

Service performance, marketing strategies, and business sustainability in agri-coops in Calabarzon: Model for cooperatives' operation

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Abstract

The purpose of this paper is to create a model that will be used by agri-based cooperatives in their smooth operation. The model was based on the actual practices of the top-performing cooperatives in CALABARZON as per CDA data in 2022. The determining factors used were the service performance, marketing strategies and business sustainability of the participating cooperatives. A total of 337 respondents answered the research instrument with a Cronbach Alpha Value of 0.97 making it reliable for the study. In interpreting the data, the statistical tools employed are frequency percentage, ranking, weighted mean, and Multiple Correlations–Pearson R. Based on the findings, it was agreed that service performance based on its facilities & equipment, timeliness, customer satisfaction, trust & confidence and record keeping is highly significant in the operation of a cooperative. The same goes to the 7Ps of marketing strategies which are product, price, place, people, promotion, process, and physical evidence. The said variables were seen to have an effect to a great extent in the marketing side of operation. And as per business sustainability, result showed that its environmental, economic, and social aspect was highly seen to be indispensable in the operation. It was clearly shown in the study that there is a significant relationship between service performance, marketing strategy and business sustainability in running an agri-based cooperative. Thus, the development of a model by the proponent will be recommended for utilization of the newly formed agri-based cooperatives in the hopes of a higher success rate and sustainable operation of agri-based cooperatives in CALABARZON.

Keywords: service performance, marketing strategies, business sustainability, cooperative operation model

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1. Introduction

The new strategic vision for the agricultural sector is a food-secure and resilient Philippines with prosperous farmers and fisherfolks. The Department of Agriculture's battle cry is the "Masaganang Ani at Mataas na Kita". The country being considered as a land of abundant opportunities with a wide variety of crops can be harnessed not only for livelihood but to build agribusiness enterprises. It was once regarded as an agricultural nation with several innovations in the areas of sustainability, sufficiency, and food security.

For many years, the country's primary source of income has been agriculture. Agricultural cooperatives were one of those interventions that flourished in the different parts of the world under the agriculture sector. However, agricultural cooperatives in the country failed to thrive despite significant capital investments made by the government in the middle to late 1960s, including sizeable loans for marketing and facilities as well as technical support from USAID. Based on CDA data in 2021, the number of agriculture-based cooperatives were insignificant as compared to other industries in the country. Again, as an agricultural country, focus and interventions should not stop with production but rather into the transformation of agriculture as a business through accredited agricultural cooperatives. Countries like Europe, Canada and other first world countries focused on the entrepreneurial aspect of agriculture as essential thrust of their agri-coops. Dutch agricultural cooperatives have a long history of achieving corporate expansion success all around Europe. More farmers are establishing cooperatives to offer locally produced food and have been introducing food and beverage goods into the national and international marketplaces (Dodsworth et al., 2021).

With this, a process flow or standard operational procedure for cooperatives will be of great help in order to facilitate and capture the activities of an agri-based cooperative. This could be possible by knowing its service performance, marketing strategies and business sustainability. Each variable is crucial in the success of a cooperative in general. In terms of service performance, developing an excellent and practical service performance evaluation method will be beneficial to the advancement of service quality as well as corporate image. The service performance of an agri-based cooperative generally shows and reflects the overall operation of the business. It also gauges the reception of the clientele, customers and even the members of the cooperative itself in terms of serving them. In terms of the business aspect of the operation, marketing strategies play a vital role.

Crafting a personalized strategy for a specific agri-based cooperative can lead to the further success of the cooperative. Religiously following and observing the marketing strategies of a cooperative leads to the strengthening of the business core. And in order to make a business particularly the agri-based cooperatives, sustainability in all aspects should be observed. It should be economically sustainable ensuring the continuous cycle of operation from the accumulation of raw products up to the monetization and financial stability of the cooperative. In terms of environmental sustainability, to ensure that the environment is preserved, considering that the said cooperative are dealing mostly with natural resources, proper use of land, intercropping, proper fertilization and meticulous handling of livestock, poultry and swine should be observed. And when rendering services concerning agricultural activities, renewable energy should be prioritized and used for machinery and operation. Lastly, it should also be socially sustainable. Being part of the community as an institution or business enterprise, agri-based cooperatives should ensure a giveback activity, project or program to the community through CSRs.

In evaluating the said variables, different tools and dimensions should be studied. A SERVPERF Model tackles the performance of an organization based on the available facilities & equipment, timeliness, customer satisfaction, trust & confidence and its record keeping. The 1st variable focused mainly on the operational process and tools of

the cooperating. While for the marketing strategies variable, agri-coops should focus on the 7 key strategies: product, price, promotion, place, packaging, positioning and people. This one give emphasis on the approaches and policies of the organization. And lastly by knowing its sustainability economically, environmentally, and socially the third variable which concerns the external and internal aspect of the business is being addressed.

The researcher chose to conduct this study to produce a model for cooperatives' operation that will ensure the stability of agri-based cooperatives in the country, particularly in CALABARZON. Being a former Municipal Agriculturist who headed an Agriculture Office focusing on the creation of Agri-Based Cooperative in their municipality, the researcher sees the need for a manual or model which can somehow guide newly created cooperatives in their operation and eventually sustain such operation. With the current focus on agriculture in the country, combined with the onset of pandemic and other calamities, the agricultural sector has been very relevant in the economy not only in the Philippines but all over the world. Cooperatives as a whole were already existed and have been supported for ages; however, its sustainability is always at question. Having a sustainability plan is needed in order to stabilize the said industry, especially the agriculture cooperatives who are the usual partners and beneficiaries of the government, particularly the Department of Agriculture.

Objectives of the Study - This study aimed to examine the service performance, marketing strategies and business sustainability of Agri-Coops in CALABARZON as Model for Cooperatives' Operation. The study specifically aimed to assess the Service Performance of the Agri-Coops in CALABARZON as to facilities & equipment, timeliness, customer satisfaction, trust and confidence and record keeping; determined the market strategies adopted by the Agri-Cooperatives based on the 7 key strategies – product, price, place, people, promotion, process, and physical evidence; described the agri-coop business sustainability in terms of environment, economic and social; tested the significant relationship between SERVPERF, marketing strategies and business sustainability and developed a model for Agri-Coop Operations.

2. Methods

Research Design - The study assessed the overall service performance of the cooperative through SERVPERF, marketing strategies and business sustainability of Agri-Based Cooperatives in CALABARZON with the end goal of proposing a model for Cooperatives' Operation. The researcher employed a descriptive method. This method can either be quantitative or qualitative. Mitchell et al., (2013) defines descriptive research as an appropriate tool and practices of which can be treated with the statistical tools. It is a type of analysis that focuses on describing the features of population or phenomena under investigation. This approach concentrates more on the “what” of the research rather than the “why”. In 2019, Manjunatha further explained that descriptive research is a statement of the current state of circumstances. It simply attempts to determine, describe, or identify what is. Research that is descriptive aims to shed light on present challenges or problems, a method of data collection that enables them to provide a more detailed description of the situation more thoroughly than what was possible without using this technique. Furthermore, the researcher believes that this type of research design is the most appropriate tool given that it addresses and explains the information and attributes needed in assessing the service performance, marketing strategies and business sustainability of Agri-Based Cooperatives in CALABARZON.

Participants of the Study - The participants of the study were the members of the Top 5 performing Agri-Based Cooperatives in CALABARZON in terms of financial performance as per CDA Data in 2022 which are the Sorosoro Ibara Development Cooperative (SIDC), Bago (Ibaan) Multi-Purpose Cooperative, Tayabas Community Multi-Purpose Cooperative, Luntian Multi-Purpose Cooperative and Padre Garcia Development Cooperative (PADECO). Using RAOSOFT, the needed number of participants per cooperative according to their actual number of active members are as follows: 118 respondents from Ibaan (Bago) Multipurpose Cooperative, 125 from Luntian Multipurpose Cooperative and 94 from Padre Garcia Development Cooperative. The total number of respondents of the study was 337 consists of members and consumers with 100% retrieval rate.

Instrument of the Study - A survey questionnaire was used for data gathering as the research instrument of

the study. The survey was used to assess the service performance, marketing strategies and business sustainability of Agri-Based Cooperatives in CALABARZON. The researcher used a questionnaire with 3 parts. The first part was comprised of the service performance of the cooperative adapted based on the SERVPERF standardized questionnaire by Cronin, et al. (1992). For the second part of the questionnaire, the researcher created a questionnaire regarding marketing strategies based on the 7Ps of marketing mix. While the third part of the questionnaire was modified and based on a previous study of De Guzman (2019) regarding business sustainability.

The researcher created a strategic plan on how to administer the distribution of questionnaires to the respondents all over CALABARZON. The “Likert Scale” will be used in assessing the answers of the participants. Before the distribution of questionnaire, it was then subjected to reliability test using Cronbach’s alpha. Taber in 2018 defined Cronbach’s alpha as statistic commonly quoted by authors to demonstrate that tests and scales that have been constructed or adopted for research projects are fit for purpose. It is one of the most widely used measures of reliability in the social and organizational sciences. It is a measure of internal consistency, that is, how closely related a set of items are as a group.

In this study, an initial 20 respondents were asked to answer a google form containing the 70 questions with Four-Likert point pertaining to the service performance, marketing strategies and business sustainability of Agri-Coops. The 20 respondents were randomly selected from the initial list of Agri-Coops in CALABARZON retrieved from the CDA database. They were given ample time to answer the questionnaire and were quickly brief. The closer the coefficient is to 1/00 the greater the internal consistency of the items in the scale. It was provided by Srivastava in 2016 that a value of 0.90 means excellent, 0.80-0.89 as good, 0.70-0.79 as acceptable, 0.60-0.69 as questionable, 0.50-0.59 as poor and 0.50 as unacceptable. Therefore, based on the result, the instrument is reliable.

Data Gathering Procedure - The questionnaire was the main tool for data collection. A validation of the questionnaire before gathering was conducted. A letter of permission together with a sample questionnaire was submitted to the adviser. Upon its approval, it was further validated by an expert for the said field before the actual data gathering process for the identified respondents. A letter of request for the survey was submitted to the cooperatives for approval. The target participants were visited so they could be briefed about the purpose, content, and outcomes of the paper. An informed consent was also discussed with them, and each question was explained. The data was immediately collected after the respondents finished answering them. Each questionnaire was checked to see if all the items were answered while tallying of data was also attended by the researcher.

Data Analysis - To perform data analysis, the following statistical tools were used. Weighted means and ranking were used to assess the “Service Performance, Marketing Strategy and Business Sustainability of Agri-Based Cooperatives in CALABARZON: Model for Cooperatives’ Operation”. The result of Shapiro-Wilk Test revealed that p-values of the main variable were greater than 0.05 which means that the data set is normally distributed. Therefore, Pearson Product Moment Correlation was used to test the significant relationship of the treated variables. In addition, all data were treated using statistical software known as IBM SPSS version 29 to further interpret the result of the study using an alpha level of 0.01.

Ethical Considerations - The ethical aspect of the research was strictly followed. Enough time was given to the respondents so they can answer the questionnaire in their true views and opinions. Consent and permission from the respondents were ensured. Confidentiality was maintained in the study. Identities of the respondents was not disclosed to ensure the privacy of their data.

3. Results and discussion

Table 1

Summary Table on the Service Performance

| Indicators | Weighted Mean | Verbal Interpretation | Rank |
|-----------------------------|---------------|-----------------------|------|
| 1. Facilities and Equipment | 3.35 | Agree | 4.5 |
| 2. Timeliness | 3.35 | Agree | 4.5 |
| 3. Customer Satisfaction | 3.47 | Agree | 1 |
| 4. Trust and Confidence | 3.39 | Agree | 3 |
| 5. Record Keeping | 3.41 | Agree | 2 |
| Composite Mean | 3.39 | Agree | |

Legend: 3.50 – 4.00 = Strongly Agree; 2.50 – 3.49 = Agree; 1.50 – 2.49 = Disagree; 1.00 - 1.49 = Strongly Disagree

Table 1 summarizes and showcases the level of importance of the different sub-indicators of service performance. It can be observed that all the 5 sub-indicators were agreed by the respondents as crucial and needed in performing the services being offered by an agri-based cooperative and it produced a composite mean of 3.39. Out of the five variables, customer satisfaction ranked 1 with a weighted mean of 3.47, followed by record keeping, trust and confidence and facilities and equipment and timeliness on the last rank.

Cooperatives being innately a service and goods provider needs to focus on customer satisfaction since they are the ones who will keep the business going. The more satisfied a client is, the higher the chance of its continuous patronage. As mentioned earlier, proper decision making can only be made based on actual and factual records thus the great need for good record keeping activity of a company. This already entails trust and confidence once members and consumers have been shown reliable records of the operation and performance of the cooperative they belong to. Other remaining factors though rank last such as the facilities and equipment and timeliness doesn't mean irrelevancy to the overall service performance of the cooperative. This only shows that less attention is given by the members to such factors, but they were also agreed to be equally important as the other variables. Overall Service Performance is an interconnection of what the cooperative can offer, how they can deliver it and how they can maintain it. Performance, as defined by Kaswan (2011), is the ability of the employee to accomplish work, it may be enhanced by highlighting the person's strengths and comprehending the modifications required. Performance is ultimately the consequence of cooperation between individuals or parts of an organization in order to achieve a goal.

Table 2

Summary Table on Marketing Strategies

| Indicators | Weighted Mean | Verbal Interpretation | Rank |
|----------------------|---------------|-----------------------|------|
| 1. Product | 3.30 | Agree | 2 |
| 2. Price | 3.21 | Agree | 4 |
| 3. Place | 3.18 | Agree | 7 |
| 4. People | 3.20 | Agree | 5.5 |
| 5. Promotion | 3.22 | Agree | 3 |
| 6. Process | 3.20 | Agree | 5.5 |
| 7. Physical Evidence | 3.35 | Agree | 1 |
| Composite Mean | 3.24 | Agree | |

Legend: 3.50 – 4.00 = Strongly Agree; 2.50 – 3.49 = Agree; 1.50 – 2.49 = Disagree; 1.00 - 1.49 = Strongly Disagree

Table 2 shows the ranking of the seven indicators under the variable marketing strategy. Overall, the said indicators were agreed to be a crucial part of the marketing strategy of an agri-based cooperative with a weighted mean of 3.24. With this said, each of the “ingredients” or indicators of marketing strategy is key to success. No element can be considered in isolation. You cannot, for example, develop a product without considering a price, or how it will reach the customer, to whom you will sell the product, how to promote the brand and how to set it up all. The 1st in rank among the seven indicators is physical evidence with a weighted mean of 3.35. As mentioned in a study of Yusuf, et.al in 2020, consumers find it challenging to assess service offerings, notably quality and value for money, prior to purchase because of the intangibility of service products. Additionally, due to their

intangibility, new service product offers may be challenging for marketers to position. Due to this, marketers frequently need to be "tangible" in terms of service offering the manner they handle the tangible materials that go along with it. Physical evidence includes things like the service provider's facilities and staff look, as well as things like uniformity and personal hygiene. Additionally, promotional items and branding initiatives all serve as tangible evidence that may be measured or used in consumer service industries. Next in rank is product with a weighted mean of 3.30. Third and fourth in rank are promotion and price with weighted means of 3.22 and 3.21, respectively. While people and process had the same rank and weighted mean of 3.20. The last in rank among the indicators under marketing strategy is placed with a weighted mean of 3.18.

Table 3

Summary Table on Business Sustainability

| | Weighted Mean | Verbal Interpretation | Rank |
|-----------------------|----------------------|------------------------------|-------------|
| 1. Environment | 3.18 | Agree | 3 |
| 2. Economic | 3.27 | Agree | 2 |
| 3. Social | 3.31 | Agree | 1 |
| Composite Mean | 3.26 | Agree | |

Legend: 3.50 – 4.00 = Strongly Agree; 2.50 – 3.49 = Agree; 1.50 – 2.49 = Disagree; 1.00 - 1.49 = Strongly Disagree

Table 3 shows the summary of the sub-variables of business sustainability of Agri-based cooperatives in CALABARZON. It has a composite mean of 3.26 stating that the respondents generally agreed on the need of the following sub-variables in business sustainability of cooperatives in general. The social aspect ranked 1st with a weighted mean of 3.31 which means that public relations and people interaction is still the most relevant attribute in sustaining a business. Humanity still prevails up to this date and is crucial in maintaining a business, especially for agri-based cooperatives. This was followed by the economic aspect with a weighted mean of 3.27, which dictates the financial side of a business. Financial sustainability can be equated to business sustainability; thus, it also dictates the future and continuous operation of a business or a cooperative. If there are no concrete plans and goals in the economic side of a business, it will not prosper no matter what. While the environment, although ranked third with a weighted mean of 3.18, is still agreed by the respondents to be of great need in order for an eco-friendly and sustainable enterprise. Because of the vision and goal of keeping the cooperative operating and running in the long run, environmental aspect should not be neglected because once the environment specifically the source of raw materials was depleted the business overall will be stopped.

Sustainability is based on the principle that we must meet current needs without compromising the capacity of future generations to meet their own needs. Good management of both natural and human resources is therefore essential. In order to properly manage human resources, it is important to consider social responsibilities such as the living and working conditions of laborers, the needs of rural communities, and the health and security of consumers both now and in the future. Stewardship of land and natural resources requires long-term preservation or enhancement of this crucial resource base.

Cooperatives in line with the agriculture sector or the agri-based cooperatives are greatly dependent on the social, economic and environmental aspects of such business. Agriculture must be changed over time to become more sustainable. Farmers often need to take a number of small, manageable steps in order to transition to sustainable agriculture. Depending on family finances and personal goals, participants' ability to advance in the transition either quickly or significantly will vary. The importance of quality agricultural products and environmental protection cannot be overstated. Even the smallest action can have an effect and advance the system as a whole along the "sustainable agriculture continuum." The key to progress is the drive to take the next step. The goal of sustainable agriculture must be pursued by everyone involved in the system, including farmers, employees, politicians, academics, retailers, and consumers. The sustainable agriculture community can expand as a result of the contributions made by each group in a unique way.

Business sustainability needs to be built into organizations from the start. According to studies on the subject, new entrepreneurs' motivation to create social value and their pursuit of environmental sustainability as a means

of differentiating themselves from rivals are the two main forces behind the incorporation of sustainability into their business models (Glinik et.al., 2021).

Table 4*Relationship Between Service Performance and Marketing Strategies*

| Facilities and Equipment | r-value | p-value | Interpretation |
|------------------------------|---------|---------|--------------------|
| Product | .713** | <.001 | Highly Significant |
| Price | .541** | <.001 | Highly Significant |
| Place | .646** | <.001 | Highly Significant |
| People | .579** | <.001 | Highly Significant |
| Promotion | .554** | <.001 | Highly Significant |
| Process | .557** | <.001 | Highly Significant |
| Physical Evidence | .538** | <.001 | Highly Significant |
| Timeliness | | | |
| Product | .426** | <.001 | Highly Significant |
| Price | .478** | <.001 | Highly Significant |
| Place | .442** | <.001 | Highly Significant |
| People | .423** | <.001 | Highly Significant |
| Promotion | .347** | <.001 | Highly Significant |
| Process | .480** | <.001 | Highly Significant |
| Physical Evidence | .399** | <.001 | Highly Significant |
| Customer Satisfaction | | | |
| Product | .578** | <.001 | Highly Significant |
| Price | .570** | <.001 | Highly Significant |
| Place | .523** | <.001 | Highly Significant |
| People | .599** | <.001 | Highly Significant |
| Promotion | .618** | <.001 | Highly Significant |
| Process | .548** | <.001 | Highly Significant |
| Physical Evidence | .503** | <.001 | Highly Significant |
| Trust and Confidence | | | |
| Product | .608** | <.001 | Highly Significant |
| Price | .507** | <.001 | Highly Significant |
| Place | .486** | <.001 | Highly Significant |
| People | .548** | <.001 | Highly Significant |
| Promotion | .548** | <.001 | Highly Significant |
| Process | .389** | <.001 | Highly Significant |
| Physical Evidence | .395** | <.001 | Highly Significant |
| Record Keeping | | | |
| Product | .205** | <.001 | Highly Significant |
| Price | 0.068 | 0.213 | Not Significant |
| Place | .132* | 0.015 | Not Significant |
| People | 0.104 | 0.055 | Not Significant |
| Promotion | .116* | 0.032 | Not Significant |
| Process | .147** | 0.007 | Not Significant |
| Physical Evidence | .178** | <.001 | Highly Significant |

Legend: Significant at p-value < 0.01

Table 4 presents the association between service performance and marketing strategies. It was observed that the computed r-values indicates a moderate direct correlation, and the resulted p-values were less than the alpha level except on record keeping and the marketing strategies. The result shows that there was significant relationship exists and inferred that the better is the service performance, the better are the marketing strategies employed in the business. For the relationship between service performance in terms of facilities and equipment, timeliness, customer satisfaction, trust & confidence as to the marketing strategies in terms of 7P's namely product, process, place, people, promotion, process and physical evidence were generally highly significant with a p-value of <0.001. This holds true to all variables except record keeping and the marketing strategies since the value ranges from 0.007 to 0.213 and can be equated to its insignificant value. Product and process in relation to record keeping had a p-value of <0.0001 due to the importance of record keeping with regards to the said marketing strategies variable but overall, the indicators under record keeping are considered not significant and can be seen as negligible in the overall service performance of an agri-cooperative.

Specifically record keeping in terms of price, place, people, promotion, and process can obviously be seen to be insignificant since such variables don't need record keeping in any operation may it be private, public or cooperative. The data to be collected under the said variables will be of no use in the inventory as well as in the operation of the agri-based cooperatives. Instead of focusing efforts and labor on such activity, record keeping should be greatly focused on the inventory of products and delivery. It is crucial in any business operation that records of its products and services are updated, complete and easy to understand, from the point of view of the BODs up to the employee level. Record keeping is the everyday process of compiling, classifying, and evaluating financial data in the accounting system. Accounting for businesses must include record keeping. This includes records of regular transactions involving receipts and payments as well as, in some situations, a description of the assets and liabilities of the organization. This document aids in assessing the company's performance over a specific time, typically at the conclusion of a financial period. Keeping accurate records demonstrates how the transaction was handled and supports the actions that were done to adhere to business standards (Makinde-Ojo, et.al., 2020).

As for the other service performances such as facilities and equipment, timeliness, customer satisfaction and trust & confidence, all of these indicators are highly significant with regards to the 7Ps of marketing strategies namely: product, price, place, people, promotion, process and physical evidence. With such result, this only shows that the respondents who came from the top performing agri-based cooperatives in CALABARZON indeed exercise and operates in a way that the operation will be aligned to its goal of earning and surviving despite and inspite. Results showed that the marketing strategy variable had a positive effect on service performance. By providing quality services, it will create a positive perception from customers and will lead to satisfaction after experiencing the services provided. The result of this study is in accordance with and in line with the studies of Amelia, et.al. in 2019 which states that marketing strategy has a positive effect on service quality and over all in the service performance of an institution or cooperative. Marketing cooperatives, multifunctional cooperatives, thrift and credit cooperatives, and producers' or farmers' cooperatives are the four types of agricultural cooperatives that have been identified in the research region. The data showed that most respondents (53%) belong to thrift and credit cooperatives, while just a small percentage (12%) belong to multifunctional cooperative organizations. This backs up the conclusions of Baruwa et al. (2016) wherein marketing cooperatives, farmers' multipurpose cooperatives, as well as thrift and credit cooperatives, make up the majority of cooperative organizations in rural areas. With this conclusion, cooperatives in rural areas tend to focus more on the relationship of marketing strategies and its service performance.

Table 5 illustrates the association between service performance and business sustainability. It was observed that the computed r-values indicate a moderate direct correlation, and the resulted p-values were less than the alpha level. The result reveals that there was a highly significant relationship existing between the two variables and can be concluded that the better the service performance, the more that the business is sustainable. For the relationship between service performance in terms of facilities and equipment, timeliness, customer satisfaction, trust & confidence and record keeping as to the business sustainability in terms of environment, economic and social aspect were generally highly significant with a p-value of <0.001. Tools and methods can support the company transformation towards sustainable and circular business models and can also allow new ventures to develop a desirable, viable, feasible and sustainable business model (Bocken, 2023). With the right tools and methods being used for service performance, business sustainability can be achieved. Since there is a highly significant relationship between the two variables, each sub-variable should be taken seriously because it directly affects one another.

The type of facilities and equipment being operated by the cooperative can highly affect the environment in terms of noise pollution, air pollution and the likes directly affecting the environment. If the cooperative used old equipment, higher chances of higher economic cost and if the machines are designed specifically for the built of a man, then it doesn't comply with social aspect of business sustainability. In terms of timeliness, as the saying goes "time is gold" more so for business and agri-cooperatives especially in terms of the timeliness of crop production and animal raising. There should be a cropping calendar or timeline to be followed by the management in order to

determine when the right term is to harvest, process or sell a specific agricultural product. Even in terms of services, timing is a must. When is the right time to prepare a land allocated for specific crop production being sold by the cooperative, when is the right time to apply fertilizers and pesticides if needed. When is the right time or season to raise a chicken, cattle or swine. And when is the right time to use agricultural machinery, facility, or equipment. It will be very much sustainable if all of these activities are in right timing. It will be beneficial to humanity since everything will be delivered according to their needs at the right time and place. Economically speaking, cooperatives can gain profit at its maximum if the right proper calendar will be observed. Right crops, livestock and services will be harvested, raised and render at the right time. And lastly, the environmental cycle will not be disrupted because the operation undergoes the right process and timing.

Table 5

Relationship Between Service Performance and Business Sustainability

| Facilities and Equipment | r-value | p-value | Interpretation |
|--------------------------|---------|---------|--------------------|
| Environment | .495** | <.001 | Highly Significant |
| Economic | .638** | <.001 | Highly Significant |
| Social | .629** | <.001 | Highly Significant |
| Timeliness | | | |
| Environment | .281** | <.001 | Highly Significant |
| Economic | .391** | <.001 | Highly Significant |
| Social | .396** | <.001 | Highly Significant |
| Customer Satisfaction | | | |
| Environment | .447** | <.001 | Highly Significant |
| Economic | .565** | <.001 | Highly Significant |
| Social | .695** | <.001 | Highly Significant |
| Trust and Confidence | | | |
| Environment | .460** | <.001 | Highly Significant |
| Economic | .547** | <.001 | Highly Significant |
| Social | .672** | <.001 | Highly Significant |
| Record Keeping | | | |
| Environment | .309** | <.001 | Highly Significant |
| Economic | .339** | <.001 | Highly Significant |
| Social | .313** | <.001 | Highly Significant |

Legend: Significant at p-value < 0.01

As for customer satisfaction, if the consumers were satisfied by the products and services offered by the cooperative, it will immediately incur profit and can create more collaborations and CSR projects in the community. Since more earnings can lead to more help to the community. If the community is stable, other needs coming from the environment such as other resources for food will also be under control. Trust and confidence most specially in terms of record keeping and admin activities of the cooperative, making them one of their priorities will help in business sustainability as a whole may it be economic, social and environmental since each variable will have a domino effect in the overall operation of the business. With the result of the study, the respondents from the identified cooperatives had been experiencing the undeniable connection between the said variables in order for a cooperative to be successful.

According to Gatto (2020), the "responsibility rate," which has its roots in economic ethics and may connect local and human development with sustainability theories, has given birth to a new business sustainability theory. At the moment here, linking human, local, and sustainable development is a growing challenge that requires directing sustainable human development toward a new, fungible, and people-centered paradigm territorial viewpoint. Therefore, for intergenerational well-being, the environment and resource governance play crucial roles. This position calls for tenacious actions. With learning systems that produce capacity for adaptation and mitigation in the face of change, thinking designed to address vulnerability can be achieved.

Table 6 displays the association between marketing strategies and business sustainability. Based on the result, the computed r-values indicate a moderate direct correlation, and the resulted p-values were less than the alpha level. This means that there was significant relationship existing and implies that the better are the marketing

strategies, the more that the business becomes sustainable. For the relationship between marketing strategies in terms of 7P's namely product, process, place, people, promotion, process, and physical evidence as to the business sustainability in terms of environment, economic and social aspect were generally highly significant with a p-value of <0.001. In order to grow and increase revenue, a company must diversify by creating new products and entering new markets.

Table 6*Relationship Between Marketing Strategies and Business Sustainability*

| Product | r-value | p-value | Interpretation |
|-------------------|---------|---------|--------------------|
| Environment | .663** | <.001 | Highly Significant |
| Economic | .633** | <.001 | Highly Significant |
| Social | .640** | <.001 | Highly Significant |
| Price | | | |
| Environment | .421** | <.001 | Highly Significant |
| Economic | .457** | <.001 | Highly Significant |
| Social | .496** | <.001 | Highly Significant |
| Place | | | |
| Environment | .543** | <.001 | Highly Significant |
| Economic | .573** | <.001 | Highly Significant |
| Social | .573** | <.001 | Highly Significant |
| People | | | |
| Environment | .412** | <.001 | Highly Significant |
| Economic | .642** | <.001 | Highly Significant |
| Social | .587** | <.001 | Highly Significant |
| Promotion | | | |
| Environment | .439** | <.001 | Highly Significant |
| Economic | .627** | <.001 | Highly Significant |
| Social | .582** | <.001 | Highly Significant |
| Process | | | |
| Environment | .487** | <.001 | Highly Significant |
| Economic | .668** | <.001 | Highly Significant |
| Social | .551** | <.001 | Highly Significant |
| Physical Evidence | | | |
| Environment | .562** | <.001 | Highly Significant |
| Economic | .464** | <.001 | Highly Significant |
| Social | .444** | <.001 | Highly Significant |

Legend: Significant at p-value < 0.01

Chirani et al. (2013), asserted that a company's ability to grow and thrive will be determined by its ability to diversify. Cooperatives as well should adopt marketing strategies as well to achieve growth and sustainability in all aspects. Measures that ensure certification or standardization are susceptible to a relationship between business sustainability and the effectiveness of long-term management. The International Organization for Standardization (ISO) handles this responsibility. Many of these standards, according to Gatto (2020), are deemed required to determine whether a procedure or a product complies with sustainability principles. In terms of promotion, Moreno et.al (2022), that a promising field for the investigation of consumer is the User engagement and experience are related to behavior. Social media's expansion is primarily to blame for this fascination. By making the Internet their primary platform, incorporating a variety of exciting changes to the way their content is produced and delivered, and utilizing and combining new media techniques and processes. Examples of these include live streaming and content on social media platforms like Twitch, Twitter, YouTube, Facebook and Tiktok to name a few, agri-based cooperatives can also do the same. This will be both sustainable economically, socially, and most specially in terms of conserving environmental resources.

Global forces push legislative initiatives to legitimize sustainable development, according to Saavedra Garcia (2022) development projects at the corporate level, which serve as the ethical foundation for determining the validity, defining the roles, individuals' duties, and rights within a society. Others may impose these norms, values, or cultures, which will stabilize the social structure and allow individuals to play their roles. Meanwhile, based on a combination or association effect, it is possible to better understand how local forces affect mimetic reactions.

Companies are likely to imitate the actions of other businesses, things they believe to be worthy and legitimate. This study supports the idea that the right place, people, process and the physical evidence involving the agri-based cooperatives' operation are crucial in all aspects of business sustainability.

While in terms of price, it is also significant that pricing strategy of the cooperative is economically acceptable where profits will be gained while being socially humane and environmentally conscious. Producing products and providing services at the most minimal cost without sacrificing quality, service and nature. With the overall relationship of the 7Ps of marketing (product, price, place, people, promotion, process, and physical evidence) in relation business sustainability economically, socially and environment aspect, agri-based cooperatives should always bear in mind the significant relationship between the said variables. Since each and every indicator proves that their presence in cooperatives operation is crucial to ensure success and continuous thriving the world of cooperatives and businesses. The Model for Cooperatives' Operation as shown in Figure 1 illustrates the linear and direct relationship between service performance, marketing strategy and business sustainability. Based on the figure presented, service performance of the cooperative using five cited indicators has a positive relationship with the 7Ps of marketing strategy as well as business sustainability. It means that the higher the performance level of the cooperative in terms of facilities and equipment, timeliness, customer satisfaction, trust and confidence and record keeping with regards to product, price, place, people, promotion, process, and physical evidence, the higher the business sustainability environmentally, economically, and socially.

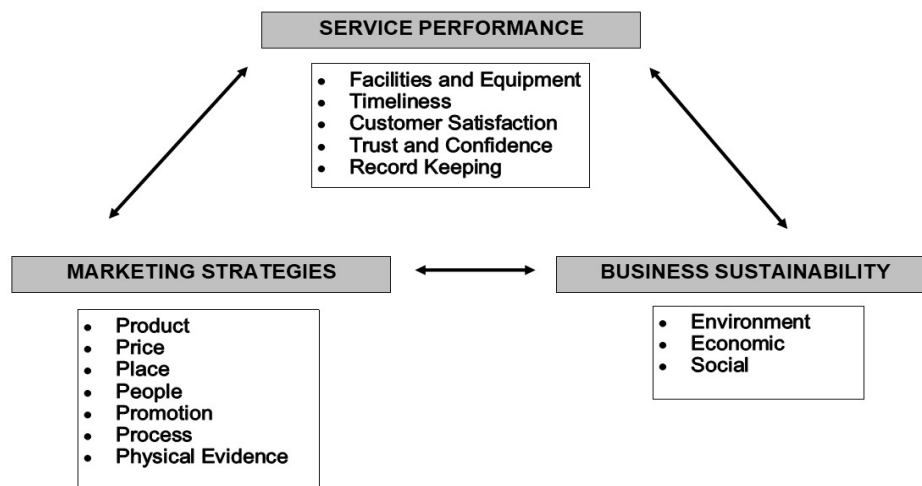


Figure 1. Model for Cooperatives' Operation

The Model was basically the result of analyzing the relationship between service performance, marketing strategies and business sustainability among the top performing agri-based cooperatives in CALABARZON. This is the product of the mixed strategies of the successful and still operating agri-cooperatives in the region. This model aims to guide the other existing, striving and even the startup cooperatives as their basis for their future operation. Business Model is the essence of the way a company does business (Margretta, 2002). It is a way to quickly explain how the business works and remains viable. Sustainable business models have the potential to radically improve environmental and social performance of firms (Bocken et al., 2014). It draws on economic, environmental, and social aspects of sustainability in defining an organizations' purpose and performance measures; consider the needs of all stakeholders rather than giving priority to owner and shareholder expectations; treat 'nature' as a stakeholder and promote environmental stewardship; and take a system, as well as a firm-level perspective on the way business is done.

4. Conclusions and recommendations

The respondents agreed that the agri-based cooperatives in CALABARZON have a very good service performance based on their facilities & equipment, timeliness, customer satisfaction, trust & confidence and record keeping. The 7Ps (product, price, place, people, promotion, process and physical evidence) were seen to have an

effect to a great extent in the marketing strategies of an agri-based cooperative. The agri-based cooperatives were highly sustainable in terms of environment, economic, and social aspects. There is a significant relationship between service performance, marketing strategy and business sustainability. A model for agri-based cooperative operations was developed. The Board of Directors (BODs) of the agri-based cooperatives may sustain and further enhance their current service performance as per their facilities and equipment, timeliness in delivering their goods and services, providing customer satisfaction, continuously building trust and confidence, and keeping good tracks of their record. With the great effect of the marketing strategies in the successful operation of an agri-based cooperatives especially in terms of product promotion, pricing and placement, the Board of Directors (BODs) may ensure the presence of a good marketing team in their cooperatives. With the goal of being sustainable and continuous operation, the Board of Directors (BODs) of the agri-based cooperatives may always align their goals, mission, and vision with regards to the environment, social and economic aspect of the community they belong to. The agri-based cooperatives initially involved in this study may create a development organization that will continuously do the check and balance between its service performance, marketing strategies and business sustainability status and they can use the “Model for Cooperative’s Operation” in their businesses. The proposed model can be considered by other researchers to test its applicability.

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