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## “ANALYSIS OF THE PROFITABILITY AND SUSTAINABILITY OF MULTI-PURPOSE COOPERATIVES”

**AUTHOR: GIEHLITOCAMMAYODULIN**

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**ABSTRACT-***This study aimed to determine the profitability and sustainability of multi-purpose cooperatives in Northern Philippines. The respondents were three multi-purpose cooperatives. It employed the descriptive-evaluative research and the spearman’s rho in determining the relationship between profitability and sustainability of the cooperatives. Findings revealed that the cooperatives are profitable and sustainable using the different indicators. There is a perfect relation between net profit margin and growth in membership; earnings per share and growth in assets . There is a negative perfect relation between asset efficiency with growth in equity and growth in assets.*

*A positive moderate substantial relation exist between net profit margin, asset efficiency and earnings per share with growth in asset and growth in membership.*

*On the other hand, there is a negative moderate substantial relation between the net profit margin, operating efficiency with growth in equity and assets.*

*On sustainable growth rate of cooperatives, the study concluded that the Tabuk MPC and DA R02 MPC surpassed their growth targets while Ambigaton MPC did not met its growth targets. The cooperatives with larger membership and various services have higher levels of profitability.*

**KEYWORDS:** *growth, profitability, operating efficiency, cooperatives*

### Chapter I

## INTRODUCTION

Cooperatives are business enterprises which are organized by persons with a common bond of interest to achieve their economic, social, cultural needs and aspirations. As business enterprises, these are capitalized, owned, operated and patronized by their members. The International Cooperative Alliance (ICA) provides the



core principles of cooperatives as cited by Smith (2014) which include democratic control, member economic participation, voluntary and open membership, education, training and information, autonomy and independence, concern for community, and cooperation among co-operatives. It further states that co-operative business is driven by values and not just profit.

They play meaningful economic roles in the community life by serving and performing as efficiently and responsively like other financial and business enterprises. Tablante, N (1964) explained that cooperatives may provide the instrument by which almost any kind of socio-economic need can be met at whatever type it may be. All types of cooperatives provide opportunities for small individual producers and consumers to jointly obtain commodities and services otherwise not available to them as individuals but available to larger producers or consumers.

Furthermore, Tablante pointed out that cooperatives possess certain well-defined characteristics not found in other types of business organizations such that cooperatives afford common people an excellent means to participate in management and in business decisions affecting their interest as individual producers or consumers. He also stated that, “no form of organization other than cooperative cuts across all levels and practically all kinds of economic activity in which the mass of population is involved or are deeply concerned.”

As cited on the Philippine Development Plan (2011-2016), the cooperatives as self help organizations are expected to contribute to rapid economic growth. Cooperatives have the power to mobilize savings and capital which can serve as inputs in the production



of goods and services of the less privileged members of the society. The Cooperatives engaged in deposit mobilization and capital formation have been proven as providers of capital to micro entrepreneurs, who are most often denied by formal financial institutions. The establishment of micro and small entrepreneurs who accessed financial services from cooperatives create a rapid, inclusive and sustained economic growth, particularly in rural and agricultural areas.

Cooperatives operate and serve as an alternative channel in delivering services to the rural sector. Their activities are expected to be more responsive to the needs and demands of the community, particularly to the needs of the most disadvantaged sectors. The cooperatives do not only cater to the members' needs, but its ultimate purpose is to improve the lives of members and the community in which they live. Cooperatives are described as an engine of local development and are displaying an alternative model where money is used to balance life and the well-being of the people and not to make more money.

The existence of cooperatives in the Philippines contributed to the economic growth and sustainable development of the nation through creation of jobs, improvement of income distribution, and establishment of fair market practices. These cooperatives either engaged in offering one type of service such as credit cooperative, producers' cooperative, marketing cooperative or a combination of two activities performed by a cooperative known as a multi-purpose cooperative. In reality, the number of cooperatives is increasing per year, however, the growth is cancelled out by the number of cooperatives that are closing or being dissolved. A lot of government programs on technical, financial assistance



and institutional developments are provided to these cooperatives. However, despite numerous efforts exerted by the government, several cooperatives are being dissolved due to its low performance as presented in previous studies.



In the Philippines, few studies had been made to examine the profitability and sustainability of cooperatives using profitability indicators such as net profit margin, return on assets and return on equity. The dearth of study encompassing the profitability and sustainability of cooperative in Northern Philippines in the literature has motivated the researcher to conduct the study using other profitability indicators such as operational efficiency, earnings per share and asset efficiency. This study analyzes the profitability and sustainability of multipurpose cooperative in Northern Philippines from 2015 to 2017. Moreover, it also aims to determine if a relationship exist between profitability and sustainability. Such findings may serve as models to the other cooperatives.

Profitability is the ability of the cooperative to generate adequate profit to sustain its operations and earn satisfactory return to the members. A cooperative is said to have net surplus if its revenues exceeds its expenses. Obtaining net surplus is an indication of the cooperatives success or failure. The common measures used by accountants to measure the company's profitability is through ratio analysis. Ratio Analysis is a technique which makes use of ratios to interpret the relationship of one item in the financial statements to another item in the same statement. The common measures used by accountants to evaluate the profitability of a business are the gross margin ratio, operating ratio, return on sales and return on assets. For purposes of the study, the profitability performance for cooperatives will be use the profitability ratio, return on assets, return on equity, operating efficiency, asset efficiency and earnings per share.

Profitability as cited by Jaggi and Considine (1990) is a crucial indicator for determining the financial position of the firm. The firm is considered financially weak when



its profitability is sliding or the profitability is weak compared to other firms in the industry.

In their study, return on equity is used as an indicator to reflect profitability

Burns (1985) and Meric et al (1997) measured profitability by using three ratios particularly the return on total assets, return on net assets, and return on equity. As cited by Burns, the best measure of a firm's efficient use of assets is the return on total assets because it is independent of financing methods.

Performance measurement as explained by Lakew, T, Meniga, M and Gebru, A. (2014) is a process of quantifying effectiveness and efficiency. Effectiveness is regarded as compliance with customers' requirement and Efficiency on the other hand, is how the organizations resources are used to achieve customer's satisfaction level.

One of the strengths of the multi-purpose cooperative union studied by the authors, is that it has an established clientele particularly farmers which belong to the agricultural sector of the country which ultimately created an impact in its economic condition. However, the cooperative has low capital build up strategies like reducing operating expenses which caused deprivation of the union to obtain leverage from banks. Image is important and that can be seen through its financial statements and its operation in general. Sustainability refers to the ability of a given activity to continue into the future within the likely resources of an organization. In financial terms, sustainability refers to an organization's ability to service all of its expenses through its generated income (Kimando, Kihoro and Njogu , 2012).

Sarma (2011) as cited by Nthaga corroborates the definition by adding that microfinance institutions can be said to be sustainable when their operating income from



issuing loans is sufficient to cover all operating costs. In the case of microfinance institutions, the definition is extended to cover the ability to continue operations once grants and soft loans to the organization are withdrawn.

Sustainable growth rate (SGR) is another measure which can be used by management and the Board of Directors to monitor a cooperative's growth. Sustainable growth rate is a financial measure to address potential growth problems. As cited by Smart, N and Briggerman, B. (2017) the sustainable growth challenge (SGC) is obtained by comparing the actual sales growth rate and the sustainable growth rate. The sustainable growth challenge indicates whether the firm is not meeting its growth target and potentially not capturing their full value for their owners or outside financing is necessary to fund its growth.

#### **Objectives of the Study:**

To conduct an analysis on the profitability and sustainability of multi-purpose cooperatives .

Specifically it aims to answer the following:

1. To determine the **profitability indicators** of the Multi-Purpose Cooperative in terms of ;
  - a. Net Profit Margin
  - b. Operating Efficiency
  - c. Asset Efficiency and
  - d. Earnings per share
2. To determine the **sustainability indicators** of the Cooperatives in terms of ;
  - a. Growth in Membership



- b. Growth in Assets
  - c. Growth in Equity
3. To determine the status of multipurpose cooperatives using the evaluation tool on sustainable growth rates for cooperatives.
  4. To determine if there is a significant relationship between the profitability and sustainability indicators of cooperatives.

**Significance of the Study:** The result of the study will benefit the cooperative & its members. This will give them an opportunity to develop a better understanding on the profitability and sustainability of multi-purpose cooperatives. The findings of the research will also provide insights on the operations of the cooperatives leading to their profitability and sustainability by identifying which activities on the variables to measure sustainability contributed most.

## **Chapter II**

### **RESEARCH METHODOLOGY**

The descriptive-qualitative research design was used in the study with 3 multi-purpose cooperatives as the respondents. One of which is a billionaire cooperative and the two are millionaire cooperatives which are performing cooperatives in their respective areas. The study was conducted in Northern Philippines. The data on the audited financial statements of the cooperative for the period 2015-2017 were requested from the respondents.

Documentary and financial ratio analysis were employed in determining the profitability and sustainability of the cooperatives. The sustainable growth rate was used to



monitor the growth of cooperatives and to address the sustainable growth challenge. The Spearman Rank Correlation coefficient was used in determining the relationship between profitability and sustainability indicators. To supplement the information obtained from the secondary data, interviews and discussions were also done by the researcher.

## Chapter IV

## RESULTS AND DISCUSSIONS

**Table 1. Distribution of the Respondents as to Profitability Indicators**

Performance	Tabuk MPC			Ambigaton MPC			DA R02 MPC		
	2015	2016	2017	2015	2016	2017	2015	2016	2017
Net Profit Margin	48.70%	44.57%	46.77%	35.41%	33.64%	36.41%	17.92%	18.57%	23.80%
Operating Efficiency	9.60%	9.42%	9.54%	19.40%	20.48%	18.36%	14.29%	15.77%	17.02%
Asset Efficiency	4.67%	4.20%	4.60%	6.87%	6.89%	6.68%	2.56%	2.93%	4.51%
Earnings per share	7.18%	6.73%	7.01%	4.53%	5.05%	4.65%	4.71%	5.37%	7.28%

Table 1 shows that the multi-purpose cooperatives are profitable in all the profitability measures used in evaluating their performance for a period of three years. The variations in their performance were due to the differences in equity, services offered and the members' patronage of their businesses. It can be seen that the Tabuk MPC had the highest profit rates. A slight decrease in net profit in 2016 was experienced by Tabuk MPC and then increased in 2017. The decrease in the net profit was caused by the loss incurred in one of the services offered. The net profit margin of 46.77% in 2017 means that for every peso of sales, it earned 47 centavos. For Ambigaton MPC, the trend in their net profit



margin is similar to that of the Tabuk MPC. Although this cooperative had the lowest in equity, it generated more profit than DA R02 MPC because of its coverage in terms of services and clients. This is an institutional cooperative where members are employees of the provincial government which operates government hospital and one of its services is the selling of medicines and hospital needs of the patients. From the table it shows that in 2017 for every peso of sales, it earned 36 centavos for the cooperative. For the DA R02 MPC, the results of their profitability had been increasing from year to year. In 2017, for every peso of sale, it earned 24 centavos.

As to the ability of the cooperatives to generate revenue from the use of assets, the Ambigaton MPC has the highest rates followed by the DA R02 and lastly, the Tabuk MPC. This means that the assets of TAMPCO were not fully utilized to generate revenue. As per interview with the staff, sometimes the cooperative over estimate what is to be retained for the operation of the credit services as well as the ATM machine, hence there is no earnings for the excess funds being set aside.

On asset efficiency, Ambigaton MPC was the highest with 6.89% and DA R02 as the lowest with 2.56%. This is a measure of profitability on how assets were used to generate net surplus. This means that for every peso of asset utilized it earned 6.89 centavos for the Ambigaton MPC.

On the earnings per share, DA R02 MPC has the highest earnings per share of 7.28 % which means that for every 1 peso of share deposit, it earned 7.28 centavos. The lowest earnings per share for the cooperatives was 4.65 centavos. In general, it can be said that the cooperatives have been doing well in all their activities.



**Table 2. Distribution of Respondents as to Sustainability Indicators**

Sustainability Indicators	Tabuk MPC			Ambigaton MPC			DA R02 MPC		
	2015	2016	2017	2015	2016	2017	2015	2016	2017
Growth in Membership	9.15%	7.24 %	10.29 %	0	3%	13.08 %	2%	5%	8%
Growth in Assets	8.35%	13%	13.01 %	8.03 %	7.31 %	18.54 %	8.03%	7.31%	18.54 %
Growth in Equity	11.32 %	8.43 %	15.30 %	3.11 %	4.37 %	12.25 %	12.00 %	25.84 %	19.19 %

Table 2 shows that membership in the 3 cooperatives continued to grow from year to year with the exception of Ambigaton MPC in 2015. As per interview, there were new members admitted but were offset with the withdrawal of other members. In the case of Tabuk MPC, the decrease on the growth in membership was caused by the death and termination of some delinquent members as mentioned by the manager during the interview. This shows that individuals consider cooperatives when investing their money. The growth in the assets were brought about by the acquisition of assets by the cooperative from the net surplus or profit as well as additional purchase of assets needed by the cooperatives. The growth in equity was the result of the increase in membership because to become a member, the individual has to invest in terms of share capital. Some members also chose not to get their interest to capital and patronage refund but left it to the cooperative and form part of their share capital. Other reasons for the increase in equity is seen in their by-laws on Capital build-up. All the cooperatives, retain a certain amount from the proceeds of the members' loan to be added to their share capital. On sustainability, the cooperative had been effectively and efficiently doing their best in the management of the



cooperatives. This displays the kind of management the cooperatives have as well as the members too.

**Table 3. Relationship between the Profitability Indicators and the Sustainability Indicators**

Variables/Indicators	Correlation	Description
<b>Net Profit Margin</b>		
Growth in Membership	1	Perfect relation
Growth in Assets	.50	Moderate substantial relation
Growth in Equity	-.50	Moderate substantial relation
<b>Operating Efficiency</b>		
Growth in Membership	-.50	Moderate substantial relation
Growth in Assets	-1	Perfect relation
Growth in Equity	-.50	Moderate substantial relation
<b>Asset Efficiency</b>		
Growth in Membership	.50	Moderate substantial relation
Growth in Assets	-.50	Moderate substantial relation
Growth in Equity	-1	Perfect relation
<b>Earnings per Share</b>		
Growth in Membership	.50	Moderate substantial relation
Growth in Assets	1	Perfect relation
Growth in Equity	.50	Moderate substantial relation

As seen in Table 3, there is a perfect relation between the net profit margin and growth in membership. This implies that as growth in membership increases net profit also increases because of the investment of the members which can be utilized to generate profit for the cooperative. The other profitability indicators such as operating efficiency and



earnings per share have a perfect relation with the growth in assets. This means that as operating efficiency and earnings per share increases, growth in asset also increases. This shows the ability of the company to generate profits that would benefit the members and eventually bring growth in assets. The growth in assets indicate that members of the cooperatives do not get all their shares in the profit but instead invest it as an additional share capital. As gathered from interviews, the cooperatives encourage their members to retain a portion of their interest to capital and patronage refund in the cooperative to grow. Hence, the growth in assets will result to new investments. There is also a positive relation between the Asset efficiency and growth in equity. On the other hand, there is a negative moderate substantial relation between the operating efficiency and the growth in assets and equity. This implies that as assets and equity increases, the operating efficiency decreases. This is due to the non investment immediately of all the increases in assets and equity as it needs careful planning and analysis before any investment decisions. A positive moderate substantial relation exist between net profit margin, asset efficiency and earnings per share with growth in asset and growth in membership.

**Table 4. Distribution of Respondents as to Sustainable growth rate evaluation**

Sustainability	Tabuk MPC			Ambigaton MPC			DA R02 MPC		
	2015	2016	2017	2015	2016	2017	2015	2016	2017
Indicators	2015	2016	2017	2015	2016	2017	2015	2016	2017
Sustainable Growth rate	18.07 %	9.26%	9.60%	7.52 %	6.74 %	6.88 %	6.02%	6.38%	8.30%
Actual Growth rate	13.47 %	11.00 %	14.44%	4.5%	- 2.20 %	6.25 %	21.40%	23.07%	20.93%
Sustainable Growth challenge	5.40%	(1.745)	(4.84%)	3.02 %	8.94 %	.63%	(15.38%)	(16.69%)	(12.63%)



Table 4 , shows that DA R02 MPC have surpassed their targets from 2015-2017, hence, in order to have growth , outside financing would be the alternative solution to address the growth problems. This is also true to Tabuk MPC starting from year 2016-2017 . This results are expected because of the various services the cooperatives provide to its members and the community which needs huge finances. The services offered by the DA R02 MPC are loan services for housing, salary loan, production loan, microfinance , appliance and car loans. Other services include credit services for commodities like meat products, rice, gasoline, refilling station, agri-business service provider, and rental of function rooms. Tabuk MPC offers several lines of businesses such as credit and banking services, Funeral Care, Gasoline station, PI Water services Inn and Training Center. The Ambigaton MPC as shown on their evaluations were not able to meet their growth targets but instead have funds which are not fully utilized to provide more value to the members.

**CONCLUSIONS.** After the analysis of the data collected, this study concludes that there is a perfect relation between the profitability and sustainability indicators such as net profit margin and growth in membership, earnings per share and growth in assets. This implies that profitability is a significant determinant of sustainability.

There is a negative perfect relation between asset efficiency and growth in assets.

A positive moderate substantial relation exist between net profit margin, asset efficiency and earnings per share with growth in asset and growth in membership.

On the other hand, there is a negative or inverse moderate substantial relation between the net profit margin, operating efficiency with growth in equity and assets.



As to the sustainable growth rate of cooperatives, the study concludes that the Tabuk MPC and DA R02 MPC needs outside financing for their growth while Ambigaton MPC has more than enough funds for its activities.

Furthermore, this concludes that cooperatives with larger membership and various services have higher levels of profitability.

**RECOMMENDATIONS.** Based on the findings of the study, the researcher recommends the use of the various indicators on profitability in measuring the performance of the cooperatives. It also recommends the use of the sustainable growth rate as bases in planning as well as addressing the sustainable growth challenge.

## REFERENCES.

Battaglia, F., Farina, V., Fiordelisi, F., Ricci, O. (2010). *The Efficiency of Cooperative Banks:*

*The Impact of Environmental Economic Conditions.* Italy: Vol. 20, 2010, Issue 17,  
<https://doi.org/10.1080/09603107.2010.491442>

Briggerman, B. C and Smart, N. Sustainable Growth rates for Cooperatives. ACCC Fact Sheet Series Paper # 1

Burns, P. (1985), Financial characteristics of small companies in the UK, Cranfield School of Management.

Cooperative Code of the Philippines, 2008 (RA 9520)

ICA, I. C. A. (2005). What is a co-operative? Retrieved February 28, 2017, from  
<https://ica.coop/en/what-co-operative>

Jaggi, B. and Considine, J., (1990), Differences in financial characteristics of owner controlled and non-owner controlled acquired firms, *The Mid-Atlantic Journal of Business*, 26(2).

Lakew, T., Gebru, M. (2014). *A Study on Financial Performance of Multi-Purpose Cooperative Unions of Tigray Region*, Ethiopia. [www.ea-journals.org](http://www.ea-journals.org)

Meric, I., Ross, L. W., Weidman, S. M., and Meric G., (1997), A comparison of the financial characteristics of U.S. and Japanese chemical firms, *Multinational Business Review*, Fall, p. 23 – 27.

Sarma, G. K., & Borbora, P. S. (2011). Is microfinance outreach sustainable? A case of microfinance institution model in India. Paper prepared for the Second European



Research Conference on Microfinance, University of Groningen, The Netherlands,  
June 16-18.

Smith, S. (2014). Promoting cooperatives: An information guide to ILO Recommendation  
No. 193. International Labour Organization.

Tablante, N. (1964). *Economic & Technical Feasibility of Cooperatives and Credit in Laos*.  
Laos: Agricultural Credit & Cooperative Institute, U.P.