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Sustaining an Agrarian Reform Cooperative in Santa, Ilocos Sur, Philippines

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Abstract

The most effective socio-economic organizations established in the agrarian reform communities (ARCs) are the agrarian reform beneficiaries (ARB) organizations or cooperatives as autonomous organizations, and potent force for the economic and social betterment of all its members based on self-reliance and selfmanagement. This research was focused on the sustainability of Paraiso Multi-Purpose Cooperative as an agrarian reform beneficiary organization (ARBO) in Paraiso ARC. It considered 184 sample-member respondents from the poblacion, highway and island barangays of Santa, Ilocos Sur, Philippines, determined through stratified random sampling. It revealed that almost all the respondents are Roman Catholic while most of them are engaged in farming, married and are not members of another cooperative aside from their present membership; all the indicators of organizational capability of the ARB organization as leadership, management, financial, and physical are on the "very good" level; the implementation of business operations of the ARB organization is on the "very good" level; the sustainability of the ARB organization is on the "very good" level; Management and physical capability of the ARB organization influence its level of implementation of business operations; and the level of implementation of business operations of the ARB organization influences its level of sustainability.

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The poor in this country are mostly located in rural areas. They are prone to be poor because they have no choice but to engage in farming and fishing activities. Poverty incidence in rural areas remains a big challenge to the Philippine government.

The Department of Agrarian Reform (DAR) envisions a just, safe, and equitable society that upholds the rights of tillers to own, control, secure, cultivate and enhance their agricultural lands, improve their quality of life toward rural development and national industrialization (*www.dar.gov.ph*; 21 June 2021). This is anchored on the government's development priorities to alleviate poverty, ensure food security and pursue countryside development.

DAR implements the Comprehensive Agrarian Reform Program (CARP) with three major thrusts land tenure improvement (LTI), Program Beneficiaries Development (PBD), and Delivery of Agrarian Justice (DAJ). Under the LTI, and PBD components, the agrarian reform community (ARC) was conceptualized in 1993 as growth centers in the countryside and as convergence points for all resources and partnerships in implementing development programs and projects for ARBs.

According to the Facilitator's Manual on Organizational Capacity Self-Assessment and Action Planning by the DAR-SARC-SARRD (2000), various interventions and support mechanisms were provided to the ARCs to facilitate their transformation into productive and dynamic agrarian communities, and perhaps the most effective socio-economic organization to be established in the ARCs is the cooperative. The government recognizes cooperatives as autonomous organizations and a potent force organized for all its members' economic and social betterment based on self-reliance and self-management.

Paraiso ARC was launched in 2005 in Santa, Ilocos Sur, Philippines. It is one of the successful ARCs launched nationwide that continues to cater to the needs of its ARBs and non-ARBs to improve their quality of life. In the same year, the Paraiso ARBs Multi-Purpose Cooperative (MPC), with its office located in Labut Sur, Santa, Ilocos Sur. It was registered to the Cooperative Development Authority. To date, the membership has reached 340. The sustainability of this ARB organization is a major concern at these trying times.

This research aimed to look into the sustainability of Paraiso Agrarian Reform Community Multi-Purpose Cooperative (Paraiso ARC MPC) as an agrarian reform beneficiary organization (ARBO) in Santa, Ilocos Sur. It determined the profile of the member-respondents in terms of gender, age, civil status, educational attainment, occupation, monthly income, member classification, 4Ps classification, religion, family size, number of years as a member, and membership in other cooperatives; level of organizational capability, as perceived by the respondents in terms of leadership, management, financial and physical; level of implementation of business operations of the ARB organization; level of sustainability of the ARB organization; the significant influence of the profile and the level of organizational capability on the level of implementation on business operations; and the significant influence of the level of implementation of business operations on the level of sustainability.

The results of this study were beneficial to the Department of Agrarian Reform as it gave insights into the strengths and weaknesses of the organization. In this way, the DAR management was guided on the extent of support and assigned competent personnel to assist the organization to ensure the sustainability of the ARB organization.

It was also helpful to the Board of Directors (BODs), Core Management Team (COMAT),

Committee Chairmen, and members of the cooperatives as it provided a technical description of the status of their ARB organization and its organizational functionality and financial viability, and sustainability, as well as the extent of awareness, patronage, and satisfaction of the members on the services and benefits offered by the organization.

Lastly, this study is beneficial to the country as it is a living witness that despite the alarming problem of poverty that our nation faces, there are still a group of people who are striving to improve the quality of their lives and make their organizations potent to survive against all economic challenges.

Theoretical Framework

Candemir (2021) compiled a literature review of the role played by agricultural cooperatives in influencing farm sustainability. First, it focused on theoretical literature to highlight the various economic behaviors of cooperatives. Thereafter, all three dimensions of sustainability in developing and developed countries were investigated. The paper showed that cooperatives play a non-negligible role in farm economic sustainability and in adopting environmentally friendly practices, suggesting that both public policies and private initiatives in cooperatives may be complementary. As regards social sustainability, only a few studies exist on the role of agricultural cooperatives. The trade-off between economic and environmental sustainability in cooperatives would need to be further investigated.

Ajates (2020) offered a framework that was composed of three conceptual components: first, the cooperative triangle illustrates interwoven cooperative identitary dimensions; second, the cooperative hourglass depicts ongoing tensions between the cooperative economic and governance model, and the market economy they exist in; and third, the concept of cooperative sustainability brings together the previous two components to analyze agriculture cooperative's ability and capacity to maintain the dimensions indicated in the cooperative triangle while also fostering environmental sustainability through their practices.

The cooperative has been the policy instrument of the government in promoting social justice and economic development. The policy is well spelled out in the Philippines Constitution of 1987 and the enabling laws passed by the Philippine legislature at the turn of the century. The RA 6939 created the Cooperative Development Authority (CDA), the agency that promotes the viability and growth of cooperatives as instruments of equity, social justice, and economic development. The law provides its powers, functions, and responsibilities; the governing body; budget and funds; and rule-making power (Castillo and Castillo, 2017).

Moreover, Chapter XI, Article 89, "Special Provisions Relating to Agrarian Reform Cooperatives" of Republic Act No. 6938 (RA 6938), otherwise known as the Cooperative Code of the Philippines (Cooperative Code of the Philippines and Related Laws, CDA; 43), it states that, "An agrarian reform cooperative within the meaning of this Code is one where the majority of the members are agrarian reform beneficiaries and marginal farmers and organized for any or all purposes.

Deriada (2005) presented up-to-date information and knowledge on the present status and dynamics of cooperatives in the Philippines as a basis for strategic programs, and policies to strengthen them. The study also aimed to identify important core organizational capacity indicators needed for cooperatives to survive and live up to their role as effective partners in improving the welfare of their members. Based on the comprehensive analysis, it was found that cooperatives showed an overall positive

productivity performance and growth rate. Beside these potentials, they were also found to have weaknesses in the identified important core organizational capacity indicators such as savings mobilization, sufficient budget, innovativeness, and entrepreneurial skill development, members' participation and continuous education, and training.

Quilloy (2015) looked into the cooperative's important role and contribution to empowering farmers in the Philippines. It presented evidences from the case study of Subasta Integrated Farmers Multipurpose Cooperative (SIFMPC), a micro cooperative of small cacao farmers in Davao City, Philippines, that has successfully created opportunities and provided benefits to its farmer-members to improve the quality of their lives. The success story shows how SIFMPC has effectively empowered small and weak farmers, particularly in terms of increasing their participation in the supply and value chain and expanding their market reach; promoting their rights, and improving their access to adequate human and physical resources; business development services, strengthening their voice and representation at various levels through democratic control; social equity, and building their identity as a partner in agricultural development. SIFMPC's practices are highly coherent with the empowerment process of small farmers.

In the Facilitator's Manual of the Organizational Capacity Self-Assessment and Action Planning (2000; 2), it was written, "Strong ARB organizations are believed to ensure sustainable development. Being self-reliant, they could identify their own needs, prepare and implement their plans and negotiate and obtain higher levels of support services from relevant public, financial, administrative, and political institutions. To evolve and sustain strong ARB organizations, however, it will require a continuing process of self-assessment."

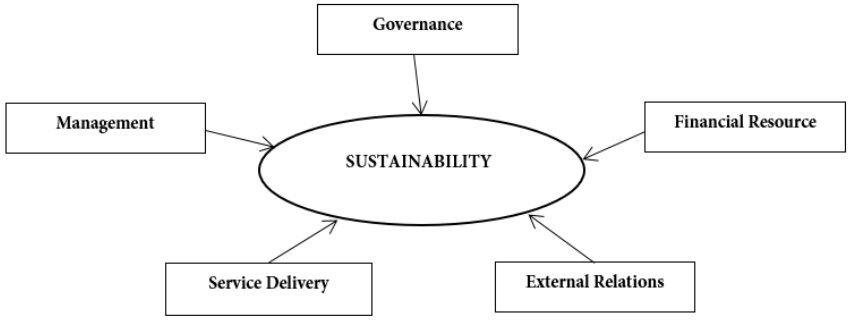
The ARC Level of Development (ALDA) is a tool utilized by DAR in determining the levels of development of the ARCs and ARB organizations. It includes six key result areas/components as Land Tenure Improvement (LTI), Organizational Maturity (OM), Economic and Physical Infrastructure Support Services (ECOPISS), Farm Productivity and Income (FPI), Basic Social Services (BSS), and Gender and Development (GAD). The assessment is done in the ARCs every fourth quarter of the year by a provincial and regional offices team. The data were then forwarded to the central office for statistical treatment. After which, a computer printout of results will be distributed to the municipal offices to know the level of the respective ARCs and ARB organizations. ALDA is used as an institutional tool of DAR in determining appropriate interventions for the ARCs and ARB organizations.

DAR developed the Organizational Capacity Self-Assessment Tool (OCSAT) to look into the basic organizational systems and management processes. It examines the capability of the leaders and members to 1) use/implement these systems and processes, 2) develop and institute appropriate organizational policies, and 3) follow them.

Figure 1 shows the framework of the OCSAT that covers six components of organizational capacity, namely, governance, management, financial resources, service delivery, external relations, and organizational and program sustainability. It presents that at the core of the six components is sustainability. The framework asserts that for each organizational capacity, what is being looked at is the readiness or preparedness of the organization to become sustainable and self-reliant (OCSA and Action Planning, A Facilitator's Manual, 2000; 5-6).

Figure 1

Framework of the OCSAT with the six components of Organizational Capacity



OCSA is a tool for use by the officers and members of ARB organizations to identify specific strengths and weaknesses of their organizations so they could develop the appropriate action plan. The result of the OCSA can provide details as to why an organization may be low or high in its organizational maturity (OCSA and Action Planning, A Facilitator's Manual, 2000; 5-6).

Another tool that the researcher came across is the Agrarian Reform Communities Organizational Capacities Assessment (ARCOCA) that DAR utilized to assess ARCs under the Department of Agrarian Reform – Asian Development Bank – Agrarian Reform Communities Project (DAR-ADB-ARCP). The tool was developed specifically by the ARCP for assessing the community organizing and capacities of organizations at the ARC level to provide better grounding to its community and institutional development component. While the current organizational assessment tool was earlier institutionalized in DAR particularly the organizational management assessment (OMA) of the ALDA, it was clear that certain capability factors need to be enhanced in light of the expanded ARC framework.

Lampridi et al. (2019) presented a methodological framework for the systematic literature review of agricultural sustainability studies. The chronological analysis revealed that the scientific community's interest in agricultural sustainability increased in the last three years. The most used methods include indicator-based tools, frameworks, and indexes, followed by multicriteria methods. In the reviewed studies, stakeholder participation is proved crucial in determining the level of sustainability. It should also be mentioned that combinational use of methodologies is often observed; thus, a clear distinction of methodologies is not always possible.

Ngegba et al. (2016), in their study on the effectiveness of farmers associations in facilitating clientele participation in agricultural development programmes in Port Loko District, Northern Sierra Leone, utilized purposive and random sampling in selecting the farmer respondents, with whom 80.9% were males and 19.1% were females. The farmers associations (FAs) in the study area have received some funds from government and external agencies such as International and Local Non-Governmental Organizations. The main source of internal funding for FAs proceeds from sales, monthly contributions, fines from defaulters, donations, registration fees, sales of membership cards, hiring association's labor, and interest on loans. These sources are exploited to ensure the sustainability of his associations and the

achievement of the various goals of the associations.

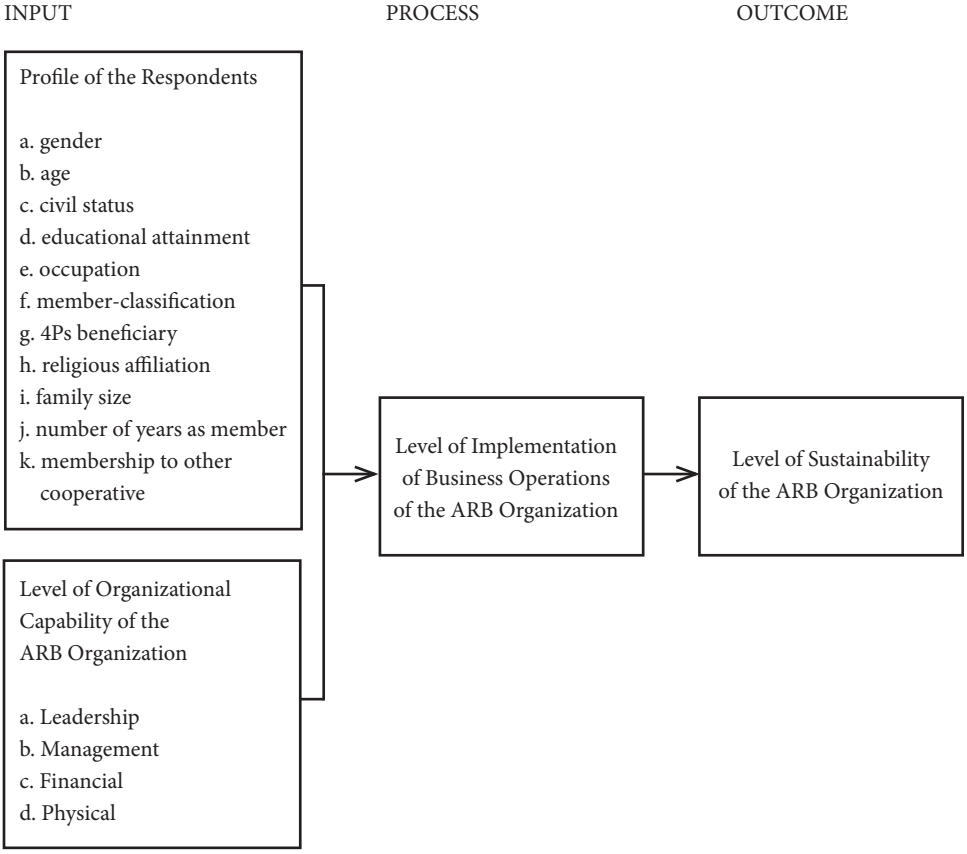
The study of Nkhoma (2011) explored the sustainability problems affecting agricultural cooperatives in Malawi, New Zealand. It was found that most farmers joined cooperatives to improve their livelihood through better access to capital and product markets, and for family food security. Despite their dissatisfaction with their cooperative's failure to access product markets, the farmers have managed to obtain input loans on a small scale. The consensus among the participants was that these cooperatives are not sustainable in their current state. Although all the members interviewed were satisfied with the idea of having a cooperative and perceived it to be a good idea for addressing their needs, they were skeptical of their survival. The study indicated that the Malawian agricultural cooperatives are essential but still need a lot more support in the area of product marketing.

Burjorjee (2017) conducted a case study in Germany about land cooperatives as a model for sustainable agriculture. Results showed that through the cooperative democratic structure, they also enable and exhibit some of the Commons Principles needed for successful commons governance. It also revealed that the cooperative's role in greater sustainability would depend on their ability to grow their memberships, and as niche innovators the cooperatives can act as seeds in helping develop a new and more sustainable agro-social paradigm.

In the study conducted by Martinez (2005) on the "Effectiveness of ARB Organizations in MACATI ARC, Sta. Maria, Ilocos Sur," it revealed the following: ARB organizations in MACATI ARC as a whole obtained a very good level of organizational capability; the member-respondents were aware of all the services offered and benefits derived from their respective cooperatives; the level of implementation of the four ARB organizations in MACATI ARC was very good; the level of effectiveness in terms of patronage was sometimes; in terms of satisfaction was very much satisfied, and in terms of sustainability as very good; organizational capability and level of awareness and occupation had significant effect on the level of implementation of business operations; organizational capability, length of membership, monthly income and religion had significant influence on the degree of patronage; organizational capability, length of membership, monthly income and religion had significant effect on the level of satisfaction; organizational capability and level of awareness had a significant influence on the level of sustainability; and the level of implementation of business operations had a significant effect on the degree of patronage, level of satisfaction, and level of sustainability. Guided by the variables and findings of the above-mentioned research, the conceptual framework of this study was established.

Figure 2

The Research Paradigm



Methodology

Research Design

The researcher made use of the descriptive-correlational method of research as it employed a survey and simple and multiple regression analysis.

Population and Sample

The population of the study are the 340 members of Paraiso ARBs MPC of Santa, Ilocos Sur, Philippines. To determine the sample size, the researcher utilized the Lynch et al. formula. Stratified random sampling was the technique used to determine the sample respondents from each area using proportional allocation, as presented in Table 1.

Table 1

Population and Sample Respondents of the Study

Areas	Population	Sample
Highway and Poblacion Barangays	184	100
Island Barangays	156	84
Total	340	184

Data-Gathering Instrument

The researcher adapted the survey questionnaire of Martinez (2005) with additional portions and items according to the information needed in the study. The questionnaire had both English and Iloko translations with a mean content validity index of 4.88. Part I asked the profile of the member-respondents in terms of gender, age, civil status, educational attainment, occupation, member-classification, 4Ps classification, religion, family size, number of years as a member, and membership in other cooperatives; Part II wanted to know the level of organizational capability; Part III asked the level of implementation of the ARB organization's business operations; and Part IV solicited the level of sustainability, all of which utilized a five-point rating scale.

Data-Gathering Technique

The questionnaire was administered to the respondents with the assistance of the Development Facilitator from the DAR Provincial Office after permission was sought from the Provincial Agrarian Reform Program Officer of DAR Ilocos Sur.

Statistical Treatment of Data

Frequency count and percentage were used to know the distribution of the respondents in terms of the different personal information. Mean was used to determine the extent of awareness, patronage, sustainability; level of organizational capability; level of implementation of business operations; level of sustainability; and the extent of DAR intervention. The range of values was arbitrarily set to describe the level. Simple and Multiple Linear Regression was used to determine the significant influence of independent variables on the dependent variables considered. The researcher utilized the STATISTICATM Software in the statistical computation.

Results and Discussion

Profile of the Respondents

Almost all the respondents are Roman Catholic (182; 98.91%), while most of them are engaged in farming (169; 91.85%), married (158; 85.87%), and are not members of another cooperative aside from their present membership (164; 89.13%). A great majority are males (142; 77.17%) and are ARBs (142; 77.17%), while the majority are not 4Ps beneficiaries of the government (126; 68.48%). A great number belongs to the age bracket 41-50 (57; 30.98%), are high school graduates (80; 43.48%), with a family size of 5-6 members (91; 49.46%) and members of the ARB organization for 3-4 years (51; 27.73%).

Level of Organizational Capability in terms of Leadership, Management, Financial and Physical

The level of organizational capability of the ARB organizations is presented in Table 2.

Table 2

Level of Organizational Capability of the ARB Organizations

Items	Mean	Description
A. Leadership		
1. The Board provides overall policy direction and oversight.	3.73	Very Good
2. The Board is capable of carrying out key roles such as policy formulation, resource mobilization and public relation	3.90	Very Good
3. Officer's relationship to members is participatory, transparent, and management decisions are delegated to the appropriate level.	3.80	Very Good
4. The current leadership is developing second-line leaders, including women.	3.86	Very Good
Overall	**3.82**	**Very Good**
B. Management		
1. The organizational structure clearly defines lines of authorities, responsibilities and accountabilities.	3.92	Very Good
2. Appropriate check and balance is in place and functioning.	3.85	Very Good
3. There are processes in place to gather and analyse data and disseminate information.	3.77	Very Good
4. Communication lines are open and feedback mechanisms are in place.	3.67	Very Good
5. An annual operation plan based on the strategic plan is developed, reviewed and updated.	3.67	Very Good
6. Resources are planned and properly allocated.	3.74	Very Good
7. A monitoring and evaluation system is installed and outputs are used for decision making and short- and long-term planning.	3.77	Very Good
8. Activities and results of evaluation are regularly reported to stakeholders.	3.71	Very Good
9. Members are involved in project design, implementation and evaluation.	3.79	Very Good
10. At the project development stage, guidelines on the quality of services are defined.	3.69	Very Good
11. Implementation of projects is guided by the project management plan.	3.75	Very Good
12. A system for regular information gathering about project operations is in place.	3.76	Very Good
Overall	**3.76**	**Very Good**

C. Financial		
1. Regular budgeting process for the organization and for each project is developed and integrated into the annual operations planning.	3.62	Very Good
2. Officers prepare, implement and manage the budgets for the organization and its projects.	3.61	Very Good
3. Budget versus expenditures and revenues are reviewed at least twice a year. Variances are discussed and budgets are revised as appropriate.	3.82	Very Good
4. An accounting system (standards, policies, records and reporting) is installed and is supported with written procedures and guidelines.	3.72	Very Good
5. Financial report is accurate and timely.	3.82	Very Good
6. The BOD, manager and other officers regularly receive financial reports and are capable of interpreting and understanding financial statements and using the information to make decisions.	3.70	Very Good
7. Adequate financial and inventory controls are implemented.	3.70	Very Good
8. External financial audit is performed with appropriate frequency to assure transparency.	3.73	Very Good
Overall	**3.71**	**Very Good**
D. Physical		
1. The organization has availed its own lot.	3.65	Very Good
2. The organization has established its own office building.	3.59	Very Good
3. There are sufficient office supplies used by BOD and COMAT.	3.72	Very Good
4. There are available facilities or equipment used by the members for better services.	3.59	Very Good
Overall	**3.64**	**Very Good**
General Overall	**3.74**	**Very Good**

Legend:

Range of Values	**Item and Over-all Description**
4.21 – 5.00	Excellent
3.41 – 4.20	Very Good
2.61 – 3.40	Good
1.81 – 2.60	Needs Improvement
1.00 – 1.80	Very Poor

The level of organizational capability of the ARB organization as a whole obtained a general overall mean of 3.74, which is described as "Very Good." It affirms the finding of Martinez (2005) when he determined the level of organizational capability of the four ARB organizations in MACATI ARC, Sta. Maria, Ilocos Sur.

In terms of leadership capability, it obtained an overall mean of 3.82, which is described as "very good." This got the highest mean value among the four indicators of organizational capability as each item obtained mean values ranging from 3.73 to 3.90. Management capability got the second highest mean value among the four indicators with an overall mean of 3.76, which is described as "very good." All the items showed mean values from 3.67 to 3.92, which fall under the "very good" level. Financial capability got an

overall mean of 3.71, which corresponds to a "very good" level. All the items were on the "very good" level with mean values of 3.61 to 3.82. Physical capability got the lowest overall mean of 3.64 that corresponds to a "very good" level. All the items got mean values of 3.59 to 3.72 corresponding to a "very good" level. These results are manifestations that the basic organizational systems and management processes of the ARB organization are in place and are effective. These results are in congruence with Burjorjee (2017), where a democratic structure exists that brought about successful governance, but contradictory to the study of Deriada (2005) that obtained weaknesses in savings mobilization and sufficient budget, which pertain to financial capability in this study; and members' participation and continuous education and training which correspond to personnel capability.

Moreover, the findings also implied that the ARB organization is ready and prepared to become sustainable and self-reliant (OCSA and Action Planning, A Facilitator's Manual; 2000). Guided by this, the specific strengths and weaknesses were identified so that an appropriate action plan can be developed.

Level of Implementation of Business Operations of the ARB organization

The level of implementation of business operations of the ARB organizations is exhibited in Table 3.

Table 3

Level of Implementation of Business Operations of the ARB Organization

Items	Mean	Description
1. Relevant technical expertise exists within the organization and known to the community.	3.45	Very Good
2. The organization has installed consultative mechanisms to determine members' needs and inform them about current and planned services.	3.41	Very Good
3. The organization is capable of adapting its program and service delivery to the changing needs of the members and clients.	3.67	Very Good
4. Appropriate structures and mechanisms exist to reach out to ARBs (men and women) and other people in the ARC.	3.61	Very Good
5. Baseline data are gathered and indicators of success and impact of the service, project or enterprise of the organization are established from the start.	3.59	Very Good
6. Data gathering and analysis for impact assessment are jointly undertaken with members and community partners.	3.48	Very Good
7. Impact assessment results are used to improve the implementation of projects or services and activities of the organization.	3.62	Very Good
8. The services have positive impact on the lives of the members.	3.65	Very Good
9. Members are involved in project design, implementation and evaluation.	3.65	Very Good
Overall	**3.56**	**Very Good**

Legend:

Range of Values	Item and Overall Description
4.21 – 5.00	Excellent
3.41 – 4.20	Very Good
2.61 – 3.40	Good
1.81 – 2.60	Needs Improvement
1.00 – 1.80	Very Poor

The overall mean of the level of implementation of business operations was 3.56, which is described as "very good." All the items were on the "very good" level, as supported by mean values from 3.41 to 3.67. This finding conforms to the study of Martinez (2005), where it obtained a "very good" level on the implementation of business operations of the four ARB organizations in MACATI ARC, Sta. Maria, Ilocos Sur. The result could be attributed to the dedication of the Board of Directors (BODs), Core Management Team (COMAT), and DAR Development Facilitators (DFs) to deliver the different services possible for all members and non-members in the community. In other words, the business operations of the ARB organization are managed very well.

These findings corroborated with Nkhoma (2011) study, where participants claimed that the cooperatives were good ideas for addressing their needs. As indicated in item 8, "The services have a positive impact on the lives of the members," where a "very good" level was obtained. Apparently, it also conformed the study of Quilloy (2015) with the efforts of improving access to human and physical resources and business development services.

Level of Sustainability of the ARB organization

The level of sustainability of the ARB organization is shown in Table 4.

Table 4

Level of Sustainability of the ARB Organization

Items	Mean	Description
1. Projects/activities of the organization are supported by members because they have a sense of ownership of these and the benefits derived are important to them.	3.39	Good
2. Services are patronized and paid by the members for the purpose of cost recovery.	3.36	Good
3. Systems and procedures for internal fundraising (e.g., capital build up and savings) are in place and implemented.	3.52	Very Good
4. The organization is capable of writing proposals and developing a business plan.	3.40	Good
5. Profitable and viable enterprise/s exist/s.	3.50	Very Good
6. Each enterprise has defined objectives, clear operational structure, installed systems and capable management staff.	3.58	Very Good
7. Information on the needs and wants to members are gathered, regularly updated, and periodically reviewed against the services offered by the organization.	3.38	Good
8. Information on availability and prices of services offered by actual and potential competitors is regularly collected to improve the competitiveness of the enterprise.	3.47	Very Good
9. The organization has assigned somebody to continuously identify and tap resources form the LGUs, other government agencies and the civil society (NGOs and POs) and the resources generated are properly managed.	3.58	Very Good
10. Aside from the main enterprise, income-generating activities (IGAs) for the organization to exist.	3.62	Very Good
11. Each IGA has gone through a feasibility study or based on a detailed assessment of its economic viability.	3.39	Good
12. Costs and revenues of each IGA is regularly monitored and reported to members.	3.52	Very Good
Overall	**3.48**	**Very Good**

Legend:

Range of Values	Item and Over-all Description
4.21 – 5.00	Excellent
3.41 – 4.20	Very Good
2.61 – 3.40	Good
1.81 – 2.60	Needs Improvement
1.00 – 1.80	Very Poor

The level of sustainability of the ARB organization is described as "very good" as supported by an

overall mean of 3.48. This corroborated with Martinez (2005). However, mean values for every item obtained different levels. Items 1, 2, 4, 7, and 11 obtained mean values ranging from 3.39-3.40, corresponding to a "good" level. The remaining items were described as "very good", with mean values of 3.47 to 3.65. These findings complement the result of the level of organizational capability as it affirmed the preparedness of the ARB organization to become sustainable (OCSA; 2000). For more than a decade, the level of sustainability of Paraiso ARC Multi-Purpose Cooperative as one of the ARB organizations in Ilocos Sur was sustained.

Further, the study of Ngegba et al. (2016), which stated that external and internal sources of funds are exploited to ensure the sustainability of the associations, was also applied and found in the study as a "very good" level to ensure the sustainability of the ARB organization. By the involvement of the LGUs, other government agencies, and civil society like the non-government organizations and the people's organizations, which was described at a "very good" level, Lampirdi et al. (2019) proved that stakeholder participation is crucial in the determination of the level of sustainability.

Influence of the Profile and Level of Organizational Capability on the Level of Implementation of Business Operations

Table 5 shows the summary of the regression of the level of implementation of business operations on profile and level of organizational capability.

Table 5

Regression of the Level of Implementation of Business Operations on Profile and Level of Organizational Capability

Independent Variables	B	t-values	p-level
Gender	0.0791	1.2263	0.22
Age	0.0014	0.5610	0.56
Civil Status	-0.0416	-0.7338	0.46
Educational Attainment	-0.0176	-0.8840	0.38
Occupation	-0.0860	-0.9413	0.35
Member classification	0.0204	0.3225	0.75
4Ps Beneficiary	0.0064	0.1096	0.91
Religious Affiliation	-0.1412	-1.1905	0.24
Family Size	0.0025	0.1874	0.85
No. of Years as member	-0.0120	-1.1913	0.24
Membership in other cooperative/s	0.0024	0.0292	0.98
Leadership Capability	0.0062	0.0843	0.93
Management Capability	0.4276	2.3828	0.02*
Financial Capability	0.0382	0.2696	0.79
Physical Capability	0.2820	3.3319	0.00*

**significant at .05 level*

R^2= .7020 F-value=26.380; p<0.0000

The null hypothesis Ho : β_i= 0 was rejected as supported by the F-value of 26.380 with a probability level of 0.0000 which indicates a high statistically significant regression. Because of this, two of the independent variables were found to have a significant influence on the level of implementation of business operations. These are the level of management capability (t=2.3828) and the level of physical capability (t=3.3319), both of which are indicators of organizational capability. This means that management and physical capability affect the level of implementation of business operations, which indicates that the high or low levels of management and physical capability determine the high or low level of implementation of business operations. If the ARB organization is managed and has the available physical infrastructure, facilities, equipment and supplies, the implementation of its business operations is assured of having a high level. This finding confirmed the study of Martinez (2005).

However, none of the profiles were found to have a significant influence on the level of implementation, though, the coefficient of determination (R2) with a value of .7020 indicates that 70.20% account for the total variation of the independent variables on the level of implementation on business operations (dependent variable) while 29.80% account for other variables not considered in this study.

Influence of the Level of Implementation of Business Operations on the Level of Sustainability

Table 6 exhibits the regression of the level of sustainability on the level of implementation of business operations.

Table 6

Regression of the Level of Sustainability on the Level of Implementation of Business Operations

Independent Variables	B	t-values	p-level
Intercept	0.2322	1.7020	0.09
Implementation of Business Operations	0.9108	24.0594	0.00*

**significant at .05 level*

R^2= .7608 F-value=578.85; p<0.0000

The table shows a highly significant regression with F-value equal to 578.85, whose probability level of 0.0000. It indicates that the independent variable was found to have a significant influence on the dependent variable. This is backed up by the t-value of 24.06 with a probability level of 0.00. This means that the level of sustainability is influenced by the level of implementation of business operations. In other words, for the ARB organization to maintain and sustain its existence, there should be a high level of implementation of its business operations. This result conformed to the finding of Martinez (2005), where the level of implementation of business operations had a significant effect on the level of sustainability.

The level of implementation of business operations accounts for 76.08% of the variation, as indicated by the R2 value of .7608, which also means that 23.92% are accounted for those variables not considered in the study. This finding also led the researcher to come up with a regression equation to predict the level of sustainability given the level of implementation of business operations that can be used over a certain period of time as: Y = 0.2322 + 0.9108X; where Y is the level of sustainability of the ARB organization and X is the mean level of implementation on business operations.

Conclusions

1. Almost all the respondents are Roman Catholic, while most of them are engaged in farming, married, and are not members of another cooperative aside from their present membership.

2. All the indicators of the organizational capability of the ARB organization as leadership, management, financial, and physical are on the "very good" level.

3. The implementation of business operations of the ARB organization is on the "very good" level.

4. The sustainability of the ARB organization is on the "very good" level.

5. Management and physical capability of the ARB organization influence its level of implementation of business operations.

6. The level of implementation of business operations of the ARB organization influences its level of sustainability.

Recommendations

1. The ARB organization officials and members, as well as the assigned DAR Development Facilitator (DF), are encouraged to exert more effort in recruiting more members that should not be limited to ARBs. The DAR provincial management should always monitor membership expansion not only to the subject ARB organization but to all ARB organizations in the province.

2. To obtain a higher level of organizational capability, the BODs, COMAT, and DF shall work hand-in-hand in attaining the vision, mission, goals and objectives of the ARB organization. They should continue to update themselves with the latest trends and innovations in cooperative management by attending to relevant seminars and training programs. Furthermore, the DF should constantly request from DAR and CDA the necessary seminars and training programs and see to it that these are conducted.

3. To achieve a higher level of implementation of business operations, the cooperative manager and other officers are encouraged to capitalize on their competitive advantages, sustain the viability of their organization and improve and diversify their operations to meet present challenges. To help them achieve this, it is suggested to: a) maximize resources and continuously strive to enhance productivity; b) commit to continuous self-improvement and education to enhance management capabilities and competencies; c) forge a strategic alliance with key partners like the non-government organizations (NGOs), local government units (LGUs); and co-cooperatives; d) undertake value-added operations and involve greater member participation, and e) adhere to good governance.

4. To ensure a higher level of sustainability for the ARB organization, the DF should maintain its commitment to constantly assist the officers in formulating a long-term sustainability plan and monitor its accomplishment to ensure the longevity of the ARB organization.

5. Another research may be undertaken to other ARB organizations, with the inclusion of more variables for a more comprehensive result that would contribute auspiciously for the furtherance

and appreciation of the DAR support services. Variables such as the extent of DAR intervention, DAR administrative capability, level of ARBO member's awareness, patronage and satisfaction with the services and benefits, among others.

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