



Access To The Agri Negosyo Loan Program Of Dairy Buffalo Entrepreneurs In Nueva Ecija, Philippines

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ARTICLE INFO

Article History:

Received: July-26-2023

Revised: Dec-05-2023

Accepted: April-20-2024



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ABSTRACT

Dairy buffalo entrepreneurship is a livelihood strategy or employment generator in the Philippines. Factors affecting the access of loan programs for capitalization is not yet explored and studied in Nueva Ecija; hence this study. Data were gathered through secondary sources and Key Informant Interview. Document analysis was employed in this study to explain the current status of ANYO's implementation, factors that could hinder or motivate the access of dairy carabao entrepreneurs on the ANYO, assess possible recommendations, best practices and policies to enhance the implementation of ANYO. Based on findings of the study, Action Plan and Project that will address identified factors that could limit or motivate the capability to access loans for dairy buffalo entrepreneurs was proposed. Findings showed that the approval of endorsed loan application from PCC as an intervention to facilitate easier access, posted high loan release rate of 79% (38 out of 48). The remaining 21% (10 out of 48) of loan applications, either pending or disapproved, demonstrated that there is still room for improvement for the program to have more impact in reaching the remaining 858 or 95% of the total dairy entrepreneurs in Nueva Ecija. This study recommends strategies to formalize and enhance the collaboration of PCC and NRBSL through a Memorandum of Agreement (MOA), to support the marginalized dairy buffalo entrepreneurs.

Keywords: Access, Agri Negosyo, Loan Program, Dairy buffalo entrepreneurship

THE PROBLEM AND ITS CONTEXT

1.1 Background of the Study

The Philippine Carabao Center (PCC) was created through the passage of Republic Act No. 7307 in 1992. It is a national government agency attached to the Department of Agriculture (DA) mandated in conserving, propagating and promoting the carabao as a source of milk, meat, draft power and hide. The institutionalization of

the PCC is considered to be government's stern effort to improve the local dairy industry using the water buffalo as the commodity (PCC, 2021). The Carabao-Based Enterprise Development (CBED) program was perceived and proven by PCC as one of major foundations in the development of local dairy industry using the carabao as an eco-

conomic resource of small hold farmers. Improvement of the nutritional status, increased level of income and enhanced general well-being of rural farming families are the continuing goals and objectives of the program. Using the CBE project as a development model, the province of Nueva Ecija became the National Impact Zone (NIZ) for dairy buffalo development project through the partnership between PCC and the Nueva Ecija Provincial Government (NEPG) in the year 2000.

The impact zone model envisions to help establish an alternative livelihood for small hold dairy farmers and transform small-scale dairying activities and potentials of small farmers into cooperative-led viable village-based dairy enterprises. Farmers were organized into cooperatives and they are expected to operate dairy business enterprises that involves production of calves, meat, milk, hide and processing of various products that later on marketed through the Dairy Box and Milka Krem .

Initially, the PCC loaned-out 1,000 heads of Bulgarian Murrah Buffaloes to partner-cooperatives. The process of animal lending is through incubator modules consisting of 25 breedable dairy buffaloes. The module also includes one (1) male Murrah buffalo that will ensure the detection and impregnation of in-heat female buffaloes. A total of 36 partner cooperatives in Nueva Ecija participated in the CBE project in 1999-2000. After 19 years of partnership, the CBE project had consequently improved the agricultural landscape of Nueva Ecija. Dairy buffaloes seamlessly complemented with rice-based and vegetable farming system. The rice straws collected from the rice fields serves as feeding for the carabao while the plants get organic fertilizers from the dung and vermi-cast produced by the carabao.

In 2020, NIZ was transformed as the National Dairy Business Hub (NDBH) Unit to focus on value chain approach to maximize the Ani at Kita of dairy farmers in support to DA's new ways of thinking. Currently, there are 35 assisted registered organizations classified into cooperatives or associations which benefit from the Dairy Buffalo Loan Module of PCC, through their respective organizations as conduits of support (PCC Annual Report, 2021).

The province posted a total of 1,708,497.6 liters of milk production in 2021 with a traded value of Php132,612,688.75. It has also produced genetically improved carabaos with a total of 1,020 heads for 2021. Valued at Php15,000.00 per head, these calves have a total peso value of Php15,300,000.00. The NDBH project had contributed an additional income for at least 35 cooperatives/associations and 906 dairy farmers in Nueva Ecija with a total amount of Php138,912,688.75 (PCC-NDBH Annual Report).

Further, the province of Nueva Ecija is now one of the major source and contributor of buffalo milk and genetically improved buffaloes in the country. Milk production and marketing provide households with regular daily source of cash throughout the season/year, which can be used for small expenditures. Crop production, on the other hand, provides a lump sum only after the harvest.

Animals are not kept exclusively for milk production but are used for other purposes like draught, stock, manure, meat, hides, hair and wool. They can also be kept as store of value or investment, which is an increasingly important consideration for livestock ownership (Edomah, 2020). Based on the 2020 data from the Philippine Statistics Authority (PSA), local milk production reached 26.71 million liters, an increase of 9.5% from 24.38 million liters in 2019. However, the local milk supply only accounts to at least 2% of the total supply for the Liquid Milk Equivalent (LME) and 98% of which were imported.

The passage of Republic Act No. 11037, otherwise known as the "Masustansyang Pagkain para sa Batang Pilipino Act", significantly increased the demand for milk in the country causing shortage in the supply of milk even in Nueva Ecija that produces at least 35% of the total buffalo milk supply in the country (PCC Annual Report, 2021). To cope up with the demand, more investment should be provided. However, limited interventions could only be provided to address the needs of dairy farmers given a budget of only Php555,924,000 for the agency's nationwide operations.

According to the study conducted by Dela Cruz and Dizon (2020, p. 181), the benefits of running a dairy business can be directly impacted by the size of the pasture area and the forage

¹These are dairy outlets and advocacy hubs used to sell the processed dairy products produced by dairy Carabao entrepreneurs.

supply on the farm. These include milk income, overall benefits, cooperative share, savings in the bank, weekly and yearly milk intake, and health satisfaction. According to the study, the farmers did not maintain the requisite grazing area size of 1,000 square meters per buffalo. Given that eight buffaloes were reared on average each herd, the grazing area should be at least 8,000 square meters in size. However, the survey only found an average size of 2,179 square meters, falling short of the necessary 5,821 square meters. The study found that the area of the land used for forage production has an effect on how much fodder can be provided to the animals, which can have a substantial impact on the benefits of Dairy Business Enterprises (DBEs) due to lower milk output. The study also found that because there weren't enough capitalization funds available, program participants didn't build animal sheds that were the required size.

Executive Order No. 113, s. 1986 created the Agricultural Credit Policy Council (ACPC) to help DA align all credit policies and initiatives in support of the latter's top priorities. Prior to approval, it was also entrusted with reviewing and assessing the viability of all current and new agricultural credit programs, regardless of whether they were intended to receive domestic or foreign finance. Additionally, ACPC was mandated to develop additional liquidity, interest rate stabilization, and risk cover mechanisms for its various financing programs.

By virtue of Executive Order No. 116, ACPC was added to the DA's list of attached agencies in 1987. Through DA Administrative Order No. 5, it was required to manage the Comprehensive Agriculture Loan Fund (CALF) in the same year.

The Magna Carta of Small Farmers, Republic Act No. 7607, which was passed in 1992, added the following new duties to the ACPC's role: (i) undertake institutional capacity building programs and (ii) establish special projects to promote innovative financing strategies for small farmers. The ACPC also advocated for rural and agricultural financial policies and programs (ACPC, 2021).

The Agriculture and Fisheries Modernization Act, also known as the AFMA (RA 8435), was passed in 1996 and "made it possible for ACPC to carve its niche in a liberalized and globalized market. The Agro-Industry Modernization Credit and

Financing Program, often known as the AMCFP, is a transnational agricultural credit scheme that was designed to support AFMA. The ACPC was tasked with creating its design and serving as the program's administrator. The ACPC will be in charge of overseeing the AMCFP Fund's administration, including the DCP monies, and will make sure that enough money is flowing to the DA's priority sectors and intended clients (ACPC, 2021).

As a result of its ongoing participation in institution-building, policy/action research, and agriculture, ACPC is able to assist the government in the creation and implementation of strategies and policies that boost and sustain the flow of credit to agriculture and fisheries, increase the viability of farmers and fisherfolk, and support modernization of the agricultural sector, food security, and poverty reduction.

Small Farmers and Fishers (SFF) and registered Micro and Small agri-fishery Enterprises (MSEs), which may be sole proprietorships, partnerships, corporations, associations, or cooperatives, are eligible for zero percent interest loans through the Agri-Negosyo (ANYO) Loan Program, which is led by ACPC. Individual SFF borrowers who qualify may borrow up to PhP 300,000, while registered MSEs, depending on their size, may borrow up to PhP 15 million (subject to approval of Partner Lending Conduit). Without any security and with only a 3.5% annual service fee for the conduit banks, loans are repayable for up to five (5) years (ACPC, 2021).

Those who fall under the following categories are eligible borrowers: "(1) SFF registered or enrolled under the Registry System for Basic Sectors in Agriculture (RSBSA); (2) Overseas Filipino Worker (OFW) certified by the Overseas Workers Welfare Administration (OWWA) to have lost their overseas employment, been repatriated, or been unable to return to their overseas employment due to the COVID-19 pandemic; and (3) MSE Borrower, which is defined as those engaged in It may be a sole proprietorship, partnership, corporation, cooperative, or association; and (4) registered entities that are organizations or associations of farmers and fisher folks (ACPC, 2021).

ANYO can be applied to the manufacturing, distribution, purchase of machinery and equipment, building of facilities, processing, and marketing of products and services.

Therefore, to capacitate dairy carabao farmers in maximizing their benefits derived from CBE, capability and ease of access to available loan programs like ANYO is essential to provide substantial opportunity for the development of their dairy enterprises. Evidences that would back up this claim is very much needed and appropriate. Hence, the necessity of conducting this study.

1.2 Problem Statement

Dairy buffalo farming has been extensively studied as an enterprise and the government has been offering various loan programs since the 1980s. However, there are limited information on the factors that are hindering or motivating the access of farmers to avail credit windows offered by the government. In this connection, there is a need to determine and establish a frontier of knowledge on the capability of dairy buffalo farmers to access loan programs like the ANYO.

Livelihood strategy refers to the choices that people make in the pursuit of income, security, well-being, and some productivity and reproductive goals (Padit, 2012). In this study, dairy buffalo entrepreneurship is the livelihood strategy engaged by rural families to achieve their goal of *masaganang ani at mataas na kita*.

"Entrepreneurship is recognized as an important driver of economic growth" (Mahadea, 2013 in Urio, 2016). The idea of functioning 'beings' and 'doings' refers to important undertakings that contribute to people's well-being (Sen, 1999); entrepreneurship activities just like dairy buffalo farming which can be realized as one of the functioning integral various things a family may value doing or investing as a community-based enterprise that has a great potential of providing sustainable livelihood to people particularly family entrepreneurs in the farming communities.

It provides employment that helps define family entrepreneurs' socioeconomic status or well-being and provides sense of self-worth or satisfaction. Since dairy buffalo entrepreneurship is an important livelihood strategy or employment generator, factors affecting the access of loan programs for capitalization is not yet explored and studied in Nueva Ecija, Philippines. This gap has motivated the researcher to look for answers to the main question: "What are the causes that can hinder or motivate dairy buffalo

entrepreneurs to apply for the ANYO Loan Program in Nueva Ecija, Philippines?" Specifically, this study was anchored on the following questions:

1. What is the current status of the ANYO's implementation in Nueva Ecija, Philippines?
2. What are the factors that could hinder or motivate the access and capability of the dairy carabao entrepreneurs in availing ANYO?
3. What are the possible recommendations, best practices and policies to enhance the implementation of ANYO?

1.3 Goals and Objectives

The study was conducted to understand and evaluate the factors that may affect the capability to access the ANYO Loan Program of dairy buffalo entrepreneurs in Nueva Ecija, Philippines. Specifically, the study aimed to:

1. Describe the current status of ANYO's implementation;
2. Discuss the factors that could hinder or motivate the access of dairy carabao entrepreneurs on the ANYO;
3. Assess the possible recommendations, best practices and policies to enhance the implementation of ANYO; and,
4. Propose an Action Plan and Project that will address identified factors based on this study that could limit or motivate the capability to access loans for dairy buffalo entrepreneurs.

1.4 Significance of the Study

This study is in line with the socio-economic dimensions of carabao development program thematic aspect and the Integrated Management System (IMS) Policy specifically on the Sustainable Development Goal (SDG) Nos. 3, 5, and 8. The study would provide broader insights about the people's understanding on the struggles of dairy buffalo farmers to access loan programs. Continuous improvement for the implementation of such programs to deliver quality service to clients has always been the goal of PCC through its IMS Policy. The SDG number 3 focuses on Good Health and Well-Being which can only be achieved with SDG number 5: Gender Equality for opportunities as targeted by SDG number 8: Decent Work and Economic Growth. It could be helpful to policy makers, industry players (investors, processors, traders, and others)

and the Local Government Units (LGUs) in crafting appropriate community development programs that will address the plight of the poor, specifically the families engaged in dairy buffalo enterprise.

The results of the study would provide some basic information regarding the factors affecting the capability to access of families engaged in dairy buffalo entrepreneurship in Nueva Ecija, Philippines. The findings would serve as baseline information for PCC and this will immensely contribute to the frontier knowledge in the fields of community development, agribusiness, public administration and socioeconomics.

While there are several studies conducted about credit institutions and policies but understanding the factors affecting the capability to access such credit windows is also vital. Policies and programs were often created or implemented but the ease and capability to access and to truly serve the target farmer beneficiaries were seldom discussed and mostly neglected due to the lack of knowledge and opportunities given to the farmers. This is particularly true in the case of the province of Nueva Ecija. The outcomes of this study would add to the existing frontier of knowledge and fill up the gaps.

1.5 Scope and Limitation

This study was limited to the analysis of the factors affecting the capability to access the Agri-Nergosyo Loan program implemented by the New Rural Bank of San Leonardo (NRBSL) as the sole Conduit Bank that opened its windows for dairy buffalo entrepreneurs in Nueva Ecija, Philippines. The analysis was based on the response of the bank managers involved in the provision of ANYO services to the carabao farmers.

Due to time and financial constraints, the study only covered the actual cooperatives or associations that served as Bank Aggregators to its member applicants in accessing the loan through the interventions implemented by the research team. The committee that was created by PCC has limited roles in the implementation of the program due to the informal collaboration with the NRBSL as the conduit bank certified by the ACPC thereby limiting the possible interventions to be introduced by the researcher in this study to recommendations and endorsements only in support of the dairy buffalo entrepreneurs in accessing ANYO.

However, this study only used the respondent's ability to recall prior events and circumstances. The data are only as reliable as the respondents' memories when memory is a factor (Guy et al., 1987).

1.6 Definition of Terms

Access refers to the permission or ability to avail or enter into a program or project. Aggregator Organization refers to a cooperative or association that agreed to assist, facilitate and endorse their members' application to avail loan programs. Awareness refers to the knowledge or perception of certain available opportunities. Conduit Bank refers to the rural bank that passed the evaluation of ACPC as co-implementer of various credit programs. Dairy buffalo enterprise refers to the production and marketing of dairy buffalo milk. Dairy buffalo entrepreneurship refers to the livelihood strategy of dairy buffalo entrepreneurs in the study site. Entrepreneurs refer to household heads who are directly engaged in dairy buffalo enterprise/farming. Hindering Factor refers to the factor that could interfere with the activity or progress of a program. It could cause harmful or annoying delay or interference with progress. Motivating Factor refers to the strategies, incentives, recognitions and any other elements that increase an individual's overall motivation to perform or achieve something significant.

REVIEW OF RELATED LITERATURE

2.1 Review of Related Literature

a. Access to Networks

Networks provide options for entrepreneurs to have access to capital (Shane & Cable, 2002), Opportunities for information and technology (Owen et al., 2004) as well as assistance with developing entrepreneurial capabilities (De Carolis & Saporito, 2006). Entrepreneurs embedded in many networks are more exposed to opportunities and ideas (Cooper & Yin, 2005).

The decision to start and grow a business, as well as its survival and success, may be influenced by gender disparities in network structures and networking behavior (Carter et al., 2001 in Terjesen & O'Gorman, 2007). "Social contacts play a role in mobilizing complementary resources, getting support and help, and establishing viable business relations" (Greve, 1995).

The family is a valuable source of contacts for female company owners and may greatly assist them in resolving business-related issues, setting up resources for business activity, and introducing them to resourceful individuals who may be able to assist in resolving complex issues (Kao, 1993).

In the study of the International Development Research Centre (2000), The various stages of production, processing, and delivery via market-focused collaboration among various stakeholders who produce and market value-added products are covered by the dairy value chain, which includes the full range of activities necessary to bring dairy and dairy-based products to final consumers. The constraints identified by Lantican et al. (2017) in the input provision, production, milk collection, processing and marketing functions in the Value Chain (VC) include:

1. "insufficient feeds (roughage/concentrates) and water supply;
2. high percentage of Village Based Artificial Insemination Technician (VBAIT) inactivity due to non-uniformity/non-payment of their services;
3. declining carabao population due to poor growth performance, high mortality rate of imported carabaos, and limited number of breedable carabaos as a result of high male-to-female ratio and unavailability of bulls for natural mating;
4. limited financial/credit support to carabao meat and dairy production;
5. lack of experts/consultants in meat science and processing at PCC being a Research for Development (R4D) institution;
6. poor milk handling;
7. inadequate milk processing capability, facilities and equipment;
8. milk spillage while in transit;
9. short shelf-life of milk and milk products and lack of Food and Drug Administration (FDA) certification;
10. limited awareness by consumers of locally produced carabao's milk and milk products;
11. limited market access due to individualized marketing of active but unorganized farmers; and,
12. delay in accessing timely market information".

Based on the study, the top three (3) con-

straints identified in the carabao VC were highly technical and requires the livestock industry's full support and commitment for it to be developed. The fourth constraint, however, can be addressed immediately through collaborative efforts in pulling funds for the sector for capital investment to dairy buffalo raisers to practice entrepreneurship and graduate from the "dole out mentality" to start a private-led industry like the development of poultry and swine industry.

Carabao farmers receive very little and no credit help. Typhoons and other natural catastrophes have a substantial impact on carabao welfare and are inescapable. This was seen in Region 4-A where the farmers were unable to rebuild the carabao housing units that Typhoon Glenda had destroyed in 2014 because they could not obtain credit support for such a purpose. As noted by Lantican, et al. (2017), lack of credit access impedes the growth of the carabao farmer's enterprise, which results in inefficiency and lost financial benefits. Additionally, having access to financing will let farmers buy the proper feeds, concentrate, buy more animals, and fix their animal housing.

Furthermore, there were also constraints identified in the Ethiopian Dairy Value Chain (USAID, 2013). These are the following challenges:

1. production-related low milk yield per cow, low use of crossbred, weak animal health and extension services, feed issues such as high cost, poor quality and lack of supply, and poor milk quality;
2. post-production issues such as high levels of wastage and milk spoilage;
3. processors operate below capacity;
4. weak cooperative management;
5. low consumption and demand for pasteurized milk products
6. limited access to financial services; and,
7. low returns throughout the value chain.

Ethiopia's dairy value chain also identifies limited access to financial services as one of the constraints that serve as barrier for the growth of their dairy industry. It limits the opportunities for dairy and meat farmers that are commonly backyard raisers that relies on their income for subsistence living and seldom invest on the improvement of their farms' development due to lack of financial liquidity (USAID, 2013).

b. Economic and Personal Well-Being of Dairy Buffalo Entrepreneurs and Credit Access

A study was conducted by Dela Cruz and Dizon in 2019-2020, that aimed to study and analyze the relationships of the profiles of the dairy buffalo entrepreneurs and dairy buffalo enterprise, and personal entrepreneurial competencies with the economic and personal well-being of the respondent buffalo farmer entrepreneurs in Nueva Ecija.

The study discovered that the dairy buffalo entrepreneurs' personal well-being score fell within the normative range for the population, indicating that they typically experience a normal degree of well-being. The results also showed that the entrepreneurs were happy with their lives on the farm and were even able to fit in some leisure time even though they were working both dairying and other sources of revenue for their family, such as non-dairy farms, off-farm jobs, and non-farm jobs.

The Personal Entrepreneurial Competencies (PECs) of dairy buffalo farmers were found to be strong in opportunity seeking, perseverance, commitment to work contract, demand for quality and efficiency, risk-taking, goal setting and information seeking, systematic planning and monitoring, and self-confidence. However, they were only moderately strong in persuasion and networking.

According to the study, networking and persuasion, which are prerequisites for accessing financing programs, are at a moderate level for PECs and within the normative range for dairy buffalo entrepreneurs. Lack of networking suggested that although there were credit windows with zero or low interest rates, carabao entrepreneurs lacked the necessary knowledge on how to access them and who to contact in order to qualify for such programs. Low persuasion capabilities among carabao entrepreneurs can largely affect the approval of their loans that was proven in the Production Loan Easy Access (PLEA) that was implemented in 2017 to 2019 spearheaded by ACPC through the assistance of PCC that resulted in 31% loan approval rating in Nueva Ecija (PCC-BDCU Annual Report, 2019).

c. Enabling Laws for Sustainable Dairy Carabao Industry

The AFMA Act, which was passed by Re-

public Act No. 8435, intends to improve the agriculture and fishing industries through modernization, increased smallholder participation, food security and self-sufficiency, private sector involvement, and human empowerment.

It identifies three (3) characteristics or prerequisites of a modern agriculture: (1) a vibrant community that embraces innovation and change; (2) the application of modern or recent production and management technologies that would increase productivity and enhance competitiveness; and (3) the presence of enterprising people who choose from among the options available to them on what technology to apply, what crop and livestock to raise, and when and to whom to sell their produce in order to get profit (Official Gazette, 1997).

This suggests that various stakeholders, especially small-scale farmers, must change their attitudes toward modern technology, whether it be managerial, institutional, or physical (De Castro, 2004). The growth of entrepreneurship in the livestock industry, and more specifically among dairy carabao/buffalo producers, is a realization of the actual meaning of development and one of the key characteristics of contemporary agriculture in the AFMA.

Entrepreneurs are frequently seen as the economic change agents, responsible for shifting the economy from one state to another (Manimala, 1999 in De Castro, 2004). Farmers' organizations and their roles in development cooperatives and rural workers' associations in agriculture continue to support rural areas with income and a variety of opportunities today.

Rural entrepreneurship with an agricultural focus is viewed as a crucial factor for economic transformation that must occur if many rural areas are to survive (Pettrin, 1994 in Sugiarto, 2006). Through their work in rural communities and advocacy on behalf of farmers, farmers' groups play a significant part in the fight to end rural poverty (IFAP, 2000 in Sugiarto, 2006). Sugiarto (2006) emphasized that as rural agriculture-based entrepreneurship grows, it leads to the emergence of a variety of rural organizations, including cooperatives and farmers' groups or associations.

A cooperative is an independent, duly registered group of people with a shared interest who have come together to meet their so-

cial, economic, and cultural needs and aspirations by contributing fairly to the capital needed, using their goods and services, and accepting a fair share of the risks and rewards of the venture, according to Article III of Republic Act No. 9520, also known as the Philippine Cooperative Code of 2008 (Official Gazette, 2009).

The Cooperative Development Authority was the driving force behind RA 9520's mandate. Farmers who share same interests and requirements create an organization known as a farmers' group. A number of factors must be taken into account when creating a farmers' group, including the following: (1) the presence of a territory that becomes the responsibility of all members; (2) the existence of collective needs; (3) the availability of support from key leaders in certain areas; (4) powerful leadership to inspire farmers; and (5) actual action from farmers' groups that involve members (Department of Agriculture, 1988 in Sugiarto, 2006).

The Comprehensive Agrarian Reform Law of 1988, also known as Republic Act No. 6657, states in paragraph 4 that the State shall recognize the right of farmers, farmworkers, and landowners, as well as cooperatives and other independent farmers' organizations, to participate in the planning, organization, and management of the program. The State shall also support agriculture through appropriate technology and research, and adequate financial production, marketing, and other support (Official Gazette, 1988).

Based on Section 5 (Powers and Functions of the PCC) of RA 7307 which created PCC, the PCC shall have the following powers and functions: "(1) Conserve, propagate and promote the Philippine carabao as a source of draft animal power, meat, milk, and hide; (2) Enable the farmers, particularly smallholder farmers and Comprehensive Agrarian Reform Program (CARP) beneficiaries to avail themselves of good quality carabao stocks at all times and at reasonable prices through an organized program of production, breeding, training and dispersal; (3) Undertake training programs for farmers, particularly smallholder farmers and CARP beneficiaries, designated to transfer technology on the proper care and reproduction of the carabao and the processing of its meat and milk; (4) Encourage backyard dairy development in rural areas

by raising carabaos so as to meet the nutritional needs of the smallholder farmers and their families and reduce dependence on imported milk by-products; (5) Undertake research activities in all disciplines that lead to the improvement of the over-all productivity of the Philippine carabao; (6) Increase the existing annual population growth of the Philippine carabao to keep pace with human population growth; and (7) Enter into memoranda of agreement and receive donations through the DA from local and foreign sources. Upon the recommendation of the PCC Advisory Board, the individual carabao centers may enter into agreements directly with funding agencies through their respective board of regents or head of agency" (Official Gazette, 1992, p.1).

2.2 Synthesis and Gaps

Based on the literature, there are legal frameworks to support the dairy buffalo farmers' enterprises by way of assisting them to access credit with low interest rates especially if they are members of Agrarian Reform Beneficiary Organizations (ARBOs). Moreover, carabao farmer entrepreneurship can be affected significantly by the opportunities available in an environment. Dairy value chain both in Luzon, Philippines and other countries identifies lack of credit access as one of the major constraints in the dairy value chain.

Thus, understanding the factors affecting credit access for investment is essential to maximize the gains in engaging to the CBE. Therefore, the need to formulate an APP to address the gaps is imperative to improve the chances of accessing and availing the ANYO Loan Program.

2.3 Conceptual Framework

The framework demonstrates the Frontier of Knowledge on the implementation of ANYO. It shows that for the government to address the gaps; a need to understand the current status; hindering factors that limits the capability to access; motivating factors and what are the strategies that were proven to be effective in implementing credit programs to be prosperous dairy buffalo entrepreneurs not just mere farmers that relies on government dole outs.

METHODOLOGY

3.1 Research Design

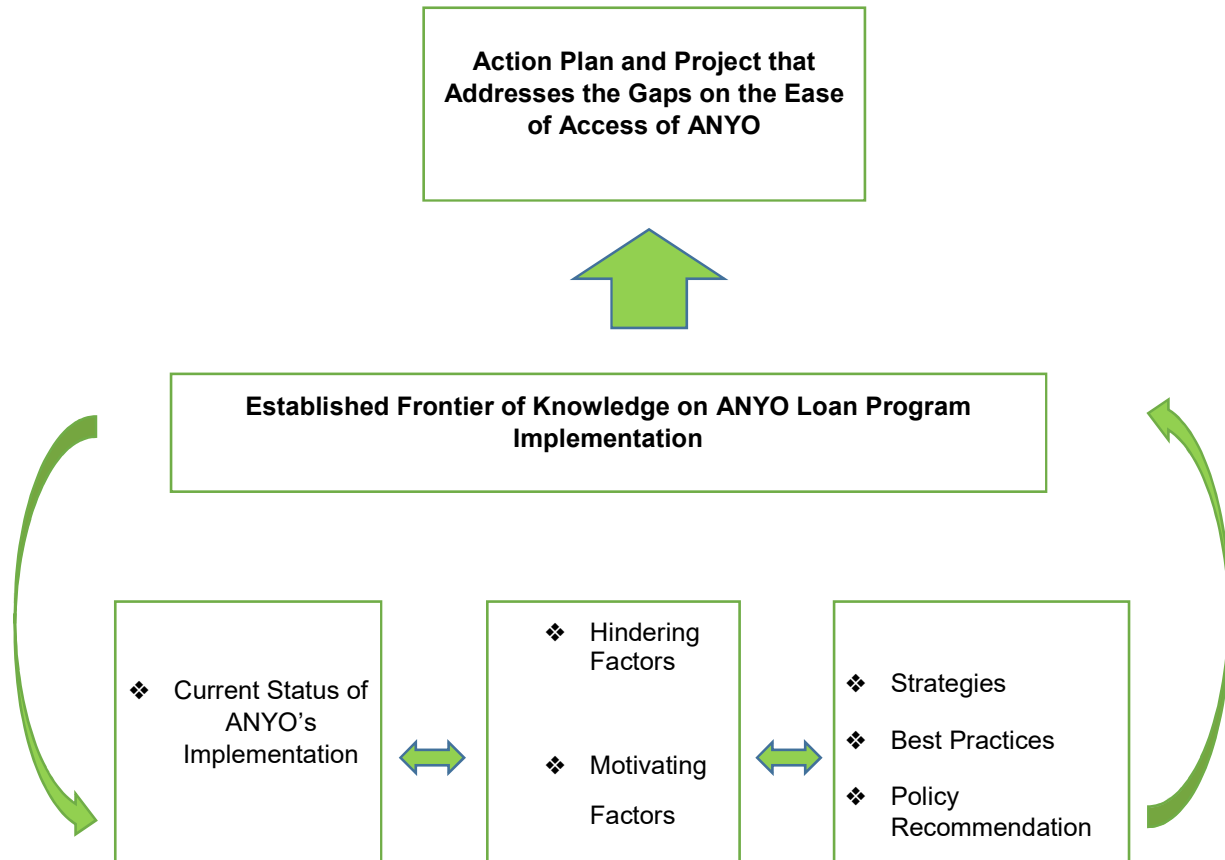


Figure 1.
Conceptual Framework of the Study

Note: Adopted with major revisions from the Conceptual Framework on the Economic and Personal Well-Being of Dairy Buffalo Entrepreneurs in Nueva Ecija, Philippines written by Dela Cruz and Dizon, 2020.

The study was conducted to analyze the factors affecting the capability to access available credit windows (ANYO) of dairy buffalo entrepreneurs. To arrive at this, the study applied an operational research design.

The study used qualitative methods of analysis. Document analysis was employed to understand the current status of the loan program based on the data (secondary) from ACPC and NRBSL. It was also used to assess the effect of the initial intervention implemented by the researcher with NRBSL. Key Informant Interview (KII) was used to understand the hindering and motivating factors based on the experiences of bank managers involved in the implementation of the program that serves as the primary data.

The primary and secondary informa-

tion were analyzed to come up with a proposed APP on enhancing capability and access to ANYO of dairy buffalo entrepreneurs.

3.2 Locale of the Study

The study was conducted in Nueva Ecija, Philippines. Nueva Ecija is a landlocked province in Central Luzon (Region III), and it occupies the eastern rim of the Central Luzon plains. Its capital is Palayan City. Nueva Ecija borders, from the south clockwise, Bulacan, Pampanga, Tarlac, Pangasinan, Nueva Vizcaya and Aurora.

The province is composed of five (5) cities, 27 municipalities, and 849 barangays. It has a total land area of 5,638 sqm, which relies on agriculture as the main source of livelihood. Nueva Ecija is often tagged as the "Rice Bowl of the Philippines".

The Legislative Districts of Nueva Ecija,



Figure 2.
Map of Nueva Ecija (wikipedia.com)

namely the first, second, third and fourth districts are the representations of the Province of Nueva Ecija in the Philippine House of Representatives. The Local Government Code, also known as Republic Act No. 7160, defines agricultural land as land devoted principally to the planting of trees, raising of crops, livestock and poultry, dairying, salt making, inland fishing and similar aquacultural activities and other agricultural activities, commercial or industrial.

This definition explicitly categorizes dairy buffalo as an agricultural enterprise. The Philippine Standard for Industrial Classification (2009) classified Dairy Buffalo Farming as animal production and manufacturing of foods and food products.

3.3 Unit of the Study

The study was conducted in the NRB-SL Branches that offer the ANYO. Dairy buffalo entrepreneurs from the cooperatives or associations that were assisted by the NDBH, an operating unit of PCC at the Central Luzon State University (CLSU) as a counterpart of Socio-Economics and Policy Research Section (SEPS) for agribusiness was included.

3.4 Sampling Design

According to Israel (1992), who cited Miaoulis and Michener (1976), there are three (3) criteria that often need to be given in order to determine the proper sample size, in addition to the objective of the study and the size of the population. These three factors include the degree of variability in the variables being assessed, the level of confidence or risk, and the degree of accuracy (sampling error).

For this study, the total number of Bank Managers (total population) involved in the provision of the ANYO were all included and they were at the following branches: Also, document analysis was done to determine the current status of the implementation of ANYO Loan Program and the initial effect of the intervention focusing on the total number of loan applicants (total population) through the following aggregator organizations:

3.5 Data Collection Procedures

Data were gathered using KII questionnaire with the seven (7) Branch Managers involved in ANYO through face-to-face and phone

Branch Name	Number of BMs In-Charge
San Leonardo	1
Bongabon	2
Peñaranda	1
Sto. Domingo	1
Rizal	1
Cabanatuan	1
Total	7

Table 1.
Number of Bank Managers involved in ANYO

call interview guided by questions such as “what are the hindering factors among carabao farmers in accessing loans based in your experience as implementer of ANYO?” and “what are the motivating factors among carabao farmers in accessing loans based in your experience as implementer of ANYO?” (see Annex D). For the document analysis, all available documents related to the ANYO from ACPC website were included as well as documents from NRBSL which were requested through a formal request letter (see Annex C).

The researcher diligently observed the confidentiality of data in accordance with Republic Act No. 10173, “An Act Protecting Individual Personal Information in Information and Com-

munications Systems in the Government and the Private Sector, Creating for this Purpose a National Privacy Commission, and for other Purposes” or “Data Privacy Act of 2012” in its shortened title (NPC, 2012). All information that were gathered from the informants were treated with utmost secrecy. The researcher has explained the nature and objectives of the study, methodology, and informant’s expected involvement.

3.6 Research Instrument

The method that was used to identify the factors was KII, wherein qualitative in-depth interviews with people who know what is going on in the community was conducted.

Name of Aggregator Organization	Number of Member Loan Applicants
Bongabon Dairy Cooperative	18
Aliaga Dairy Producers Cooperative	5
Bosque Multi-Purpose Cooperative	2
Bagong Pag-Asa sa Bungo Association	22
Rizal Credit Cooperative	1
Total	48

Table 2.
Name of Aggregator Organizations and their number of applicants

The purpose of the KII is to collect information from a wide range of people—including community leaders, professionals, or residents (NRBSL Bank Managers) —who have first-hand knowledge about the ANYO. These local specialists can shed light on the nature of problems and make recommendations for remedies thanks to their specific experience and understanding (UCLA, 2004). Attached in Annex D is the KII guide questionnaire utilized by the researcher.

Document analysis is a type of qualitative research in which the researcher interprets materials to give context and meaning to a topic under review (Bowen, 2009). In document analysis, content is coded into themes in a manner akin to how focus group or interview transcripts are examined (Bowen, 2009). A document may also be scored or graded using a rubric. According to O’Leary (2014), there are three (3) main categories of documents: public records, personal documents, and physical evidence. Personal documents are first-person accounts of an individual’s actions, experiences, and beliefs, and include accounts from NRBSL bank managers and PCC extension workers. Public records are the official, ongoing records of an organization’s activities (NRBSL, ACPC, and PCC) (often called artifacts). These were used to determine how the ANYO

implementation was progressing at the time.

3.7 Data Analysis

Based on the real data provided by the NRBSL, the researcher determined the actual percentages of loan approval rates of applicants before and after the pilot intervention. The qualitative responses specifically from the KII were analyzed thematically through data exposition and interpretation. Conclusions and analysis were completed after extensive discussion and consultation with PCC coworkers who were specialists in the social sciences. To identify the themes, the replies’ commonalities were examined.

3.8 Action Plan and Project Matrix

The APP Matrix served as guide for the researcher in conducting and coordinating with NRBSL for the completion of the study. It contains the activities to achieve the objectives of the APP: 1) assessment of the current implementation of the ANYO Loan Program; 2) determination of the factors that hinder or motivate access for carabao entrepreneurs; 3) assessment of the initial effects of the interventions implemented; 4) formulation of recommendations for further actions; and 5) crafting of an action plan to sustain the gains of the intervention.

Matrix 1. APP Matrix

Objectives	Major Activities	Expected Results & Success Indicators	Person/Group Responsible	Time Frame	Risk	Risk Treatment	Indicative Budget
1. Describe the current status of ANYO’s implementation	Documents Analysis	Updated information on the status of the loan program	JFC	August 18 - September 15, 2022	Slow internet connection and outdated or unavailability of needed information	Strategic communication with concerned organizations and use of faster internet connection	P35,000.00
2. Discuss the factors that could hinder or motivate the access of dairy carabao entrepreneurs on the ANYO	Key Informant Interview	Data generated from the survey	JFC	August 18 - September 15, 2022	Hightened Quarantine Protocols due to the COVID-19 Pandemic	Strategic coordination with concerned organizations and use of google forms	
3. Analyze the actual approval rating of loans before and after the intervention was introduced by the researcher	Documents Analysis	Comprehensive information on the actual data of loan applicants	JFC	August 18 - September 15, 2022	Limited time for analysis due to intervening task as a working student	Time management and proper coordination with partner stakeholders	
4. Assess the possible recommendations, best practices and policies to enhance the implementation of ANYO	Key Informant Interview	Data generated from the interview	JFC	August 18 - September 15, 2022	Limited time for analysis due to intervening task as a working student	Strategic coordination with concerned organizations and use of google forms	
5. Propose an Action Plan and Project that will addresses an identified factors based on this study that could limit the capability to access loans for dairy buffalo entrepreneurs	Analysis of the data collected from the survey	Analysis of Data Based on KII & Document Analysis	NDBH and SEPS Staff	August 18 - September 15, 2022	Disapproval of proposed APP	Strategic and well written research proposal	P15,000.00

RESULTS AND ANALYSIS

4.1 Findings and Analysis

The analyses done in this chapter were based on the objectives identified by the researcher to assess the actual implementation of the program and through the initial intervention implemented by the researcher.

Current status of ANYO’s implementation

Document review was employed to describe the current status of credit access in Nueva Ecija and in the Agri-fishery Sector in the Philippines. A comprehensive analysis was done based on the available information from ACPC’s website and all available information provided by the NRBSL.

a. Status of Agri-fishery Credit in the Philippines

Based on the data provided by the Bangko Sentral ng Pilipinas (BSP), the agri-fishery sector’s share in the total loans by the banks remains low at 2% as of December 31, 2021 according to the ACPC. Specifically, there was a decline in the agri-fishery loans or the total loan activities financed by banks in the country from 2.53% in 2020 to 2.31% in 2021 (BSP, 2021).

On the other hand, there is a slight increase in the recorded proportion of all banks’ loans to the agriculture and agrarian sectors to the total loanable funds generated by banks with 10.0% by the end of 2020 to 10.7% in 2021. There are limited investment opportunities in the agriculture sector as signified by shortage from the 25% mandated Agri-Agra Credit (BSP, 2021).

Based on the study in 2020 of Philippine Institute for Development Studies (PIDS) which examined the state of Financial Inclusion among Small Farmers and Fisherfolks in the Philippines, the following information were established:

A. Only 93% of the farmers and fisherfolks owned government issued IDs, but mostly were voter’s ID, which is among the main requirements in financial transactions such as the opening of bank accounts;

Credit Access: Issues and Challenges	
Supply side (Banks/Financial Institutions)	Demand side (Farmers and Fishers)
<ol style="list-style-type: none"> Limited physical network in rural areas <ul style="list-style-type: none"> Limited knowledge/clarity of demand High cost of servicing small loans Perceived risks in agriculture <ul style="list-style-type: none"> Lack of understanding of agri-markets and borrowers (lack of information) Limited understanding of risk management products and their effectiveness Inadequate institutional capacity <ul style="list-style-type: none"> Lack/limited skilled staff to evaluate agriculture proposals Inability to design appropriate products 	<ol style="list-style-type: none"> Limited access to financial services <ul style="list-style-type: none"> High transaction cost due to distance Weak financial and digital literacy <ul style="list-style-type: none"> Lack of understanding of products and services Inability to prepare proper financing proposals Borrowing related concerns <ul style="list-style-type: none"> Cumbersome documentation requirements Lack of collateral acceptable to financial institutions Lack of products/services aligned with farmers' needs (agri production, education, consumption, etc.)
Risk Management (insurance and guarantee)	
<ol style="list-style-type: none"> Limited scale and reach Banks' lack of awareness of products 	<ol style="list-style-type: none"> Delayed claims processing High guarantee fee
Enabling Environment and Infrastructure	
<ol style="list-style-type: none"> Limited credit information on small farmers (incomplete/outdated RSBSA) Inadequate capacity building (for farmers and FIs) Thinly spread agri lending programs – limited scale and outreach 	<ol style="list-style-type: none"> Lack of thorough evaluation to help inform program design and focus Limited technical and marketing support, lack of markets and low prices

Figure 3.
ACPC Identified Credit Access: Issues and Concerns

B. 81% of them are aware of the various financial services/products such as bank accounts, ATM/Debit, credit cards, financial transactions through mobile phones and internet, which leaves a portion of the population unaware of the same;

C. Only 32% have bank accounts and 21% have ATM/debit cards;

D. 17% accessed credit from banks while 25% accessed credit from Micro Financing (MFI) and 26% accessed credit from cooperatives;

E. 19% have insurance on health and 3% Agri Insurance; and

F. 37% have savings in banks, MFIs and coops".

It can be noted from above numbers that the most indicators of financial inclusion are relatively low in the population that was studied by ACPC.

Data derived from the document analysis also shows that the sector was not given enough

opportunities to facilitate and capacitate the farmers to pursue perceived investments that could potentially generate economic gains. On the other hand, capability of the farmers to access loans was also low due to identified high risk investment in the sector and borrowing concerns from past loans which is still an indication of the traditional "dole out" mentality of some farmers for government programs. The limited investment on the sector also serves as a hindering factor for ACPC to provide services to the countryside by building physical networks and hire additional staffs for the implementation of their mandate. Table 3 below contains a summary of the findings from the analysis conducted. With the analysis, the researcher identified the following strategies to improve the status of Agri-fishery Credit:

1. Prioritize Agri-fishery credit in the budget

Themes	Codes	Recommendation
Limited Investment on the Agri-fishery Sector	2% credit share Limited Infrastructure Limited Employees	Increase on the budget allocation for Agri-fishery loans
Incapacity of Farmers to Access Loans due to unstable income	Risky Investment Unstable market	Capability Building on Financial Management for the farmers and fisherfolks
Limited Reach to implement loan programs	Lack of Infrastructure Limited Personnel	Implement Digitalization of Loan Processes while improving social media reach and Partnership with more conduit rural banks
Slow Loan Processing	Cumbersome requirements Unresponsive Website Limited Means of monitoring and verification on loan application and updates	Streamlining of loan requirements and processes

Table 3.
Analysis on the Issued and Concerns on Credit Access

allocation and encourage private banks to offer loans with low interest rates to promote entrepreneurship;

2. Create capability training program for farmers and fisher folks in applied entrepreneurship that ensures funding support upon completion;

3. Promote and establish ease of doing business through digitalization of loan from applications up to the release of loans that could be piloted through the Kapital Access for Young Agripreneurs (KAYA) Loan Program; and,

4. Streamline the process and requirements for loan application.

b. Status of ANYO’s Implementation through NRBSL as Conduit Bank

In 2020, PCC created the Credit Access Assistance Committee (CAAC) to assist, link and capacitate dairy farmers to avail loans on available credit windows with zero to low interest rates. The committee has attended numerous trainings and seminars spearheaded by ACPC to know the qualified applicants, learn the concepts and understand the documentary requirements and processes in accessing loans with low interest rates offered to Farmer Cooperatives and Associations (FCAs).

Through a series of meetings, the committee came up with the idea to directly contact and visit the identified conduit banks of ACPC

for ANYO Loan Program in Region 3. Members of the committee first visited the identified bank located in Nueva Ecija wherein to protect their identity, the researcher decided not to mention the name of the bank. Collaboration to assist carabao farmers in accessing the program was offered; unfortunately, the said bank was not entertaining carabao farmers for such loan due to their prioritization of other farmers venturing in rice and other high value crops production.

The other conduit bank was located in Pampanga that due to its distance, the committee decided that it is more practical to focus in pursuing the last remaining rural bank identified as conduit by ACPC that was located in Nueva Ecija thereby, NRBSL and PCC started assisting dairy carabao farmers since May 2021 to present. During the first four (4) months of orienting and assisting carabao farmer loan applicants the old process of loan application from ACPC (Figure 4) was implemented. The old process, which has six (6) steps, requires individual farmers to sign up and create their own accounts with the ACPC website which was proven to be difficult for ordinary farmers due to their lack of education, low technology adoption, low self-esteem and slow internet connection. For an ordinary farmer to formally apply for his/her desired loan, it would demand time and money which most of them do not have especially if they would still undergo a stringent process that doesn’t provide assurance if they will be qualified for the loan



Figure 4.
ACPC Loan Availment Process

or not. Such cumbersome and lengthy processes test the patience of farmers and most of the time it discourages applicants to pursue their loans. In cooperation with NRBSL, the process was streamlined from six (6) steps down to just three (3) steps provided that the application was endorsed by PCC-CAAC. Figure 5 shows the streamlined process which was pilot-tested.

PCC that serves as aggregator for the loan program upon confirmation where an individual carabao farmer belongs to, the committee endorses the loan application to the bank.

After one (1) week, NRBSL employees conduct house-to-house Credit Investigation (CI) to assess the capability of the loan applicant to pay and ensure that the proposed loan will be spent



Figure 5.
New Process Piloted for Availment ANYO Loan

The new process piloted by the PCC and NRBSL aimed to streamline the processes involved in the application to save time and resources as well as improve the number of farmers accessing the ANYO. The Loan Application Forms were provided either by the PCC or NRBSL after orienting the carabao farmers regarding the features of the loan which reduces the bureaucratic process of accomplishing registration, requesting loan application and seeking endorsement from ACPC's website.

After consultation with Agricultural Extension Worker (AEW) in-charge in of the area of the cooperative or association assisted by

based on the Farm Plan and Budget. Registration of the farmer/fisher folk through the ACPC website is no longer required because the NRBSL employees do the registration to save time and money for the famers as well as ensure the client's convenience.

The last step is the opening of bank account at NRBSL with short lecture on financial management in order to remind the loan applicant that the loan amount must be used as an investment and not for other purposes. The newly opened bank account is where the loan amount will be deposited and will also serve as account for payment whenever the loan term

Intervention	No. of Applicants	No. of Days (Processing)	No. of Approved Loan Applicants	Success Rate
Old Process	48	117	0	0%
New Process	48	46	38	79%

Table 4.
Loan Results from May to November 2021

Measure	Total Loan Applicants	Approved	Disapproved	Pending	Returned	No Action
Number	48	38	3	5	1	1
Percent	100%	79%	6%	10%	2%	2%

Table 5.
Status Breakdown of Loan Applicants Endorsed by PCC-CAAC

expires or renewed depending on the future agreement of the carabao farmer and NRBSL.

As to the success rate of the loan application, Table 4 below shows the number of days and percentages of approved applica-

tions in the old and new versions of processes. The data shows that through the process streamlining done by the PCC – CAAC and NRBSL, the number of days spent for the processing of loan application was streamlined from 117 days, which

No. of Loan Applicants	Results/Credit Decision
38	Approval. The amount of individual loan approved is derived from each applicant’s requested financing for the intended project as correlated with his/her debt servicing capacity
3	Dis-approval. The rejection is based on the adverse information gathered that the applicants have existing past due loan accounts with other lending institutions in their area.
4	Pending. The project for financing is land acquisition for planting of grass for carabao’s feed consumption but prospective property to be purchased is not yet determined. Their loan applications may be activated subject to presentation of possible site.
1	Pending. The applicant is under quarantine due to COVID-19 symptoms exhibited during project visit. Processing may resume once applicant is already well.
1	Returned. Concern is raised on the applicant’s age and health condition which put at risk the project management and loan repayment. The applicant may opt for substitution using a close relative.
1	No Action. No loan application is formally filed.

Table 6.
Detailed Loan Results/Credit Decision

was proven to be inefficient down, to just 46 days, which was 71 days shorter. The collaboration created an avenue for dairy carabao farmer entrepreneurs to pursue their perceived investments that could potentially generate sustainable income. Table 5 shows that although the approval of loan at 79% was evidently high, the combined number of disapproved and pending applications was still significant and demonstrates the areas for improvement in developing dairy carabao farmer entrepreneur's capacity to access loan programs that offers investment opportunities. Meanwhile, Table 6 provides the concise explanation on why decisions such as Approval, Dis-approval, Pending, Returned and No Action were made by the bank. The researcher observed that all of the dis-approvals were made since previous past due loans of carabao farmers were not paid. This demonstrates the capability of NRBSL to safeguard and ensure that the loan program will be given to those farmers that certainly worthy of such investment opportunities. Other pending cases were due to the unavailability of land for expansion or development of forage areas for dairy animals. This information is very useful for future loan applicants who wish to use the loan as investment on land acquisition for them to prepare the needed documents for ease of application, approval and release of investment funds. The presence of the COVID-19 pandemic has also caused the delay of the loan release of one (1) applicant.

For the cases of returned and no action, NRBSL did an excellent job in assessing the current health condition of the applicant with marginal note that he/she has the privilege to a choose a close relative as substitute to proceed with the loan.

Overall, the approval of endorsed loan application from PCC posted high loan release rate of 79% (38 out of 48). The remaining 21% (10 out of 48) of loan applications, either pending or dis-approved, demonstrated that there is still room for improvement for the program to have more impact to reach the remaining 858 or 95% of the total dairy entrepreneurs in Nueva Ecija. This analysis also shows that the 2% of loans for the Agri-fishery Sector were insufficient particularly that livestock was not a priority in DA with regard to credit programs due to the prioritization of crops for food security and faster Return of Investment (ROI).

Factors that could hinder or motivate the access of dairy carabao entrepreneurs on the ANYO

a. Hindering Factors

Based on the KII conducted by the researcher with the bank managers, the following were identified as hindering factors in accessing the ANYO:

- a. Lack of awareness among dairy carabao farmers for available credit windows;
- b. Agri-fishery, specifically the Livestock Sector, is not being prioritized in Loan Programs;
- c. Carabao farmers possess low self-confidence in applying for loan programs with banks; and,
- d. Capability to pay.

The analysis of the interviews shows that the hindering factors limit the investment opportunities for dairy carabao farmers in maximizing their economic gains in the CBE.

Lack of awareness among dairy carabao entrepreneurs is evident on the number of loan applicants during the conduct of the study with 48 out of the 906 farmers or only 5% of them who applied for the ANYO mainly due to lack of information and network.

Agri-fishery sector was not a priority especially by the livestock raisers. According to the bank managers, "we only started processing loans for carabao farmers in ANYO when PCC approached our office to help them provide loan with zero percent interest rate through their endorsements".

Carabao farmers, as they commonly see themselves, as mere farmers and not entrepreneurs. This influence their confidence in applying for loans for capital investment which resulted in missed opportunities in developing their CBEs for improved production and income.

Capability to pay loans is of course one of the important considerations in approving loans as identified in the document review as well as in the KII. since some of the dis-approvals was due to past-due loans with other banks and old age. Such reasons for disapproval do establish the fact that most of the applicants are earning enough income to be qualified for loans and livelihood in CBE is profitable.

b. Motivating Factors

Motivating factors are the activities, strategies, practices or even policies that could encourage anyone to avail products or services being offered by the private sector or the government. In this study, the following were the identified factors:

- a. Endorsement from PCC - CAAC;
- b. Barangay Level Orientation conducted by NRBSL;
- c. Zero Percent Interest Rate; and
- d. Proactive Bank Employees conducting quick CI.

Table 7 below shows the analysis of the interviews conducted as to the hindering and motivating factors.

of 0% interest rate entices most of the farmers in availing the program, conversely, the 3.5% service charge before the loan release gives second thoughts to farmers. However, mostly, if not all, of the applicants continued their respective loan applications. Assured income in dairying also encourages carabao farmers to access the loan and perceived it as an investment to improve gains in CBE. Furthermore, proactive bank employees and the quick conduct of CI expedite the processing of loans that encourages more farmers to apply.

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

Results of KII	Analysis
Code	Themes
<p>Hindering Factors: Low awareness on available credit windows 2. Not Prioritized Sector (Livestock) 3. Lack of Self Confidence (Carabao Farmers) 4. Capability to Pay (Carabao Farmer) *Uncertainty of milk supply , unstable market</p> <p>Motivating Factors: 1. Endorsement (From PCC) 2. Barangay Level Orientation (From NRBSL) 3. Zero Percent Interest Rate 4. Assured Income in Dairying 5. Quick Credit Investigation (CI)</p>	<p>1. Hindering Factors: 1. Missed Opportunities 2. Lack of Opportunities 3. Underdeveloped Potential 4. Opportunity Worthiness *Risky (Agri-sector)</p> <p>Motivating Factors: 1. Trust & Pledge of Support 2. Improved Understanding 3. Economic Benefit 4. Credit as an Investment 5. Proactive Conduit Bank</p>

**Table 7.
Results of KII**

The motivating factors significantly motivated the farmers in applying for the loan program. According to the KII, farmers prefer direct transactions rather than applying through online websites. The endorsements provided by the PCC boosted the self-confidence in applying for loans and the proactive services delivered by the bank employees resulted in a higher approval and release of loans compared to the previous process. Barangay level orientations that were piloted in Bongabon, Nueva Ecija constituted positive response among dairy carabao farmers evidently through the increasing number of applicants. Loan feature

5.1 Summary of Findings

The study aimed to describe the current status on the implementation of the ANYO Loan Program. The study targeted to understand and evaluated the factors that could hinder or motivate the access of dairy carabao entrepreneurs to credit windows.

The study is also designed to come up with proposed improvement in the process/system, best practices and policies to enhance the implementation of ANYO or further improve and determine the perceived effects of the improvement based on its actual implementa-

tion as well as other areas for improvement.

The study used a combination of qualitative research methods: document review on the available information regarding the implementation of ANYO and other Agri-Fishery Loan Programs spearheaded by ACPC and NRBSL as conduit bank. KII with Bank Managers who were involved with the processing of loans was also utilized by the researcher to identify and understand the factor that hinders or motivates dairy carabao entrepreneurs in accessing the loan. Following are the major findings:

1. The Agri-fishery credit in the Philippines only receives 2% of the total loans provided by banks which shows that the sector especially livestock was not a priority of both the public and private sector. This is mainly due to the high risk investment, low ROI and the "dole out" mentality of farmers and fisher folks.

2. There were several factors affecting the access to ANYO by the dairy carabao entrepreneurs based on the study some are hindering while some are motivating. The hindering factors lies more on the capability of the dairy entrepreneur such as being aware and taking advantage of credit opportunities with lesser cost of capital or interest rates. Non-prioritization the livestock sector was also observed and can cause the confidence level among farmers to fall when they got consistently denied of such loan opportunities.

3. On the other hand, motivating factors include the PCC endorsement, conduct of Barangay Level Orientation, having a zero percent interest rate, assured Income in dairying, and the quick CI.

4. The collaboration of PCC and NRBSL was proven be a good practice and strategy in streamlining processes and providing quality service to 38 assisted clients or 79% of the loan applicants who received their loans. However, the remaining 858 or 95% of the dairy carabao entrepreneurs in Nueva Ecija are still missing the opportunity to access loan program with zero percent interest rates.

The study also showed that dairy carabao entrepreneurs in Nueva Ecija are earning sufficient and consistent income from CBE proven by their high approval rating in loan releases compared to loans applications as evaluated by the NRBSL.

5.2 Conclusion

Based on document review and thematic analysis, there were limited investments given to the Agri-fishery Sector to provide substantial amount of loans for capitalization which only constituted 2% of the total loans offered by all banking institutions in the country. Credit for livestock farmers specifically for dairy carabao were uncommon especially when the Production Loan Easy Access (PLEA) was terminated two (2) years ago. Perception of banking institutions that investment for the Agri-fishery Sector is risky that can still be observed by the limited number of private lending institutions opening its credit windows to farmers and fisher folks. Dole out mentality among farmers and fisher folks is still prevalent.

The informal collaboration between PCC-CAAC and NRBSL is proven to effective and efficient. The 38 loans released out of 48 applicants endorsed by the committee in just 46 days of loan processing was noteworthy and can be considered for upscaling or replication.

Results of the KII showed that hindering factors are: lack of awareness among dairy carabao farmers for available credit windows; non-prioritization of agri-fishery livestock sector in Loan Programs; low confidence of carabao farmers in applying for loan programs with banks; and capability to pay. Common theme based on the analysis of these factors is that credit access as a limited investment opportunity for the development of CBE to optimize economic gains can be missed due to incapability of carabao farmers to prove their credit worthiness. Motivating factors are the following: endorsement from PCC-CAAC; barangay level orientation conducted by NRBSL; zero percent interest rate; and proactive bank employees conducting quick CI. Common theme based on the analysis of these factors is that collaborating institutions should continue and enhance such interventions and should capitalize on the distinctive loan features of ANYO.

5.3 Recommendations

There is a need to formalize the collaboration of PCC and NRBSL through a Memorandum of Agreement (MOA). Further, the following are the recommended actions by the researcher: 1) formalize commitment to assist all the qualified carabao farmers in optimizing their gains in CBE

through ANYO; 2) co-create a capability training program that would teach entrepreneurship and must be applied by dairy carabao farmers with a loan grant upon completion of the program; 3) offer online loan applications for young carabao farmer entrepreneurs and fully digitize the loan processing system; 4) implement Objective Key Results (OKR) tool in the program's implementation, monitoring and evaluation; 5) promote the Loan Program in social media platforms like Facebook, Youtube and Tiktok to increase the awareness on their target stakeholders and to increase its reach; and finally,

6) further streamline the loan application, processing and approval by limiting the documentary requirements to at most three (3) documents and reducing the bureaucratic process of needing endorsement from the barangays to the NGAs. This causes lag time and delays on the process which could be reduced if there are minimal documentary requirements and the farmers can apply directly to the conduit banks like the NRBSL.

5.4 The Project Sustainability Plan

5.4.1 Plan Matrix

5.4.2 Proposal for Sustainability

Matrix 2. The Project Sustainability Plan Matrix

Expected Outcome	Strategy	PPA per strategy	KPI per PPA	Timeframe per PPA	Resources Needed	Responsible Person/Unit	Support from Identified Stakeholders
Formalized collaboration between PCC and NRBSL in assisting dairy carabao farmer entrepreneur in accessing available credit windows	MOA signing	Dialogue with the key stakeholders	Signed MOA	2022	Office supplies and snacks	PCC, ACPC, Cooperatives and NRBSL	Concurrence of each institution's ExeCom/ManCom
		Implement the Agreements	Endorsed Loan Applications and Loans Released	2022	Logistics, office supplies and snacks	PCC, ACPC, Cooperatives and NRBSL	Proactive participation of all responsible person
	Disseminate the information on the available credit windows offered by the ACPC and its loan features	Orientation on ACPC's and NRBSL's Loan Programs	1 orientation conducted	Annual	Training expenses (venue, training materials, facilitator)	Learning and Development Team (PCC, ACPC & NRBSL)	Approval of the activity by Executive Director, provision of facilitators
		Seminar-workshops on Customer Relations	1 seminar-workshop conducted	Annual	Training expenses (venue, training materials, facilitator)	Learning and Development Team (PCC, ACPC & NRBSL)	Approval of the activity by ED, provision of facilitators
To provide enabling mechanisms that would encourage the promotion of entrepreneurship competencies among dairy carabao farmers	Conduct of capability training program	Designing & teaching training modules on Entrepreneurship	2 capability trainings	2023	Training Funds	Performance Management Team, AFMD, PIMD, HRMS (PCC, ACPC, CLSU, DTI, DAR, NRBSL)	Approval of head of the Agencies
	Application of learnings through a business incubator or trade fairs	Business incubator partnership with Central Luzon State University, KADIWA and DTI for Trade Fairs	3 Months in Business Incubator to test	2023	Funds for Assistance		
	Provision of loan grants upon completion of the program	ANYO or other loans available	profitability of chosen enterprise/ at least 3 Trade Fairs Participated At least 100 loan releases	2023	Loan Funds		

To ensure sustainability of the of the loan program, the researcher recommends adoption of the previously presented Project Sustainability Plan. Specifically, MOA signing should be done as soon as possible to formalize and forge an iron-clad collaboration between PCC and NRBSL to fully support the marginalized dairy carabao farmers. Capability Training Program on Applied Entrepreneurship must be pursued to improve the entrepreneurial competencies of dairy carabao farmers. Digitization of loan application, processing up to releasing must also be the next priority of the ACPC to improve access and provide convenient service to its clients. Lastly, maximization of social media platforms to improve the reach of the program can be explored to improve the awareness of farmers and fisher folks regarding loan programs that offer zero percent interest.

5.4.3 Strategic Implications of the Project to the Researcher's Organization

The researcher is highly confident that upon the formalization of collaboration between PCC and NRBSL through a MOA, immediate impact on the CBEs of farmers can be observed and the intention to change the mindset of "dole out" government programs could be lessened if not eliminated. This can be done by capacitating the farmers to be entrepreneurs that takes calculated risk such as the ANYO to maximize economic gains.

The APP also provided strategic modalities and good practices such as hands-on processing of documents by NRBSL Managers; endorsement of loan applications from PCC; consolidation of loan applicants through aggregator organizations. These highlights the whole-of-nation approach in governance that could be replicated by other organizations.

5.5 Suggestions for Further Studies

Numerous sub-studies or even deeper studies could be done to bridge the gap between marginalized farmers and fisher folks to credit programs for capitalization. The researcher suggests that for further studies, the following could be considered:

a. Implementation of OKR Tools in Loan Processing through a time and motion study to really understand and demonstrate where are the

processes that serves as bottle neck in the implementation of ANYO;

b. Digitized loan application, processing and release for young farmers;

c. Study on the Effectiveness of Capacity Building Program on Applied Entrepreneurship for Dairy Carabao Farmers with Loan Grants;

d. Impact assessment on the socioeconomic benefits and wellbeing of loan ANYO borrowers; and,

e. More operational researches that has high impact on the lives of marginalized farmers and fisher folks.

5.6 The Leadership Journey

I started my MPM journey one year ago (June 25, 2021), the program was shared to me by Dr. Ericson N. Dela Cruz, my mentor in PCC. While facing the uncertainty of what life may bring due to the drastic changes brought about by the COVID-19 Pandemic I tried to apply and luckily, I got qualified and eventually admitted to the MPM program. At first, I thought I would just need to attend classes online and pass the exams or complete the course requirements to graduate, but I was totally wrong.

Our first subject was the PM-TPI, I was shocked and almost gave up right away due the first course requirement from Dean Lizan that required us to make an article review with an article that contains at least 600 pages published paper and submit it before the next meeting the following week using the APA style, which gave me hard-time in writing. We were asked to submit the paper thru (iGNITE) wherein, it must have the maximum similarities of 24% from internet sources, publications and write-ups from my co-learners.

The course requirement tested my time management skills and it was a failure because I was only able to read the article two (2) days before the submission and with just a day to complete the paper, I ended up submitting it on time but with 61% similarities and I felt nervous and frustrated. Thinking of the words from Dean Lizan "You must always give your 100% in writing your papers to come up with excellent and practical publications in the future that could potentially contribute to the frontier of knowledge in Public Management", I was so frustrated that I started thinking that MPM with DAP is out of my league.

I was just lucky that during the next meetings, cool professors like Doc Ed, Doc and Doc Regi came in and they made the classes lighter and lessons easier to digest. From that time on, I gained back my confidence that I am really part of the batch Madasigon and I belonged.

My groupmates in the first courses Sir JP, Ma'am Jackie and Ma'am Caren gave me extra boost of confidence and endearment that helped me motivate myself to pursue the program. My succeeding courses demanded more attention and focus especially during our PPA classes with Doc Jay due to his comprehensive course requirements and numerous (iGNITE) postings that challenged my intellect and interaction with other co-learners.

My previous classes before the APP 2 improved and challenged my ability to work with another group. The group was composed of Atty. Jane, Ma'am Aimee, Ma'am Mila Joy and Ma'am Joyce who taught me many fundamental skills. They highlighted the pursuit of excellence in every activity for our course requirements that we worked on and I learned and enjoyed the happy pressure spirit a lot.

For my APP, I tried to highlight the importance of grassroots approach in creating and amending public policies. The ANYO Loan Program of the Department of Agriculture – Agricultural Policy Credit Council (DA-ACPC) is a loan with zero percent (0%) interest with term ranging from one to five (1-5) years. "The local dairy carabao farmers in Nueva Ecija dairy farmers has the willingness and ability to pursue entrepreneurship but due to the stringent and bureaucratic process of loan applications, their goals were not achieved and causes disappointment" based on the study of Dela Cruz et al, 2020. Understanding the needs of the farmers for easy access of loan programs such as the ANYO requires the implementing agencies to come up with a Whole-of-Nation Approach in management in order to provide the needs of all the sectors in the economy. The paper also targets to demonstrate the importance of Phronetic Leadership in the organizations that assist their members in loan applications and financial literacy trainings to capacitate their members as good payers of loans and wise investors. My most valuable lessons in the implementation of my APP and as a Public Manager were the following:

A. Time management is the key in ac-

complishing significant task and researches

Having different designations as the Head of two (2) Units, Section Head, Project Leader and National Milk Feeding Program Coordinator has tested my time management and leadership skills. There were times when I must attend four meetings simultaneously during my online Class at DAP, which really challenged me. I started learning on how to mentor and capacitate my subordinates for bigger task and undertakings learning and applying the concept of delegation.

B. I started to learn communicating better with partners especially our clients by listening to their key ideas and interest while aligning what is the interest of the agency and how can I help in bridging these gaps to create a synergy among the key stakeholders. This has proven to be effective especially in setting expectations and predicting what would be the next move of your stakeholders and where their decisions or perceptions are coming from.

C. Understanding the environment you are in and its dynamics is very important in consolidating support and cooperation. There are some cases that you need not to do anything and just wait when you are uncertain with what are the other parties are thinking, planning. It can also be the opposite wherein you know exactly what are they thinking and planning but you know that the consequences of any action are not worth it. Working in the Bureaucracy was proven to be process-based and do not have the end in the mind or not an output-based one. Political oppositions and support is very crucial in operating in the grounds especially when the media wanted to ask your opinions as a Public Manager on pressing issues involving a politician. Choosing the right words, delivery of the message and channels to communicate them is very crucial.

D. Teamwork makes everything easier. My MPM journey would never reach this point without my co-learners' support and my colleagues. There were multiple times that we proposed projects with different LGUs and only few were realized. Through the Department of Agrarian Reform (DAR) as lead, we were able to establish a Village Level Farm-Focused Enterprise Development (VLFED) in Bongabon, Nueva Ecija. PCC together with other agencies such as the Department of Trade and Industry (DTI), Department of

Science and Technology (DOST), Food and Drug Administration (FDA), Cooperative Development Authority (CDA) and the Local Government Unit worked together for the Bongan Dairy Cooperative's success as the lead producer, processor and seller of various carabao based dairy products in their Municipality proves that team work makes the dream work and it was done in just four (4) months during the COVID-19 pandemic.

Currently, I have learned so much through the MPM Program of DAP. The biggest challenge now is on how can I apply this knowledge through practice. My APP would be the best way to demonstrate and apply what have I learned. Struggles in time management is still experienced and prioritization of the tasks needed to be accomplished was planned accordingly, however, intervening tasks in the agency limited the conduct of the paper. The political landscape of the Department of Agriculture is also affecting the pursuit of the conduct of the paper due to the changes on the management came wherein our Executive Director who happened to be my IP retired from government service. With the retirement of Dr. Domingo, I am still planning on what would be the best course of action/s I need to do to catch up with the conduct of my APP. During our last meeting with Doc Nic, he asked every one of us on what is the status of our APPs and everyone was motivated to accomplish and strategized on how to catch up on the delays for the implementation of APPs. His guidance and knowledge shared in the class really fueled our spirits to keep going and fight to reach the goal of MPM.

My accountability partners Ma'am Joyce and Ma'am Aimee helped me improve my paper by reminding me on what do I need to accomplish each week and they provided suggestions and comments on how the paper can be improved. Our Research Division also pledged to provide the necessary manpower support and technical assistance for the completion of the paper.

My MPM journey is full of ups and downs and this diverse experience of achievements and failures made it exciting and worth cherishing. Hopefully, I can graduate this coming November to complete my MPM journey and share the knowledge, experiences and practices I learned from the best leadership academy in the country.

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