY CO-OPS*. Retrieved from https://ncbaclusa.coop/resources/co-op-sectors/food-and-grocery-co-ops/

NDAREC. (n.d.). Retrieved from https://ndarec.com/ruralgrocery

NIH. (2023, April 26). *National institute of health*. Retrieved from https://www.nimhd.nih.gov/resources/understanding-health-disparities/food-accessibility-insecurity-and-health-outcomes.html#:~:text=Food%20insecurity%20and%20the%20lack,disorders%20and%20other%20chronic%20diseases%20.

NRECA. (2016, December 1). *Understanding the Seven Cooperative Principles*. Retrieved from https://www.electric.coop/seven-cooperative-principles%E2%80%8B

Olive, R., Draeger, K., Kim, H.-Y., Hanawa Peterson, H., Jarvi, M., Park, D., & Jorgenson, A. (2020). *2019-2020 Minnesota Rural Grocery Survey Report.* University of Minnesota Extension.

Peters, W. E. (1963). Agricultural Cooperatives and the Antitrust Laws. *Nebraska Law review, 43*(1).

Peterson, C. (20221, Dec 01). Retrieved from https://www.ndliving.com/node/544

Phillip R. Kaufman, J. M. (1997). *Do the Poor Pay More for Food? Item Selection and Price Differences Affect Low-Income Household Food Costs.* Food and Rural Economics Division,Economic Research Service, U.S. Department of Agriculture. Agricultural Economic Report No. 759.

Procter, D. E. (2010, August 18). *The Rural Grocery Crisis*. Retrieved from https://dailyyonder.com/rural-grocery-crisis/2010/08/18/

Radcoopnd. (2022). Retrieved from https://radcoopnd.com/#:~:text=The%20Rural%20Access%20Distribution%20Cooperative,together%20to%20decrease%20wholesale%20costs

Raphael, D. (1995). Community transportation: Moving people,building communities. . *Journal Mass Transit, 6,38*.

Reynolds, G. L. (2005). *Keys to Success for Food Co-op Start Ups in Rural Areas: Four case Studies.* A USDA-funded report prepared for Northcountry Cooperative Development Fund by the University of Wisconsin Center for Cooperatives. United States Department of Agriculture.

Rienna G. Russo, S. H. (2022, April 18). Assessing changes in the food retail environment during the COVID-19 pandemic: opportunities, challenges, and lessons learned. *National Library of Medicine*, 22: 778. doi:10.1186/s12889-022-12890-x

Rocha, V. A. (2019, August 30). *Co-ops and Rural Health Care: Changing Communities*. Retrieved from https://www.cooperative.com/remagazine/articles/Pages/electric-co-ops-lead-efforts-rural-health-care-access.aspx

Rural Grocery Initiative. (n.d.). Retrieved from https://www.ruralgrocery.org

Ruralhealthinfo. (2022, Jan 18). Retrieved from https://www.ruralhealthinfo.org/topics/food-and-hunger

S., Skerratt. (2013). Enhancing the analysis of rural community resilience: Evidence from community land ownership. (t. L. Rural Society and Policy, Ed.) *Journal of Rural Studies*. doi:https://doi.org/10.1016/j.jrurstud.2013.02.003

SC Center for Cooperative and Enterprise Development. (n.d.). Retrieved from https://www.clemson.edu/extension/agribusiness/sccced/resources/roles-of-cooperatives.html

Schaars, M. A. (1971). *Cooperatives, Principles and Practices* (Vol. Classification; Cooperatives; Financial Support; History; *Information Sources; Laws; Organization; Public Relations; *Teaching Guides). Wisconsin: Wisconsin Univ., Madison, Univ. Extension.

Service, K.-s. R. (2023, Feb 1). Retrieved from https://www.ksre.k-sstate.edu/news/stories/2023/02/community-rural-grocery-cooperatives-grant.html

Sexton, R. J. (1986). Cooperatives and the Forces Shaping Agricultural Marketing. . *American Journal of Agricultural Economics*, 68(5), 1167-1172.

Shaw H.J. (2016). Food deserts: towards the development of a classification. *Geografiska Annaler: Series B, Human Geography*, 88(2): 231–247.

Simmons, L. (2023, 06 12). Retrieved from https://hpr1.com/index.php/feature/news/rural-grocery-stores-are-disappearing-initiatives-in-place-to-help/

Staff, P. G. (2022, 05 15). Retrieved from https://progressivegrocer.com/pg-100-ranking-top-food-retailers-north-america

Steve Martinez, M. H. (2010). Local Food Systems; Background and Issues. . *Economic Research Service, USDA.*

Steven Deller, Ann Hoyt., Brent Hueth & Reka Sundaram-Stukel. (2009). *Research on the Economic Impact of Cooperatives* . University of Wisconsin Center for Cooperatives.

University of Wisconsin center for cooperatives, R. o. (n.d.). Retrieved from https://reic.uwcc.wisc.edu/groceries/

USDA. (1995). *What Is a cooperative?* Rural business and cooperative development service cooperative information report 50, U.S. Department of Agriculture.

USDA. (2022). *Household Food Security in the United States in 2021.* USDA economic research

USDA Rural Development. (n.d.). *cooperative services*. Retrieved from https://www.rd.usda.gov/programs-services/all-programs/cooperative-services

Valentinov, V. (2007, 01 April). Why are cooperatives important in agriculture? An organizational economics perspective. *Journal of Institutional Economics*, 3(1), 55-69. doi:doi:10.1017/S1744137406000555

Velaga, Y. N., Chen, A., Sen, P., & Dubey, A. (2019, August 01). Trends in Rural Electric Cooperatives (Co-ops) in USA: Challenges and Opportunities. *2019 IEEE Rural Electric Power Conference (REPC)*. doi:10.1109/REPC.2019.00010

Wikipedia. (n.d.). Retrieved from https://en.wikipedia.org/wiki/Walsh_County,_North_Dakota

Wikitravel. (2021, May 29). Retrieved from https://wikitravel.org/en/Walsh_County_(North_Dakota)

Wilson Majee & Ann Hoyt. (2011). Cooperatives and Community Development: A Perspective on the Use of Cooperatives in Development. *Journal of Community Practice*, 19:48-61. doi:10.1080/10705422.2011.550260

Appendix

Figure 8 RAD Cooperative Redistribution Truck

Figure 9 Hoople Grocery store, Hoople North Dakota

Figure 10 Market on main Grocery store, Edinburgh. North Dakota

Figure 11 Jim Supervalu Grocery store, Park River, North Dakota

Figure 12 Organizing and Loading the Delivery Truck from Jim Supervalu to Its Two Sister Stores

Survey Tool

**Rural grocery Co-Op Survey Tool**
**RGCG Feasibility Study of Developing a Rural Grocery Store Purchasing and Distribution Cooperative**

**Funded by:** USDA Rural Cooperative Development Grant Program

**Research Principal Investigators:** Dr. Brian Briggeman, Adetola Lamidi, Rial Carver, Erica Blair, Dr. Aaron Johnson, and Dr. Logan Britton, Kansas State University.

**Purpose of the Research Project:** Evaluate and assess the economic feasibility of establishing a rural grocery purchasing cooperative or a shared services business in Southeast Kansas.

**Project Description:** Grocery stores are economic drivers in small towns: they contribute to the local tax base, create jobs, and keep profits in local communities by recirculating dollars. Despite the economic significance of these stores, the grocery industry remains very challenging, with slim profit margins, high operating costs, and an increasingly competitive landscape.

**Project Procedures:** You have been asked to participate in an economic feasibility study due to your interest in and engagement with the Rural Grocery Initiative as a rural grocery store owner. This feasibility study will require you to agree to complete an electronic feasibility survey, which will be administered by the research principal investigators. The Institutional Review Board (IRB) of Kansas State University requires participants to explicitly agree to being surveyed and know how that information will be used. The survey will collect information about your grocery store and your opinions on a purchasing cooperative or shared services cooperative. The feasibility survey will take approximately 4 hours of your time to complete.

**Questions or Feedback:** For any questions or feedback, please contact Dr. Brian Briggeman (bbrigg@ksu.edu or 785-532-2573) at 305C Waters Hall, Kansas State University, Manhattan, Kansas 66506.

For concerns or to gain further information about your rights as a participant, you may contact the University Research Compliance Officer at 785-532-3224 or fax at 785-532-3278 or by email at: comply@k-state.edu.

You may also contact the chair of the Kansas State University Institutional Review Board (IRB), Dr. Lisa Rubin, at 785-532-3224.

**Benefits:** The research should provide insights into the feasibility of establishing a purchasing cooperative or shared services cooperative. These types of businesses could provide a means of (1) lowering costs of sourcing grocery products, and/or (2) having a more consistent and reliable supplier of grocery products. Moreover, learnings from this research could lead to the development

of training and tools that will assist other rural grocers establish cooperatives to help ensure their long-term viability.

Please know that your responses will be confidential. If the feasibility research does suggest a purchasing cooperative or shared services cooperative could lead to benefits (1) and (2) above, then relevant information on how this new business model will work and/or function will need to be shared with participating grocers. This could include information provided by grocers in the feasibility survey (e.g., cost of sourcing grocery items, supplier, etc.). However, only relevant information will be shared that is pertinent to the functions of this new joint business venture in delivering benefits (1) and (2) above.

**Voluntariness:** The study itself poses no additional physical or emotional risks that might lead to a participant dropping out. Participation is voluntary so if a participant decides to withdraw, most likely for personal reasons, then they are free to do so at any time during the survey. There are no penalties attached to discontinuance.

**Confidentiality:** Your participation is completely voluntary. Your input and the data that you provide will be kept strictly confidential. All data will be always stored on secured computers in locked offices. Every effort will be made to ensure that information collected as part of this study's records will be kept confidential. Only authorized persons working on the project will have access to the individual level data. Only relevant information, as described above, will be shared with grocers who agree to explore the functions of a new joint business venture. Only summaries and general findings from the data collected will be published and/or presented. The information that will be collected as part of this research could be used for future research studies by the project investigators without additional informed consent.

I verify that clicking on 'Yes, I consent' below indicates that I have read and understand this consent form, and willingly agree to participate in this study under the terms described.

- ○ Yes, I consent (1)
- ○ No, I don't consent (2)

*Skip To: End of Survey If Feasibility Study of Developing a Rural Grocery Store Purchasing and Distribution Cooperative Fun... = No, I don't consent*

*Skip To: End of Block If Feasibility Study of Developing a Rural Grocery Store Purchasing and Distribution Cooperative Fun... = Yes, I consent*

**End of Block: First Page**

---

**Start of Block: Store characteristics**

On this page, you will be asked 5 questions about your grocery store (questions 1 - 5). Please answer all questions to the best of your ability.

(1) Name and position of respondent

_____

(2) How many years of experience do you have in the retail or grocery sector?

- ○ Less than 1year
- ○ 1-3 years
- ○ 4-6 years
- ○ 7-10 years
- ○ More than 10years

(3) What is the name of your grocery store? _____

(4) How many individuals or entities own your grocery store? _____

(5) What is your store's location (town or nearest town)? _____

6) How many years has the store been operating? _____

(7) How would you describe the population of the area your store serves?

- ○ Less than 500
- ○ 501 to 1000
- ○ 1001 to 5000
- ○ Over 5000

(8) What is the total number of aisles in your grocery store? _____

(9) What is the total number of checkout lanes? _____

On this page, you will be asked 5 questions about your grocery store (questions 10 - 14). Please answer all questions to the best of your ability.

(10) What is the total square footage (sq. ft.) of your store?_____

(11) In the boxes below, please report the store's sales floor space devoted to dry goods, refrigerated, and frozen. If none, please type '0'.

☐ Dry Goods (sq. ft.) _____

☐ Refrigerated (sq. ft.) _____

☐ Frozen (sq. ft.) _____

(12) In the boxes below, please report the store's storage space on the sales floor by dry goods, refrigerated, and frozen. If none, please type '0'.

☐ Dry Goods Storage on Sales Floor (sq. ft.) _____

☐ Refrigerated Storage on Sales Floor (sq. ft.) _____

☐ Frozen Storage on Sales Floor (sq. ft.) _____

(13) In the boxes below, please report the store's storage space not on the sales floor by dry goods, refrigerated, and frozen. If none, please type '0'.

☐ Dry Goods Storage Not on Sales Floor (sq. ft.) _____

☐ Refrigerated Storage Not on Sales Floor (sq. ft.) _____

☐ Frozen Storage Not on Sales Floor (sq. ft.) _____

(14) Does your store frequently have any unused or excess storage space? If so, describe the space (sq. ft., type of storage, etc.). If not, please type 'none' _____

On this page, you will be asked 6 questions about assets under your control and other businesses connected to your grocery store (questions 15 - 19). Please answer all questions to the best of your ability.

(15) Does your store have handicap accessibility? If so, could you please describe how you are ADA compliant? If not, please type 'no'. _____

(16) Please report the types of loading equipment and transportation vehicles the store owns, such as pallet jacks, forklifts, trucks, semis, etc. If you own none of these assets, then please type 'none'. _____

(17) Do you have access to a vehicle or vehicles that can be used for delivery? If yes, please provide information about the vehicle(s) in the text box below. If not, type 'no'. _____

(18) Does your store have a backup generator?

- ○ Yes
- ○ No
- ○ Not currently, but plan to purchase one in the next 6 months.

(19) Does your store have a loading dock?

- ○ Yes
- ○ No

(20) What are the biggest operational challenges you face in running your store? (Select up to three)

- [ ] Procurement of products
- [ ] Pricing and margins
- [ ] Staffing and labor issues
- [ ] Competition
- [ ] Marketing and customer outreach
- [ ] Store maintenance and utilities
- [ ] Compliance with regulations
- [ ] Others (please specify) _____

(21) Does your grocery store have any other businesses associated with it? Alternatively, is there another business or event that attracts customers to your grocery store?

- ○ No, there are no associated businesses/events
- ○ Yes, there are associated businesses/events

(21a) Because you answered 'yes', please describe this business/event, including its type, size, and estimated contribution to the total sales of the grocery store. _____

On this page, you will be asked 8 questions about the labor you use to operate your grocery store (questions 22 - 29). Please answer all questions to the best of your ability.

(22) How many owners work in the store? _____

(23) What is the average number of hours per week worked by the owners of your grocery store?

_____

(24) How many full-time employees does your grocery store have, excluding owners? _____

(25) How many hours per week do full-time employees typically work on average? _____

(26) How many individuals work part-time at your grocery store? _____

(27) What is the average number of hours worked per week by part-time employees? _____

(28) How many volunteers are currently working at the store? _____

(29) What is the average number of hours per week worked by volunteers? _____

On this page, you will be asked 7 financial questions about your grocery store (questions 29 - 33). Please answer all questions to the best of your ability.

(29) On average, what is the annual gross sales of the grocery store?_____

(30) In the boxes below, please report what percentage of your total annual gross grocery sales comes from each grocery category. Note that the percentages for the 15 categories should sum up to 100%.

Beverages (non-alcoholic and non-dairy): _____
Meat: _____
Produce: _____
Dairy: _____
Deli: _____
Frozen: _____
Beer/wine: _____
Bakery: _____
Health, beauty, and cosmetics: _____
Seafood: _____
General merchandize: _____
Tobacco: _____
Floral/live plants: _____
Pet food: _____
Prepared food: _____
0thers (please specify: _____
Total: _____

(31) On average, what is the annual cost of goods sold for the grocery store?_____

Q109 (32) In the boxes below, please report what percentage of your operating expenses is allocated to the following areas? (The total should add up to 100%)

Inventory purchases: _____
Staffing and labor: _____
Rent/Lease/Mortgage: _____
Utilities (electricity, water etc.): _____
Transportation and logistics: _____
Marketing and Advertising: _____
Others (Please specify): _____
Total: _____

(33) Are there any current financial challenges or constraints that significantly impact your store's operations? _____

If you have an agreement with another rural grocery store to purchase grocery items, you will be asked questions about that arrangement. If you do not have this type of arrangement, you should click NO to move to the next section of the survey.

(34) Do you order and receive grocery items through another rural grocery store?

- ○ No
- ○ Yes

*Skip To: End of Block If (34) Do you order and receive grocery items through another rural grocery store? = No*

(34a) What is the name of the other rural grocery store, and why do you use this store as a supplier? _____

(34b) What percentage of your total annual grocery supply orders come from this particular rural grocer?

| | Percentage of Total Orders<br>0 10 20 30 40 50 60 70 80 90 100 |
|---|---|
| Purchasing from another rural grocery store () |  |

(34c) Who is the primary supplier to the other rural grocery store? _____

(34d) What are the main reasons for using another grocery store for your supply needs?

_____

(34e) How often do you use another rural grocery store for ordering and receiving items?

- ○ Regularly
- ○ Occasionally
- ○ Rarely
- ○ Only in emergency situations

(34f) Does the primary supplier of the other rural grocery store have a monthly minimum purchasing requirement? If yes, what is that amount? If no, type 'no'. If unknown, type 'unknown'. _____

(34g) What is the membership fee the other rural grocery store must pay its supplier, in dollars? Please input an amount under one option below. If there is no fee, then type '0' in the 'One time upon enrollment' option. If unknown, then type 'unknown' in the 'One time upon enrollment' option.

- ○ Month _____
- ○ Year _____
- ○ One time upon enrollment _____

(34h) In the boxes below, briefly describe the buying agreement you have with the other rural grocery store.

- ☐ Cost of mark up _____
- ☐ Dividends received _____
- ☐ Distance traveled to pick up (one-way miles) _____
- ☐ How many times per month do you receive supply _____
- ☐ Please list any other details here _____

(34i) Is the rural grocery store open to adding additional orders?

- ○ No
- ○ Unsure
- ○ Yes

(34j) Please click all product categories that you order through this supplier.

- [ ] Beverages (non-alcoholic and non-dairy)
- [ ] Meat
- [ ] Produce
- [ ] Dairy
- [ ] Deli
- [ ] Frozen
- [ ] Beer/wine
- [ ] Bakery
- [ ] Health, beauty and cosmetics
- [ ] Seafood
- [ ] General merchandise (includes paper products, cleaning supplies, etc)
- [ ] Tobacco
- [ ] Floral/live plants
- [ ] Pet food
- [ ] Prepared food

On this page, you will be asked 6 questions about your primary supplier of grocery items to your grocery store (questions 35 - 40). Please answer all questions to the best of your ability.

(35) Who is the primary supplier to your grocery store? (Note that this is not another rural grocery store's purchasing arrangement). _____

(36) What factors influenced your choice of this supplier? (Select all that apply)

- ☐ Price of goods
- ☐ Quality of products
- ☐ Reliability and consistency of supply
- ☐ Delivery options and logistics
- ☐ Customer service
- ☐ Proximity to your store
- ☐ Specialized product offerings
- ☐ Other (Please specify)

(37) Briefly describe the buying agreement you have with this supplier.

- ☐ Supplier drops off at your store (Yes/No) _____
- ☐ You drive to pick up (Yes/No) _____
- ☐ Where is pick up _____
- ☐ Distance traveled to pick up in miles (one way) _____
- ☐ How many times per month do you receive supply _____
- ☐ Please list any other details here _____

(38) What is this supplier's monthly minimum purchasing requirements of this supplier?

_____

(39) What is the membership fee amount for this supplier in dollars? Please input an amount under one option below. If there is no fee, then type '0' in the 'One time upon enrollment' option.

- ○ One time upon enrollment _____
- ○ Month _____
- ○ Year _____

(40) What are the dividends received after paying membership fees to this primary supplier? Please input an amount below. If there are no dividends, then type '0'.

_____

(40a) Please click all product categories that you order through this primary supplier.

- [ ] Beverages (non-alcoholic and non-dairy)
- [ ] Meat
- [ ] Produce
- [ ] Dairy
- [ ] Deli
- [ ] Frozen
- [ ] Beer/wine
- [ ] Bakery
- [ ] Health, beauty, and cosmetics
- [ ] Seafood
- [ ] General merchandise (includes paper products, cleaning supplies, etc.)
- [ ] Tobacco
- [ ] Floral/live plants
- [ ] Pet food
- [ ] Prepared food

(40b) What percentage of your total annual grocery supply orders come from this primary supplier?

0 10 20 30 40 50 60 70 80 90 100

| | |
|---|---|
| Percentage of Total Orders () |  |

Before answering question 41, please take a moment and identify the exact number of suppliers you currently purchase from. You have already provided us with information about your primary supplier and possibly a rural grocery store that supplies groceries to your store. Please think of all of the other suppliers you use for sourcing grocery items.

NOTE: Do not include yourself as an 'other' supplier. We have a separate section devoted to you procuring your own grocery supplies.

The number you type in below will be used to generate a series of additional questions about your other suppliers.

(41) Please type the total number of suppliers, other than the primary supplier and/or rural grocery store supplier you previously answered, that you currently have for your store?

_____

On this page, you will be asked 6 questions about your 'other' supplier(s) of grocery items to your grocery store. Please answer all questions to the best of your ability. Note: this series of questions will be repeated depending on the number of other suppliers you typed earlier so that you can provide information for each supplier you buy from.

41a (1-other supplier) What is the name of your other supplier? _____

(41b) (2-other supplier) Briefly describe the buying agreement you have with this supplier.

- [ ] Supplier drops off at your store (Yes / No) _____
- [ ] You drive to pick up (Yes/No) _____
- [ ] where is pick by _____
- [ ] Distance traveled to pick up, miles (one way) _____
- [ ] How many times per month do you receive supply _____
- [ ] please list any other details here _____

(41c) (3-other supplier) What is this supplier's monthly minimum purchasing requirements? If there are no requirements, then type '0' below.

_____

(41d) (4-other supplier) What is the membership fee amount for this supplier in dollars? Please input an amount under one option below. If there is no fee, then type '0' in the 'One time upon enrollment' option.

- ○ Month _____
- ○ Year _____
- ○ One time upon enrollment _____

(42e) (5-other supplier) What are the dividends received after paying membership fees to this supplier? Please input an amount below. If there are no dividends, then type '0'.

_____

(41f) (6-other supplier) Please click all product categories that you order through this supplier

- [ ] Beverages (non-alcoholic and non-dairy)
- [ ] Meat
- [ ] Produce
- [ ] Dairy
- [ ] Deli
- [ ] Frozen
- [ ] Beer/wine
- [ ] Bakery
- [ ] Health, beauty and cosmetics
- [ ] Seafood
- [ ] General merchandise (includes paper products, cleaning supplies etc)
- [ ] Tobacco
- [ ] Floral/ live plants
- [ ] Pet food
- [ ] Prepared food

(41g) How satisfied are you with the consistency of your current suppliers? (1 being very dissatisfied, 5 being very satisfied)

| | 1 2 3 3 4 5 |
|---|---|
| Scale of 1 to 5 () |  |

(41h) how satisfied are you with the pricing from your current suppliers? (1 being very dissatisfied, 5 being very satisfied)

1 2 3 3 4 5

| | |
|---|---|
| Scale of 1 to 5 () |  |

(41i) Do you currently take advantage of bulk purchasing discounts with your suppliers?

- ○ Yes, frequently
- ○ Yes, occasionally
- ○ No, rarely
- ○ No, never

(41j) Do you face any challenges with this supplier? (Select all that apply)

- ☐ Inconsistent product quality
- ☐ Unreliable delivery times
- ☐ High prices
- ☐ Limited product selection
- ☐ Lack of transparency in sourcing
- ☐ Others (please specify) _____

On this page, you will be asked to answer questions on sourcing grocery products independently. If you are involved in sourcing products yourself, you will be asked to provide additional information on products sourced and the distance travelled. If you don't, please click 'No' to move to the next section of the survey.

(42) Do you, as the owner, buy groceries on your own to resell in your store?

- ○ No
- ○ Yes

*Skip To: End of Block If (38) Do you, as the owner, buy groceries on your own to resell in your store? = No*

(42a) Briefly describe your approach to procuring your own groceries. Why do you make your own purchases? What are your motivations? Reliable supply? Lower cost? Other reasons?

_____

(423b) Please click all product categories that you source yourself.

- ☐ Beverages (non-alcoholic and non-dairy)
- ☐ Meat
- ☐ Produce
- ☐ Dairy
- ☐ Deli
- ☐ Frozen
- ☐ Beer/wine
- ☐ Bakery
- ☐ Health, beauty, and cosmetics
- ☐ Seafood
- ☐ General merchandise (includes paper products, cleaning supplies etc.)
- ☐ Tobacco
- ☐ Floral/ live plants
- ☐ Pet food
- ☐ Prepared food

(42c) How many different places do you purchase from? _____

(42d) What is the furthest and shortest one-way distance traveled to purchase products, measured in miles?

☐ Furthest one-way distance _____

☐ Shortest one-way distance _____

On the following pages, you will be asked to provide your sales and cost information for the top 10 items sold in 6 departments at your grocery store. These departments are common across all grocery stores. After listing the item in the first table, please provide your monthly average for the variable cost, purchasing, and sales of that particular item. Note that there will be a second table that will pull information from the first table.

(43a) **Dairy Products (Department 1 of 6)**: In the table below, please provide the sales information for the top 10 dairy products sold at your grocery store. Each row should include the item name, suppliers of the item, and the unit in which you mostly purchase this item (e.g., pallet, case, bundle, single, etc.). If the unit is not "single," please indicate the number of single items that come in one unit.

| | Item 1 | Item 2 | Item 3 | Item 4 | Item 5 | Item 6 | Item 7 | Item 8 | Item 9 | Item 10 |
|---|---|---|---|---|---|---|---|---|---|---|
| Item name | | | | | | | | | | |
| Supplier of this item | | | | | | | | | | |
| Describe the UNIT that you mostly buy this item (e.g. pallet, case, bundle, single, etc) | | | | | | | | | | |
| If the UNIT is not "single", how many single items come in one UNIT? | | | | | | | | | | |

(43b) **Dairy Products:** Please complete the following table by providing the sales and variable cost details for your top 10 dairy products sold at your grocery store. For each item, kindly provide the average monthly cost per unit, total units purchased, total units sold, total sales for the item, and the gross margin. (e.g. pallet, case, bundle, single, etc.). You provided this information in the previous table. NOTE: Please ensure you are providing information for the UNIT that you mostly buy each item

| | ${46a/ChoiceTextEntryValue/1/1} | ${46a/ChoiceTextEntryValue/1/2} | ${46a/ChoiceTextEntryValue/1/3} | ${46a/ChoiceTextEntryValue/1/4} | ${46a/ChoiceTextEntryValue/1/5} | ${46a/ChoiceTextEntryValue/1/6} | ${46a/ChoiceTextEntryValue/1/7} | ${46a/ChoiceTextEntryValue/1/8} | ${46a/ChoiceTextEntryValue/1/9} | ${46a/ChoiceTextEntryValue/1/10} |
|---|---|---|---|---|---|---|---|---|---|---|
| (COGS in $) | | | | | | | | | | |
| Total UNITS purchased (monthly average) | | | | | | | | | | |
| Total UNITS sold (monthly average) | | | | | | | | | | |

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Total sales $ for item (monthly average) | | | | | | | | | | |

(44a) **Produce Products (Department 2 of 6):** In the table below, please provide the sales information for the top 10 produce products sold at your grocery store. Each row should include the item name, suppliers of the item, and the unit in which you mostly purchase this item (e.g., pallet, case, bundle, single, etc.). If the unit is not "single," please indicate the number of single items that come in one unit.

| | Item 1 | Item 2 | Item 3 | Item 4 | Item 5 | Item 6 | Item 7 | Item 8 | Item 9 | Item 10 |
|---|---|---|---|---|---|---|---|---|---|---|
| Item name | | | | | | | | | | |
| Supplier of this item | | | | | | | | | | |
| Describe the UNIT that you mostly buy this item (e.g. pallet, case, bundle, single, etc) | | | | | | | | | | |
| If the UNIT is not "single", how many single items come in one UNIT? | | | | | | | | | | |

(44b) **Produce Products:** Please complete the following table by providing the sales and variable cost details for your top 10 produce products sold at your grocery store. For each item, kindly provide the average monthly cost per unit, total units purchased, total units sold, total sales for the item, and the gross margin. (e.g. pallet, case, bundle, single, etc.). You provided this information in the previous table. NOTE: Please ensure you are providing information for the UNIT that you mostly buy each item

| | ${46a/ChoiceTextEntryValue/1/1} | ${46a/ChoiceTextEntryValue/1/2} | ${46a/ChoiceTextEntryValue/1/3} | ${46a/ChoiceTextEntryValue/1/4} | ${46a/ChoiceTextEntryValue/1/5} | ${46a/ChoiceTextEntryValue/1/6} | ${46a/ChoiceTextEntryValue/1/7} | ${46a/ChoiceTextEntryValue/1/8} | ${46a/ChoiceTextEntryValue/1/9} | ${46a/ChoiceTextEntryValue/1/10} |
|---|---|---|---|---|---|---|---|---|---|---|
| (COGS in $) | | | | | | | | | | |
| Total UNITS purchased (monthly average) | | | | | | | | | | |
| Total UNITS sold (monthly average) | | | | | | | | | | |

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Total sales $ for item (monthly average) | | | | | | | | | | |

(45a) **Meat Products (Department 3 of 6):** In the table below, please provide the sales information for the top 10 meat products sold at your grocery store. Each row should include the item name, suppliers of the item, and the unit in which you mostly purchase this item (e.g., pallet, case, bundle, single, etc.). If the unit is not "single," please indicate the number of single items that come in one unit.

| | Item 1 | Item 2 | Item 3 | Item 4 | Item 5 | Item 6 | Item 7 | Item 8 | Item 9 | Item 10 |
|---|---|---|---|---|---|---|---|---|---|---|
| Item name | | | | | | | | | | |
| Supplier of this item | | | | | | | | | | |
| Describe the UNIT that you mostly buy this item (e.g. pallet, case, bundle, single, etc) | | | | | | | | | | |
| If the UNIT is not "single", how many single items come in one UNIT? | | | | | | | | | | |

(45b) **Meat Products:** Please complete the following table by providing the sales and variable cost details for your top 10 meat products sold at your grocery store. For each item, kindly provide the average monthly cost per unit, total units purchased, total units sold, total sales for the item, and the gross margin. (e.g. pallet, case, bundle, single, etc.). You provided this information in the previous table. NOTE: Please ensure you are providing information for the UNIT that you mostly buy each item

| | ${46a/ChoiceTextEntryValue/1/1} | ${46a/ChoiceTextEntryValue/1/2} | ${46a/ChoiceTextEntryValue/1/3} | ${46a/ChoiceTextEntryValue/1/4} | ${46a/ChoiceTextEntryValue/1/5} | ${46a/ChoiceTextEntryValue/1/6} | ${46a/ChoiceTextEntryValue/1/7} | ${46a/ChoiceTextEntryValue/1/8} | ${46a/ChoiceTextEntryValue/1/9} | ${46a/ChoiceTextEntryValue/1/10} |
|---|---|---|---|---|---|---|---|---|---|---|
| (COGS in $) | | | | | | | | | | |
| Total UNITS purchased (monthly average) | | | | | | | | | | |
| Total UNITS sold (monthly average) | | | | | | | | | | |

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Total sales $ for item (monthly average) | | | | | | | | | | |

(46a) **Deli Products (Department 4 of 6):** In the table below, please provide the sales information for the top 10 deli products sold at your grocery store. Each row should include the item name, suppliers of the item, and the unit in which you mostly purchase this item (e.g., pallet, case, bundle, single, etc.). If the unit is not "single," please indicate the number of single items that come in one unit.

| | Item 1 | Item 2 | Item 3 | Item 4 | Item 5 | Item 6 | Item 7 | Item 8 | Item 9 | Item 10 |
|---|---|---|---|---|---|---|---|---|---|---|
| Item name | | | | | | | | | | |
| Supplier of this item | | | | | | | | | | |
| Describe the UNIT that you mostly buy this item (e.g. pallet, case, bundle, single, etc) | | | | | | | | | | |
| If the UNIT is not "single", how many single items come in one UNIT? | | | | | | | | | | |

(46b) **Deli Products:** Please complete the following table by providing the sales and variable cost details for your top 10 deli products sold at your grocery store. For each item, kindly provide the average monthly cost per unit, total units purchased, total units sold, total sales for the item, and the gross margin. (e.g. pallet, case, bundle, single, etc.). You provided this information in the previous table. NOTE: Please ensure you are providing information for the UNIT that you mostly buy each item

| | ${46a/ChoiceTextEntryValue/1/1} | ${46a/ChoiceTextEntryValue/1/2} | ${46a/ChoiceTextEntryValue/1/3} | ${46a/ChoiceTextEntryValue/1/4} | ${46a/ChoiceTextEntryValue/1/5} | ${46a/ChoiceTextEntryValue/1/6} | ${46a/ChoiceTextEntryValue/1/7} | ${46a/ChoiceTextEntryValue/1/8} | ${46a/ChoiceTextEntryValue/1/9} | ${46a/ChoiceTextEntryValue/1/10} |
|---|---|---|---|---|---|---|---|---|---|---|
| (COGS in $) | | | | | | | | | | |
| Total UNITS purchased (monthly average) | | | | | | | | | | |
| Total UNITS sold (monthly | | | | | | | | | | |

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| average) | | | | | | | | | | |
| Total sales $ for item (monthly average) | | | | | | | | | | |

(47a) **Bakery Products (Department 5 of 6):** In the table below, please provide the sales information for the top 10 bakery products sold at your grocery store. Each row should include the item name, suppliers of the item, and the unit in which you mostly purchase this item (e.g., pallet, case, bundle, single, etc.). If the unit is not "single," please indicate the number of single items that come in one unit.

| | Item 1 | Item 2 | Item 3 | Item 4 | Item 5 | Item 6 | Item 7 | Item 8 | Item 9 | Item 10 |
|---|---|---|---|---|---|---|---|---|---|---|
| Item name | | | | | | | | | | |
| Supplier of this item | | | | | | | | | | |
| Describe the UNIT that you mostly buy this item (e.g. pallet, case, bundle, single, etc) | | | | | | | | | | |
| If the UNIT is not "single", how many single items come in one UNIT? | | | | | | | | | | |

(46b) **Bakery Products:** Please complete the following table by providing the sales and variable cost details for your top 10 bakery products sold at your grocery store. For each item, kindly provide the average monthly cost per unit, total units purchased, total units sold, total sales for the item, and the gross margin. (e.g. pallet, case, bundle, single, etc.). You provided this information in the previous table. NOTE: Please ensure you are providing information for the UNIT that you mostly buy each item

| | ${46a/ChoiceTextEntryValue/1/1} | ${46a/ChoiceTextEntryValue/1/2} | ${46a/ChoiceTextEntryValue/1/3} | ${46a/ChoiceTextEntryValue/1/4} | ${46a/ChoiceTextEntryValue/1/5} | ${46a/ChoiceTextEntryValue/1/6} | ${46a/ChoiceTextEntryValue/1/7} | ${46a/ChoiceTextEntryValue/1/8} | ${46a/ChoiceTextEntryValue/1/9} | ${46a/ChoiceTextEntryValue/1/10} |
|---|---|---|---|---|---|---|---|---|---|---|
| (COGS in $) | | | | | | | | | | |
| Total UNITS purchased (monthly average) | | | | | | | | | | |
| Total UNITS sold (monthly average) | | | | | | | | | | |

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Total sales $ for item (monthly average) | | | | | | | | | | |

(47a) **Beverages (excluding alcohol and dairy) Products (Department 6 of 6):** In the table below, please provide the sales information for the top 10 beverages (excluding alcohol and dairy) products sold at your grocery store. Each row should include the item name, suppliers of the item, and the unit in which you mostly purchase this item (e.g., pallet, case, bundle, single, etc.). If the unit is not "single," please indicate the number of single items that come in one unit.

| | Item 1 | Item 2 | Item 3 | Item 4 | Item 5 | Item 6 | Item 7 | Item 8 | Item 9 | Item 10 |
|---|---|---|---|---|---|---|---|---|---|---|
| Item name | | | | | | | | | | |
| Supplier of this item | | | | | | | | | | |
| Describe the UNIT that you mostly buy this item (e.g. pallet, case, bundle, single, etc) | | | | | | | | | | |
| If the UNIT is not "single", how many single items come in one UNIT? | | | | | | | | | | |

(47b) **Beverages (excluding alcohol and dairy) Products:** Please complete the following table by providing the sales and variable cost details for your top 10 beverages (excluding alcohol and dairy) products sold at your grocery store. For each item, kindly provide the average monthly cost per unit, total units purchased, total units sold, total sales for the item, and the gross margin. (e.g. pallet, case, bundle, single, etc.). You provided this information in the previous table.
NOTE: Please ensure you are providing information for the UNIT that you mostly buy each item

| | ${46a/ChoiceTextEntryValue/1/1} | ${46a/ChoiceTextEntryValue/1/2} | ${46a/ChoiceTextEntryValue/1/3} | ${46a/ChoiceTextEntryValue/1/4} | ${46a/ChoiceTextEntryValue/1/5} | ${46a/ChoiceTextEntryValue/1/6} | ${46a/ChoiceTextEntryValue/1/7} | ${46a/ChoiceTextEntryValue/1/8} | ${46a/ChoiceTextEntryValue/1/9} | ${46a/ChoiceTextEntryValue/1/10} |
|---|---|---|---|---|---|---|---|---|---|---|
| (COGS in $) | | | | | | | | | | |
| Total UNITS purchased (monthly average) | | | | | | | | | | |
| Total UNITS sold (monthly average) | | | | | | | | | | |

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Total sales $ for item (monthly average) | | | | | | | | | | |

(48) How willing would you be to collaborate with other rural grocery stores for joint purchasing and distribution efforts?

- ○ Very Unwilling
- ○ Unwilling
- ○ Neutral
- ○ Willing
- ○ Very Willing

(49) Which factors motivate you to consider collaborative purchasing? (Select all that apply)

- ○ Potential for cost savings
- ○ Better negotiation power with suppliers
- ○ Consistent product availability
- ○ Access to a wider range of products
- ○ Strengthening community relationships with other stores
- ○ Others

(50) Would you be willing to adjust your ordering frequency to align with a collaborative purchasing schedule?

- ○ Yes, definitely
- ○ Yes, but with some reservations
- ○ Maybe, I'd need more information
- ○ No, I prefer my current schedule

(51) What would be the ideal number of stores to collaborate with for bulk purchasing in your opinion?

- ○ 2-3 Stores
- ○ 3-5 stores
- ○ More than 5 store
- ○ No preference

(52) Would you prefer to collaborate with stores that have a similar product focus or a diverse range of products?

- ○ similar product focus
- ○ Diverse product focus
- ○ No preference

(53) How would you prefer to handle the distribution of products once a collaborative order is received?

- ○ Centralized pick-up point
- ○ Delivery to each individual store
- ○ A combination of pick-up and delivery
- ○ Other (please specify) _____

(54) What concerns or challenges do you anticipate when considering collaborative purchasing with other stores? (Select all that apply)

- ☐ Trust and transparency issues with other stores
- ☐ Logistical challenges in distribution
- ☐ Inflexibility in order volume and frequency
- ☐ Potential disagreements on suppliers or products
- ☐ Others

On this final page, you will be asked 6 questions regarding your perspective on Forming a Purchasing or Shared Services Cooperative. Please answer all questions to the best of your ability.

(55) How would a purchasing or shared services cooperative benefit your grocery business?

_____

(56) Provide your general thoughts on what factors should go into determining the physical location of the co-op business.

_____

(57) If your grocery store was selected as a potential location for this co-op business, what incentives or compensation, if any, would you require to physically host the co-op business?

_____

(58) What would you be willing to provide to help the purchasing co-op business operate? Things to include would be physical assets such as a forklift, truck, or storage space; labor; time spent coordinating orders and/or delivering products; startup and/or operating funds, etc.

_____

(59) One thing we learned from the Rural Access Distribution (RAD) Co-op in North Dakota is that grocery stores helped local schools purchase food and beverages through the RAD Co-op. Are there schools or other entities (restaurants, hospitals, churches, etc.) that could benefit from establishing a purchasing or shared services cooperative in your local area? If so, who are these entities, and how could they benefit from this potential co-op?

_____

(60) Please provide any questions you have or any other comments you have regarding the formation of a purchasing or shared services cooperative. If you have no additional questions or comments, please type 'none' below.

_____