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Environmental Scanning: An Application to Agricultural Cooperatives

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Abstract

Strategic management contributes to business success and profitability. A fundamental step in the strategic management process is scanning the business environment. Often, a SWOT analysis is used for this step, but there are other tools that can benefit a cooperative's management team while completing this step. The objective of this paper is to demonstrate how to conduct a STEEP analysis, Five Forces, and Internal Environment Analysis for the overarching agricultural cooperative industry in the U.S. as well as apply these tools to the Rice Growers Association of California case study. These tools can be used by future cooperative leaders to better assess their business environment, and in the case of Rice Growers, show how an environmental analysis could have helped prevent that cooperative's failure.

Keywords: Internal Analysis, External Analysis, cooperatives, STEEP, Five Forces

Introduction

Strategic management is important for business success and profitability. The basic elements of the strategic management process are environmental scanning, strategy formulation, strategy implementation, and evaluation and control (Hunger and Wheelen, 2011; Beierlein, et al., 2014; Besanko, et al., 2017). An organization's strategy and make-up are greatly affected by the external business environment. Research done by Aguilar (1967) on scanning the external business environment and by Lawrence and Lorsch (1986) on contingency theory has led to the idea that an organization's function is dependent on the external environment, which then determines the internal structure and overall procedures of the organization.

The landscape of agricultural cooperatives has been shaped by mergers, acquisitions, joint ventures, and strategic alliances in recent past. From 2000 to 2016, the number of agricultural cooperatives declined by 41% (Demko, 2018). Reasons for this decline can be attributed to a consolidation of farms and farmers. Since 2014, bankruptcies and dissolutions have increased as causes for cooperative consolidation. From 2014 to 2017, almost 3 out of every 10 cooperative consolidations were caused by bankruptcy or dissolution. This has come from the need for cooperatives to have larger and more costly infrastructure to serve larger farmers requesting more diversified services. It has been critical for cooperatives to manage the economic downturns as of late to remain viable and to continue to serve their members' needs. Battling the farm crisis, lean margins, and weak

balance sheets of the 80s and 90s perhaps led to consolidation, dissolution, and failures in the early 2000s (Kowalski & Merlo, 2019). One example is the Rice Growers Association of California (RGA). Bond, Carter, and Sexton (2009) found that poor business decisions were a contributing piece to this cooperative's failure. Fully conducting all elements of the strategic management process could aid in making viable business decisions.

It is important to note that strategic management can help avoid business failure, especially conducting a thorough scan of the environment. The objectives of this paper are to show an approach on how to conduct a scan of the current agricultural cooperative environment and to also apply this approach to the RGA case study. We will be using the STEEP analysis, Five Forces analysis, and a traditional internal analysis to scan the environment of the overarching agricultural cooperative industry in the U.S. as well as applying the concepts to the specific case of RGA mentioned above.

A variety of tools are available when assessing strategic management: SWOT Analysis, STEEP Analysis, Five Forces Analysis, and Internal Environment Analysis. Bensoussan and Fleisher (2012) suggest that there are different purposes for each tool. For example, a SWOT (strengths, weaknesses, opportunities, and threats) analysis should be used for analyzing and exploring a company's situation, hence the reference name of a *situation analysis*. A Five Forces analysis is used to better understand an industry and its participants. It provides a

foundation for bridging the gap between a firm's external environment and their internal resources. Finally, a STEEP analysis (social, technological, economic, ecological, and political/legal) allows the firm to identify the aspects of the environment that can affect the competitiveness of the industry and the company. This analysis has also been referred to as *PEST* or *macroenvironmental analysis*.

Furthermore, Hunger and Wheelen (2011) show how the tools can be used together to scan the three major environments related to a firm: societal environment, task (industry) environment, and internal environment. The STEEP analysis is a tool used to scan the societal environment and the Five Forces analysis can be used to scan the task (industry) environment. Putting them together, for example, the STEEP analysis provides a more definitive way to identify opportunities and threats as part of a firm's SWOT analysis. The Five Forces analysis can provide details that contribute to all four aspects of a SWOT analysis. In fact, Hunger and Wheelen place the SWOT analysis into the second element of strategic management: strategy formulation.

We realize that a SWOT analysis is heavily utilized when analyzing strategic management. Our goal is to provide insights into how to apply the less common tools in this area. Therefore, to focus on the first step (i.e. environmental scanning) in strategic management analysis, we explain and apply the STEEP analysis, Five Forces analysis, and internal analysis.

Several studies have adopted the internal/external analysis approach to better understand organizational structure and processes (for a review see Kourteli, 2000). Damanpour and Schneider (2006) look at the effects of the environment and the organization on innovation adoption. In their study, they identify cultural, social, political, and geographic conditions as they relate to innovation. Nystrom, Ramamurthy, and Wilson (2002) analyze the organizational context and climate as it relates to imaging technology adoption in hospitals. Grima, Spiteri, and Romanova (2020) used the STEEP framework to analyze the key external issues that may impact the insurance industry's openness to blockchain technology.

Background of the Rice Growers Association of California

The Rice Growers Association of California (RGA) officially started in 1921. However, it existed prior to that as the Pacific Rice Growers Association, which was a marketing cooperative for regional rice growers in California's Central Valley. Business was booming as growing rice became more profitable. By the early 1980s, RGA was marketing roughly 75% of the region's rice crop. Over time, RGA expanded into rice-processing and shipping, including purchasing their own shipping vessel. As RGA grew, other cooperatives and competitors came onto the scene, such as Farmers' Rice Cooperative (FRC) (Bond, Carter, & Sexton, 2009).

A variety of events, both internally to the cooperative and externally in the rice industry and beyond, took place over the century that ultimately led to the failure of RGA in 2000. One of the internal mishaps was related to one of the shipping vessels the cooperative owned (or part-owned at the time). Because of management decisions and binding contracts, RGA was left to make remaining lease payments on a shipping vessel when their lease partner, Intercoastal Bulk Carriers, declared bankruptcy in the late 1970s. Additionally, maintenance expenses began to add up related to this shipping vessel and demand for rice began to decline, causing financial strain on the cooperative (Bond, Carter, & Sexton, 2009).

At one point, RGA looked to expand and purchase a nearby rice-milling facility, then owned by Pacific International Rice Millers Inc. However, the Department of Justice investigated this potential purchase and decided that it would “substantially increase concentration in the purchase of paddy rice in California.” This led to antitrust violations that soured the RGA brand (Bond, Carter, & Sexton, 2009).

Following the antitrust violations and the declining demand for rice, RGA struggled to stay afloat financially. Other competitor cooperatives, such as FRC, pivoted with their strategy and began to overtake RGA’s place in the rice industry. With RGA’s financial troubles, they issued bills to their membership instead of returns after having to close one of their large mills. RGA attempted to shift their strategy but chose an unstable route through the U.S. domestic table rice

market. Membership was still declining and management turned over a couple of times leading up to RGA's closure in 2000 (Bond, Carter, & Sexton, 2009).

Environmental Scanning

As stated previously, a variety of tools are available to conduct a scan of the environment. According to Hunger and Wheelen (2011), there are three environments to be scanned: societal, task (industry), and internal. First, we apply a STEEP analysis to the overarching agricultural cooperative industry in the U.S. to scan the societal environment. Second, we apply the Five Forces analysis to scan the task (industry) environment. Finally, we use a resource-based view of cooperatives to conduct scan of the internal environment. Through each, we use the case of the RGA as a way to show how the analysis can be utilized by a specific cooperative.

Societal Environment - STEEP Analysis

The external factors affecting the farmer cooperative can be systematically analyzed using a STEEP analysis. This framework allows us to categorize factors into five areas: Sociocultural, Technological, Economic, Environmental, and Political/Legal. Sociocultural forces are those that create the values, norms, and customs of a society, such as demographic trends, lifestyle changes, career expectations, population growth, health care, and education levels. Technological forces include advancements in technology and innovations that change the way

problems are solved. Economic forces are those that regulate the markets and economy, such as GDP trends, interest rates, the money supply, inflation rates, unemployment, income levels, and the financial system as a whole. Environmental forces are those that affect the natural environment around us, including physical resources, wildlife, and climate. Political/legal forces are those that allocate power and define laws and regulations (Hunger & Wheelen, 2011). The application of STEEP analysis to the external environment in which cooperatives operate will help to identify the major change forces and market drivers that are redefining the agriculture industry.

Sociocultural Forces

Urbanization is a major force that has changed several industries over the past few decades, and it continues to reshape industries. As more people travel and settle in different regions compared to their ancestors, the make-up of the communities around the world changes. This causes the needs of those communities to change (Reiter-Palmon, Young, Strange, Manning, & James, 2006). The United States population has grown, on average, over the past 40 years, with the majority of that growth seen in urban areas. Surprisingly, the poverty rate has remained the same at roughly 12%. Education levels are on the rise for both rural and urban areas leading to a higher-educated population (Economic Research Service, 2022).

Additionally, the global population is shrinking, especially in nations that are major agricultural export locations for the United States. Some models suggest a peak global population in 2084 while others suggest it will occur much sooner in 2065 (Woolf & Close, 2025). Not only will this population peak and eventual decline affect labor considerations, but it will also affect food demand. Research has shown that older and younger populations demand and purchase less food than middle-aged populations (Woolf, 2025). With an aging population and a drop in fertility rates, it is assumed that the demand for food will also decline. As Woolf (2025) suggests, producers may need to shift their focus from quantity to quality to adapt to these changing demographics of food demand. Finally, the biggest U.S. agricultural export locations include Europe and Asia. These two continents have projected population peaks in 2025 and 2050, respectively (Woolf & Close, 2025).

Farms and farmers have different characteristics including size, make-up, and age. Farm size, for example, has increased while the total number of farms has decreased (USDA National Agricultural Statistics Service, 2021). The push towards efficiency and increasing total factor productivity has led to total agricultural output drastically increasing while total farm input use has remained constant (USDA Economic Research Service, 2022). This creates information gaps among farmer cooperative members, which can then trickle down into board make-up as well as each member wanting and needing different goods and services from the same cooperative (Candemir, Duvaléix, & Latruffe,

2021). The heterogeneity in cooperative membership threatens the culture, vision, and values of the cooperative. Therefore, collective action can in some cases be no longer mutually beneficial (Saitone & Sexton, 2017).

Consumer preferences continuously change, thereby affecting the type of food produced in the agriculture sector as well as how it is produced. Modern agriculture is required to provide a variety of products that differ in quality, variety, size, color, ingredients, and production practices. This affects how cooperatives are run and the types of commodities they can accept and process, for example. This could include generic yellow #2 corn but it could also stretch to organically produced grains or processing byproducts of conventional grains (i.e. distiller grains, soybean oil, and ethanol). It also affects the types of products the cooperative can sell to the farmers as inputs such as seed, fertilizer, and feed. Consumers are increasingly becoming aware and concerned about the environment. These pollution and environmental concerns affect how cooperatives and agricultural producers operate. The types of products and processes used are closely watched and scrutinized (Saitone & Sexton, 2017). Food safety concerns and information about food origins can affect consumer preferences as well.

For the RGA, the sociocultural forces created a very promising environment in which to start the cooperative back in 1921 – rice could finally be grown profitably in California and there was a high demand in the western United States for the raw product. As competitors came into

the area, that profitable environment changed. Producers were looking for assistance with all business areas related to producing rice – services that the RGA did not offer. As domestic demand for rice changed in the late 20th century, producers needed new markets and buyers of their rice grain. The RGA attempted to look outside of the U.S. but wasn't able to establish direct sales relationships like their competitors (Bond, Carter, & Sexton, 2009). Understanding the sociocultural forces at play in the middle of the 20th century could have helped the RGA expand their services to support their rice producers.

Technological Forces

Advancements in science have led cooperatives to rethink the services they provide and what their members actually need. There may be an increased role of producers. Perhaps the cooperative will serve its members by way of financial and management analysis, agronomy and crop scouting, crop production experts, marketing, and mechanics (Wadsworth, 2011).

Over the last two decades, production agriculture itself has become more capital intensive. Decisions across the supply chain are becoming more interdependent and risks are arising around food health and safety. Additionally, information tends to bring control and power. Such things have led to an increase in vertical coordination and integration (Merrett & Walzer, 2001). Cooperatives have then been

challenged with identifying their place within the vertical coordination of the production supply chain.

The expansion of broadband access in rural areas across America will affect cooperatives and the types of goods and services they can provide (Halverson, 2020). Other advancements have led to new products such as the creation of biodiesel and ethanol or even electric vehicles, solar power, and wind energy. The rise of technology has allowed for the growth of precision agriculture techniques as well as digital applications tied directly to agricultural production.

The digital technologies available for production agriculture, including soil maps, yield monitors, variable rate technologies, auto-steer and guidance systems, satellite imagery, and unmanned aerial vehicles, have been present for several years. However, the adoption rates have varied. In 2001, only 5.3% of planted corn acres were produced using auto-steer guidance systems. This adoption grew to 58% in 2016, with the assumption it would continue to increase in the future (McFadden, Njuki, & Griffin, 2023). Digital technologies have caused the service sector to adjust by providing technical support or commercializing artificial intelligence applications, for example. The digitalization of the sector is expected to increase efficiency across the sector by providing cost reductions and yield increases (McFadden, Njuki, & Griffin, 2023).

These technological advancements may affect the services the cooperatives provide. For example, the RGA took advantage of these advancements in 1960 by purchasing a shipping vessel to enter into the shipping industry. This provided a direct service the cooperative could provide for its producers. As production became more capital-intensive, so too did the services offered by cooperatives. This financial-heavy business model provided some issues for the RGA as they were going through their decline in the late 1990s (Bond, Carter, & Sexton, 2009). By identifying technological forces, the RGA could have connected their assets to their profitability earlier on so they could divest accordingly and invest in newer technologies to better serve their members.

Economic Forces

The decreasing number of farms, increasing costs, industrialization of agriculture, increasing competition, and decreasing profits are all contributors to the changing cooperative landscape (Hine, Fulton, & Pritchett, 2005). The number of farms has decreased by roughly 200 over the past decade while the average size of the farm has slightly increased over that same time period (Economic Research Service, 2022). The net value of producing corn in the U.S., for example, has been negative the past seven years and looks to continue in the near future (Economic Research Service, 2021). Additionally, the threat of vertical integration in other parts of the agricultural supply chain and in competing agribusinesses affects the current model of cooperatives (Saitone & Sexton, 2017).

The make-up of farm household income changes each year. In 2019, on average, farm households received roughly 80% of total income from off-farm income (Giri, Subedi, Todd, Litkowski, & Whitt, 2021). Land prices fluctuate yearly along with commodity prices and lease agreements. It seems as if once farmers can capitalize on lower interest rates, inflation rises causing interest rates to rise once again (Key, Burns, & Lyons, 2019). All such factors affect how farmers evaluate input costs and grain marketing decisions, which then affect the products and services a cooperative might provide.

The general economy affects agriculture as well. Unemployment in the United States has remained steady around 3.6% in both rural and urban areas from 2022 to 2023 (Economic Research Service, 2025). The state of the general economy may affect the labor force available to cooperatives and to the agricultural industry as a whole. Additionally, these factors could affect household incomes and food purchases, trickling down to the agricultural production level.

Innovation and globalization are pushing agribusinesses, food manufacturers, and food retailers to consolidate and to become more effective at navigating local impacts of global events (Dunn, Crooks, Frederick, Kennedy, & Wadsworth, 2002). Agricultural cooperatives have consolidated and increased their business volume. The number of farmer cooperatives alone has decreased by roughly 4,200 over a 35-year period (from 6,445 in 1979 to 2,186 in 2014) (Eversull, 2014). By 2023, the number of agricultural cooperatives fell again by about 500,

leaving the most recent count at 1,647 cooperatives (Wadsworth, Coleman, & Rivera, 2024). This could be attributed to various factors including going out of business entirely, consolidating, merging, or being acquired by another cooperative. However, the livelihood of the existing agricultural cooperatives is looking positive given agricultural cooperatives achieved the second highest revenue year on record in 2023 with \$296.7 billion in total gross business volume (Wadsworth, Coleman, & Rivera, 2024). Assets were also near a record high in 2023, ending at \$124.7 billion (Wadsworth, Coleman, & Rivera, 2024).

For the RGA, they tried to pivot their value proposition instead of directly competing with more profitable cooperatives and for-profit businesses. Instead of bulk shipments, they were going to pursue the domestic packaged consumer rice products. The table rice market in the U.S. was still relatively small and the change in strategy was costly to implement. Additionally, some of their management decisions contributed to the economic forces at play – in 1985, they weren't able to issue returns to their members. Instead, they requested a payment to help the cooperative cover some of the costs they incurred (Bond, Carter, & Sexton, 2009). Identifying members needs and connecting those to profitable business decisions could have helped the RGA successfully pivot.

Environmental Forces

Drought conditions that have plagued parts of the United States in recent years affect the food supply and types of crops and produce

grown in such regions. As different crops are planted, this places a different expectation on cooperatives to serve those members. Climate change has brought about initiatives to reduce carbon emissions. As a result, policy considerations at the level of the larger government as well as within individual companies become vital (Cavey, et al., 2021).

High impact but low probability events that arise from the natural environment tend to blindside agriculture. This could include wildfires, flooding, tornados, hurricanes, and derechos. These catastrophes lead to great changes in supply for certain agricultural products. Another more recent example would be the Covid-19 pandemic. The pandemic affected daily lifestyles, short-term incomes, and job prospects, creating a ripple effect across various supply chains.

This particular force is harder to prepare for in advance. However, contingency plans could be created and enacted if an environmental force is at play. For the RGA, perhaps it is identifying ways to increase rice storage in the event of excess supply, such as what happened when growing rice became more profitable in California. However, as the need for storing large quantities of rice diminished for the cooperative, they could have looked to sell or repurpose their existing storage facilities to remain profitable.

Political/Legal Forces

Policies, such as unemployment benefits and healthcare, put in place to support and protect employees affect the workforce available

for cooperatives and other businesses. The availability of reliable help affects the breadth of services a cooperative can provide. Monetary policy and interest rate levels impact farmers, which in turn, impact local cooperatives. Additionally, the individuals put in place at the national government level to run the United States Department of Agriculture and to create the ever-changing Farm Bill have trickle-down effects on the local farming community (Ehmke, 2020).

Immigration policies greatly affect the agriculture sector. It is no secret that agriculture relies on immigrant labor. With policing of illegal immigration increasing, this could also drive up the cost of labor for those rural employers (CoBank Knowledge Exchange, 2024).

The COVID-19 pandemic affected various policies, such as what businesses were deemed essential as well as policies for shipping various materials between countries. Travel restrictions limited tourism and household lifestyles, including how and where families and individuals chose to consume their meals (Dobis, et al., 2021).

With agricultural output growing faster than domestic demand, overseas markets are needed to bring profits and price stability to producers. Agricultural exports have grown in the U.S. by roughly \$100 billion over the past quarter century. The largest increase over that time period was exports to the European Union, North America, South Asia, and Central America. U.S. agricultural imports have also increased by more than \$100 billion over the past 25 years (Economic Research

Service, 2022). The flow of exports and imports relies on trade barriers, such as trade agreements, tariffs, and quotas.

However, the prospect of tariffs could be harmful to the industry. The political climate and government administration has led to imposed tariffs on imported goods with the idea that these will be a tool to achieving other outcomes. The reciprocal tariffs could create a challenging financial environment for producers and other domestic agribusinesses (CoBank Knowledge Exchange, 2024).

The future of biofuels policy hangs in the balance. The status of the Renewable Fuels Standard is unknown, leading some refineries to hit pause on larger production goals. Some cooperatives own refineries or contract grain sales with local refineries. It is projected that renewable diesel production capacity will grow by 100 million gallons in 2025 but remain steady in 2026 (CoBank Knowledge Exchange, 2024). The policy and regulation uncertainty around biofuels can lead to challenges for both producers and agribusinesses.

Locally, policies are being put into place that restrict the types of products farmers are allowed to use to produce crops and livestock. When these policies are implemented, cooperatives have to modify the product offerings they provide for their members (Saitone & Sexton, 2017). Strategic planning becomes a key factor for cooperatives when navigating such policies.

The RGA faced challenges with policies – specifically with antitrust laws. They tried to purchase a rice-milling facility that was currently owned by a large milling company in California. The Department of Justice argued that they represented two of the five largest rice mills in California at the time. Additionally, the RGA depended on demand for rice from a foreign aid program, “Food for Peace,” in order to help justify the use of their shipping vessel. With this change in demand because of policies, keeping the shipping vessel created a financial loss (Bond, Carter, & Sexton, 2009). By understanding or consulting legal council before making these business decisions, it could have saved the RGA from negative publicity and inflated legal costs.

Task (Industry) Environment – Five Forces Analysis

The Five Forces analysis by Michael Porter is a widely utilized framework to identify the threat of new entrants, rivalry among existing firms, the threat of substitutes, the bargaining power of buyers, and the bargaining power of suppliers (Porter, 1980). Given we are utilizing the RGA to apply our analyses, we will only be conducting the Five Forces analysis on the rice processing/marketing industry in the western United States for the late 20th century.

Threat of New Entrants

The threat of new entrants in the rice processing/marketing industry in the western U.S. in the late 20th century was fairly low. There

were relatively few players with large market shares. There were surpluses of rice and limited demand that would have deterred new entrants from wanting to enter into the market. Additionally, there were fairly high upfront costs to enter into the market. There was a huge capital investment needed to acquire milling and storage facilities. When RGA tried to purchase a nearby milling facility from Pacific International Rice Millers Inc. (PIRMI), the Department of Justice's argument in the antitrust lawsuits related to the fact that PIRMI and RGA together represented two of the five largest rice mills in California (Bond, Carter, & Sexton, 2009).

Rivalry Among Existing Firms

Given that the RGA was one of the top 5 largest rice mills in California in the late 20th century, this is a good indicator that rivalry among existing firms was fairly high. When RGA made the strategic move to switch their focus to table rice, they were still met with high competition. In the table rice market, there were large players such as Uncle Ben's, Mahatma, and Near East for the RGA to compete against. The amount of land being converted into rice paddies in California was also limited, making the growth of the industry relatively slow (Bond, Carter, & Sexton, 2009).

Threat of Substitutes

There may not be many substitutes for rice itself. However, there were potentially substitutes for the type of service (i.e. milling and the

marketing of the rice product) that the RGA provided, hence the high competition among existing firms. If we look at RGA as a company providing rice, more substitutes could be named as there are a handful of competitors selling the same (or similar) product. When the international demand for rice was high, RGA attempted to trade rice with South Korea. When South Korea wasn't willing to work with the RGA's preferred broker, South Korea entered into trade deals with other companies with large supplies of rice. Therefore, there is a mixed view on the threat of substitutes in this situation (Bond, Carter, & Sexton, 2009).

Bargaining Power of Buyers

As Hunger and Wheelen (2011) define the bargaining power of buyers, the buyer must have a high enough influence to force down prices or bargain for higher quality, for example. The bargaining power of buyers in the rice industry is perceived to be fairly high because of the fact that companies can integrate backward into the rice milling process of the supply chain to become a direct competitor to the RGA. One example is Ben's Original (formerly Uncle Ben's) (Ben's Original, 2026). Furthermore, with higher supplies of rice in the late 20th century, buyers were able to bargain for lower prices and could switch supplies fairly easily (Bond, Carter, & Sexton, 2009).

Bargaining Power of Suppliers

The bargaining power of suppliers has a very similar definition – the supplier must have a high enough influence to raise prices or reduce

the quality of the purchased good or service. With several rice producers in central California in the late 20th century (leading to a rice surplus), their bargaining power was fairly low. In general, agricultural producers are price-takers. Given rice is directly utilized for human consumption, there are standards put in place to govern the quality, leaving little room for suppliers (i.e. producers) to bargain for a change in this area.

The RGA could have used this Five Forces Analysis when redesigning their value proposition in the late 1990s. By identifying areas of competition and opportunity, they could have developed a value proposition that met their current memberships' needs as well as created a profitable business model.

Internal Environment – Resources and Capabilities Analysis

The major internal factors that impact organizations' performance include resources and capabilities. Resources are the assets of an organization, including tangible, intangible, and human assets. Capabilities are the abilities of the organization to utilize its resources. These consist of how the organization uses its resources to turn inputs into outputs and can be separated in various categories such as marketing capabilities, manufacturing capabilities, and human resource capabilities (Hunger & Wheelen, 2011). Analyzing the internal factors that exist within the agricultural cooperative industry is the next step in environmental scanning. Here, we will look at the resources and capabilities available to the RGA.

One of the most important resources of any given cooperative is its human capital. This includes both its members and the management team (i.e. general manager, employees, and board of directors). Without these individuals, the cooperative does not thrive. The members choose the directors, and the directors choose the general manager, who then is responsible for personnel decisions. Establishing a positive cooperative culture is important for these groups to work together. Moreover, research has shown establishing a safety culture is important for farmer cooperatives. Hanson and Boland (2020) surveyed farmer cooperatives regarding the importance of establishing a culture that “creates a set of beliefs, norms, attitudes, roles, and technical practices that reduce workplace dangers.” Findings show that cooperative employees are trained in safety practices and that cooperative managers should invest in establishing a safety culture. However, membership has declined from 2013 to 2022 by 6.9% in U.S. agricultural cooperatives. More specifically, membership has decreased 3.7% in marketing cooperatives and 8.4% in supply and service cooperatives (USDA Rural Development, 2024). This reduction in membership could lead to fewer potential directors which can negatively impact the selection process of a general manager. As mentioned previously in the societal environment analysis, fewer farmers could be contributing to the decrease in membership as well. In the case of the RGA, lack of leadership, knowledge, and skills from the CEO and Board of Directors caused members to lose confidence in the cooperative, ultimately leading to RGA’s closure (Keeling, 2004).

Fulton and Giannakas (2006) mention that members may lose interest in cooperatives sometimes based on who is running the cooperative. This could cause decreased membership. Based on management decisions, the RGA saw a rapid decrease in membership, ultimately leading to more financial struggles. More specifically, management decided to change their strategy to pursue differentiated products, which was a very expensive move. While the outlook was positive, the realized returns were costly (Bond, Carter, & Sexton, 2009).

As Park, et al. (2019) mentions, Situational Leadership Theory is important when evaluating and selecting the management team. This theory suggests that a leader's behavior is connected to the characteristics of the team in which they belong. Therefore, different situations may require different styles of leadership as well as different abilities and skills in order to be successful. Pushing further, as Choi, et al. (2014) states, the board of directors is assumed to monitor and control management, which is tied to agency theory. Process theory suggests that the performance of the board of directors and the organization is different depending on characteristics of the decision-making process. Since the board of directors is the decision-making group, agency theory and process theory could present hurdles. For the RGA, this was evident as they went through different CEOs as they embarked on the various paths in the later stages of its life. Michael Cook was brought in to help implement the differentiated products strategy while Bill Ludwig tried to

make dramatic changes to stabilize the failing cooperative (Bond, Carter, & Sexton, 2009).

According to Park, et al. (2019), 1) board members are elected from among the members and therefore, may have limited experience to agricultural production only; 2) board members are experts at managing their own operations; 3) members of the cooperative expect equal treatment; and 4) board members may not have had many opportunities to hone their interpersonal skills. Additionally, since directors are chosen from the farmer memberships, the diversity of thought being brought to the table may be limited. A study done among Swedish cooperatives found that educated directors alone were related to cooperative success (Hakelius, 2018). High-performing cooperatives spent significant time educating both new and sitting directors. As a result, training programs for new directors, current directors, and managers are vital to having a long-standing cooperative business model. In the case of the RGA, this was cited as one of the reasons for failure – former managers and members mentioned that the board was passive and ill equipped to evaluate business decisions. Additionally, perhaps the board also lacked governance and analytical skills (Bond, Carter, & Sexton, 2009).

Another resource for cooperatives is their collection of assets, liabilities and equity. From 2013 to 2022, the marketing volume of cooperatives increased by 29%. In addition, farm supply volume is up 11%, asset values have increased 53%, liabilities have risen 48%, and equity levels are up 58% (USDA Rural Development, 2024). Farmer and

rural utility cooperatives have access to unique capital funding opportunities through CoBank, who has a loan volume of more than \$42 billion (Frederick, 2012).

The RGA had a long list of assets that were once very beneficial to its existence. For example, the investment into a shipping vessel to make international shipments of rice a very viable business offering. As they grew, they were able to expand and purchase more milling facilities to better serve their growing membership. It seemed that the RGA was heavily leveraged and tried to finance their growth using debt. This served them well until demand shrunk, causing their membership to shrink, leading to less than ideal financial positions (Bond, Carter, & Sexton, 2009).

The way that cooperatives are governed and designed could act as an advantage or a potential limitation. For example, traditional cooperatives operate under the rule of one member, one vote and open membership. New Generation Cooperatives (NGC's) are built based on closed memberships. They tend to focus on a single commodity and processing of that commodity. They utilize delivery rights and try to maximize profits from downstream in the supply chain. This differs from traditional cooperatives since traditional cooperatives exist to serve the wide variety of members which may include working with several types of commodities and providing a multitude of services, such as fuel, fertilizer, grain storage and marketing, feed solutions, etc. (Merrett & Walzer, 2001). On the contrary, the open membership model with one

vote per member can be an asset. This gives all members a voice, allows for a variety of membership, and a wider pool to draw from for director positions.

Another challenge that cooperatives face based on their structure is the free-rider problem and the horizon problem (Cook, 1995). The first suggests that little incentive exists for members to monetarily invest in the cooperative since benefits come from the use of the co-op. Therefore, members may only invest what is required to be considered a patron of the co-op. The horizon problem suggests that members may only focus on the short-term rather than the long-term life of the co-op since benefits are only received from the co-op when members use the co-op. In order to see returns this year, the member needs to patronize the co-op this year. For the RGA, they were not able to issue returns like other cooperatives. This caused membership to lose faith in the long-term strategy of the cooperative and invest their equity elsewhere. Members needed short term gains to remain profitable while the cooperative needed more long-term investors to build back up their viability in the later years of its existence (Bond, Carter, & Sexton, 2009).

By analyzing their resources and capabilities, the RGA could have capitalized on what they did have and what they were able to do when redesigning their value proposition to ensure future business profitability.

Conclusion

Given strategic management is important for business success and profitability, it is imperative to understand the basic elements of the strategic management process. The first element is environmental scanning, which includes scanning the societal environment, the task (industry) environment, and the internal environment. This paper illustrated how a complete scan of the environment could be conducted for the overarching agricultural cooperative industry in the U.S., utilizing the STEEP analysis, Five Forces analysis, and a traditional internal analysis of observing a firm's resources and capabilities. The concepts were specifically applied to the Rice Growers Association as well.

From this work, we can see that international business, trade policies, and technology will continue to create challenges and opportunities for the agricultural industry. The changing demographics of farms and farmers are altering the needs of the agricultural worker that the cooperative may be able to meet. Consumer preferences are constantly changing, affecting how agricultural workers produce food products and inputs. With this analysis, cooperatives can see the importance of continuing looking externally and internally to remain viable. By utilizing the RGA case, you can see how applying the STEEP analysis, the Five Forces analysis, and an internal analysis could prevent potential failure.

Use this paper as an example to conduct your own analysis in the future.

To do so, follow these steps:

1. For the societal environment analysis, use the STEEP framework focusing on sociocultural, technological, economic, environmental, and political/legal factors affecting the external landscape of your cooperative. You can conduct research by following key thought leaders in the industry such as the United States Department of Agriculture (USDA), National Agricultural Statistics Service (NASS), and the Federal Reserve. The external analysis allows you to identify the major change forces and market drivers that are redefining the purpose and goals of your cooperative. Prioritize in your strategic planning change forces and market drivers based on the likelihood of occurrence and the relative impact on your cooperative's medium- and long-term success.

2. For the task (industry) environment analysis, use the Five Forces framework focusing on the threat of new entrants into your immediate industry, the rivalry among existing firms, the threat of substitutes, the bargaining power of buyers, and the bargaining power of suppliers. This will help you identify the profit potential of the industry and where your cooperative might find its niche.

3. For the internal environment analysis, evaluate your individual cooperative's resources and capabilities. These are the assets of your organization, including tangible, intangible, and human assets, and the abilities of your organization to utilize these resources. More specifically,

how is your cooperative using your resources to turn inputs into outputs? This could include categories such as marketing capabilities, manufacturing capabilities, and human resource capabilities. In your investment decisions, prioritize developing resources and capabilities based on their relative strengths and strategic importance.

One limitation of this study is that not all recent events in agriculture could be analyzed as part of the external environment. There is a chance that some aspects have been missed that would fall under internal or external forces.

Opportunities for further research based on the results of this study is to apply the same conceptual framework and internal and external analysis to a broader view of the cooperative world. For example, we could examine the rural electric cooperative industry or the grocery cooperative industry to compare the results to what was discovered in this particular study.

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