

RURAL ECONOMY

**Cooperative and Rural Development: The Case of
Dayap Credit Cooperative and Development Inc., Philippines**

Celeste Lacuna-Richman, D.S. Gill, and E.C. Murray

Project Report 93-09

PROJECT REPORT



Department of Rural Economy
Faculty of Agriculture and Forestry
University of Alberta
Edmonton, Canada

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The authors are respectively, Research Assistant, Professor, and Professor, in the Department of Rural Economy, University of Alberta, Edmonton, Canada.

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Study of Dayap Credit Cooperative and Development, Inc., Philippines

Abstract

The purpose of this study was to understand the organization and operations of a cooperative and examine its contribution to rural development in the Philippines. Quantitative and qualitative data were used in the study. Data analysis showed the socioeconomic characteristics of the cooperative's members. Chi-square and multiple regression analysis revealed that land tenure status was a significant variable in acquiring loans from the cooperative, even if land ownership was not a membership requirement. Regression also showed that land tenure status is a significant factor in achieving leadership positions. Contrary to expectations, respondents with lower tenure status were more inclined to assume leadership roles than respondents with more land, in this cooperative.

The most frequently mentioned reason for joining the cooperative is its function as a source of production loans. However, cooperative members also recognize the other social benefits the cooperative provides, including extension and marketing assistance. The cooperative also serves as a source of capital for cottage-industry projects which non-farming members can access. The respondents suggest several improvements for the cooperative. These include the more efficient processing of loans, raising the maximum loan limit, and higher prices for produce. Despite its limitations, members regard the cooperative as a viable and dependable source of support and services. Members are cognizant of the benefits of belonging to a self-help organization, as opposed to dependence on external aid.

1. Introduction

Philippine economic growth declined considerably in the 1980s, particularly in the period 1980 to 1985, when the gross national product (GNP) averaged a rate of -0.5 percent. Bautista (1990) attributes this decline to the highly unequal distribution of economic benefits. This decline can be observed in the rise of unemployment and underemployment in the country. Inequality in economic benefits, particularly in the rural sector, is seen by Hayami et al., (1987) as a major source of the country's social ills.

Land reform has always been at the forefront of the equalizing programs proposed by the Philippine government. However, it has failed because of legislative problems and the lack of other forms of capital assistance for farming (Thiesenhusen 1987). This capital assistance, which includes credit, marketing facilities, inputs such as water, seed and fertilizer, were once provided by landlords. The terms may have been highly unfair to tenants, but these were open for negotiation. These resources, and not just land ownership, are necessary for former tenants to continue production.

Cooperatives were initiated by the Philippine government to provide credit for land reform beneficiaries. However, these cooperatives did not prove as successful as expected, due to the lack of government support after the initial capitalization, and the apathy of members. The absence of any support for cultivators who did not benefit from land reform, was hardly addressed (Quisumbing, and Adriano, 1987; Hayami et al., 1987; Asian Productivity Organization, 1989). Despite the poor performance record of government cooperatives, cooperatives are still seen as a viable tool for promoting rural development. The needs of farmers remain unfulfilled, and the central government cannot address these needs sufficiently from public resources. Appropriate means, therefore, must be found to make cooperatives more effective. This study addresses itself to this problem.

This is a case study of a Philippine cooperative which has existed for the past twenty years. The study traces the development of the cooperative from a small group of local farmers in Laguna to its current expanded operations and services. The study is based on interviews with members and officials of the cooperative, as well as on records and literature about Philippine cooperatives. Its purpose is to describe and analyze the operations and characteristic features of the Dayap Credit Cooperative and Development, Inc. (DCCDI), which have contributed towards its success.

The study of a cooperative which provides credit and other support services is important in the Philippines because aside from land reform, credit for agricultural production is one of the basics for rural development. Unfortunately, as a Food and Agriculture Organization of the United Nations (FAO, 1964) report observes, governments in developing countries usually require tangible assets before providing loans. In many cases, this tangible asset is land, a resource which is neither widely distributed nor easily transferable. The conditions for obtaining a loan are not within the reach of the majority of farmers who do not own land.

Most small and even medium scale farmers, defined as those who cultivate less than three hectares of land, lacking the ability to obtain credit from formal sources, often resort to borrowing from moneylenders. These moneylenders may not require security when providing loans, but they do charge exorbitant interest rates, trapping farmers in a cycle of debt from which few escape. The production and consumption needs of farmers are so immediate, however, and the paperwork and conditions set by formal lending institutions so complicated, that moneylenders are in little danger of running out of clients. The FAO (1964) suggests that credit services, together with extension and cooperatives (for credit, marketing and farm supplies) would be the best possible contributing factors for rural development.

Objectives:

The objectives of the study were (1) to describe the history and development of the Dayap cooperative; (2) to describe the management and operations of the cooperative; to analyze the socioeconomic characteristics of the cooperative's members, and how these characteristics affect the members' standing and role within the cooperative; (3) to analyze the reasons for the apparent success of the Dayap cooperative, as well as its shortcomings, taking into account the members' perception of the cooperative; and to observe the levels of participation within the cooperative.

There were five hypothesis presented for the apparent success of a multipurpose cooperative such as DCCDI. The first hypothesis focused on membership requirements. It was hypothesized that a cooperative which does not require land ownership for membership is likely to attract farmers to join.

The second hypothesis was that a cooperative that emphasizes meeting payments for loans rather than operating on government handouts is more likely to last.

The third hypothesis was that a cooperative that encourages both financial responsibility in obtaining loans and sharing administrative duties among its members is sustainable.

The fourth hypothesis was that a cooperative that allows access to leadership positions regardless of age, sex, land-owning status or "connections" to traditional sources of power is likely to have more credibility among its members.

The fifth hypothesis was that a cooperative that sets its objectives and operations according to the needs of its community is more likely to grow in membership and functions.

2. Theoretical Perspectives on the Problem

2.1 Rural Development in the Philippines

For rural development to occur, agriculture in the Philippines has to undergo what is known as structural transformation. Johnson and Kilby (1975:3-31) describe the situation of semi-isolated village economies that dot the countryside of nations like the Philippines, some of them just a short distance from the westernized capital city. The social and economic horizons of the inhabitants are limited to kinship networks. The inclusion of these villages in a national and ultimately global economy widens their horizons but, in a sense, it also leaves the village economy wanting for resources for development. The reliance on local resources, whether material or technology, diminishes considerably. Limited self-sufficiency is transformed into interdependence as producers are integrated into a national and international system of markets, information flows and support services. Some of these producers never manage to adjust to the new system.

Baquizal (1991) discusses government expenditure on the Philippine agricultural sector, which comprises 70 percent of the economy. The importance of agriculture notwithstanding, budget allocation for rural development was decreasing at a rate of about four to nine percent yearly from 1979 to the 1980s. This was partly due to policies that stressed the importance of the urban manufacturing industries. Moreover, this shift in government priorities significantly affected rural development including agrarian reform and community development. Public spending on rural development dipped from 301 million pesos in 1977 to 63 million pesos in 1984. Baquizal states that this decrease in fiscal support for agrarian reform and community development has worsened the social unrest in the country that still exists.

2.2 Agrarian Reform and Land Tenure

The importance of agriculture in countries such as the Philippines is reflected by the value placed on land, which is considered not just as an important resource for production, but is representative of a way of life. Galbraith (1977) stresses the direct relationship between the lack of access to land and poverty in agricultural countries. The scarcity and frequently unequitable distribution of land has made land tenure arrangements necessary. Land reform, which Dorner (1972) defines as the restructuring of the rules and procedures regarding land, is so vital to rural development that at different times in history virtually all countries have struggled with the issues posed by it.

Factors other than land also influence farming opportunities. Some of these factors are labour, capital and product markets. The absence of support services makes the benefits of land reform considerably less than it could be. Redistribution of land rights alone achieves only modest benefits. Agrarian reform, which aims to include the provision of support services like farm credit and marketing assistance, helps to increase production. Only through widely shared increased productivity could the quality of life of the agricultural sector and ultimately, the greater population, be improved (Dorner, 1972). The Philippines' experience with land reform is discussed in the context of cooperatives, which will be presented as a means of providing support services to farmers even as problems of land transfer are being resolved by the government.

2.3 Comparative Study of Agricultural Cooperatives

In a comparative study of Japan, Taiwan, Korea and the Philippines, four very different Asian countries, a common observation made by the researchers, Hayami and Ruttan (1985) was that deterioration in the man-land ratio led to an increase in the percentage of agricultural land under irrigation. This also enabled the diffusion of the new seed and fertilizer technology. The increase in production did not necessarily affect arrangements regarding the use of land, or the distribution of benefits from greater yields. Those who did not or could not pay the costs of greater inputs, like irrigation, were further marginalized.

Whether it is the establishment of a new irrigation system, or the formation of a marketing pool for grain, agreement on the decisions that would affect the whole community is needed. The groundwork for such cooperation varies among countries, as Japan and its neighbours would illustrate. Other countries in Southeast Asia, faced with the limitations in land and water resources that Japan did, opened new land for cultivation. Today the necessity for cooperation in these countries lies in the worsening man-land ratio, a situation faced by Japan earlier (Hayami and Ruttan, 1985). Simply, there is less room to expand.

The kinds of cooperative endeavours are almost as varied as their number. However, there are characteristics common to all cooperatives. Primarily, a cooperative is a combination of a social unit and a business enterprise. As such, it must be flexibly organized and yet act efficiently enough to ensure large revenue and small costs (van Dooren, 1982). Various authors categorize cooperatives in different ways, from the task the cooperative is most concerned with, to ties with the government, and according to levels of complexity and size. From the point of view of this study, three of the most common functions of agricultural cooperatives within the Philippines will be described according to their main objectives. Multipurpose cooperatives, such as the Dayap Credit Cooperative and Development, Inc., combine these functions and incorporate other services within their mandate.

The types and number of cooperatives in the Philippines are discussed by Rola (1988). One of the most striking observations in the study is the decrease in number of almost all types of Philippine cooperatives. The number of the government-initiated Samahang Nayan (Village Organization) was reduced from 20,675 in 1980 to 2,382 in 1988. Credit cooperatives numbering 1,469 were almost half of that in 1988. Marketing cooperatives dwindled from 296 in 1980 to 80 in 1988. Only multipurpose cooperatives such as DCCDI increased slightly, from 126 in 1980 to 159 in 1988. These figures illustrate the short life-span of the majority of Philippine cooperatives.

2.3.1 Credit Cooperatives

In a 1965 study of agricultural credit through cooperatives, the FAO observed that there is little spontaneous demand for agricultural credit for long-term purposes, or development. The subsistence nature of most farming in developing countries makes the need for crop loans, or short-term loans the most dominant, as it is the most urgent. The main purpose of such a loan is to enable the farmer to buy inputs for his crop, whether the crop happens to be for

food or for cash. These inputs may include anything from seed to hiring labourers. However, there are also non-agricultural uses of the loan. Due to the difficulty of their circumstances, most farmers availing of short-term credit tend to use the money for household, ceremonial, or personal purposes.

The need for credit, especially for consumption purposes, cannot be avoided in a subsistence economy. The FAO paper suggested that this fact be accepted by credit institutions instead of persisting in the well-meaning but naive belief that agricultural credit should only go to crop production. For example, a cooperative bank in India which allows 30 to 40 percent of a loan to be used for consumption and 60 to 70 percent for production purposes takes a more realistic view of the matter.

A number of factors differentiate agricultural credit administration from other forms of banking. To succeed, agricultural credit requires effective planning, an adequate rural infrastructure, a system for stabilizing fluctuations in agricultural prices, proper land tenure, marketing and supply arrangements, a well-organized extension service and continuity in government policies (FAO, 1964). The difficulty lies in ensuring that all of these conditions must be fulfilled before credit is provided. The FAO suggests simultaneous implementation of the credit project after a thorough investigation of the minimum requirements of the other factors.

Several authors have written on the provision of agricultural credit and other services through cooperatives in the Philippines. Among these is Abada (1984) who wrote on the benefits and limitations of crop insurance in the Philippines. The same topic is also discussed by Muyco (1987) who concentrates on the operationalization of the crop insurance program of the government, as well as its ties with the supervised credit program. The Technical Board for Agricultural Credit (TBAC), 1987 discusses the Integrated Rural Financing (IRF) scheme launched by the government in 1983. With the Ministry of Agriculture and Food (MAF) as lead agency and the Central Bank of the Philippines (CBX) as the conduit for funds, credit is provided to farmers through organizations such as cooperatives. The transformation of farmers from recipients of subsidized credit to holders of savings is one of the main objectives of this program.

A general perspective on the farm situation in Asia is given by Agabin (1984). She outlines the advantages of institutionalized credit, such as that provided by agricultural cooperatives and other sources. An interesting discussion on the shift in credit patterns is also presented. Although more institutional credit is available to the farmer now than in the 1970s, it is also more difficult for small farmers to access this credit (Agabin, 1964). Defaults on loans in the 1970s, when Philippine rural banks first made institutionalized credit available to the small farm sector, made these farmers ineligible for credit. The majority of these farmers have gone back to borrowing from informal sources of credit. Cooperatives are presently being considered as more practical conduits of institutionalized production loans.

Magpale (1984) discusses high-risk, non-collateralized loans, credit for natural calamities, crop insurance for natural and market risks, and the demand for credit. He also traces the role of the rural banks, the Development Bank of the Philippines, and the Philippine Land Bank in providing credit to the Filipino farmer. These institutions are the most concerned with funding farm-organizations and credit cooperatives.

On the topic of agricultural credit in the Philippines, a seminar paper of the German Foundation for International Development (GFID, 1980) discusses crop insurance, alternative credit allocation policies, and low interest rates for poor farmers. In the interviews with the cooperative's members, these topics were some of the most frequently mentioned areas of concern.

Finally, a word from a small farmer himself. Dimagiba (1984), a leaseholder from the Philippine province of Nueva Ecija, presented his point of view of a farmer's credit needs in an Asian Productivity Organization (APO) seminar. Among his recommendations were a lessening of the red tape that accompanies loan applications, providing loan supports and marketing at the village level, and improving the credit delivery system, so that suppliers of farm inputs will not get the greater part of the benefits for farm credit. These are some of the issues that cooperatives, specifically, multipurpose cooperatives, address. Far from being an isolated component of rural development, credit is incorporated with all the other aspects of agricultural production.

2.3.2 Marketing Cooperatives

Van Dooren (1982) identifies the major objective of a marketing cooperative as bringing together the relatively small amounts of produce of individual farmers to sell them to the public at the best obtainable price. The competitive pricing of cooperative produce with that of other producers is the most vital factor in determining the success of the cooperative. Marketing cooperatives are particularly useful in the sale of cash crops, where large producers have a distinct advantage over small farmers. A marketing cooperative can provide services to the small farmer which could include any or all of the following: channelling the goods to the consumer, wholesaler or exporter; grading the quality of the produce; processing; transport and storage; and the manufacture of related goods, e.g., cheese processing in a dairy cooperative. These services could perhaps be provided by the small farmers for themselves, but at a considerably greater cost than it would take a marketing cooperative.

In the Philippines, marketing farm produce is the concern of two government agencies, the National Food Authority (NFA) and the Food Terminal Inc. (FTI). The NFA is authorized to register, license and supervise parties engaged in marketing. The FTI is a market complex for producers and wholesalers (Calayag, 1989).

Aside from the NFA and the FTI, the organizations involved in marketing agricultural produce in the Philippines, are farmers' associations known as Area Marketing Cooperatives (AMCs). These are composed of about 10 Samahang Nayan(s) (SNs) which are in turn composed of at least 15 farmers each. The SNs and the AMCs are cooperatives formed by the government to work with its land reform program. Although the AMCs were expected to handle large proportions of produce for marketing, it has been charged with inefficiency by a number of members. Because of this, marketing still remains largely within the hands of private traders and middlemen (Calayag, 1989).

The NFA, in collaboration with the Japan International Cooperative Assistance (JICA) has a programme designed to help farmer organizations strengthen their marketing capabilities. The terms are specified by Rotor (1989), and include such items as payment on a soft loan basis, no interest or price escalation clause on the use of processing equipment (although the NFA owns the equipment until fully paid for by the cooperative), training in technical and marketing aspects of the facilities granted, and the registration of the farmers' organization with the Bureau of Agricultural Cooperatives Development (BACOD) or the Securities and Exchange Commission (SEC) for at least two years.

Rotor's (1989) discussion of the marketing system within the Philippines also includes a situational survey of post-harvest facilities of cooperatives. Among the most salient points are: that rice is the main crop of 88 percent of these farmers' organizations, 70 percent are engaged in group marketing, farmers' organizations are active in almost all stages of production, and high interest loans is the most common problem. Rotor's study also revealed that most farmers' organizations would like to have training in the cooperative and entrepreneurial development, postharvest technology and marketing.

2.3.3 Production Cooperatives

A production cooperative may be the most all inclusive type of cooperative. This is because even the resources for growing the crop, including labour, are pulled together. Credit, supply and marketing are often included in the services provided to members, but at a considerable loss of entrepreneurial freedom. Galeski (1975) distinguishes collective farms into those created by ideology, and which put higher value on non-economic goals; those created by landless families; those organized by governments as a matter of state policy; and those organized by farmers who want to get the advantage of larger operation.

This classification of cooperative farming is ideal, however. In reality, cooperative farms of all types or a combination of types could be observed in a single country, sometimes in the same organization. The Dayap Credit Cooperative and Development, Inc., has some aspects of a production cooperative in its operations as a multipurpose cooperative.

2.3.4 Multipurpose Cooperatives

A multipurpose cooperative is one that tries to offer a varied assortment of services to its members, in lieu of having separate cooperatives for specific activities. Van Dooren (1982) discusses the advantages and disadvantages of having a multipurpose cooperative instead of a cooperative that concentrates on a single purpose. Among the

advantages of a multipurpose cooperative mentioned are comprehensive, year-round service to its members, the avoidance of underemployment of cooperative employees, better over-all insight into the economic situation of the member, and closer contact between members. The disadvantages of a multipurpose cooperative lie in the complexity of its accounting system, the difficulty of finding a competent manager, and the risks of confusing its functions, e.g., credit with marketing payments. According to van Dooren, the greatest risk of all is a conflict of interest between members who avail themselves of the various services within the cooperative. Although the ultimate decision on a cooperative's functions belongs to its members, van Dooren suggests that as far as operational costs are concerned, a multipurpose cooperative is cheaper to maintain than several single-purpose cooperatives.

3. The Study Area and Methods of Research

3.1 The Study Area

The area of study includes the six municipalities served by the Dayap Credit Cooperative and Development, Inc. (DCCDI). These towns are Calauan, Nagcarlan, Victoria, Pila, Sta. Cruz and Bay. The cooperative office is located in Dayap, a barangay (village) within Calauan, in the Laguna province. Laguna province, in the Southern Tagalog region, is one of the Philippines' major rice producing areas. The study was based on Calauan, Dayap in particular, where the DCCDI office, rice granaries and sari-sari (general) store are located. It is the center of operations of the cooperative. The study included observation of the day-to-day activities within the cooperative's office that were considered important. One of these activities was the procedure for loan application of the members. Another activity, was the election of the cooperative's Board of Directors. The survey itself, however, was conducted both within the DCCDI's office and in the homes and farms of the cooperative's members.

The DCCDI was selected for the study on the recommendation of the Land Bank of the Philippines (LBP). Although Laguna is not typical of most Philippine provinces due to its relatively high agricultural productivity (Smith and Gascon, 1979) and the presence of the University of the Philippines at Los Banos (UPLB) and the International Rice Research Institute (IRRI) within its boundaries, the DCCDI was still considered a cooperative worth examining. It may have greater access to agricultural research from UPLB and IRRI than other areas, but the DCCDI is self-organized.

Land reform is another aspect of rural life in which Laguna could be considered more progressive than other Philippine provinces. By 1978, 68% of Laguna's farmers had become leaseholders instead of share tenants. This decline in the institution of landlord-tenant agriculture may be the impetus for more advanced farming systems in the area (Smith and Gascon, 1979). With freedom from tenure insecurity, farmers have branched out into growing produce that could benefit them in the long run. Leaseholders can grow crops other than rice. Multiple cropping, a condition which the sharecropping arrangements makes almost impossible, is practiced. The status of land reform in Laguna can also be gleaned from the farm sizes. Large estates are not as pervasive as in other parts of the country.

A study on changes in rice harvesting systems in Central Luzon and Laguna (Kikuchi et al., 1979), illustrates that even in its regressive aspects, agriculture in Laguna is more socially beneficial than in other areas. The 'hunusan', and its variation, the 'gama', are the main harvesting systems within the area. The 'hunusan' uses the hand-beating method for threshing and requires an output-sharing contract. It is more labour intensive than the use of the mechanical thresher. It also promotes greater interaction between the small farmers and the landless labourers. In 'gama', the farmer contracts the landless labourer to help with the weeding which is tied in with harvesting rights. Gama provides a certain form of insurance, since a landless laborer who agrees to help with the weeding is assured of being allowed a share of the harvest. Since most leaseholders till their own land and live within the village where landless labourers also live, maintaining more equitable social relations is necessary. Thus, the social interaction of communal harvesting is favoured over the technical efficiency of a mechanical thresher.

Calauan is located about 5 km. south of the University of the Philippines at Los Banos. It is predominantly a rice-producing area, except for the occasional coconut grove. Most of the land stretching from UPLB to the Calauan town proper are used as experimental plots by IRRI and agribusiness companies. Calauan itself is nestled at the foot of a mountain to which it lends its name, although the cultivated areas are flatlands. Dayap, 1 km. from the town proper, is mostly a rice-growing area.

Like the rest of the Philippines, Laguna has two seasons. The dry season is from October to May, and the wet season from June to September. For most farmers who practice multiple cropping, or who grow two crops of rice within the year, the first crop is usually planted in April or May and harvested in mid-July to August. This is also the period when transplanting of the second crop occurs. The rice fields in Calauan are completely irrigated. Farmers plant modern high yielding varieties (HYVs) from IRRI and UPLB's College of Agriculture.

3.2 Dayap Credit Cooperative and Development, Inc.

Dayap Credit Cooperative and Development, Inc., was established in 1972, with only 53 members. These original members were all resident farmers in Laguna, who with technical advice from the Philippine Rural Reconstruction Movement (PRRM), formed a credit union. From these beginnings, the DCCDI has increased both its functions and the number of its members. As mentioned earlier, six municipalities, both within and in the surrounding areas of Calauan, are served by the cooperative.

At present, the DCCDI lists among its services: credit, production loans, rice milling, rice trading, food loans, garment sewing, drug and sari-sari (general) store, emergency loan, and providential loan. The services offered are concentrated in Dayap, where members from other areas go for most transactions. Hauling and transporting produce for marketing purposes often require different arrangements. Because of the lack of transport, most members of the cooperative request for "pick-up" of the newly-harvested crop. Processing, grading, and storage of rice are done at the cooperative's headquarters.

The Dayap cooperative was admittedly, chosen for the study by the researcher because of its "model" aspect. As mentioned earlier, this could be due to its ideal location in Laguna. However, it could also be due to social rather than economic factors which is the focus of this study. Not all cooperatives in Laguna are doing better than or as well as the DCCDI. This in itself makes it an object of interest.

3.3 Selection of the Sample

Choosing the respondents for the survey was facilitated by several factors. The first of these was a list compiled by the DCCDI's employees which was made available to the researcher. The list included the names of the members, the area where they farm and their home addresses, and the size of their landholdings of the sample. From this list, members were grouped according to where they come from, and then, by simple random sampling, the respondents for the survey were chosen. The second factor that facilitated the survey was the proximity of the respondents to each other. Farm houses in Laguna are situated quite closely to each other, except in a few cases wherein the farmer's house is isolated by the surrounding fields. In the areas covered by the survey, however, it was not difficult to walk a few meters to where the next respondent lives. The third factor that helped in the data collection was the DCCDI office itself. Some of the respondents were scheduled to pay their loans and/or to apply for new loans on a particular day. It became a matter of convenience for the researcher to interview the respondent on that day, before or after business with a loan officer was done.

Simple random sampling was chosen to give all the members of the cooperative a reasonable chance of being included in the survey. One hundred respondents were chosen from 2,086 members (as of February 1992, Dayap Credit Cooperative and Development Annual Report, 1992). According to the cooperative's manager, DCCDI is planning to limit the number of new members, in order to provide their existing members with more personalized and efficient service. Over-expansion is guarded against by encouraging new applicants from more distant areas, to joint cooperatives closer to their residences.

The respondents chosen were all listed in DCCDI's roster of members. Presumably they are the heads of their respective households, as they are in charge of the household finances. Although all the respondents are from rural households, not all of them are farmers. Some are beneficiaries of production loans for animal husbandry or cottage industries. As far as the study is concerned, all members of DCCDI were considered as potential respondents regardless of their status or role within the cooperative.

3.4 Field Data Collection

The greater part of the study relies on direct information from members and officers of the cooperative. For this reason, the personal interview was the main data collection strategy. A number of questions in the interview schedule were open-ended to allow the respondents to express their full opinions. The face-to-face interview also allowed the researcher to detect nuances in replies and if necessary, probe for more informative answers. The interview, as a method, allows this probing to be done immediately, with a minimum of misleading information due to questions being misunderstood. By the same token, the respondent can also request the interviewer to clarify the questions so the appropriate answer can be given.

The interview schedule was in Tagalog, the local dialect, and was formulated in consultation with two local farmers and the cooperative manager for proper wording, content and format. The interview schedule was divided into five sections. The first section is concerned with the socioeconomic profile of the respondent, including tenurial status. The second deals with land use, while the third is on labour needs. The fourth section deals with the respondent's income and expenses. Finally, the fifth section is on services, both those provided by the cooperative to the respondent, as well as those volunteered by the respondent to the cooperative. The questions were formulated to adhere closely to the study objectives.

The literature on and records of the cooperative were also a source of data. The cooperative keeps records of its transactions and other material pertaining to its operations. The officers and members of the DCCDI were accommodating enough to allow the researcher a look through these materials, thus enabling her access to some information which would otherwise be unavailable. This material is an important part of the analysis of the cooperative.

3.5 Analysis Procedures

The first four sections of the interview schedule had mostly structured questions. The answers of the respondents were expected to fall within set categories. These categories were set based on past research and information from the employees of the cooperative concerning some common characteristics of the cooperative members. The open-ended questions elicited more varied responses. The answers for open-ended questions were categorized according to similarities and key words, and were subsequently assigned specific numbers. These numerical codes were assigned to facilitate the transfer of data to the computer.

Analysis of the data was done using the "SPSSx" statistical package. The first part of the analysis, on the socioeconomic characteristics of the respondents, used frequency counts, percentages and means. The second part used chi-square and multiple regression analyses to test the hypotheses. The degree of relationships among the variables was tested at the significance level of 0.05.

4. Findings

4.1 Socioeconomic Profile of Respondents

1. The Dayap Credit Cooperative and Development, Inc. (DCCDI) is a multipurpose cooperative. As such, its operations are not entirely geared towards agricultural production. Nevertheless, most of its members are involved in agriculture. A small percentage of the respondents earn their living in other ways, while many are farmers and maintain an off-farm occupation simultaneously.

DCCDI's members range from 21 to 90 years old, could be male or female, may have reached any educational level from grade school to a university degree, and could have other sources of income apart from farming. The sociological characteristics of the cooperative members are widely divergent. However, the average member is 46 years old, has finished grade school, lives by farming, and leases the land tilled.

The 100 respondents of this survey were either the household heads, or the family members in charge of household finances. All the respondents were registered members of the DCCDI. Of these, 62 percent were male and 38 percent were female. These figures illustrate that the female population is not necessarily ignored. However, in the list of members with loans from the cooperative in 1991, 268 were male while only 147 were female. This may be partly

explained by the traditional status of men as the titular head of the family, but it does not imply the noninvolvement of women. As one of the conditions of membership, an applicant of either sex must have the consent of his/her spouse before applying for a loan.

2. Seventy-eight percent of the respondents grow rice. Other crops are coconut, pineapple, and lanzones. Several have livestock and poultry projects. The most common animals raised are ducks and pigs. The livestock component of the cooperative is considered important by the respondents because it provides an alternative for members who do not have access to land for growing crops. These livestock and poultry projects are mostly on a cottage-industry level, which requires not much more than backyard space.

The inclusion of farmers who grow produce other than rice is also significant despite their relatively small proportion among the respondents. Hayami et al., (1987) discuss the policies of the government in excluding lands producing plantation crops from the land reform program. The government believes that scale economies do not allow optimal yields from small parcels of plantation crops. However, a reconnaissance survey conducted by Hayami and his colleagues shows that scale economies do not exist in tree crops such as coconut, rubber, coffee or cacao. There was no significant difference in yield between small and big farms given similar inputs. Thus, the cooperative could be considered progressive in providing production loans to farmers growing tree crops on a small scale.

3. Eighty-six percent of the respondents have some access to land for farming. Seventy-three percent are leaseholders, five percent are share-tenants and eight percent are owner-operators. The average size of a landholding is 1.64 hectares.

The percentage of cooperative members who have access to land shows that despite the cooperative's efforts to provide services to all types of farmers, those who have some security of tenure still have an advantage. However, the minimal size of the respondents' landholdings attests to the cooperative's objectives of providing services to small farmers.

4. The majority of respondents hire extra labour for farming operations, the most costly of which is land preparation. Payment for most farm work is in cash, except for harvesting, which is paid for with approximately 7 to 10 percent of the harvest. The gama system is widely practised. In this arrangement, the landless labourer is given harvesting rights with the understanding that weeding would be done by the labourer, sometimes free of charge.

Smith and Gascon (1979) discuss the extensive use of hired labour in Laguna, due mainly to the introduction of new rice technologies, e.g., high-input, high-yielding varieties. This increase in labour requirements has the result of increasing farming jobs within the area (Kikuchi et al., 1979) as it stresses the need for agricultural credit to pay for hired labour (Hayami et al., 1987). The results of this study confirm the literature available on agriculture in the Laguna area, and stresses the importance of providing services such as credit to small farmers regardless of their tenurial status. The data on labour expenditure shows that in many cases, land is not the most important factor. Hired labour is important for successful farming in this area.

5. Capital for farming is mostly supplied by the cooperative. Only two percent reported going to the landlord, the traditional source of capital, for loans.

The Technical Board of Agricultural Credit (TBAC) reports that in the 1950s, informal sources of credit such as landlords and moneylenders supplied about 80 percent of credit to farmers. The increase in government financing programs in the 1970s decreased credit from informal sources to about 30 percent, but in the late 1970s, this figure increased due to the reluctance of rural banks to lend for agricultural purposes. The TBAC also discovered that despite expansion in agricultural credit, there was a lack of agrarian reform beneficiaries, viable projects, and rural credit outlets. In spite of often usurious interest rates in borrowing from informal sources, farmers were more concerned with the availability rather than the cost of loans (TBAC, 1980).

The percentage of respondents who borrow from the cooperative rather than informal sources shows that in some respects, credit at reasonable rates, for production purposes, is now available to small farmers. A pervasive aspect of borrowing from informal sources is the patronage it entails. This dependency on the source of the loan is counterproductive to self-reliance, which is essential to rural development. The availability of credit from the cooperative increases self-reliance, as there is a common fund from which to borrow, and towards which the cooperative member contributes.

4.2 Factors that Affect Access to Loans and Leadership Positions

Statistical analysis enabled the researchers to determine the validity of the hypotheses. To determine the factors that affect access to loans and leadership positions, chi-square and regression analyses were used. Chi-square analysis shows whether there is a relationship between dependent and independent variables. It is limited by its inability to determine the type and strength of the relationship between these variables. For this reason, multiple regression is used for these variables to provide a more comprehensive analysis of the data.

In log-linear analysis, the value of the likelihood of chi-statistic decreases when other variables are included in the model. However, this makes the model more realistic, since it allows for other explanations to be considered. Table 1 and 2 present chi-square values on selected independent and dependent variables chosen for their relationship to the hypotheses. Table 1 sets the dependent variable against the independent variables as a whole. Table 2 presents a two by two column table of the relationship between dependent and independent variables.

The first hypothesis states that the cooperative which does not require land ownership is likely to attract more farmers to join. As of 1991, 423 new members swelled the membership list of DCCDI to 2,086 (DCCDI Annual Report, 1992:22), showing the accessibility of the cooperative. Whether these figures support the first hypothesis was examined earlier in a frequency count of tenure types of the respondents. In Table 1, tenure was found to be significant at 0.01, in obtaining financial support from the cooperative. Similar results were obtained from the 2 by 2 table (Table 2).

The second hypothesis states that the cooperative that emphasizes meeting payments for loans rather than operating on government handouts is likely to last. The DCCDI has existed for nearly twenty years, and is growing in membership as well as resources. It is partly affiliated with the government, although it receives loans and not handouts. To test the second hypothesis, 'cash contributed by' the members of the cooperative was chosen as an independent variable to the dependent variables of 'farming financed by the cooperative' and 'no personal contribution to the cooperative'. In both cases, the dependent variables were found to have no significant relationship to the independent variable. This does not necessarily mean that the hypothesis is not acceptable. The lack of significance of the cash contribution may not matter, although the act of payment might still do.

The third hypothesis states that the cooperative that encourages both financial responsibility in obtaining loans and sharing administrative duties among its members is sustainable. The sustainability of DCCDI is regarded as a given, based on its twenty-year record of local self-management. The dependent variables is 'farming financed by the cooperative', because it is the most observable measure of the cooperative functioning according to its aims. The independent variables include sex, age, tenure, education, cooperative assistance, role in the cooperative, and cash contribution to the cooperative. Of these, 'tenure' and 'role in the cooperative' were found to be significant.

Tenure was also the single significant factor in the fourth hypothesis, which deals with the issue of leadership. It states that the cooperative that allows access to leadership positions regardless of age, gender, land-owning status or connections to traditional sources of power is likely to have credibility among its members.

Tenure was not expected to matter in the role within the cooperative as much as it was thought to in 'farming financed by the cooperative'. The reason for this is that once an individual has successfully taken a loan from the DCCDI, and automatically becomes a member, leadership roles could be just as attainable. The results of the chi-square analysis in the larger table shows this to be partly true. Tenure is not a significant factor in the respondent's role within the cooperative. To check this result however, tenure was used as an independent variable to the dependent variable of 'no personal contribution to the cooperative' in the 2 by 2 tables. This was done to find if respondents who considered themselves as having no personal contribution to the cooperative were affected at all by their tenurial status. It was theorized that a member who might be having difficulties due to insecurity of this tenure status would be unable to contribute much to the cooperative as a member, much less an official. However, tenure is significant at the 0.05 level.

Logistic regression can be used to predict a binary dependent variable from a set of independent variables. For this reason, it was chosen as the statistical tool to find the strength and nature of the relationship between selected independent variables and two dependent variables.

Table 1
Relationship Between the Dependent Variables and Selected Independent Variables (Larger Tables)

Item	Farming Financed by the Cooperative		Role in the Cooperative	
	Chi. Sq.	Sig.	Chi Sq.	Sig.
Sex	0.2634	0.6078	1.6553	0.6841
Age	40.5156	0.4919	38.3963	0.5868
Tenure	18.2470	*0.0026	7.8189	0.1665
Education	1.2840	0.8641	1.3122	0.8594
Coop Assistance	0.8410	0.3591	0.6572	0.4175

* Significant at 0.01.

Table 2
Relationship Between the Dependent Variables and Selected Independent Variables (2 By 2 Tables)

Item	Farming Financed by the Cooperative		No Personal Contribution to the Cooperative	
	Chi. Sq.	Sig.	Chi Sq.	Sig.
Role in Cooperative	9.362	*0.0092	4.2164	0.01215
Cash Contribution to Cooperative	25.505	0.3248	33.2750	0.0764
Tenure	18.2747	*0.0026	11.1930	**0.0477
Education	1.2840	0.8640	3.0661	0.5468
Coop Assistance	0.8410	0.3591	5.6690	*0.0175

* Significant at 0.01

** Significant at 0.05

In Table 4, there were positive and negative slope values, but all except tenure were zero, and therefore not excluded in the situation. It reinforces the results of the chi-square analysis, in that age, education and cooperative assistance to non-farmers had no effect on the respondents' role in the cooperative. The lack of significance of these factors could show that DCCDI allows all its members to affect its policies and run its operations. Tenure, on the other hand, has a negative but significant relationship with role in the cooperative. The regression shows that as tenure security increases, from landless labourer to owner-operator, role within the cooperative decreases. The relationship between tenure and role in the cooperative is significant at 0.01 level, but at a low R^2 level of 0.06, it is nevertheless a real relationship. Only six percent of the respondents' role in the cooperative may be explained by tenure, leaving 94 percent unexplained. Tenure's effect may be due to the time available for deeper involvement with cooperative business of those with lower tenurial status. An alternative explanation given is that people who own their land do not need to get involved with the cooperative.

Table 3
Regression Results of Role in the Cooperative on Selected Independent Variables

Variables	Slope (B)	Beta	Sig T.	R ²
Age	0.1037	0.0000	0.7475	0.0000
Tenure	-0.6397	0.5274	*0.0089	-0.2392
Education	1.2607	0.0000	0.2615	0.0000
Coop Assistance	0.2630	0.0000	0.6081	0.0000

* Significant at 0.01

Table 4
Regression Results of Farming Financed by the Cooperative on Selected Independent Variables

Variables	Slope (B)	Beta	Sig T.	R ²
Age	0.5743	0.0000	0.4485	0.0000
Tenure	0.5501	1.7334	0.0162	0.1918
Education	0.1705	0.0000	0.6797	0.0000
Coop Assistance	1.5180	0.0000	0.2179	0.0000
Role in Cooperative	-1.4899	0.2254	*.1222	-0.2041

* Significant at 0.01

Table 4 presents the regression analysis done between 'farming financed by the cooperative' and the independent variables of age, tenure, education, cooperative assistance to non-farmers, and role in the cooperative. Of the five independent variables, two had significant relationships with the dependent variable. Tenure, with a positive beta slope, was significant at the 0.01 level. This means that an increase in tenure security corresponds to an increase in the possibilities of having farming financed by the cooperative. Unlike tenure, role in the cooperative has a negative slope, implying that less possibility of holding roles of responsibility within the cooperative corresponds to an increase in the chances of having farming financed by the cooperative. Role in the cooperative is significant at 0.01 level. Combined with tenure, it still leaves 92 percent of the variance in farming financed by the cooperative unexplained.

The results of the regression analysis done on the dependent variables have led to results which have been thought possible, but were not completely unexpected. First, it is surprising that statistically, a decrease in tenure stability actually increases the chances of holding a leadership role within the cooperative. This result more than strengthens the acceptance of the fourth hypothesis, it goes a little further. Tenure does affect the respondents' role in the cooperative, but not in the way it was expected to.

Secondly, although tenure was observed to affect farming being financed by the cooperative as expected, the member's role in the cooperative did not significantly affect whether a loan was obtained or not. An increase in 'role within the cooperative', and by implication, influence, lessens the possibility of farming financed by the cooperative. The cooperative's leaders have the benefit of directing the operations and allocating the funds of the organization. Whether the results show that there is less time for farming once roles of responsibility are taken, or that there is a

stringent check against "influence-peddling" within the cooperative, is still open to question. Another suggested explanation is that those who have their farming financed by the cooperative may not necessarily have the skills involved in handling role of responsibility within the cooperative. To summarize:

1. Tenure is still an important aspect of cooperative membership. Although land ownership is not a requirement for membership, tenurial status is a significant factor in securing production loans. This finding suggests that the DCCDI's accessibility as a source of loans for agricultural production is still limited by the land factor. However, since the DCCDI is also a multipurpose cooperative, to some extent it supports members who do not have land, by other income-generating projects (e.g., garments manufacturing) and other forms of aid (e.g., food loans).

2. Tenure also figures prominently in the respondent's role in the cooperative. However, results of the regression analysis showed that the relationship between the two variables was not as expected. A decrease in tenure stability corresponds with an increase in the possibility of a leadership role within the cooperative. It could be said that aside from tenure, DCCDI is quite democratic both in accessibility to loan applicants, and in choosing its leaders. The other variables that were considered in determining the respondent's role within the cooperative, such as age, sex, education, the amount of cash contributed to the cooperative, did not affect the respondent's role within the cooperative significantly.

3. Although tenure is a significant factor in applying for production loans, the DCCDI has issued a directive that a farmer who cultivates land that is not necessarily owned can deposit one cavan (50 kilos) of rice for every hectare planted, every harvest, in lieu of having land as a form of collateral.

4.3 Respondents' Views About the Cooperative

1. The majority of respondents joined the cooperative because it provides production loans. However, the cooperative means more than a source of credit to other members. For those without access to land, DCCDI has become a source of capital to be used in such projects such as animal husbandry, or establishing a small general store. Additional services such as agricultural extension and training in livelihood skills were widely requested.

2. Common complaints against the cooperative include the slow processing of loans and crop insurance claims, the occasionally inadequate loan limit, and low prices for produce marketed through the cooperative. Some members offered suggestions on how to avoid encountering some of these problems. Training in marketing to enable the farmer to sell his produce at a more competitive price was one of the most common suggestions.

3. The majority of respondents believe that they have valid contributions to the cooperative. Paying loans promptly, thus increasing the cooperative's capital, is seen as a contributing factor to the cooperative's success. Attending meetings and giving suggestions for improvement is regarded as evidence of participation within the cooperative. For a small percentage of the respondents, serving as an official is their way of showing involvement with DCCDI.

4. Among the most frequently mentioned areas of improvement for the DCCDI are greater efficiency from the employees in processing the loans, and prompt payment of loans and more cooperation among the members.

5. In 1992, the DCCDI will be placed under the New Local Government Code, wherein many of the functions of national government will be transferred to local government (DCCDI Balita, 1992). Included in the code is the provision that private organizations will be included in local government. The draft of the provision states that:

Upon completion of the accreditation process, the local government operations officer assigned to the LGU (Local Government Unit), shall, within 15 days, call accredited NGOs/POs to a meeting where these organizations shall choose among themselves their representatives in the various special bodies. The selected POs/NGOs shall then designate their principal and alternate representatives who are residents of the LGU. In no case shall an organization be a member of more than one local special body within a province, city or municipality (draft, Local Government Code of 1991).

Although there is supposedly a greater role for cooperatives in the local government, the manager of the cooperative is of the opinion that it is not necessarily a welcome change. The inclusion of farmers' cooperatives such as DCCDI in local government may lead to the cooperative's shift in focus from economic and consequently, social development, to the endless circles of Philippine politics. Interviews with some of the staff members revealed a similar

distaste for the possible involvement of cooperative funds if management becomes linked with patron-politics. Other cooperative members were either indifferent or ignorant of this development, as the code was still in draft form and not yet implemented.

5. Implications and Recommendations

5.1 Loan Processing and Crop Insurance

A number of respondents reported receiving prompt service, yet one of the most common complaints against the cooperative was the length of time it takes to have a loan application processed, or to claim crop insurance when it is due. Although speed in processing loan applications depends largely on the cooperative employees, approving the loans is largely the concern of management. Closer coordination between the loan clerk and the borrower is possible if the time allocated for processing the loans is agreed upon and followed by both parties. The absence of telephone services in the villages covered by the cooperative and in the cooperative office itself makes a commonly agreed upon processing period necessary because members have to go to the cooperative office to follow up their loans. This means time away from the farms and other possible income-generating activities. On the part of the employees, a set period will reduce the difficulties of repeatedly explaining why the loan application is not processed yet.

Approving the loans can be done more quickly and accurately if management mobilizes its personnel such that an inspection of the hectarage or facilities for the project are investigated as soon as the loan application is received. This could be done either by increasing the number of cooperative employees who could do the inspection, or by increasing the duties and compensation of the existing employees. Approval or rejection of the loan application can thus be decided on immediately. In this way, the applicant can either find other sources for the loan outside the cooperative, or apply for other types of loans the cooperative makes available to its members.

The problem of crop insurance claims is more difficult for the cooperative to remedy, because crop insurance is not completely within their mandate. The farmer who applies for membership to the cooperative must have crop insurance, which is released by the Philippine Crop Insurance Corporation (PCIC), a government office. However, claiming it when the need arises is done through the cooperative. Complaints about the tardiness of the crop insurance claims is thus received by cooperative employees, even as the funds are held by the PCIC. While the delay is occurring, the farmer has to forego the necessary production and consumption expenses, or go into debt. The solution of this problem is largely the government's responsibility. It is recommended that the crop insurance office concern itself with a problem that is within its mandate to solve. Another alternative is for the crop insurance office to allow the DCCDI complete control of all crop insurance claims, including keeping the funds for this purpose.

5.2 Training and Extension

The DCCDI provides training in the form of seminars on financial management and loan application procedures to its prospective members. It also visits farms to determine the situation of the farmer, and how the loan is best disbursed. However, the respondents would like to see more training and extension programs offered by the cooperative, on areas such as better farming techniques and livelihood programs. Respondents have said that since the cooperative gives them the opportunity to borrow money for capital, the most logical progression is to provide assistance in making the most from this capital. A study cited by Quisumbing and Adriano (1987) on past land reform programs of the government showed no significant differences among tenure groups as far as rice production is concerned. Farm practices, farm inputs and irrigation were found to be significant factors in increased farm production. The respondents are therefore quite accurate in assessing their needs for improving their livelihood.

Recommendations for more training and extension within the cooperative are probably in order, but observation of the cooperative's staff limitations does not make this feasible. Staff expansion can be done at the expense of the cooperative members. Resources which might be better spent for loans will have to pay for the salaries of additional staff. A more realistic recommendation is to coordinate with the Philippine Ministry of Agriculture, specifically, the Bureau of Agricultural Extension, and have local extension workers give training sessions within the cooperative. This could also be done with resource speakers on cottage industries. Attendance could be in conjunction with loan application, or be completely voluntary. Visits to individual farms could also be arranged through the cooperative.

5.3 Insufficient Loans

Problems regarding the maximum amount for production loans and prices paid for produce marketed through the cooperative is not so easily solved as those which require greater coordination within the cooperative. The Land Bank of the Philippines has recently increased the loan limit to 8000 pesos per hectare, and the DCCDI is in the process of passing on this increase to its members, who could previously borrow only 6000 pesos per hectare. Still, higher production expenses and unforeseen calamities such as typhoons often makes this amount insufficient.

5.4 Prices for Produce

Low returns on products marketed through the cooperative is a common complaint, such that the request for training in marketing the produce personally is often suggested by the respondents. One of the limitations of a marketing cooperative, or a cooperative with marketing as one of its functions, is described by van Dooren (1982). A marketing cooperative cannot always buy large quantities of its members' produce and sell it when the demand is high. Thus, the cooperative member often has to be content with lower prices, or wait longer for payment. Yet, a cooperative still remains the best outlet for the produce of a small farmer, who has even less chances of affecting the market than a cooperative, just as a cooperative can adjust to price fluctuations less efficiently than large producers.

The data collected from this study suggest that funds within the cooperative should be allocated more carefully. Perhaps selling the produce at more competitive prices, and passing on the profits to members in the form of higher compensation will improve the situation. This recommendation can only go so far, since the DCCDI has already overspent its budget slightly on some operational costs. Another alternative would be for the cooperative to give an initial payment to its members, however minimal, as they bring in their produce. A further payment, or a deposit in the member's name could be made when the produce is resold by the cooperative to third parties at higher prices. Based on the cooperative's performance in promoting development in rural areas, foreign agencies and the government would be well-advised to channel aid through cooperatives such as DCCDI, with stringent accounting as a condition.

5.5 Members' Contribution to the Cooperative

The cooperative is made up of its members. Most of the respondents are conscious of this fact, but others have perhaps not grasped the responsibilities of joining the cooperative completely. Since the cooperative management is doing its share in promoting financial responsibility, it is recommended that members who default on their loans be reminded by their fellow members of the effect of such an action on themselves. In promoting the idea that a cooperative's financial situation is closely tied in with that of its members, perhaps fewer defaults on payment will occur. Also, with their material well-being so closely associated with the cooperative's effective operation, the members would be encouraged to find ways for the cooperative to do better. Meetings would then be more interactive, rather than top-to-bottom affairs between the elected officials and other members.

6. Summary

Chatak and Ingersent (1984) attempt to explain the efficiency of peasant farming and the nature of technological change. According to the authors, the poor are hampered by uncertainty and overwhelming institutional, cultural and natural restraints. Removing these restraints is one of the bases for promoting rural development, and this can be done by providing agricultural support services like credit and marketing facilities to farmers.

This study was based on the premise that services seldom reach the Filipino farmer who does not have access to or ownership of land. Cooperatives formed by small farmers, whether they own land or not, were considered as an alternative to government-run programs based on land reform.

This study has confirmed that although land ownership is not a membership requirement for DCCDI, tenurial status is a significant factor in obtaining loans. It was also discovered, rather unexpectedly, that tenurial status affects the assumption of leadership roles within the cooperative such that members who have less secure tenure status have roles requiring greater responsibility. This finding may be one of the significant factors in DCCDI's effectiveness as an organization that promotes rural development.

7. Concluding Statement

The Dayap Credit Cooperative and Development, Inc. (DCCDI) was studied to have a clearer understanding of what constitutes a cooperative that contributes to rural development. The DCCDI, like most Philippine cooperatives, has been partly subsidized by the government. Unlike other Philippine cooperatives, however, it seems to be more inclined towards financial independence, as shown by its prompt repayment of loans from the Land Bank of the Philippines. Also, its expansion in membership and operations during twenty years of existence illustrates its relative sustainability, since a great majority of other Philippine cooperatives have not been able to last for a decade (Rola, 1988).

This study was also conducted, to some extent, to explain DCCDI's operations and how it fulfills most of its objectives. However, it has not been able to contrast DCCDI with less successful cooperatives in actual terms. Thus, whether DCCDI is different because it sets the right goals or because its management and organizations allows it closer adherence to those goals can be better understood by further research of other cooperatives. The researchers hope that this study can contribute to the re-evaluation of programs that are supposed to give farmers accessibility to social and financial services.

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